

Clinton Middle School

100 West Boylston Street, Clinton, MA 01510

MSBA Feasibility Study Preferred Schematic Report (PSR)

June 27, 2023

MSBA

Massachusetts School Building Authority
40 Broad Street, Suite 500, Boston, MA 02111

OWNER

Town of Clinton, MA
242 Church Street, Clinton, MA 01510

OPM

Dore + Whittier
220 Merrimac Street, Building 7, 2nd Floor, Newburyport, MA 01950

DESIGNER

Lamoureux Pagano Associates | Architects
108 Grove Street, Suite 300, Worcester, MA 01605

Prepared by:



06/27/2023

Veatriki Dagkalakou
MSBA Project Manager
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, MA 02109



RE: Clinton Middle School Project - Preferred Schematic Report Submission

Dear Veatriki Dagkalakou,

Please accept the Module 3 Preferred Schematic Report submission for the Clinton Middle School project. As OPM, we have reviewed the package and we believe that it meets the requirements as set forth by the MSBA in Module 3. We look forward to your feedback and working with you to proceed with the final evaluation of the proposed alternatives.

Please note that in section 3.3.5.2 we have currently enclosed a copy of the meeting minutes of the SBC meeting held on June 20th, 2023, at which the PSR was approved and included in this submission is a vote certification signed by the District. Our next SBC meeting will be held on July 18th, 2023 at which time the SBC will vote to approve the meeting minutes attached. This will be submitted later and will act as a certified copy of the SBC meeting minutes referenced in the Local Actions and Approvals letter from the district.

Sincerely,

A handwritten signature in blue ink that reads 'Trip Elmore'.

Trip Elmore, MCPPO

DORE + WHITTIER

doreandwhittier.com

(978) 778-5353

Feasibility Study PSR

3.3.1 INTRODUCTION

- A. Executive Summary
- B. MSBA PDP Review and District Response
- C. Updated Project Directory

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 - c. Building Floor Plans
 - 2. Addition/Renovation Option AR-1
 - a. Narrative
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 - d. Massing
 - e. Phasing Plans
 - f. Project Schedule
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 - 1. Narrative
 - 2. Reconciled Cost Estimate
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- F. Summary of Merits and Limitations Narrative

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- A. Updated Educational Program
 - 1. Redlined Educational Program
 - 2. Educational Program with Designer Responses
- B. Updated Space Summary
 - 1. Space Summary Template–700
 - 2. Space Summary Template Variation Narrative
 - 3. Updated Existing vs. Proposed Diagram–700
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 - 1. LEED–S V.4 Sustainability Scorecard
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- D. Building Floor Plans
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 - 3. Massing
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- F. Budget Statement for Preferred Solution
 - 1. Capital Budget Statement
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3.3.5 LOCAL ACTIONS AND APPROVAL CERTIFICATION

- A. Narrative
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- C. Certified Copy of SBC Meeting Minutes where PSR Submittal was Approved by Vote
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3.3.1 INTRODUCTION

- A. Executive Summary
- B. MSBA PDP Review and District Response
- C. Updated Project Directory

3.3.1 INTRODUCTION

A. Executive Summary

PROCESS TAKEN SINCE PDP

Since the submittal of the Preliminary Design Program (PDP) to the MSBA on March 28, 2023, the Owner, OPM, and Lamoureux Pagano & Associates with its consultants, have continued to develop the 2nd phase of the Feasibility Study, the Preferred Schematic Report (PSR). The three options voted for further review in the PSR phase includes:

- Addition/Renovation AR-1 for 700 students, grades 4-8, on existing site
- Addition/Renovation AR-2 for 700 students, grades 4-8, on existing site
- New Construction NC-1 for 700 students, grades 4-8, on existing site

Since the PDP, an additional option was explored which is a hybrid of AR-1 and AR-2. This additional option is labeled as AR-1.5.

During the PDP phase, the School Committee voted to support a 4-8 grade configuration rather than maintaining the existing Clinton Middle School 5-8 configuration. The two main factors for this includes the following:

- Unanticipated growth in the District.
- The need for space at Clinton Elementary School, which is currently configured for grades K-4. Moving grade 4 to the Middle School will ease overcrowding in Clinton Elementary School and is not unprecedented; until 2018 grade 4 was housed in the Middle School.

PUBLIC OUTREACH

The project team has continued the community outreach effort as previously described in the PDP:

- The project website continued to be maintained and updated so the public will have current information and can be found here: <https://www.clintonmiddleschoolbuildingproject.com/> As discussed in the PDP, the intent is to continue to upload public documents (i.e. general information, existing conditions, meeting minutes, reports, graphics, schedules, project photos, presentations, etc.) available for viewing on this website. The District has also added a link to submit questions or comments.
- A Sustainable Workshop was held on April 24, 2023. Hosted by The Green Engineer, the purpose of the sustainability workshop was to discuss the sustainability goals for the project and

collaborate on possible opportunities for the project. It started with a discussion on site and location and discussed bicycle storage and network, parking and electric vehicle parking spaces, outdoor infrastructure, and open space areas for the project. During the energy discussion, energy efficient and cost-efficient systems were recognized. Air source heat pumps, geothermal, and a hybrid system were all discussed as well as the possibility of complete electrification of the building. Photovoltaic arrays were also discussed as part of the project. Water usage was another important topic including irrigating the site, rainwater capture and reuse, flush and flow fixtures, and water metering for the building. Lastly, indoor air quality was discussed at great length including natural daylight, operable windows, healthy air quality, and green cleaning. At the end of the workshop, the Owner opted to proceed with LEED certification for the project.

- All-Boards Meeting: The project team presented an update to the All-Boards group at a televised meeting that took place on June 14th, 2023 in the Cafetorium of the existing Middle School. The All-Boards group consists of the following town boards:
 - Board of Selectmen
 - School Committee
 - Finance Committee
 - Permanent Building Committee / School Building Committee

LPA|A presented an update on the project to date, including the three (3) options that were selected in the PDP, the base repair option, as well as the new hybrid option that was developed during the PSR. The agenda and minutes for this meeting can be found in section 3.3.5, D.

- School Building Committee (SBC) Meetings: All SBC meetings have been conducted in accordance with the state's open meeting law. All agendas and minutes of these meetings can be found in section 3.3.5, D. The final SBC meeting for the PSR was held on June 20, 2023 at the Middle School Media Center where the preferred option was selected for Schematic Design.
- Clinton Public School has made every effort to keep the public informed of the MSBA process. The district's homepage includes a link to the Clinton Middle School Building Project which is updated regularly with new meetings, votes, announcements, and other relevant information. The Clinton Middle School/MSBA project is a regular agenda item for all CPS school committee meetings. All CPS school committee meetings are live-streamed and the recordings are available online. Additionally, the local paper has run multiple articles in which the CMS/MSBA updates from the school committee meeting have been feature articles. Finally, multiple updates have been provided to the Clinton Board of Selectmen and the Clinton Finance Committee. These meetings are broadcast on Clinton Cable TV and the recordings are available online.
- A letter by the superintendent, Steve Meyer, Ed.D, was released to the public on June 21, 2023 that described the public meeting held by the Clinton Permanent Building Committee on June 20, 2023 where committee members discussed and voted on the preferred solution.

PROJECT SCHEDULE

An updated project schedule, prepared by the Owner's Project Manager, is included in section 3.3.4 Preferred Solution. No major changes to the overall schedule are anticipated to date. Key landmark events include:

- Projected MSBA Board of Directors Meeting for approval of Project Scope and Budget Agreement will be April 2024
- Projected Town vote for Project Scope and Budget Agreement will be June 2024
- Anticipated start of construction is August 2025
- Target Move-in date is August 2027

FINAL EVALUATION OF EXISTING CONDITIONS

Since the submission of the PDP on March 28, 2023, additional information was gathered relative to the site survey including metes and bounds, utilities, and topography for the existing middle school property.

Additionally, the Town of Clinton continues to work with National Grid (NGRID) to record a previous land swap on the existing middle school property relative to overhead electric transmission lines that were relocated to accommodate the construction of the middle school in 1976. The Town's continued understanding is that the formal recording of the deed is not expected to impact the project timeline. Please review the attached letter from the Town in section 3.3.2, B for further information.

FINAL EVALUATION OF ALTERNATIVES

The PDP identified three (3) options on the existing middle school site for further development during the Preferred Schematic Report (PSR) phase of this Feasibility study. In addition, a fourth hybrid option (A/R-1.5) was developed during the PSR. The following is a summary of the alternatives:

- **Addition / Renovation (A/R-1):** scope of work includes renovation and selective demolition of the existing School, utilizing temporary modular classrooms and construction of modest 1-story additions, to provide a solution that meets the Educational Program requirements to the maximum extent possible.

- **Addition / Renovation (A/R-2):** scope of work includes renovation and selective demolition of the existing School, along with the construction of multi-story additions serving as swing space, to provide a solution that meets the Educational Program requirements to the maximum extent possible.
- **Addition / Renovation (A/R-1.5):** is a hybrid solution combining elements of Options A/R-1 and A/R-2. The scope of work includes renovation and selective demolition of the existing School, along with the construction of a single multi-story addition serving as swing space, to provide a solution that meets the Educational Program requirements to the maximum extent possible.
- **New Construction (NC-1):** is based on construction of a new building located on the athletic fields to the southeast of the existing middle school. It is expected that the new building will be constructed and completed while the existing building remains fully occupied. Once the new building is complete, the existing building would be demolished in its entirety and any remaining site features (athletic fields, playgrounds, parking, driveways, etc.) would be completed. While there will be temporary construction impacts with this option, including the loss of most athletic fields/courts and the relocation of vehicular circulation/parking and site utilities, they relate primarily to the site and the result is a solution that meets most if not all the Educational Program requirements.

SUMMARY OF PREFERRED SOLUTION

At the June 20, 2023 Building Committee meeting, the New Construction option (NC-1) for 700 students, grades 4-8, on the existing site was voted and approved as the Preferred Solution for further development in the Schematic Design phase of the project. The following is an outline of the major points raised during the discussion of the options:

- The new construction option most closely meets the district's educational program. Considering it would be a new building, there are no existing condition limitations that will need to be factored into the design.
- The larger 700-student grade configuration will ease overcrowding in the district's elementary school.
- The new construction option would have the least impact on the students, faculty, and staff. The new school would be built separately, albeit on the same site, while the existing school would continue to function with minimal, if any, disruptions from construction. For most if not all of the Addition/Renovation options, some students would spend all 4 years of their middle school experience in an environment impacted by construction activities and disruptions. This would

not be an equitable environment for learning, especially when one considers that these same students have just gone thru multiple years of the COVID pandemic and related impacts.

- When considering the project cost difference between New Construction and the Addition/Renovation options, the Building Committee noted that the premium for New Construction was negligible compared to the increased value of the items noted above.

3.3.1 INTRODUCTION

- B. MSBA PDP Review and District Response

This document has been updated by LPA|A with comments for the purpose of preparing a coordinated response from the District, OPM, and LPA|A. Responses to comments are in red below.

**ATTACHMENT A
MODULE 3 – PRELIMINARY DESIGN PROGRAM REVIEW COMMENTS**

District: Town of Clinton
School: Clinton Middle School
Owner’s Project Manager: Dore & Whittier Management Partners, Inc.
Designer Firm: Lamoureux Pagano Associates | Architects, Inc.
Submittal Due Date: April 4, 2023
Submittal Received Date: March 27, 2023
Review Date: March 27, 2023 – April 13, 2023
Reviewed by: V. Dagkalakou, C. Forde, J. Jumpe

MSBA REVIEW COMMENTS

The following comments¹ on the Preliminary Design Program (“PDP”) submittal are issued pursuant to a review of the project submittal document for the proposed project presented as a part of the Feasibility Study submission in accordance with the MSBA Module 3 Guidelines.

3.1 PRELIMINARY DESIGN PROGRAM

Overview of the Preliminary Design Program Submittal	Complete	Provided; <i>Refer to comments following each section</i>	Not Provided; <i>Refer to comments following each section</i>	Receipt of District’s Response; <i>To be filled out by MSBA Staff</i>
OPM Certification of Completeness and Conformity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Table of Contents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.1 Introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.2 Educational Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.3 Initial Space Summary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.4 Evaluation of Existing Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.5 Site Development Requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ The written comments provided by the MSBA are solely for purposes of determining whether the submittal documents, analysis process, proposed planning concept and any other design documents submitted for MSBA review appear consistent with the MSBA’s guidelines and requirements, and are not for the purpose of determining whether the proposed design and its process may meet any legal requirements imposed by federal, state or local law, including, but not limited to, zoning ordinances and by-laws, environmental regulations, building codes, sanitary codes, safety codes and public procurement laws or for the purpose of determining whether the proposed design and process meet any applicable professional standard of care or any other standard of care. Project designers are obligated to implement detailed planning and technical review procedures to effect coordination of design criteria, buildability, and technical adequacy of project concepts. Each city, town and regional school district shall be solely responsible for ensuring that its project development concepts comply with all applicable provisions of federal, state, and local law. The MSBA recommends that each city, town and regional school district have its legal counsel review its development process and subsequent bid documents to ensure that it is in compliance with all provisions of federal, state and local law, prior to bidding. The MSBA shall not be responsible for any legal fees or costs of any kind that may be incurred by a city, town or regional school district in relation to MSBA requirements or the preparation and review of the project’s planning process or plans and specifications.

Overview of the Preliminary Design Program Submittal	Complete	Provided; <i>Refer to comments following each section</i>	Not Provided; <i>Refer to comments following each section</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
3.1.6 Preliminary Evaluation of Alternatives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.7 Local Actions and Approvals Certification(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.8 Appendices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.1.1 INTRODUCTION

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
1	Summary of the Facility Deficiencies and Current S.O.I.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Date of invitation to conduct a Feasibility Study and MSBA Board Action Letter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Executed Design Enrollment Certification	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Narrative of the Capital Budget Statement and Target Budget	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Project Directory with contact information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Updated Project Schedule	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

3) *The District will be required to execute a Design Enrollment Certification based on its Preferred Schematic. The MSBA will prepare a certification to be forwarded for signature upon approval by the MSBA Board of Directors for its Preferred Schematic. Please acknowledge.*

- **Acknowledged; the District will execute a Design Enrollment Certification based on its Preferred Schematic.**

4) *In response to these review comments, please provide the District's target total project budget for the proposed project.*

- **Based on other current comparable school projects, it is anticipated that the total project budget for the Clinton Middle School will cost approximately \$1,000 +/- per square foot. Based on the available bonding capacity and the projected MSBA grant funding contribution, the District anticipates that the Not-to-Exceed Total Project Budget would be around \$150 million +/- . The District's final Not-to-Exceed Total Project Budget will be refined and established in the Schematic Design Phase submission.**

No further review comments for this section.

3.1.2 EDUCATIONAL PROGRAM

Provide a summary and description of the existing educational program, and the new or expanded educational vision, specifications, process, teaching philosophy statement, as well as the District’s curriculum goals and objectives of the program. Include description of the following items:

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
1	Grade and School Configuration Policies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Class Size Policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	School Scheduling Method	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Teaching Methodology and Structure				
	a) Administrative and Academic Organization/Structure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Curriculum Delivery Methods and Practices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) English Language Arts/Literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	d) Mathematics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	e) Science	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	f) Social Studies	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	g) World Languages	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	h) Academic Support Programming Spaces	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	i) Student Guidance and Support Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Teacher Planning and Professional Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Pre-kindergarten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Kindergarten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Lunch Programs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Technology Instruction Policies and Program Requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Media Center/Library	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Visual Arts Programs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Performing Arts Programs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Physical Education Programs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Special Education Programs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Vocation and Technology Programs				
	a) Non-Chapter 74 Programming	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Chapter 74 Programming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Transportation Policies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Functional and Spatial Relationships	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Security and Visual Access Requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

In response to these review comments address the comments below. As part of the District's Preferred Schematic Report ("PSR") submittal include (2) copies of the updated educational program, (1) redlined copy and (1) clean copy. The updated educational program must address the comments below, include District updates, provide a Designer response for each component of the educational program, and align with the District's Preferred Schematic. Please acknowledge.

- **Acknowledged; the educational program shall address the comments below, include District updates, provide a Designer response for each component of the educational program, and align with the District's Preferred Schematic.**

2) The information provided indicates the District's average class size is 25 students, with a range from 20-25 students per class depending on course subject. Please note and acknowledge that MSBA guidelines are based on 23 students per classroom for grades 4-8.

- **Acknowledged; MSBA guidelines are based on 23 students per classroom for grades 4-8.**

4b) In response to these review comments, provide information that describes the proposed curriculum delivery methods and practices.

The information provided states: "A main driver for the shift from traditional teams to a departmental focus is to create a more equitable learning environment by allowing students to interact freely rather than be confined to the team that may have the appropriate support available for students". In response to these review comments please provide specific examples that illustrate a program or activity that is supported by the departmental focus described above.

Additionally, please note that project-based learning encourages less of a departmental focus and more interdisciplinary work that crosses the more traditional Math/Science versus "Humanities" distinction. This approach encourages work such as examining ethical considerations in scientific research and reporting, mathematical and statistical applications to the examination of historical data and social science research. Consider incorporating project-based learning into the program. Please acknowledge.

- **Acknowledged; the District will address this in the updated "Educational Program" as part of the Preferred Schematic Report.**

Furthermore, in response to these review comments, please provide the following information:

- *Describe the current certification and assignment for the District's 4th, 5th and 6th grade teachers.*
- **The current certifications and assignments will be provided in the updated "Educational Program" as part of the Preferred Schematic Report.**
- *Confirm/describe whether the grade 4-8 teaching model would require teachers to obtain additional certification and professional development. These adjustments should be supported by time and resources between now and the opening of a new or renovated facility. Please acknowledge.*

- **Acknowledged; this will be addressed in the updated “Educational Program” as part of the Preferred Schematic Report.**

4c-g) Not provided. Provide a detailed narrative description of each program listed. Additionally, provide proposed changes and why, or a statement that no changes are being proposed. Furthermore, include a description of advantages and disadvantages for the current and proposed spaces.

- **The District will provide the requested additional information in the updated “Educational Program” as part of the Preferred Schematic Report.**

4e) Please note and acknowledge that MSBA Science Lab Guidelines are written to accommodate no more than 24 students per lab.

- **Acknowledged; Science Lab Guidelines are written to accommodate no more than 24 students per lab.**

4h) In response to these review comments, provide a description of the District’s current and proposed ‘Academic Support Programming Spaces’ and clarify if there are any proposed changes to the District’s academic support or provide a statement that no changes are being proposed.

- **A description of the District’s current and proposed ‘Academic Support Programming Spaces’ will be provided in the updated “Educational Program” as part of the Preferred Schematic Report**

4i) In response to these review comments, please describe the District’s plan to include staff and students in potential involvement and encouragement of ideas for the facility upgrades or changes that could enhance their program and promote greater integration with the other programs and students that will be in the proposed facility, if any.

- **The District’s plan will be provided in the updated “Educational Program” as part of the Preferred Schematic Report.**

5) The information provided states: “The Teacher Planning spaces shall be large enough to support an acoustically separate copy/work room with kitchenette, and a flexible technology-rich conference room area for common planning time meetings, data analysis and curriculum development”.

Please note that Teacher Planning time is more commonly affected by class schedules than spaces. If the schedule is for teachers to have planning time together, they are likely to find spaces to carry on their work. If the schedule doesn’t allow the teachers to have planning time simultaneously, there is much less of a chance that common planning will occur. Please acknowledge.

- **Acknowledged; The District will elaborate on the usage and scheduling of these spaces in the updated “Educational Program” as part of the Preferred Schematic Report.**

In response to these review comments, provide additional information that indicates the type of support services the District will provide to assist in the transition that teachers will need to make as the District moves from a more traditional middle school to one that embraces more cross-disciplinary and collaborative learning, and future-looking education programs. Additionally, provide information that describes the current and proposed 'Professional Development' for staff.

Furthermore, please describe whether the District has considered providing additional professional and curricular development opportunities outside the regular school year that would enable teachers extended times to prepare for changes in the curriculum and structure as a result of the proposed project.

- **The District will provide the requested additional information in the updated "Educational Program" as part of the Preferred Schematic.**

9) The MSBA suggests the District consider providing assisted listening technology in each classroom, as well as general use throughout educational spaces within the proposed project for hearing impaired accessibility. Please acknowledge.

- **Acknowledged; the District will consider providing assisted listening technology in each classroom, as well as general use throughout educational spaces within the proposed project for hearing impaired accessibility.**

Additionally, please provide the following information:

- *Please describe the District's plan for students to use their technology devices at home, if any.*
- *If yes, describe whether the District has a regular program to ensure that all students have access to internet at home and at an affordable cost.*
- **The District will provide the requested additional information in the updated "Educational Program" as part of the Preferred Schematic.**

10) In response to these review comments, provide a description of the District's current and proposed 'Media Center/Library' space and clarify if there are any proposed changes to the District's space or provide a statement that no changes are being proposed.

- **A description of the District's current and proposed 'Media Center/Library' space will be provided in the updated "Educational Program" as part of the Preferred Schematic**

11) Please note art storage should include secure and appropriately ventilated space for toxic and hazardous materials as well as an accessible file of material safety data sheets ("MSDS"). Additionally, safety equipment such as safety goggles should be provided and utilized. Please acknowledge.

- **Acknowledged; Art Storage shall include secure an appropriately ventilated space for toxic and hazardous materials, an accessible file for material safety data sheets (MSDS), and safety equipment such as safety goggles.**

13) In response to these review comments please describe if the Physical Education is scheduled throughout the year for a student or if it scheduled in selected semesters or trimesters.

- **Physical Education is scheduled by trimester. This information will be provided in the updated “Educational Program” as part of the Preferred Schematic Report.**

14) The information provided states: “A new or renovated school would include two ABA classrooms, both associated with the “upper elementary” neighborhoods Grades 4-6.’ In response to these review comments please describe the reasons for the two proposed ABA classrooms in the upper elementary rather than one in the 7-8 grade cluster and one in the 4-6 grade cluster. Additionally, please describe how the District will accommodate ABA students in grades 7-8.

- **The District will provide the requested additional information in the updated “Educational Program” as part of the Preferred Schematic Report.**

15a) The information provides states: “It is important that Clinton Middle School have dedicated STEM labs for Industrial Arts, Computer Science, and Life Science”. Please refer to The MSBA’s [“Review and Recommendations of Best Practices for K-12 STEM Learning Spaces”](#) report and [Staff Recommendation for 2018 Science/Technology/Engineering Area Guidelines](#) as it relates to staffing of STE rooms, classroom sinks and storage.

- **Acknowledged; The District will review and revise as necessary in the updated “Educational Program” as part of the Preferred Schematic Report.**

18) Please confirm that first responding emergency representatives will be consulted in the planning process and associated requirements will be incorporated into the Preferred Schematic.

- **Confirmed; first responding emergency representatives will be consulted in the planning process and associated requirements will be incorporated into the Preferred Schematic Report.**

No further review comments for this section.

3.1.3 INITIAL SPACE SUMMARY

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District’s response required</i>	Not Provided; <i>District’s response required</i>	Receipt of District’s Response; <i>To be filled out by MSBA Staff</i>
1	Space summary; one per approved design enrollment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Floor plans of the existing facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Narrative description of reasons for all variances (if any) between proposed net and gross areas as compared to MSBA guidelines	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

1) The MSBA has performed a preliminary review of the space summaries for new construction for the two study enrollment options and offers the following:

- **Study Enrollment Options:**
 - Enrollment 1: 550 students in grades 5-8
 - Enrollment 2: 700 students in grades 4-8
- **Core Academic** – The overall proposed square footage for this category exceeds the MSBA guidelines by 3,700 net square feet (“nsf”) for Enrollment 1; and 5,110 nsf for Enrollment 2. Based on the information provided, the following spaces have been proposed for the District to deliver its educational program:

Core Academic Spaces	Enrollment 1: Grades 5-8 for 550 students			Enrollment 2: Grades 4-8 for 700 students		
	Proposed No. Rooms	MSBA Guidelines No. Rooms	Variance	Proposed No. Rooms	MSBA Guidelines No. Rooms	Variance
General Classroom	21	23	-2	27	28	-1
Small Group Seminar	3	1	+2	3	2	+1
Collaborative Work Area	4	0	+4	5	0	+5
STE Room	1	0	+1	1	0	+1
STE Storage	1	0	+1	1	0	+1
Literacy Specialists	1	0	+1	1	0	+1
Science Classroom/Lab	3	3	0	3	3	0
Prep Room	3	3	0	3	3	0
Central Chemical Storage Room	1	1	0	1	1	0
Teacher Planning	2	0	+2	2	0	+2

The District is proposing the following spaces:

- **General Classrooms** – The District is proposing (21) 900 nsf General Classrooms totaling 18,900 nsf for Enrollment 1, which is below the MSBA guidelines by (2) General Classrooms and 2,950 nsf; and the District is proposing (27) 900 nsf General Classrooms totaling 24,300 nsf for Enrollment 2, which is below the MSBA guidelines by (1) General Classroom and 2,300 nsf. Based on the grade configuration and number of classes required for each grade, the MSBA does not object to the proposed number of General Classrooms. In response to these review comments, please review and respond to the following items:
 - **The additional classroom area of 2,950 nsf for Enrollment 1 and 2,300nsf for Enrollment 2 have been allocated to support the Collaborative Work Areas.**
 - As the project further develops, please note and acknowledge that 850 nsf is the minimum size for all newly constructed General Classrooms in a middle school.

possibly receive intervention or support. Cross disciplinary collaboration will also occur to support project-based learning.

- *Describe why these activities are better suited in a separate area rather than in a larger General Classroom.*
 - **Due to being associated with the corridor it allows for a greater number of students to gather. Additionally, all other spaces are scheduled for learning and will allow for flexible scheduling for collaboration/support. This allows students more freedom to complete their work and supports our Universal Design for Learning model.**
- **Science/Technology/Engineering (“STE”) Room** – *The District is proposing (1) 1,080 nsf STE Room for grade 5-6 for Enrollment 1; and (1) 1,440 nsf STE Rooms for grade 4-6 for Enrollment 2.*

A full-size science lab appears to be proposed for the use of grades 4 through 6 for Enrollment 2. In response to these review comments, please provide a rationale for why grade 5 and 6 science cannot be delivered within general classrooms. Alternatively, science rooms for grades 4-6 should be redesignated as 1,080 nsf STE rooms with 120 nsf storage spaces.

- **Based on the STE Memorandum, the recommendation for Enrollment 1 would be one 1,080 nsf STE room and based on Enrollment 2 would be two 1,080nsf STE rooms, with each room also having an associated 120 nsf Storage room. Therefore, Enrollment 1 meets the recommendations of the memorandum. Whereas Enrollment 2 allocates the square footage for the two 1,080 nsf room(s) and two 120 nsf storage room(s) across the following spaces to support STE learning: one 1,440 nsf STE room, one 120 nsf Storage room, the remainder of 960 nsf allocated to the Collaborative Work Areas.**

Please note and acknowledge that the MSBA will limit its participation for the proposed STE rooms for grades 4-6 to 1,080 nsf. In response to these review comments, please describe how the proposed STE Rooms for Enrollment 1 and Enrollment 2 will be scheduled, staffed, and examples of activities that will occur within those spaces.

- **Acknowledged; The District intends to develop PLTW curriculum for grades 4-6 as part of this project. They currently offer PLTW curriculum in elementary school and 7th & 8th grades. This will allow for continuity of curriculum for the District’s STEM education.**

- **STE Storage** – *The District is proposing (1) 120 nsf STE Storage area associated with the (1) STE Room for Enrollment 1 and 2.*
 - **Acknowledged**
- **Science Classroom / Lab Grades 7-8** – *The District is proposing (3) 1,440 nsf Science Classrooms totaling 4,320 nsf for Enrollments 1 and 2, which meets the MSBA guidelines. No further preliminary comments.*
 - **Acknowledged**
- **Prep Room** – *The District is proposing (3) 200 nsf Prep Rooms totaling 600 nsf associated with the (3) Science Classrooms/Labs for Enrollments 1 and 2, which meets the MSBA guidelines. No further preliminary comments.*
 - **Acknowledged**
- **Central Chemical Storage Room** – *The District is proposing (1) 150 nsf Central Chemical Storage Room for Enrollments 1 and 2, which meets the MSBA guidelines. No further preliminary comments.*
 - **Acknowledged**
- **Teacher Planning** – *The District is proposing (2) 500 nsf Teacher Planning spaces totaling 1,000 nsf, which exceeds the MSBA guidelines. In response to these review comments, please provide the following information:*
 - *Describe the anticipated adjacencies.*
 - **Teacher planning spaces will be located centrally and in close proximity to the grade level neighborhoods.**
 - *Describe the scheduling and utilization of the proposed areas.*
 - **Common planning is scheduled during the day, often during the WINN block, to allow for this time the classes are covered by an IA, so the classrooms are still occupied with students thus requiring a location for common planning time.**
 - *Describe how these areas will be supervised and staffed.*
 - **These areas would be locked, and teachers would have keys to access them. Additionally, teachers and paraprofessionals that travel between buildings will need this “home base” to store personal belongings and/or instructional materials as well.**
 - *Provide examples of activities that will occur in these areas.*
 - **These spaces will be used for teacher planning, professional practice, and cross disciplinary meetings, and house the necessary tools such as a copier, storage, white board, and short throw projector.**

- *Please relocate the following space to the 'Core Academic' category.*
 - *1,200 nsf Executive Functioning/Health/Wellness Classroom;*
 - **Acknowledged; this space will be relocated to General Education**
- *Please note and acknowledge that the Special Education program is subject to approval by the DESE. The District should provide the required information required with the Schematic Design submittal. Formal approval of the District's proposed Special Education program by the DESE is a prerequisite for executing a Project Funding Agreement with the MSBA.*
 - **Acknowledged; Special Education program is subject to approval by the DESE and a is a prerequisite for executing a Project Funding Agreement with the MSBA.**
- **Art & Music / Vocations & Technology** – *The overall proposed square footage for the combined categories exceeds the MSBA guidelines by 3,640 nsf for Enrollment 1 and by 650 nsf for Enrollment 2. In response to these review comments, please review and respond to the following:*
 - *Please clarify whether the Industrial Arts, Computer Science and Life Science programs are new or existing programs.*
 - **These are existing programs.**
 - *Provide additional information for these three programs (identified above) that describes the proposed scheduling, staffing, and overall utilization of these spaces in response to these review comments.*
 - **All students in grades 7 & 8 take 4 core academic classes (Math, ELA, Science, and Social Studies). The also have two additional period in their schedule that are broken into trimesters - One period consists of a trimester each of Art, Wellness, and Executive Functioning, the other period is a trimester each of Technology (IA), PLTW Robotics and Automation (CS), and PLTW Medical Detectives (LS).**
 - *The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note and acknowledge that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement.*
 - **Acknowledged; The District and its consultants will continue to seek opportunities to increase efficiencies and align with MSBA guidelines.**
- **Health & Physical Education** – *The overall proposed square footage for this category exceeds the MSBA guidelines by 2,750 nsf for both Enrollments 1 and 2. Please note and*

acknowledge that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement.

- **Acknowledged; The District is aware of MSBA's policy on the size of gymnasiums.**

For additional information, please refer to the attached memo regarding the MSBA's policy on physical education square footage in excess of the MSBA guidelines. Note the District may choose to build a gymnasium and related spaces in excess of MSBA guidelines, but in no event shall the gymnasium exceed 12,000 nsf. The MSBA will participate in a gymnasium of up to 6,000 nsf unless adjusted by the MSBA to increase teaching stations for enrollment and/or the educational plan. Additionally, areas in excess of the MSBA guidelines will be at the sole expense of the district; and the MSBA will exclude from its grant the cost of the total gross square feet ("gsf") in excess of the guidelines for these areas.

- **Acknowledged; The District is aware of MSBA's policy on the size of gymnasiums.**
- **Media Center** – *The overall proposed square footage for this category meets the MSBA guidelines for both Enrollment 1 and 2. No further preliminary comments.*
 - **Acknowledged.**
- **Dining & Food Service** – *The overall proposed square footage for this category exceeds the MSBA guidelines by 1,000 nsf for both Enrollments 1 and 2. The information provided indicates the additional square footage is associated with the proposed kitchen which exceeds the MSBA guidelines. The MSBA does not object to this additional area being included in the proposed project; however, please note and acknowledge that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement.*
 - **Acknowledged; The District is aware that this space would be deemed ineligible.**
- **Medical** – *The overall proposed square footage for this category exceeds the MSBA guidelines by 150 nsf for both Enrollment 1 and 2. The MSBA encourages the District to seek efficiencies in the proposed layout to reduce the overall net square footage. Please note and acknowledge that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement.*
 - **Acknowledged; The District is aware that this space would be deemed ineligible.**
- **Administration & Guidance** – *The overall proposed square footage for this category exceeds the MSBA guidelines by 2,150 nsf for Enrollment 1 and by 1,850 nsf for Enrollment 2. The MSBA encourages the District to seek efficiencies in the proposed layout to reduce the overall net square footage. Please note and acknowledge*

that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement.

- **Acknowledged; The District is aware that this space would be deemed ineligible.**
- **Custodial & Maintenance** – *The overall proposed square footage for this category meets the MSBA guidelines for both Enrollment 1 and 2. No further preliminary comments.*

- **Acknowledged.**

Please note that upon selection of a preferred solution, the District may be required to adjust spaces/square footage that exceeds the MSBA guidelines and is not supported by the Educational Program provided.

- **Acknowledged.**

No further review comments for this section.

3.1.4 EVALUATION OF EXISTING CONDITIONS

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
1	Confirmation of legal title to the property.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Determination that the property is available for development.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Existing historically significant features and any related effect on the project design and/or schedule.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Determination of any development restrictions that may apply.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Initial Evaluation of building code compliance for the existing facility.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Initial Evaluation of Architectural Access Board rules and regulations and their application to a potential project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Preliminary evaluation of significant structural, environmental, geotechnical, or other physical conditions that may impact the cost and evaluations of alternatives.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Determination for need and schedule for soils exploration and geotechnical evaluation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Environmental site assessments minimally consisting of a Phase I: Initial Site Investigation performed by a licensed site professional.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
10	Assessment of the school for the presence of hazardous materials.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Previous existing building and/or site reports, studies, drawings, etc. provided by the district, if any.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

1) *The information provided states:*

“The Town of Clinton is currently working with National Grid (NGRID) to record a previous land swap on the existing middle school property relative to overhead electric transmission lines that were relocated to accommodate the construction of the Middle School in 1976. Based on information provided by the Town, documents describing the land swap were prepared and approved by Town Meeting but were never formally recorded with the Registry of Deeds. With the documentation already available, the Town’s understanding is that formally recording the deed is not expected to impact the project timeline”.

In response to these review comments, identify any potential challenges and steps that may be required for these resolutions, if any. Please note that the resolution of this item is required in order for the District and the MSBA to execute a Project Funding Agreement (“PFA”). Please knowledge.

Additionally, in response to these review comments, please provide the Legal Title of the property for the Clinton Middle School property.

- The legal title of the property for the Clinton Middle School property is expected to be provided in the Preferred Schematic Report. The town needs to formally record the deed with the registry of deed. We do not anticipate any potential challenges at this time.**

2,4) *The information provided indicates the following:*

- The overhead power line easement controlled by National Grid will restrict the development of structures within its limits. Any proposed work within the area of the easement will require National Grid review and approval.*
- The 400’ Zone A Department of Conservation and Recreation (“DCR”) buffer, measured from the edge of Wachusett Reservoir, will restrict most development within its limits.*
- Potential for unsuitable soils will impact development of building structures.*

In response to these review comments, identify any potential challenges and steps that may be required for these resolutions, if any. Additionally, please ensure that future versions of the project schedule will include dates of anticipated approvals and key steps of the proposed site.

- **The proposed options under review will not be developed within the noted easement controlled by National Grid. Additionally, no proposed work is anticipated to be proposed within the 400' Zone A DCR buffer. The soil conditions that were noted as unsuitable are no longer being considered for development given the options selected for further study in the PSR.**

3) *The information provided states:*

“The Clinton Middle School building/site is not listed on either the Massachusetts Cultural Resource Information System (MACRIS) or the National Register of Historic Places”.

Please note that a Project Notification Form (“PNF”) must be submitted to the Massachusetts Historic Commission (“MHC”) and MHC approval is required prior to construction bids. The District should keep the MSBA informed of any decisions and/or proposed actions and should confirm that the proposed project is in conformance with Massachusetts General Law 950, CRM 71.00. In response to these review comments, please provide the timeline associated with filing a PNF with the MHC for review and approval.

- **Acknowledged; The PNF will be submitted prior to the completion of the Schematic Design submission currently scheduled for February of 2024. Final Construction documents will be made available for bidding in April of 2025.**

7) *Please note that although the 2015 International Building Code (“IBC”) and 2018 International Energy Conservation Code (“IECC”) are in effect as the basis for the current 9th edition of the Massachusetts Building Code, a 10th edition of the Massachusetts Building Code based on the 2021 IBC and 2021 IECC (including any MA amendments) is currently scheduled to take effect in June 2023. Please acknowledge.*

- **Acknowledged; The District and its consultants are aware of this project will be permitted under the 2021 IBC and 2021 IECC.**

8) *The information provided indicates geotechnical subsurface test explorations were conducted on the existing Clinton Middle/High School site in 1954, 1974 and 1966. Additionally, the information provided states:*

“For all Addition/Renovation and New Construction options it should be assumed, for cost estimating purposes through Schematic Design, that a layer of fill and/or organic material will be removed and replaced with compacted structural fill to support new foundations”.

As part of the District’s PSR submittal, please provide any updated geotechnical and soils information.

- **Acknowledged; Any additional geotechnical and soils information will be provided in the Preferred Schematic Report.**

Also, in response to these review comments, provide the timeline associated with any additional site work and note that all cost increases subsequent to a Project Scope and Budget Approval from the MSBA’s Board of Directors will be the sole responsibility of the District. Please acknowledge.

- **Acknowledged; The District is aware of the implications of cost increases after the Project Scope and Budget agreement. Once the preferred solution is selected any additional site work that requires additional investigation will occur during the Schematic Design Phase.**

9) *Please note that costs associated with the removal of fuel storage tanks and associated contaminated soil is considered ineligible for reimbursement. Please acknowledge.*

- **Acknowledged; The District is aware that costs associated with the removal of fuel storage tanks and associated contaminated soil is considered ineligible for reimbursement.**

10) *The project team should be aware of the current policies associated with MSBA's participation in the abatement and removal of hazardous materials. However, please note and acknowledge that all costs associated with the removal of asbestos containing floor materials and ceiling tiles are considered ineligible for reimbursement.*

- **Acknowledged; The district and it's consultants are aware of the current policies associated with MSBA's participation in the abatement and removal of hazardous materials.**

11) *In response to these review comments, provide any previous existing building and/or site reports, studies, drawings, etc. provided by the District.*

- **As a part of the Designer's RFS, the following documents were either available for review on site or attached to the RFP.**
 - **A Building Study on the Middle School done by Arrowstreet Architects: Viral Transmission Risk Assessment & Mitigation Strategies**
 - **2017 Ahera 3 year reinspection report**
 - **2015 HVAC CMS Renovation Drawings**
 - **Summary level plans of the existing building plans scanned and included with the RFP with additional detail drawings available on site for review**
 - **Floor plans and Civil/Geotech information on the abutting high school building**

No further review comments for this section.

3.1.5 SITE DEVELOPMENT REQUIREMENTS

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
1	A narrative describing project requirements related to site development to be considered during the preliminary and final evaluation of alternatives.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Existing site plan(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

1) *In response to these review comments, please review and respond to the following items:*

- Describe how the site constraints are impacting the design options explored in the Preliminary Evaluation of Alternatives section.
- **The site constraints identified to date will have no impact on the options selected for further investigation in the Preferred Schematic Design.**
- As part of the District's PSR submittal, describe how the onsite number of parking spaces for staff and visitors will be determined. Describe whether the required parking will be determined by school needs, after-hours athletic/performance needs, and/or local zoning requirements. In addition, provide a timeline associated with the needed permits, filings, and reviews discussed in this section. Please acknowledge.
- **Acknowledged; The requirements/calculations used to determine the number of onsite parking spaces will be included in the Preferred Schematic Report.**
- As part of the District's PSR submittal, provide site section(s) that illustrates how the Preferred Schematic sits on the site and how the proposed location impacts access and circulation. Please acknowledge.
- **Acknowledged; The site sections of the Preferred Solution will be included in the Preferred Schematic Report.**

2) *In response to these review comments, provide the following for the existing school site:*

- Circulation diagrams that identify the existing:
 - Bus and parent drop-off/pick-up locations;
 - Vehicular and pedestrian circulation; and
 - Emergency vehicle access.
- **See attached.**
- Also, provide diagram(s) and a narrative that describes how a physically challenged individual currently accesses the existing building.
- **See attached.**

- *As part of the District’s PSR submittal, please provide circulation diagrams for all options explored as part of the Final Evaluation of Alternatives. Please acknowledge.*
- **Acknowledged; circulation diagrams for all options explored as part of the Final Evaluation of Alternatives will be included in the Preferred Schematic Report.**

No further review comments for this section.

3.1.6 PRELIMINARY EVALUATION OF ALTERNATIVES

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District’s response required</i>	Not Provided; <i>District’s response required</i>	Receipt of District’s Response; <i>To be filled out by MSBA Staff</i>
1	Analysis of school district student school assignment practices and available space in other schools in the district	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Tuition agreement with adjacent school districts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Rental or acquisition of existing buildings that could be made available for school use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Code Upgrade option that includes repair of systems and/or scope required for purposes of code compliance; with no modification of existing spaces or their function	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Renovation(s) and/or addition(s) of varying degrees to the existing building(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Construction of new building and the evaluation of potential locations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	List of 3 distinct alternatives (including at least 1 renovation and/or addition option) are recommended for further development and evaluation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

4) The information provided indicates “Option BR” is not viable because it does not meet the District’s educational program. Please note the District will be required to include a Code Upgrade option as part of the District’s PSR submittal for cost comparison purposes only. This option should include additional information that identifies the capacity of the existing Clinton Middle School associated with a repair option that does not propose any new construction square footage. Please acknowledge.

- **Acknowledged; the Code Upgrade “Option BR” will be included in the Preferred Schematic Report.**

7) As part of the Preliminary Evaluation of Alternatives, the District explored the following (15) options. The following (6) options denoted with an asterisk (*) are the options that the District intends to further evaluate as part of its PSR submittal:

- *Option BR: Code Upgrade/Base Repair for grades 5-8 with an enrollment of 550 students at the existing Clinton Middle School; with an estimated total project cost of \$82-\$88 million.*
- ***Option AR-1 (550)*:** Addition/Renovation (1-story Addition) for grades 5-8 with an enrollment of 550 students at the existing Clinton Middle School; with an estimated total project cost of \$96.2-\$103.5 million.*
- ***Option AR-1 (700)*:** Addition/Renovation (1-story Addition) for grades 4-8 with an enrollment of 700 students at the existing Clinton Middle School; with an estimated total project cost of \$106.9-\$114.9 million.*
- ***Option AR-2 (550)*:** Addition/Renovation (2-story Addition) for grades 5-8 with an enrollment of 550 students at the existing Clinton Middle School; with an estimated total project cost of \$106.3-\$114.4 million.*
- ***Option AR-2 (700)*:** Addition/Renovation (1-story Addition) for grades 4-8 with an enrollment of 700 students at the existing Clinton Middle School; with an estimated total project cost of \$120.5-\$129.6 million.*
- ***Option NC-1 (550)*:** New construction for grades 5-8 with an enrollment of 550 students at the existing site (at Softball Fields); with an estimated total project cost of \$108.8-\$117 million.*
- ***Option NC-1(700)*:** New Construction for grades 4-8 with an enrollment of 700 students at the existing Clinton Middle School site (at Softball Fields); with an estimated total project cost of \$115.9-\$124.6 million.*
- *Option NC-2 (550): New construction(Separation of “lower” and “upper” school) for grades 5-8 with an enrollment of 550 students at the existing Clinton Middle School site; with an estimated total project cost of \$103.9-\$111.7 million.*
- *Option NC-2 (700): New Construction (Separation of “lower” and “upper” school) for grades 4-8 with an enrollment of 700 students at the existing Clinton Middle School site; with an estimated total project cost of \$115.9-\$124.6 million.*
- *Option NC-3 (550): New construction (Cafeteria on the South) for grades 5-8 with an enrollment of 550 students at the existing Clinton Middle School site; with an estimated total project cost of \$107.4-\$115.5 million.*
- *Option NC-3 (700): New Construction (Cafeteria on the South) for grades 4-8 with an enrollment of 700 students at the existing Clinton Middle School site; with an estimated total project cost of \$115.9-\$124.6 million.*

- *Option NC-4 (550): New construction for grades 5-8 with an enrollment of 550 students at the existing Clinton Middle School site (at the current Parking); with an estimated total project cost of \$109.5-\$117.8 million.*
- *Option NC-4 (700): New Construction for grades 4-8 with an enrollment of 700 students at the existing Clinton Middle School site(at the current Parking); with an estimated total project cost of \$123.7-\$133 million.*
- *Option NC-5 (550): New construction for grades 5-8 with an enrollment of 550 students at the existing Clinton Middle School site (between the existing high school and the overhead electric power lines); with an estimated total project cost of \$111-\$119.3 million.*
- *Option NC-5 (700): New Construction for grades 4-8 with an enrollment of 700 students at the existing Clinton Middle School site (between the existing high school and the overhead electric power lines); with an estimated total project cost of \$123.7-\$133 million.*

In response to these review comments, provide a detailed narrative that clearly describes the reasons the District eliminated the following (8) options for further consideration:

- **The town engaged in an open and transparent voting process at the end of the PDP where the members of the public, school committee, finance committee, select board, school building committee, and the permanent building committee all cast their individual votes for their top three options. At a separate SBC/PBC meeting one week after the “all boards” presentation, there was further discussion and a role call vote to select options for further study. See below for the reasons the District eliminated the eight (8) options.**
- *Options NC-2 (550) and NC (700);*
- *Options NC-3 (550) and NC (700);*
 - **The design team and School Building Committee/Permanent Building Committee acknowledged that NC-1, NC-2 and NC-3 are very similar in that they all include a new construction building on the adjacent athletic fields. NC-1 was selected as the option for further study with the caveat that if there are aspects of the building form in NC-2 and NC-3 that are advantageous to the building or site program that those items will be considered and integrated into the further development of NC-1.**
- *Options NC-4 (550) and NC (700); and,*
 - **These options were eliminated for the following reasons:**
 - **The limited space between the existing building and West Boylston Street resulted in a less efficient elongated plan with comparatively more GSF area than most other options.**

- **The limited space also required that the building entry be located on the south side of the building where it would not be visible from the street.**
 - **The vehicular circulation for this option essentially surrounded the building perimeter on all sides. This would make separation of construction activities from school site circulation extremely challenging in the short term as well as limiting opportunities for direct connections between interior and outside program spaces permanently.**
 - **This option did not receive any votes to move forward to the Preferred Schematic Report.**
- *Option NC-5(550) and NC (700).*
 - **These options were eliminated for the following reasons:**
 - **The limited space between the overhead electric lines and the existing high school resulted in a less efficient 3-story solution with comparatively more GSF area than most other options.**
 - **Multiple program spaces lacked views to the exterior or had views of adjacent roofs.**
 - **The placement of classrooms above the gymnasium required difficult structural and acoustical solutions.**
 - **The placement of the new building in this option will create conflicts with high school bus, staff, parent and student traffic; not only temporarily but permanently after construction is complete.**
 - **The proposed site circulation includes a new driveway beneath the overhead electric lines which will require approval from the utility company (NGRID).**
 - **Test borings from the construction of the high school indicate a significant layer of unsuitable organic material in the footprint of the proposed middle school.**
 - **This option did not receive any votes to move forward to the Preferred Schematic Report.**

As part of the District's PSR submittal, please provide floor plan diagrams that include a key/legend for clarity that showcase all the spaces with adjacencies to further understand the connections of the proposed spaces.

- **Acknowledged; these floor plan diagrams will be included as part of the Preferred Schematic Report.**

Also, please continue to use the same naming convention of options as part of the District’s Final Evaluation of Alternatives in the PSR submittal. Please acknowledge.

- **Acknowledged; the same naming convention will be included as part of the Preferred Schematic Report.**

No further review comments for this section.

3.1.7 LOCAL ACTIONS AND APPROVAL

Provide the following Items		Complete; No response required	Provided; District’s response required	Not Provided; District’s response required	Receipt of District’s Response; To be filled out by MSBA Staff
1	Signed Local Actions and Approvals Certification: (original)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Certified copies of the School Building Committee meeting notes showing specific submittal approval vote language and voting results, and a list of associated School Building Committee meeting dates, agenda, attendees and description of the presentation materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

2) Please provide a certified copy of the meeting minutes when available. Please acknowledge.

- **See Attached.**

No further review comments for this section.

3.1.8 APPENDICES

Provide the following Items		Complete; No response required	Provided; District’s response required	Not Provided; District’s response required	Receipt of District’s Response; To be filled out by MSBA Staff
1	Current Statement of Interest	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	MSBA Board Action Letter including the invitation to conduct a Feasibility Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Design Enrollment Certification	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

3) Please refer to the comment above in Section 3.1.1, Item 3.

- **Acknowledged.**

No further review comments for this section.

Additional Comments:

- *Please note that as part of the upcoming Preferred Schematic submittal process, districts and their consultants are required to provide a summary overview of the proposed project to the MSBA Facilities Assessment Subcommittee (the "FAS"). In preparation, the MSBA requests that the District submit a complete PowerPoint of the FAS presentation with the PSR submittal. For your reference, the guidance memorandum for preparing an FAS presentation is attached.*
- **Acknowledged; The District will submit a complete PowerPoint of the FAS presentation with the PSR Submittal.**
- *The MSBA issues project advisories from time to time, as informational updates for Districts, Owner's Project Managers, and Designers in an effort to facilitate the efficient and effective administration of proposed projects currently pending review by the MSBA. The advisories can be found on the MSBA's website. In response to these review comments, please confirm that the District's consultants have reviewed all project advisories and they have been incorporated into the proposed project as applicable.*
- **Acknowledged; The District and its consultants have reviewed all project advisories and they have been incorporated into the proposed project as applicable.**

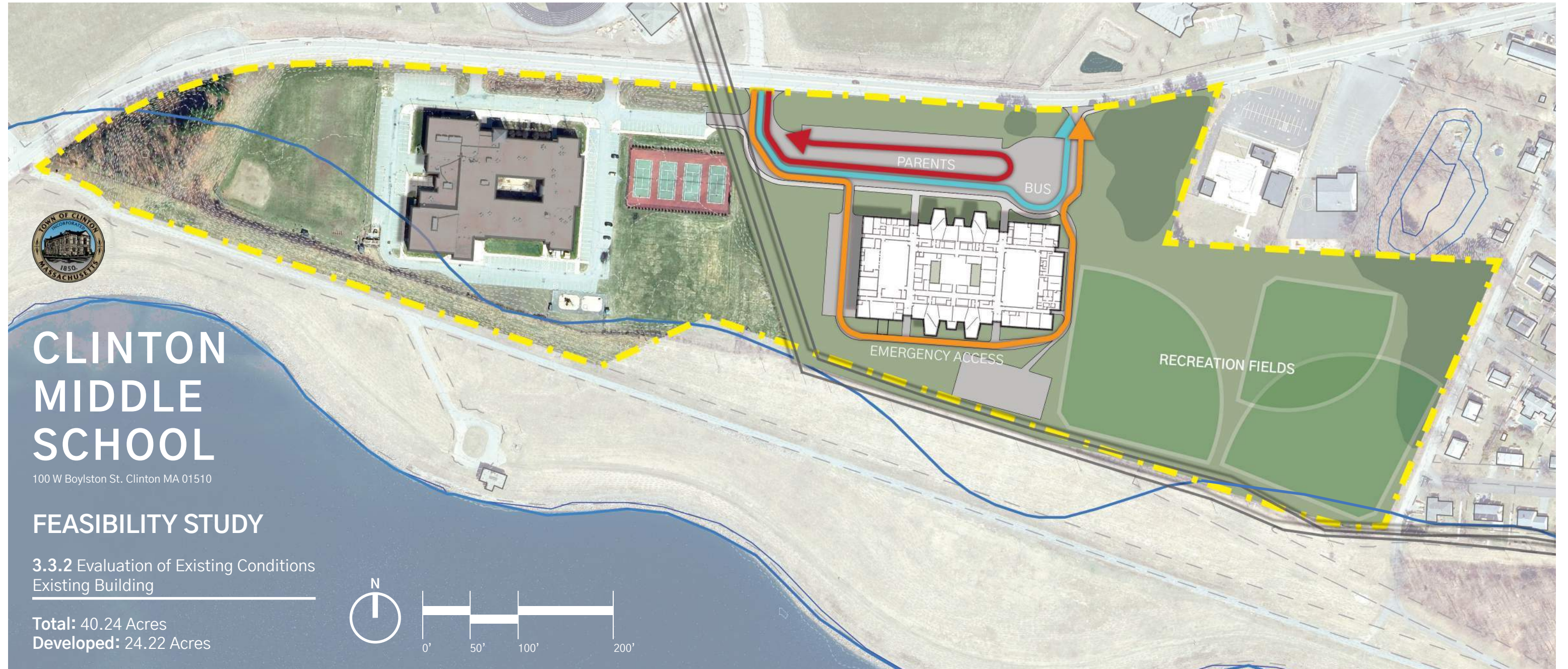
Regarding Past Projects:

Both the MSBA's enabling legislation, M.G.L. c. 70B, and the MSBA's regulations, 963 CMR 2.00 et seq. specifically, address the issue of past projects. MSBA records show a total MSBA payment of \$2,332,548 on March 2020 for the Clinton Middle School Project #C20003698 completed in December 1998.

Pursuant to these requirements and depending on the School District's ultimate plan for the School, the MSBA may recover a pro-rated portion of the financial assistance that the School District has received for previous renovation grants. The exact amount recovered will be established at the conclusion of the Schematic Design / Total Project Budget phase. Please see the MSBA website to view the MSBA's regulations, statute and closed school bulletin for additional information.

- **Acknowledged. It is the District's understanding that this payment was associated with an SBA project that is over 20 years old and would have no bearing on this project.**

End



CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Evaluation of Existing Conditions
 Existing Building

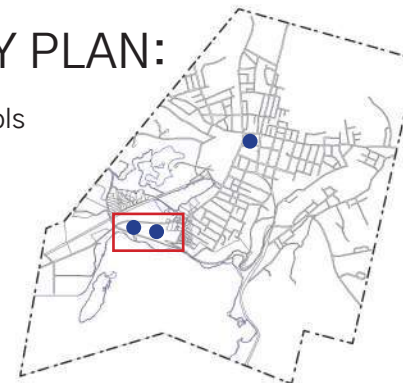
Total: 40.24 Acres
 Developed: 24.22 Acres



NOTES:

QUADRANT KEY PLAN:

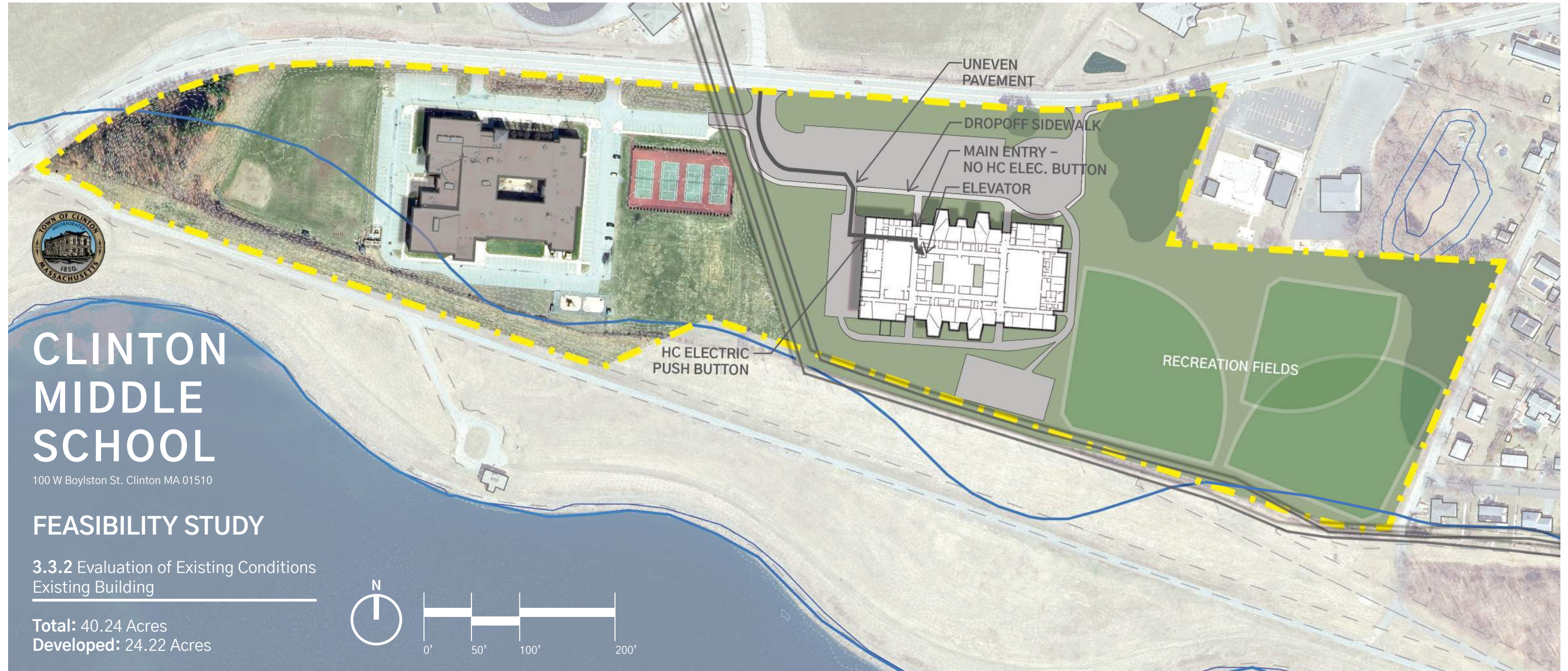
- Existing K-12 Schools
- Proposed Site



LEGEND:

- ▬ Parcel Property Line
- ▬ New Construction
- ▬ New Athletic Field
- ▬ Existing Building
- ▬ DCR Buffer Zone
- ▬ Bus Circulation
- ▬ Parent Circulation
- ▬ Access Road
- ▬ Pedestrian Access

EXISTING CONDITIONS : HANDICAPPED ACCESSIBILITY



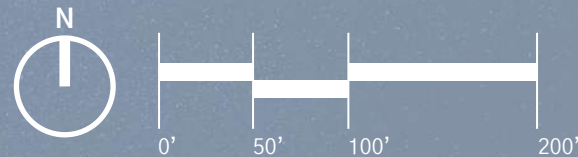
CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Evaluation of Existing Conditions
 Existing Building

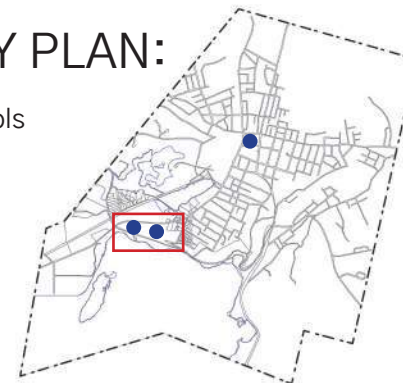
Total: 40.24 Acres
 Developed: 24.22 Acres



NOTES:

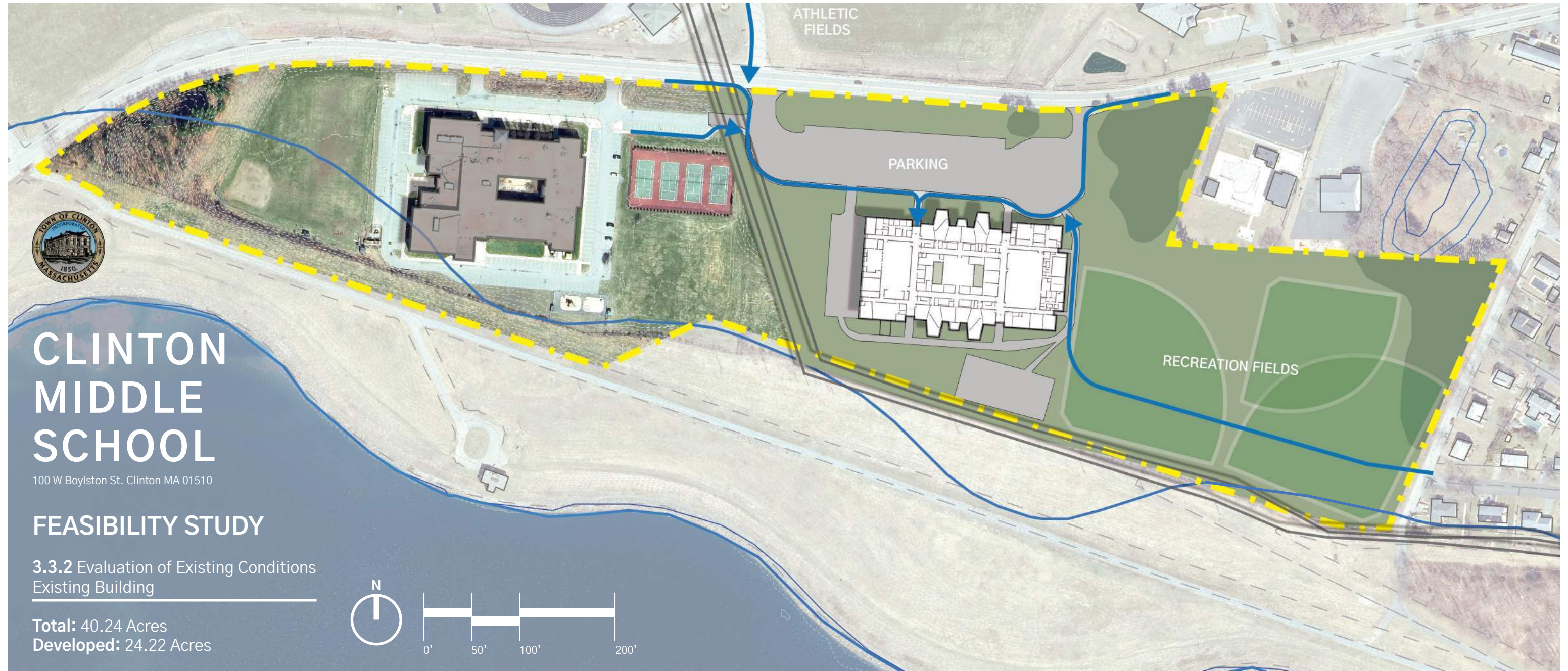
QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



LEGEND:

- ▬ Parcel Property Line
- ▬ New Construction
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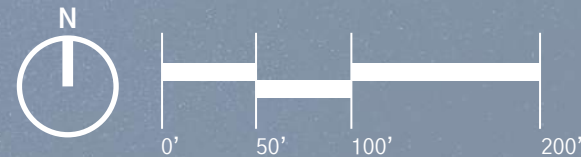
CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Evaluation of Existing Conditions
 Existing Building

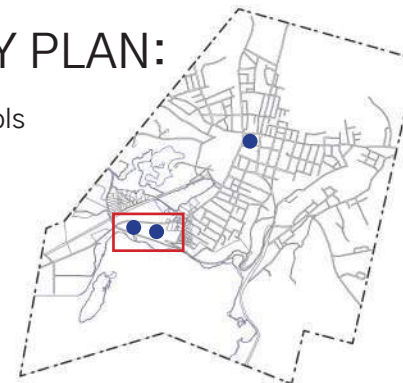
Total: 40.24 Acres
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NOTES:

QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



LEGEND:

- ▬ Parcel Property Line
- ▬ New Construction
- ▬ New Athletic Field
- ▬ Existing Building
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- ▬ Bus Circulation
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- ▬ Access Road
- ▬ Pedestrian Access



**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE
MEETING MINUTES**

Project: Clinton Middle School
 Subject: School Building Committee Meeting
 Location: 100 West Boylston Street, Clinton, MA 01510
 Distribution: Attendees, Project File

Project No: 202000640305
 Meeting Date: 03/21/2023
 Time: 6:30 PM
 Prepared By: E. Grijalva

Present	Name	Affiliation	Prese	Name	Affiliation
x	Michael Ward*	Town Administrator -PBC Member		Mike Burton	DWMP
	Sean Kerrigan	Selectman	x	Trip Elmore	DWMP
	Brendon Bailey	School Committee Chair		Steve Brown	DWMP
x	Matthew Varakis	School Committee Vice-Chair	x	Elias Grijalva	DWMP
x	Steven Meyer*	Superintendent – PBC Member		Mike Cox	DWMP
x	Brian Farragher	Director of Facilities		Rachel Rincon	DWMP
x	Chris McGown*	Chair of PBC, Head of DPW		Kathryn Crockett	LPAA
	Courtney Harter	CMS Principal	x	Peter Caruso	LPAA
x	Shane McCarthy	Teacher		Sean Brennan	LPAA
	Bill McGrail	Finance Committee Co-Chair	x	Christina Bazelmans	LPAA
x	Chris Magliozzi*	Vice-Chair of PBC	x	Eric Moore	LPAA
x	Michael Moran*	PBC Member			
	Brian Delory*	PBC Member			
	Timothy O'Toole*	PBC Member			
x	Phil Duffy	Director of Community & Econ.			
x	Kelly Turcotte	Special Education Parent Advisory			
	Laura Taylor	Parent-Teacher Association			
	Angelica Arroyo	English Learners Parent Advisor			

Item No.	Description	Action
10.1	<p>Call to Order: 6:35 PM meeting was called to order by PBC Chair C. McGown with 5 of 7 voting members in attendance.</p>	Record
10.2	<p>Previous Topics & Approval of March 07, 2023, Meeting Minutes: A motion to approve the 03/07/2023 meeting minutes was submitted by M. Ward and seconded by M. Moran.</p> <p>Discussion: None.</p> <p>Roll Call Vote: M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown (Y)</p> <p>All in favor, motion passes, March 07, 2023, meetings are certified as approved.</p>	Record
10.3	<p>LPA A Public All Boards Meeting Sticker Results Update:</p> <p>E. Moore briefly recaps each building option and provides the results from the All-Boards & Public straw poll vote that took place on March 15th, 2023. Committee members and members of the public are given (3) stickers to place on their favorite top (3) building option, to see what options the community is steering towards.</p> <p>Green Stickers: Committees opinion Red Stickers: Public opinion</p> <p><u>*Refer to March 21st, meeting package for pictures of the results</u></p> <p><u>Building Options:</u></p> <ul style="list-style-type: none"> • <u>Base Repair</u> (550 enrollment) • <u>Addition/ Renovation Building Options</u> (550 & 700 enrollment) <ul style="list-style-type: none"> ○ AR.1 (700 enrollment) – (3) votes ○ AR.2 (700 enrollment) – (21) votes • <u>New Construction Building Options</u> (550 & 700 enrollment) <ul style="list-style-type: none"> ○ NC.1 (700 enrollment)- (29) votes ○ NC.2 (700 enrollment)- (24) votes ○ NC.3 (700 enrollment)- (21) votes ○ NC.4 – (0) votes ○ NC.5- (0) votes 	Record

Discussion:

S. Meyer requested clarification on building option AR.1 vs AR.2 in terms of disruption to the students and minimizing modular or displacement of the students.

E. Moore both AR.1 & AR.2 will require the displacement of the students temporarily, either through modular classrooms by or building out an addition, keep in mind that building an addition will prolong the project. In either case, you're going to have to drive down the student population and then it's a matter of hopscotching around the building, so in this option, we would have to take advantage of the summer vacations to maximize productivity.

P. Duffy asked if we are obligated to explore AR.1 & AR.2.

E. Moore the MSBA requires you to study an option that maximizes the use of the existing building.

C. McGown states that the executive committee has had a lengthy discussion regarding the building options, and we think that building options NC.1, NC.2, and NC.3 are basically the same with slight variations. AR.1 appears to be the least expensive AR.2 with a major renovation. One of our thoughts was to pick (1) of the new construction and pick both AR.1 and AR.2 which will give us a range of projects for further study.

C. Magliozzi agrees with C. McGown. If you pick the two renovation numbers, you get the cheapest renovation, and you'll get an expensive renovation with varying degrees of disruption. I think that the New Construction options one through three are essentially the same project when you go through the actual design.

M. Varakis' response I don't disagree with you. I think the part that shouldn't get lost here is it makes no sense to go down the path of AR.1 and AR.2 if they don't really satisfy the optimal Educational Plan, which is what we're here for. This is not just a construction project, it's an education project.

C. Bazelmans refers to the building options AR.1 and AR.2, those building options did respectively score a 3 and 4, which indicates that it meets the space needs, but the adjacencies are not quite there, because certain spaces like the gym will stay in its current location. We wouldn't have provided these options if it was a total flop. There are pros and cons to consider in the building options.

M. Moran ask if across the street is an option for a new building. I think it would be the least disruptive for a new building.

E. Moore responded with the land is considered article 97 land which is open space. To change the status, you'll need a vote in the legislature.

	<p>M. Ward we're trying to figure that out. There was a vote in the legislature to transfer the property to the town.</p> <p>P. Duffy from a practical matter if this land is still under article 97. You're talking about a substantial delay to get back into the legislature or the process for the article 97 disposition.</p> <p>S. Meyer, I don't see why that site would be any more advantageous than the locations already suggested in the building options.</p> <p>T. Elmore to P. Duffy's point, when we were looking at the site, article 97 was a deterrent looking at that location.</p> <p>S. Meyer we are all in agreement that building options NC.1, NC.2, and NC.3 are essentially the same option. I think we are also in agreement to move forward with AR.1, AR.2, and NC.1, which will give us a good cost comparison between the options.</p>	
10.4	<p>School Building Committee Discussion and SBC Poll Vote for Preferred option</p> <p>C.McGown states that I think we have all come to a consensus from the previous discussion. We can move forward to the next agenda item.</p> <p>Discussion: None</p>	Record
10.5	<p>PBC and SBC Vote on top (3) building options for PDP submission.</p> <p>Top (3) building options PBC results:</p> <ul style="list-style-type: none"> o M.Ward: AR.1(700), AR.2(700), NC.2(700) o S. Meyer: AR.1(700), AR.2(700), NC.1(700) o C. Magliozzi: AR.1(700), AR.2(700), NC.1(700) o M.Moran AR.1(700), AR.2(700), NC.3(700) o C.McGown: AR.1(700), AR.2(700), NC.1(700) <p>Total Results: (5) AR.1, (5) AR.2, (3) NC.1, (1) NC.2, (1) NC.3 <u>*700 enrollment building options</u></p> <p>A motion was made by C. Magliozzi and seconded by S. Meyer to select building options AR.1 (700), AR.2(700), and NC.1(700) for the PDP submission.</p> <p>Discussion: None</p> <p>All in favor, unanimous vote, motion passes.</p>	Record

10.6	<p>Permanent Building Committee Vote to submit PDP to MSBA</p> <p>A motion was made by M. Moran and seconded by M. Ward to select building options AR.1 (700), AR.2(700), and NC.1(700) for further study in the next phase of the project and to have the OPM and Architect submit the PDP to the MSBA for their review and comments.</p> <p>Discussion: None</p> <p>All in favor, unanimous vote, motion passes.</p>	Record
10.5	<p>Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.</p> <p>Discussion: None.</p>	Record
10.6	<p>Public Comment:</p> <p>Discussion: None</p>	Record
10.7	<p>Next Meeting:</p> <ul style="list-style-type: none"> • SBC Meeting No .011- April 25th, 2023 – virtual meeting. 	Record
10.8	<p>Adjourn 7:39 PM A motion was made by C. Magliozzi and seconded by M. Moran to adjourn the meeting.</p> <p>Discussion: None.</p> <p>All in favor, the meeting is adjourned.</p>	Record

Sincerely,
 DORE + WHITTIER

Elias Grijalva
 Assistant Project Manager
 Cc: Attendees, File

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

3.3.1 INTRODUCTION

C. Updated Project Directory

OWNER

Town of Clinton
Clinton Town Hall
242 Church Street
Clinton, MA 01510

Michael Ward, Town Administrator
Tel: (978) 365-4120
Email: mward@clintonma.gov

Sean Kerrigan, Selectman
Tel: (978) 365-4120
Email: skerrigan@clintonma.gov

Bill McGrail, Co-Chair
Finance Committee
Tel: (978) 365-4110
Email: wmcgrail@mmp.org

Brian Farragher, Director of Facilities
Facilities & Grounds Department
Tel: (978) 365-4171
Email: bfarragher@clintonma.gov

Phil Duffy, Director
Community & Economic Development
Tel: (978) 365-4114
Email: pduffy@clintonma.gov

Angelica Arroyo, English Learners Parent Advis.
Council
Tel: (508) 615-7442
Email: angielinaa@gmail.com

Clinton Public Schools
150 School Street
Clinton, MA 01510

Steven Meyer, Superintendent
Tel: (978) 365-4200 c. 978-962-1431
Email: smeyer@clinton.k12.ma.us

School Building Committee

Michael Ward, Town Administrator

Tel: (978) 365-4120

Email: mward@clintonma.gov

* PBC Voting member

Sean Kerrigan, Selectman

Tel: (978) 365-4120

Email: skerrigan@clintonma.gov

Brendan Bailey, School Committee Chair

Tel: (978) 365-4112, c (978) 809-8940

Email: bbailey@clintonma.gov

Matthew Varakis, School Comm. Vice-Chair

Tel: (978) 365-4200

Email: mvarakis@comcast.net

Steven Meyer, Superintendent

Tel: (978) 365-4200 c. 978-962-1431

Email: smeyer@clinton.k12.ma.us

*PBC Voting member

Brian Farragher, Director of Facilities

Facilities & Grounds Department

Tel: (978) 365-4171

Email: bfarragher@clintonma.gov

Chris McGown, Chair

Tel: (978) 365-4110

Email: cmcgown@clintonma.gov

*PBC Voting member

Courtney Harter, Principal

Tel: (978) 365-4220

Email: harterc@clinton.k12.ma.us

Shane McCarthy, Teacher

Tel: (617) 833-2568

Email: shanefmccarthy11@gmail.com

Bill McGrail, Co-Chair

Finance Committee

Tel: (978) 365-4110

Email: wmcgrail@mmp.org

Chris Magliozzi, Vice-Chair

Tel: (978) 368-1637

Email: cmagliozzi@fbcconstruction.com

*PBC Voting member

Michael Moran, Member

Tel: (978) 368-0355

Email: mjm@cmmoran.net

*PBC Voting member

Brian Delory, Member

Tel: (978) 857-7395

Email: brian.delorey@gmail.com

*PBC Voting member

Timothy O'Toole, Member

Tel: (508) 328-1009

Email: tim.otoole66@gmail.com

*PBC Voting member

Phil Duffy, Director

Community & Economic Development

Tel: (978) 365-4114

Email: pduffy@clintonma.gov

Kelly Turcotte, Special Education Parent Advisory
Council

Tel: (508) 667-5452

Email: Kellyturcotte7@gmail.com

Laura Taylor, Parent-Teacher Association

Tel: (781) 929-7178

Email: Taylorfamily01510@outlook.com

Angelica Arroyo, English Learners Parent
Advisory Council

Tel: (508) 615-7442

Email: angielinaa@gmail.com

School Committee (separate from School Building Committee—listing Chair & Vice-Chair only)

Brendan Bailey, School Committee Chair
Tel: (978) 365-4112, c (978) 809-8940
Email: bbailey@clintonma.gov

Matthew Varakis, School Comm. Vice-Chair
Tel: (978) 365-4200
Email: mvarakis@comcast.net

Clinton Middle School
100 West Boylston Street
Clinton, MA 01510

Courtney Harter, Principal
Tel: (978) 365-4220
Email: harterc@clinton.k12.ma.us

Shane McCarthy, Teacher
Tel: (617) 833-2568
Email: shanefmccarthy11@gmail.com

MSBA

40 Broad Street, Suite 500
Boston, MA 02109

Allison Sullivan, Project Coordinator
Email: allison.sullivan@massschoolbuildings.org

Veatriki Dagkalakou, Project Manager
Email:
veatriki.dagkalakou@massschoolbuildings.org

OPM

Dore + Whittier
220 Merrimac Street
Building 7, 2nd Floor
Newburyport, MA 01950

Trip Elmore, Project Director
Tel: (978) 914-5507
Email: telmore@doreandwhittier.com

Steve Brown, Sr. Project Manager
Tel: (617) 947-5258
Email: sbrown@doreandwhittier.com

Mike Cox, Project Manager
Tel: (781) 492-6289
Email: mcox@doreandwhittier.com

Elias Grijalva, Asst. Project Manager
Tel: (603) 867-7977
Email: EGrijalva@doreandwhittier.com

Rachel Rincon, Asst. Project Manager

Tel: (617) 650-3204

Email: rrincon@doreandwhittier.com

ARCHITECT

Lamoureux Pagano Assoc. | Architects

108 Grove Street

Suite 300

Worcester, MA 01605

Kathryn Crockett, AIA, LEED AP

Principal-In-Charge

Tel: (508) 752-2831 Fax: (508) 757-7769

Email: kcrockett@lpaa.com

Eric D. Moore, AIA, Senior Project Architect and

Laboratory Consultant

Email: emoore@lpaa.com

Sean Brennan, AIA, Project Architect

Email: sbrennan@lpaa.com

Peter A. Caruso Jr., AIA, LEED AP, Project Manager

Email: pcaruso@lpaa.com

Christina Bazelmans, AIA, LEED AP BD+C

Ed Programming/Sustainable Design/Library Media

Email: cbazelmans@lpaa.com

Christopher Lee, Technology/BID Specialist

Email: clee@lpaa.com

CONSULTANTS

Site/Civil

Nitsch Engineering
120 Front Street
Worcester, MA 01610

Matthew Brassard, PE, Exec. Project Manager
Tel: (508) 365-1035
Email: mbrassard@nitschengdc.com

Jared Gentilucci, PE, Project Manager
O: (508)365-1032
Email: jgentilucci@nitscheng.com

Chelsea Christenson, PE, Project Manager
O: (508) 365-1031

Traffic

Nitsch Engineering, Inc.
2 Center Plaza, Suite 430
Boston, MA 02108

Brian Zimolka, PE, ENV SP Traffic Sr. Project Mgr.
(617) 388-0063
Email: bzimolka@nitscheng.com

Site Surveying

Nitsch Engineering, Inc.
2 Center Plaza, Suite 430
Boston, MA 02108

Denis Seguin, Directory of Land Surveying
(617) 388-0063
Email: dseguin@nitscheng.com

Landscape Architecture

Studio 2112
840 Summer Street, Suite 102
Boston, MA 02127

Lynne Giesecke, Principal
Tel: (857) 350-3856
Email: lgiesecke@studio2112la.com

Educational Programming

New Vista Design
32 Sheridan Street, Suite 2
Jamaica Plain, MA 02130

David Stephen
Tel: (617) 733-0847
Email: david@newvistadesign.net

Structural

Bolton & DiMartino Inc.
100 Grove Street
Worcester, MA 01605

Chris Tutlis, PE
Tel: (508) 756-8972 Fax: (508) 757-9750
Email: chris@boltonanddimartino.com

Fire Protection

Sensible Solutions
64 Knightly Road
Hadley, MA 01035

Lily Kara Barak, PE, President
Tel: (413) 427-7290 Fax: (413) 549-5593
Email: lkbarak@crocker.com

Plumbing Engineering & HVAC

Seaman Engineering Corp.
22 West Street, Unit C
Millbury, MA 01527

Kevin Seaman, PE President
Tel: 508-865-1400
Email: Kevin@seamanengineers.com

Chris Robinson, PE. Plumbing Engineer
Email: chris@seamanengineers.com

Derek Mathieu
Email: derek@seamanengineers.com

Acoustical/Theatrical Consultant

Cavanaugh Tocci Associates
327 F Boston Post Road
Sudbury, MA 01776

Lincoln Berry, Principal – Acoustics
Tel: (978) 443-7871
Email: LBerry@cavtocci.com

Alexander Bagnall, Principal – Theatrical
Tel: (978) 443-7871
Email: ABagnall@cavtocci.com

Technology

Edvance Technology
300 Brickstone Square, Suite 201
Andover, MA 01880

Scott Goodrich, President
Tel: (978) 256-9900
Email: sgoodrich@edvancetech.com

Electrical/Lighting, Data/Communications, Security

ART Engineering Corp.
38 Front Street, 3rd Flr
Worcester, MA 01608

Azim Rawji, P.E. Principal
Tel: (508) 797-0333 Fax: (508) 797-5130
Email: azim@artengineering.us

Aly Rawji, Project Manager
Email: aly@artengineering.us

Robbie Burnett
Email: rburnett@artengineering.us

Kitchen/Food Service

Colburn & Guyette Consulting
100 LedgeWood Place, Suite 104
Rockland, MA 02370

Todd Guyette
Tel: (781) 826-5522 Fax: (781) 826-5523
Email: rtg@colburnguyette.com

Ed Arons, Project Manager
Email: earons@colburnguyette.com

Sustainable Design

The Green Engineer
23 Bradford Street, 1st Floor
Concord, MA 01742

Chris Schaffner, President
Tel: (978) 369-8978 x 102
Email: chris@greenengineer.com

Carrie Havey, LEED AP, Project Manager
Tel: (978) 369-8978
Email: carrie@greenengineer.com

Hazardous Materials

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Ammar Dieb, President
Tel: (508) 628-5486 Fax: (508) 628-5488
Email: adieb@uec-env.com

Cost Estimating

A.M. Fogarty & Associates
175 Derby Street, Suite 5
Hingham, MA 02043

Peter Timothy, President
Tel: (781) 749-7272 x202
Email: ptim@amfogarty.com

Specifications Consultant

Architx
5 Topsy Drive
Stafford Springs, CT 06076

Traci R. Hillebrecht, Principal
Tel: (860) 872-9627
Email: traci@architx.net

Geotechnical

Lahlaf Geotechnical Consulting
23 McGuinness Way
Billerica, MA 01821

Abdelmadjid (Madjid)Lahlaf, PE., PhD, Principal
Tel: (978) 330-5912 Fax: (978) 330-5056
Email: madjid.lahlaf@lgcinc.net

GeoEnvironmental

Lord Environmental, Inc.
1506 Providence Highway – Suite 30
Norwood, MA 02062-4647

Ralph Tella, President
Tel: (781) 255-5554 ext 1004
Email: RTella@lordenv.com

Accessibility/Code Consultant

RW Sullivan Engineering
529 Main Street, Suite 203
Boston, MA 02129

Don E. Contois, P.E.
Tel: (617) 337-9312
Email: dec@rwsullivan.com

MSBA Module 3

Feasibility Study PSR

3.3.1 INTRODUCTION

C. Updated Project Directory

Furniture & Fixtures Consultant

Blueline Design
The Amherst Building
34 Main Street
Amherst, MA 01002

Mindi Sahner
Tel: (413) 253-3080 Fax: (413) 256-6456
Email: msahner@aol.com

3.3.2 EVALUATION OF EXISTING CONDITIONS

- A. Narrative Summary
- B. Supporting Documents

3.3.2 EVALUATION OF EXISTING CONDITIONS

A. Narrative Summary

Since the submission of the PDP in March 2023, there was further development of information, relative to the existing conditions, that will inform or impact the final evaluation of alternatives. This includes the following items:

- A site survey was conducted by Nitsch Engineering in May 2023 that provided metes and bounds, topography, and utility information for the middle school site including entire property east of the existing transmission lines that bisect the site between the existing high and middle schools.
- A determination was made by the Department of Conservation and Recreation (DCR), Division of Water Supply Protection, that the existing site is located outside the DCR's jurisdiction and that no further action is needed thru them. Refer to 3.3.2, B for the official letter.

Below is a summary description of additional testing recommended for future phases:

- A geotechnical exploration program, including test pits/borings located at the existing Clinton Middle School site as recommended by the geotechnical engineer and based on the District's Preferred Solution, is proposed during the SD phase. Based on information on the high school and middle school construction documents previously provided by the Town, the understanding is that there may be poor soil conditions that will need to be further evaluated.

Lastly, as an update to the deed information provided in the PDP, the Town of Clinton continues to work with National Grid (NGRID) to record a previous land swap on the existing middle school property relative to overhead electric transmission lines that were relocated to accommodate the construction of the middle school in 1976. The Town's continued understanding is that the formal recording of the deed is not expected to impact the project timeline. Please review the attached letter from the Town in section 3.3.2, B for further information.

3.3.2 EVALUATION OF EXISTING CONDITIONS

B. Supporting Documents

1. DCR Advisory Ruling
2. Site Plan-Existing
Conditions: Vehicular
Circulation
3. Site Plan-Existing
Conditions: Pedestrian
Access
4. Site Plan-Existing
Conditions: Handicapped
Accessibility
5. Existing Site-Survey
6. Deed Update Letter



Division of Water Supply Protection
Office of Watershed Management
Wachusett/Sudbury Section

WA2023-006

3/28/2023

Chelsea Christenson
Nitsch Engineering
370 Main Street, Suite 850
Worcester, MA 01608

RE: *REQUEST FOR ADVISORY RULING - WATERSHED PROTECTION ACT*
100 West Boylston Street, Clinton
Assessor Map 132, Parcel 3659

Dear Ms. Christenson:

The Department of Conservation & Recreation (DCR), Division of Water Supply Protection has reviewed your proposal for proposed site work at the Clinton Middle School as described in your letter dated March 17, 2023. The Division has determined the parcel **is located outside areas of jurisdiction.** Therefore, no further action is needed. Further specific information regarding this ruling and the jurisdiction of the Act relative to your lot and your proposal is included below.

Division staff have reviewed the jurisdictional areas of the Watershed Protection Act (WsPA) relative to the parcel and have determined your proposed project is located outside all WsPA jurisdictional areas.

In summary, your project can proceed without further review by this office. Please be aware, should your activity cause a pollutant to enter a watershed resource, you could still be subject to enforcement under the Watershed Protection Act. Please feel free to contact Bernadette DeBlander at Bernadette.DeBlander2@mass.gov or 857-303-5427 if you have any questions regarding this Advisory Ruling.

Sincerely,

Kelley Freda
Regional Director, Wachusett Watershed

Enclosure: Watershed Protection Act map

Cc by email: Steven C. Meyer, Superintendent Clinton Public Schools
Town of Clinton Building Inspector

COMMONWEALTH OF MASSACHUSETTS · EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

Department of Conservation and Recreation
180 Beaman Street
West Boylston, MA 01583
508-792-7423
www.mass.gov/dcr



Maura T. Healey
Governor

Kimberly L. Driscoll
Lt. Governor






Rebecca L. Tepper, Secretary
Executive Office of Energy & Environmental Affairs

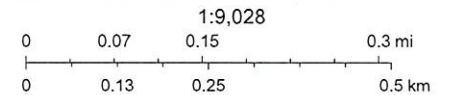
Douglas J. Rice, Commissioner
Department of Conservation & Recreation

Watershed Protection Act Property Determination Map

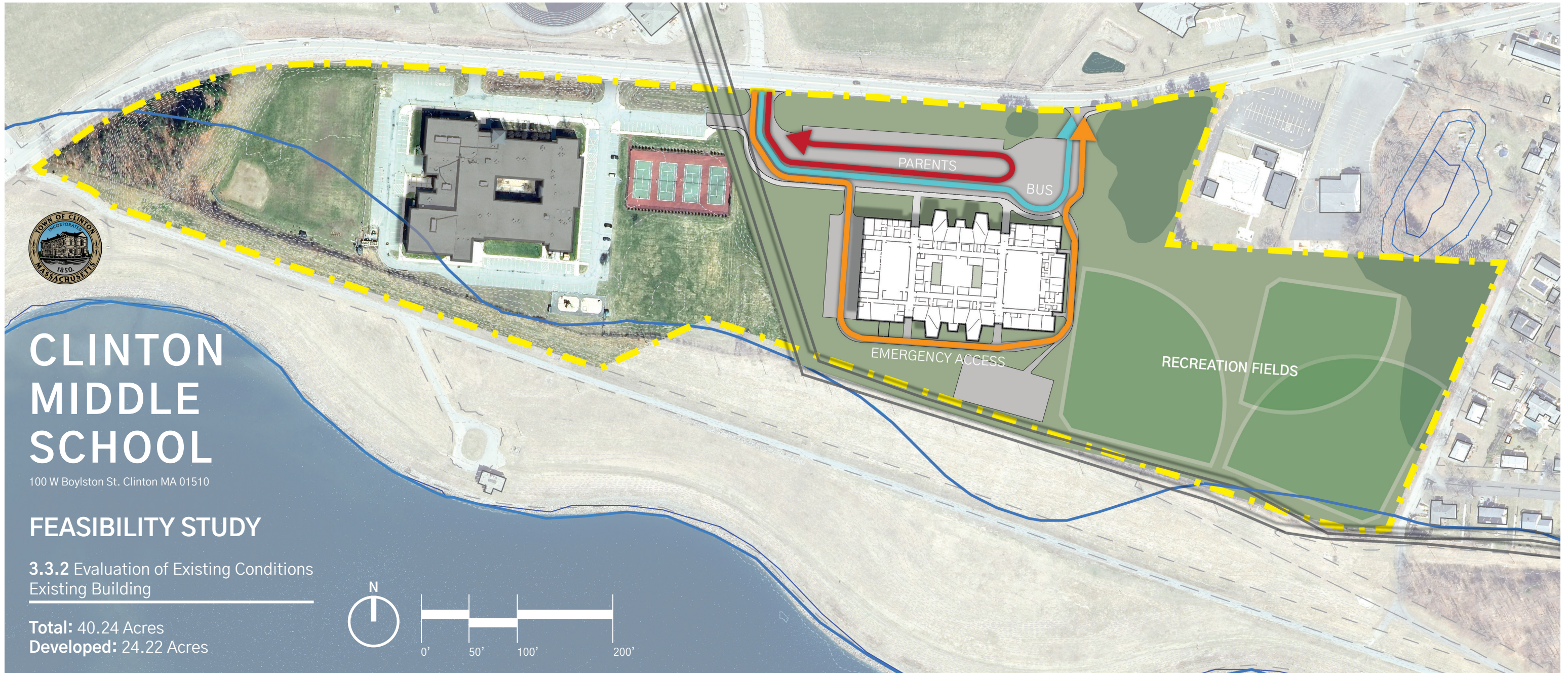


3/22/2023, 3:15:02 PM

-  DCR/DWSP Fee-Owned Land
-  Watershed Boundary
-  Primary Protection Zone Buffer
-  Low Yield Aquifers
-  WsPA Affected Parcels (2022)



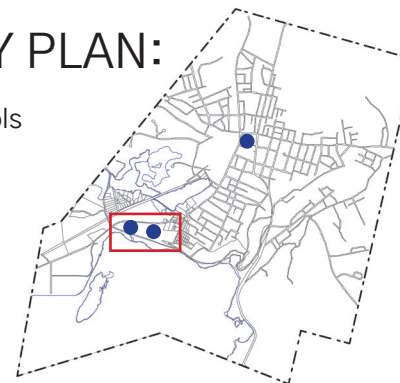
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NOTES:

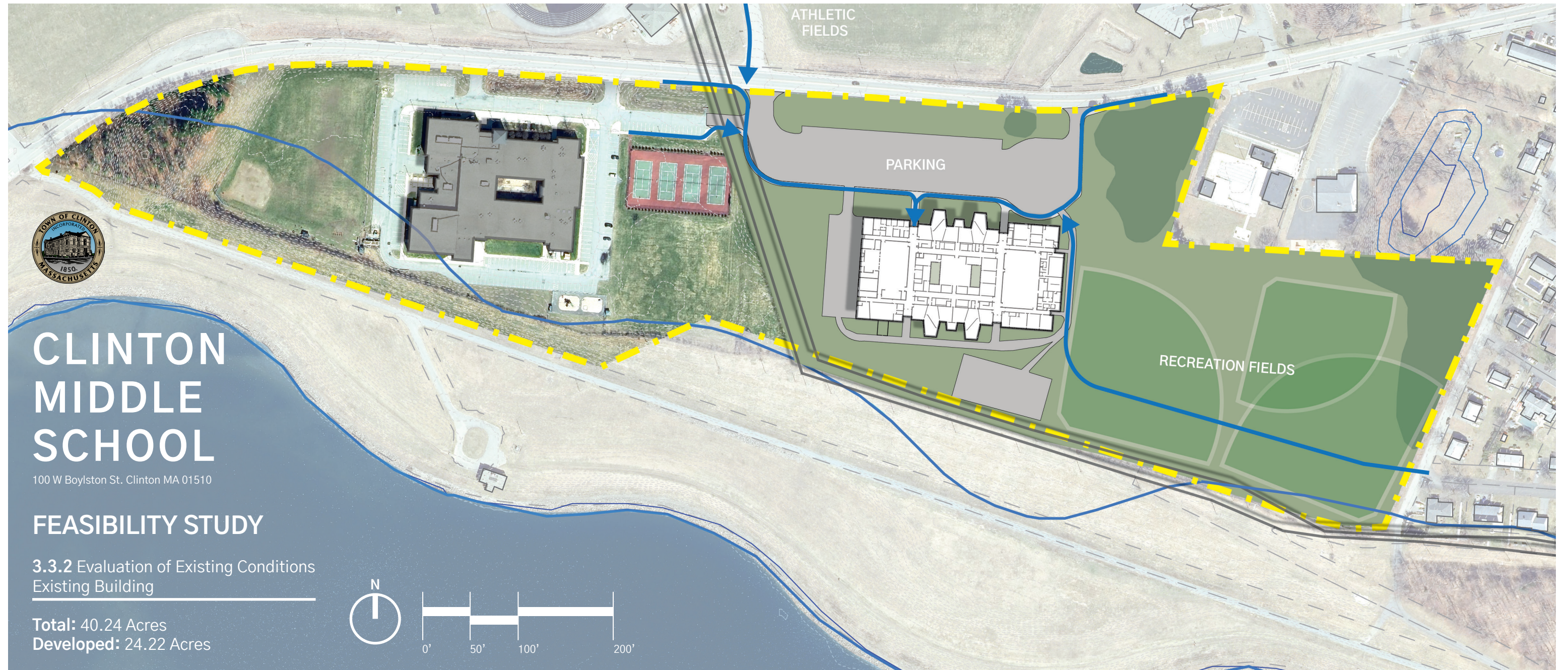
QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



LEGEND:

- ▬ Parcel Property Line
- ▬ New Construction
- ▬ New Athletic Field
- ▬ Existing Building
- ▬ DCR Buffer Zone
- ▬ Bus Circulation
- ▬ Parent Circulation
- ▬ Access Road
- ▬ Pedestrian Access



CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

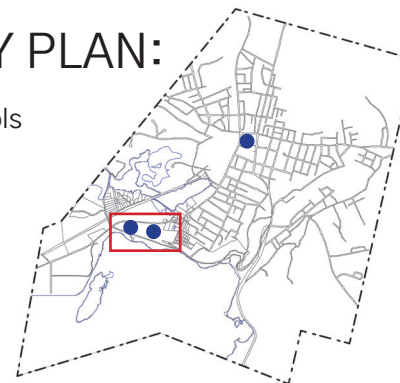
3.3.2 Evaluation of Existing Conditions
Existing Building

Total: 40.24 Acres
Developed: 24.22 Acres

NOTES:

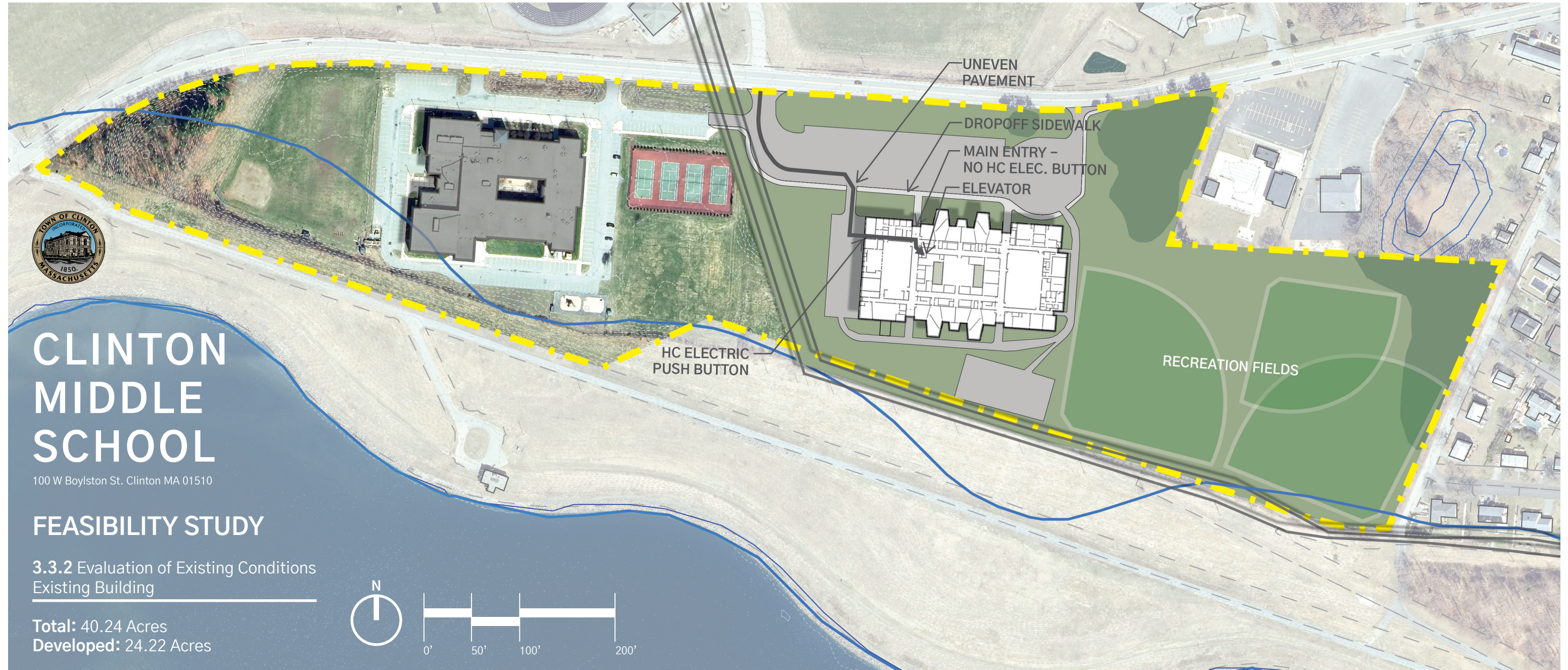
QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



LEGEND:

- Parcel Property Line
- New Construction
- New Athletic Field
- Existing Building
- DCR Buffer Zone
- Bus Circulation
- Parent Circulation
- Access Road
- Pedestrian Access



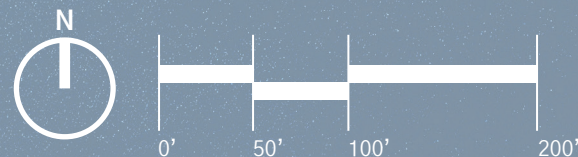
CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Evaluation of Existing Conditions
Existing Building

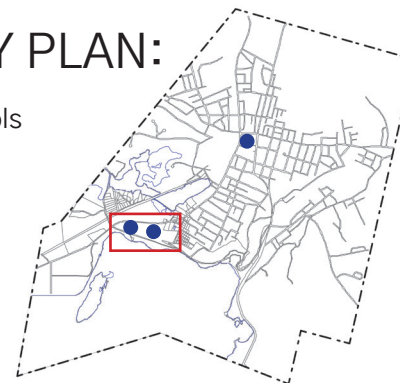
Total: 40.24 Acres
Developed: 24.22 Acres



NOTES:

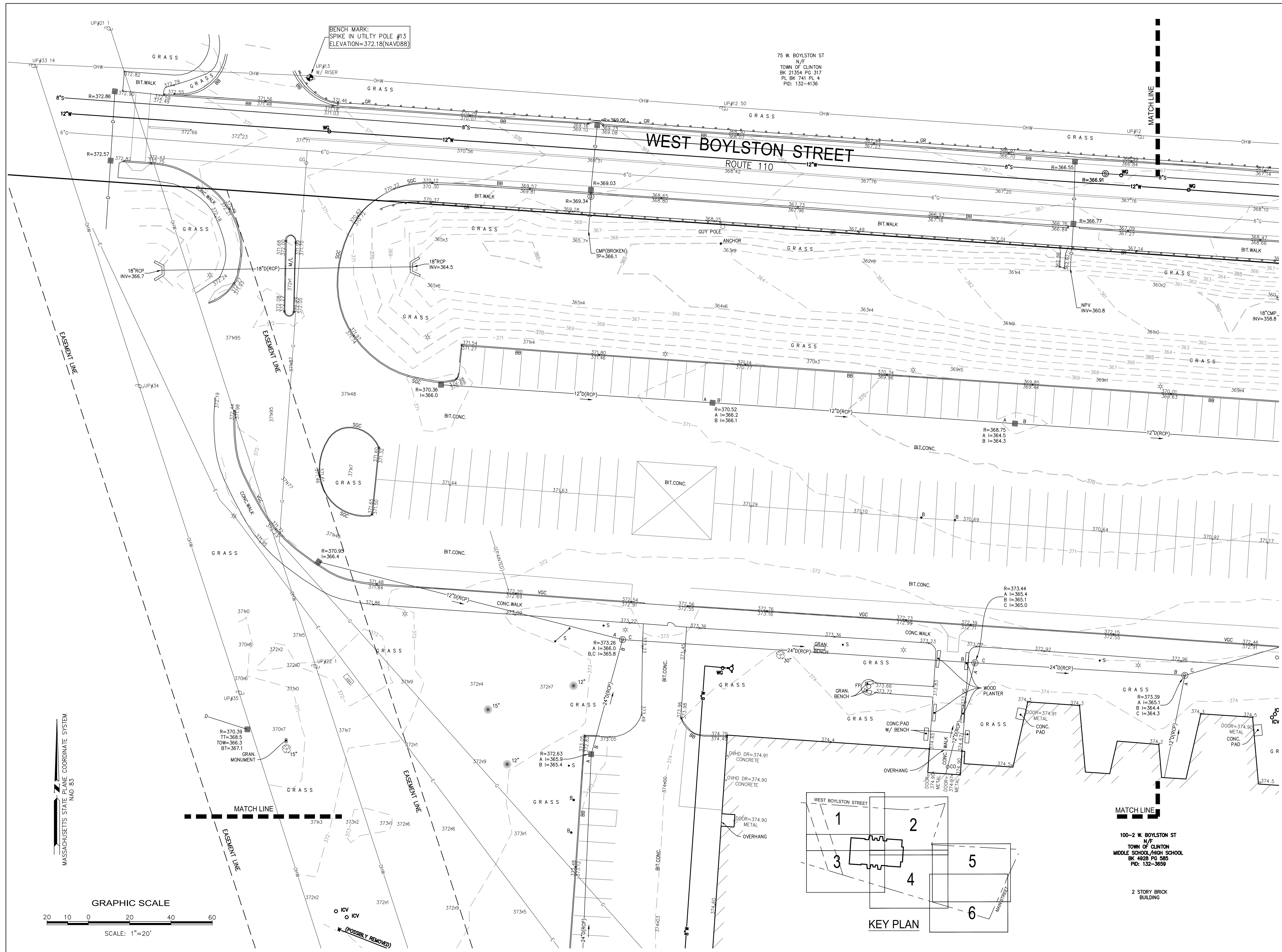
QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



LEGEND:

- Parcel Property Line
- Bus Circulation
- New Construction
- Parent Circulation
- New Athletic Field
- Access Road
- Existing Building
- Pedestrian Access
- DCR Buffer Zone



LAMOUREUX PAGANO
ASSOCIATES ARCHITECTS
108 Grove Street, Suite 300
Worcester MA 01605
508.752.2831
www.lpaa.com

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CONSULTANT

Nitsch Engineering
www.nitscheng.com
370 Main Street, Suite 850
Worcester, MA 01608
T: (508) 365-1030
F: (617) 338-6472

PROJECT

MSBA Module 3

Clinton Middle School

100W Boylston St, Clinton MA 01510

DRAWING TITLE

Existing Conditions Plan

REVISIONS

No.	Description	Date

DRAFT

FILE: #15181.1

JOB NO: #15181.1

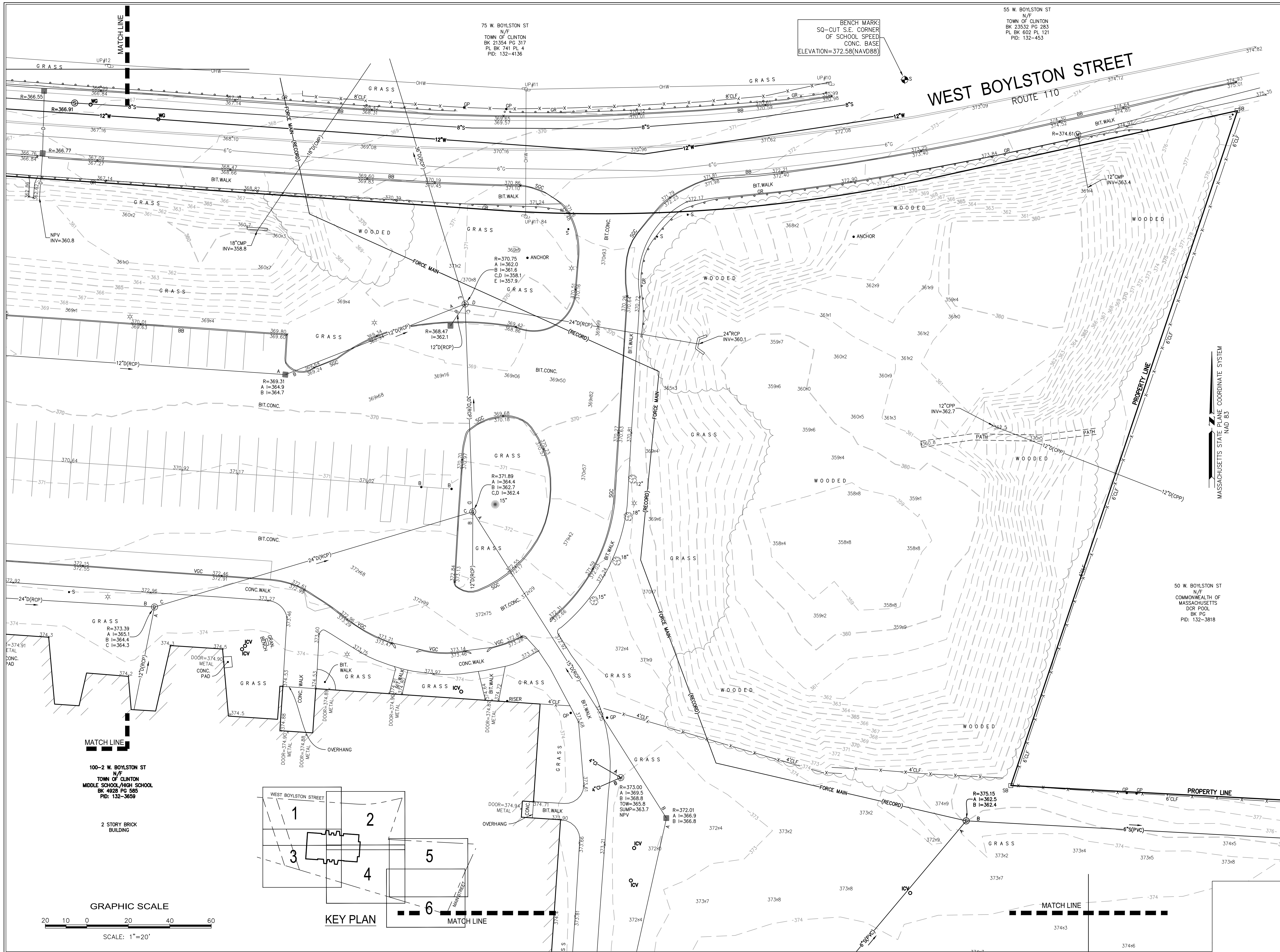
SCALE: 1"=20'

DWN. BY: CPH

CKD. BY: Checker

DATE: JUNE 22, 2023

EX-1



55 W. BOYLSTON ST
N/F
TOWN OF CLINTON
BK 23532 PG 283
PL BK 602 PL 121
PID: 132-453

BENCH MARK:
SQ-CUT S.E. CORNER
OF SCHOOL SPEED
CONC. BASE
ELEVATION=372.58(NAVD88)

WEST BOYLSTON STREET
ROUTE 110

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ASSOCIATES ARCHITECTS
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F: (617) 338-6472

PROJECT

MSBA Module 3

Clinton Middle
School

100W Boylston St, Clinton MA 01510

DRAWING TITLE

Existing
Conditions
Plan

REVISIONS

No.	Description	Date

DRAFT

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SCALE: 1"=20'
DWN. BY: CPH
CKD. BY: Checker
DATE: JUNE 22, 2023

EX-2

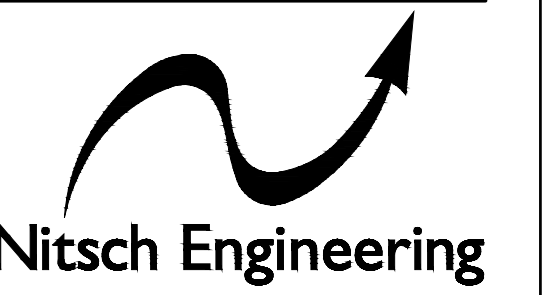
MASSACHUSETTS STATE PLANE COORDINATE SYSTEM
NAD 83

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PROJECT

MSBA Module 3

Clinton Middle School

100W Boylston St, Clinton MA 01510

DRAWING TITLE

Existing
Conditions
Plan

REVISIONS

No.	Description	Date

DRAFT

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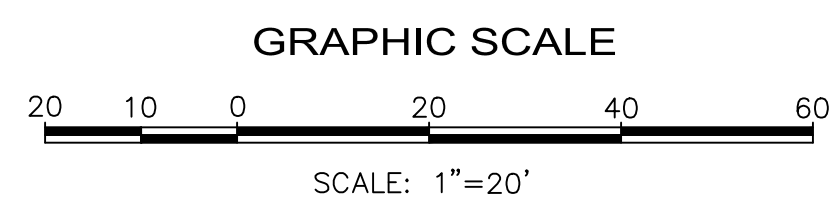
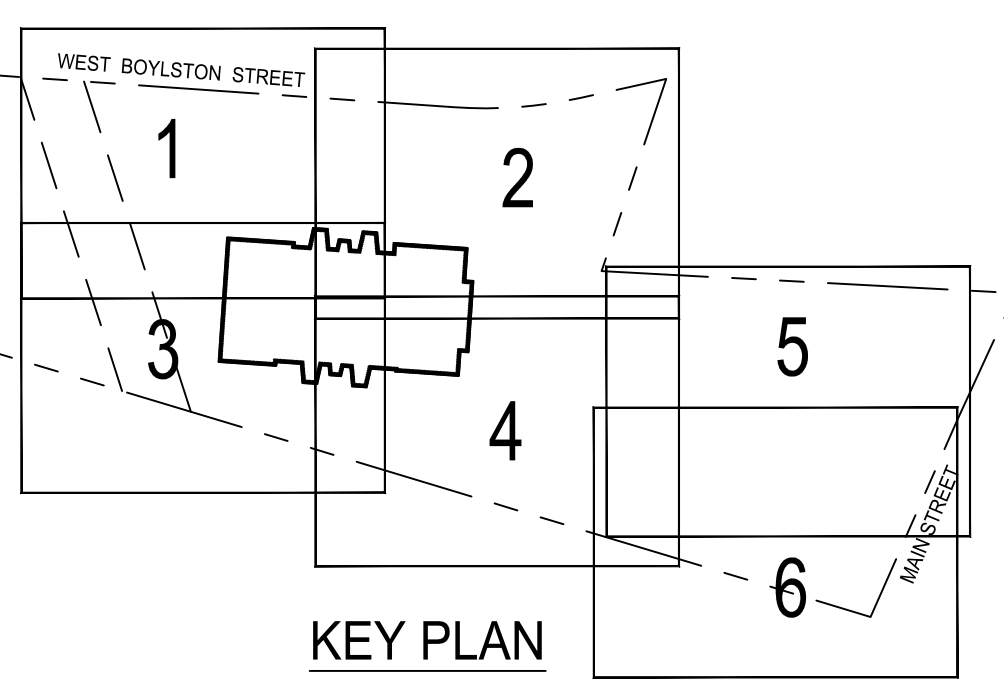
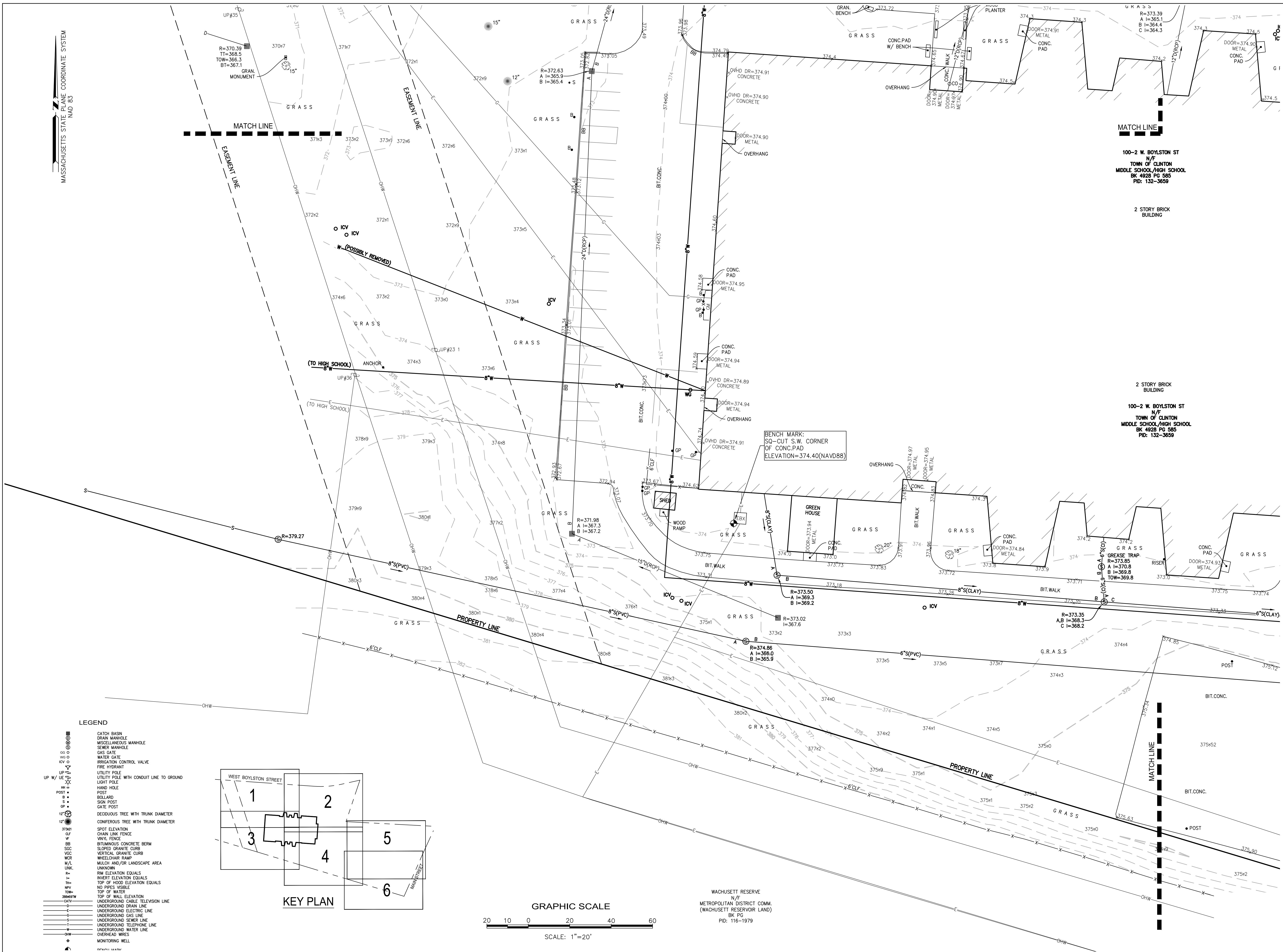
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CKD. BY: Checker

DATE: JUNE 22, 2023

EX-3

Copyright © LPAA



- LEGEND**
- CATCH BASIN
 - DRAIN MANHOLE
 - MISCELLANEOUS MANHOLE
 - SEWER MANHOLE
 - GAS GATE
 - WATER GATE
 - IRRIGATION CONTROL VALVE
 - FIRE HYDRANT
 - UTILITY POLE
 - UTILITY POLE WITH CONDUIT LINE TO GROUND
 - LIGHT POLE
 - HAND HOLE
 - POST
 - BOLLARD
 - SIGN POST
 - GATE POST
 - 12" DECIDUOUS TREE WITH TRUNK DIAMETER
 - 12" CONFERIOUS TREE WITH TRUNK DIAMETER
 - SPOT ELEVATION
 - CHAIN LINK FENCE
 - VINYL FENCE
 - BITUMINOUS CONCRETE BERM
 - SLOPED GRANITE CURB
 - VERTICAL GRANITE CURB
 - WHEELCHAIR RAMP
 - MULCH AND/OR LANDSCAPE AREA
 - UNKNOWN
 - RIM ELEVATION EQUALS
 - INVERT ELEVATION EQUALS
 - TOP OF HOOD ELEVATION EQUALS
 - NO PIPES VISIBLE
 - TOP OF WATER
 - TOP OF WALL ELEVATION
 - UNDERGROUND CABLE TELEVISION LINE
 - UNDERGROUND DRAIN LINE
 - UNDERGROUND ELECTRIC LINE
 - UNDERGROUND GAS LINE
 - UNDERGROUND SEWER LINE
 - UNDERGROUND TELEPHONE LINE
 - UNDERGROUND WATER LINE
 - OVERHEAD WIRES
 - MONITORING WELL
 - POINT MARK

WACHUSETT RESERVE
N/F
METROPOLITAN DISTRICT COMM.
(WACHUSETT RESERVOIR LAND)
BK PG
PID: 116-1979

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ASSOCIATES ARCHITECTS
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Worcester MA 01605
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www.lpaa.com

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Worcester, MA 01608
T: (508) 365-1030
F: (617) 338-6472

PROJECT

MSBA Module 3

Clinton Middle School

100W Boylston St, Clinton MA 01510

DRAWING TITLE

**Existing
Conditions
Plan**

REVISIONS

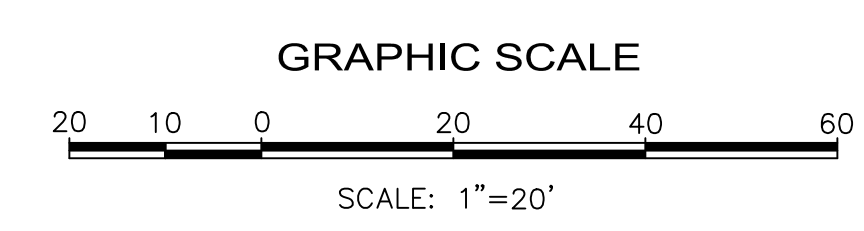
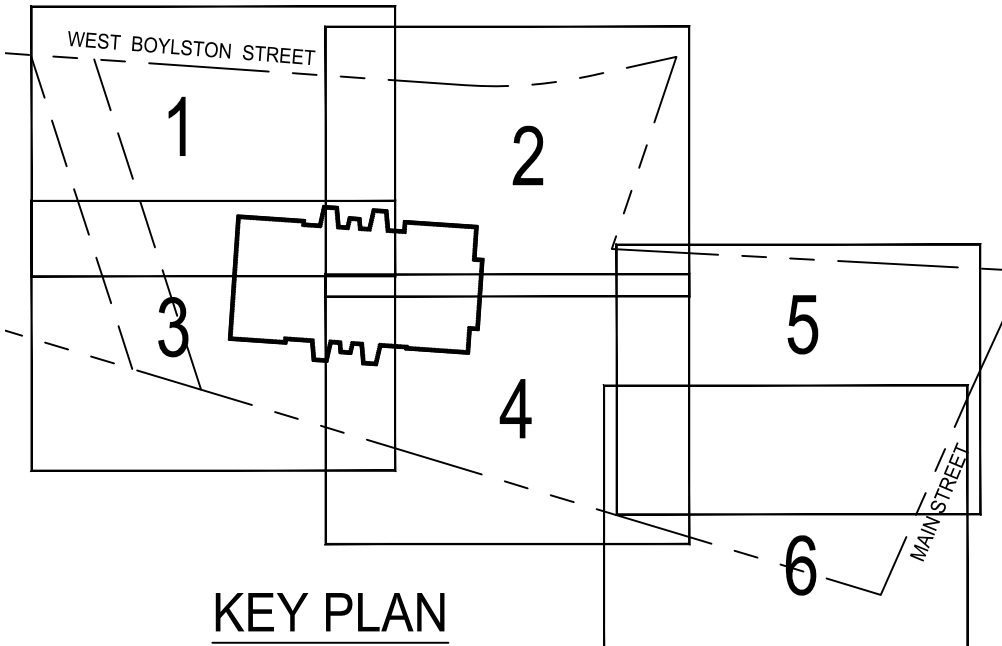
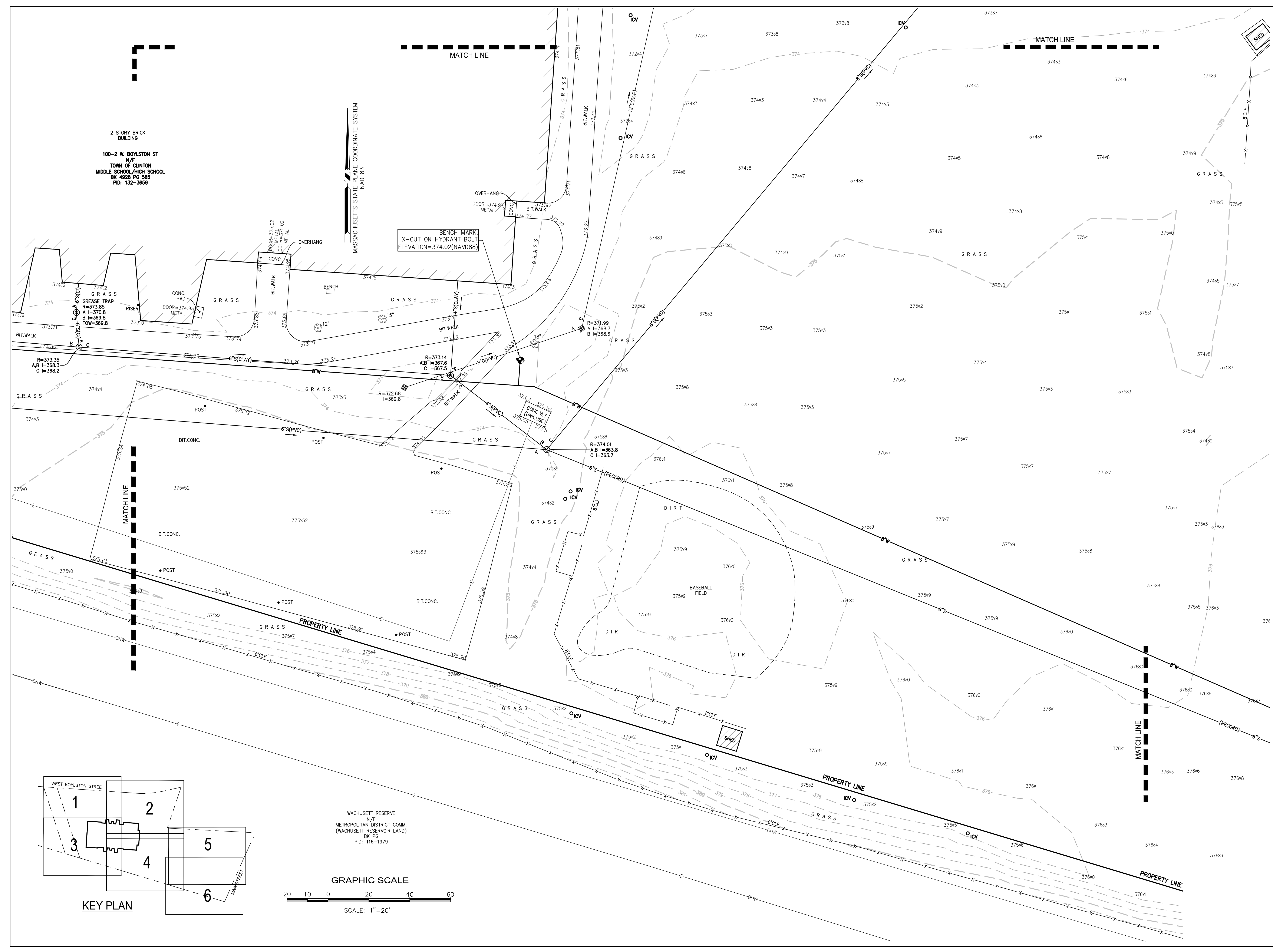
No.	Description	Date

DRAFT

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DWN. BY:	CPH
CKD. BY:	Checker
DATE:	JUNE 22, 2023

EX-4



WACHUSETT RESERVE
N/E
METROPOLITAN DISTRICT COMM.
(WACHUSETT RESERVOIR LAND)
BK PG
PID: 116-1979

2 STORY BRICK
BUILDING
100-2 W. BOYLSTON ST
N/E
TOWN OF CLINTON
MIDDLE SCHOOL/HIGH SCHOOL
BK 4928 PG 585
PID: 132-3659

MASSACHUSETTS STATE PLANE COORDINATE SYSTEM
NAD 83

BENCH MARK:
X-CUT ON HYDRANT BOLT
ELEVATION=374.02(NAVD88)

OVERHANG
DOOR=374.97
METAL

CONC.
BIT.WALK
374.77

374.79

G.R.A.S.S.

374.3

374.5

GRASS

374

BIT.WALK

373.75

373.74

GRASS

374

BIT.WALK

373.75

373.74

GRASS

374

BIT.WALK

373.75

373.74

GRASS

374

BIT.WALK

373.75

373.74

GRASS

374

BIT.WALK

373.75

373.74

GRASS

374

BIT.WALK

373.75

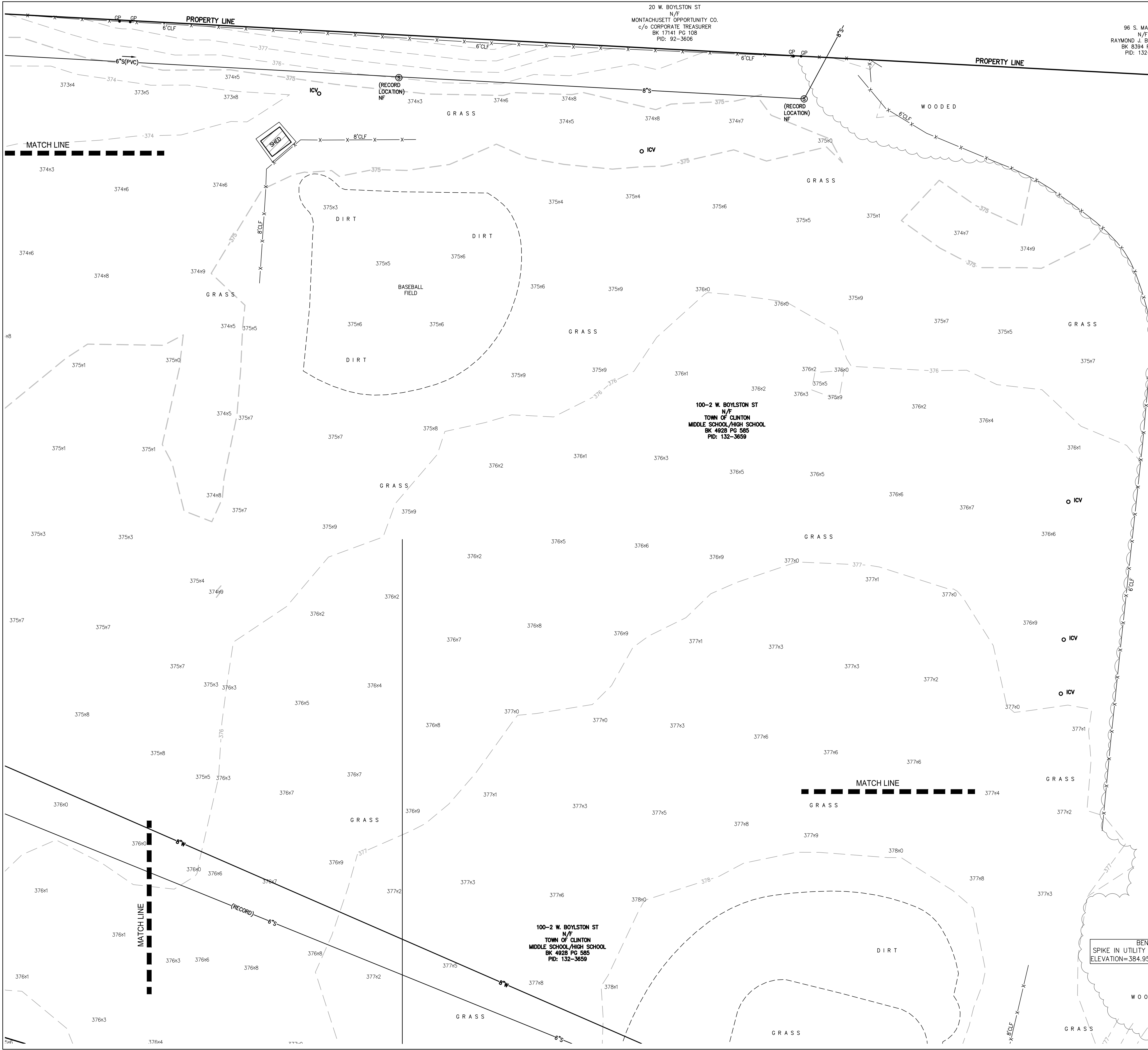
373.74

GRASS

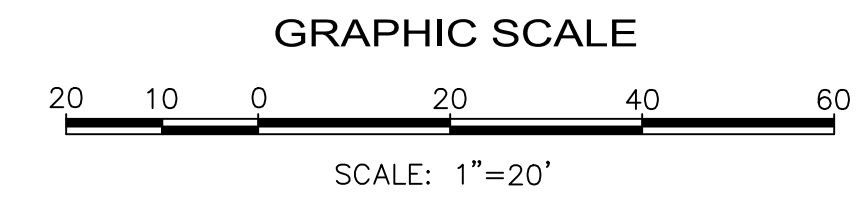
374

BIT.WALK

373.75



96 S. MAIN ST
N/F
RAYMOND J. BEVILACQUA
BK 6394 PG 371
PID: 132-793

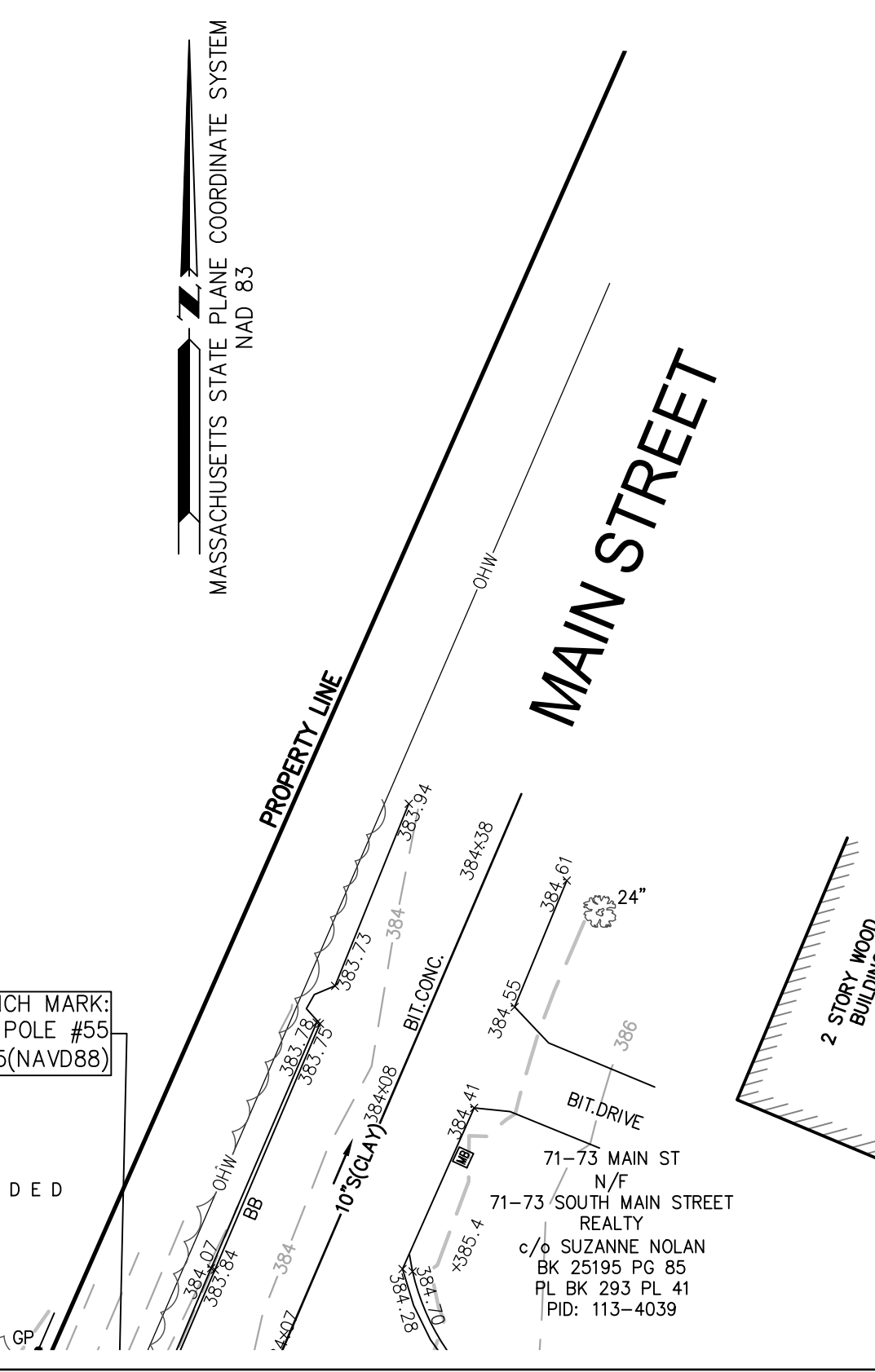
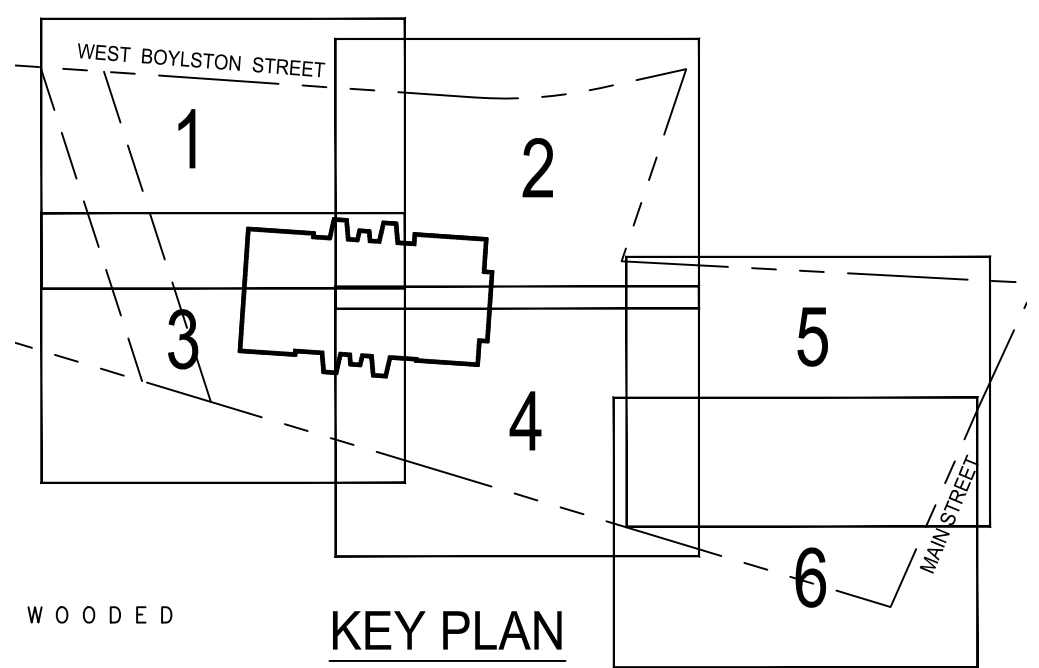


UTILITY INFORMATION STATEMENT

1. THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY. THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.
2. THE LOCATIONS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES HAVE BEEN DETERMINED FROM SAID INFORMATION, AND ARE APPROXIMATE ONLY. COMPILED LOCATIONS OF ANY UNDERGROUND STRUCTURES, NOT VISIBLY OBSERVED AND LOCATED, CAN VARY FROM THEIR ACTUAL LOCATIONS.
3. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.
4. THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED, IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILATION OF THIS INFORMATION.
5. IT IS INCUMBENT UPON INDIVIDUALS USING THIS INFORMATION TO UNDERSTAND THAT COMPILED UTILITY INFORMATION IS NOT EXACT, AND IS SUBJECT TO CHANGE BASED UPON VARYING PLAN INFORMATION RECEIVED AND ACTUAL LOCATIONS.
6. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER MATTERS.
7. THE PROPER UTILITY ENGINEERING/COMPANY SHOULD BE CONSULTED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHOULD BE VERIFIED IN THE FIELD (V.I.F.) BEFORE PLANNING FUTURE CONNECTIONS. CONTACT THE DIG SAFE CALL CENTER AT 1-888-344-7233, SEVENTY-TWO HOURS PRIOR TO EXCAVATION, BLASTING, GRADING, AND/OR PAVING.
8. AS OF THE DATE OF THIS PLAN RECORD INFORMATION HAS NOT BEEN RECEIVED BY NITSCHE ENGINEERING FOR THE FOLLOWING UTILITIES:

NOTES

1. THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF NITSCHE ENGINEERING. IT IS ISSUED TO LAMOREUX PAGANO ARCHITECTS FOR PURPOSES RELATED DIRECTLY AND SOLELY TO NITSCHE ENGINEERING'S SCOPE OF SERVICES UNDER CONTRACT WITH LAMOREUX PAGANO ARCHITECTS FOR CLINTON MIDDLE SCHOOL. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT AND PROJECT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN AUTHORIZATION IS GIVEN THEREFOR BY NITSCHE ENGINEERING.
2. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING CONDITIONS AS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY WHICH OCCURRED MAY AND JUNE 2023.
3. THIS SURVEY IS REFERENCED HORIZONTALLY TO THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE, NAD83 (2011) EPOCH 2010.00, U.S. SURVEY FOOT, DERIVED FROM RTK OBSERVATIONS WITH CORRECTIONS PROVIDED BY MACORS NETWORK.
4. ELEVATION REFERS TO NORTH AMERICAN VERTICAL DATUM (NAVD88) VERTICAL BASED ON RTK GPS OBSERVATIONS WITH CORRECTIONS PROVIDED BY MACORS NETWORK.
5. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND MAY NOT DISCLOSE ANY MATTERS THAT MAY BE REVEALED BY ONE.
6. THIS PLAN DOES NOT SHOW UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT AND VISIBLE USES OF THE LAND. THIS PLAN DOES NOT GUARANTEE THAT NO SUCH EASEMENTS EXIST.
7. LEGAL STATUS OF EASEMENTS, WAYS AND RESTRICTIONS NOT DETERMINED BY THIS SURVEY.
8. PROPERTY LINES BASED ON UNRECORDED PLAN PREPARED BY CULLINAN ENGINEERING DATED SEPTEMBER 30, 1999. PLAN NUMBER 960440-15 / P51 / 99. PROPERTY TRANSFER AND NEW ENGLAND POWER COMPANY EASEMENT NOT OF RECORD.



LAMOREUX PAGANO
ASSOCIATES ARCHITECTS
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Worcester MA 01605
508.752.2831
www.lpaa.com

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CONSULTANT

Nitsch Engineering
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370 Main Street, Suite 850
Worcester, MA 01608
T: (508) 365-1030
F: (617) 338-6472

PROJECT

MSBA Module 3

Clinton Middle School

100W Boylston St, Clinton MA 01510

DRAWING TITLE

Existing Conditions Plan

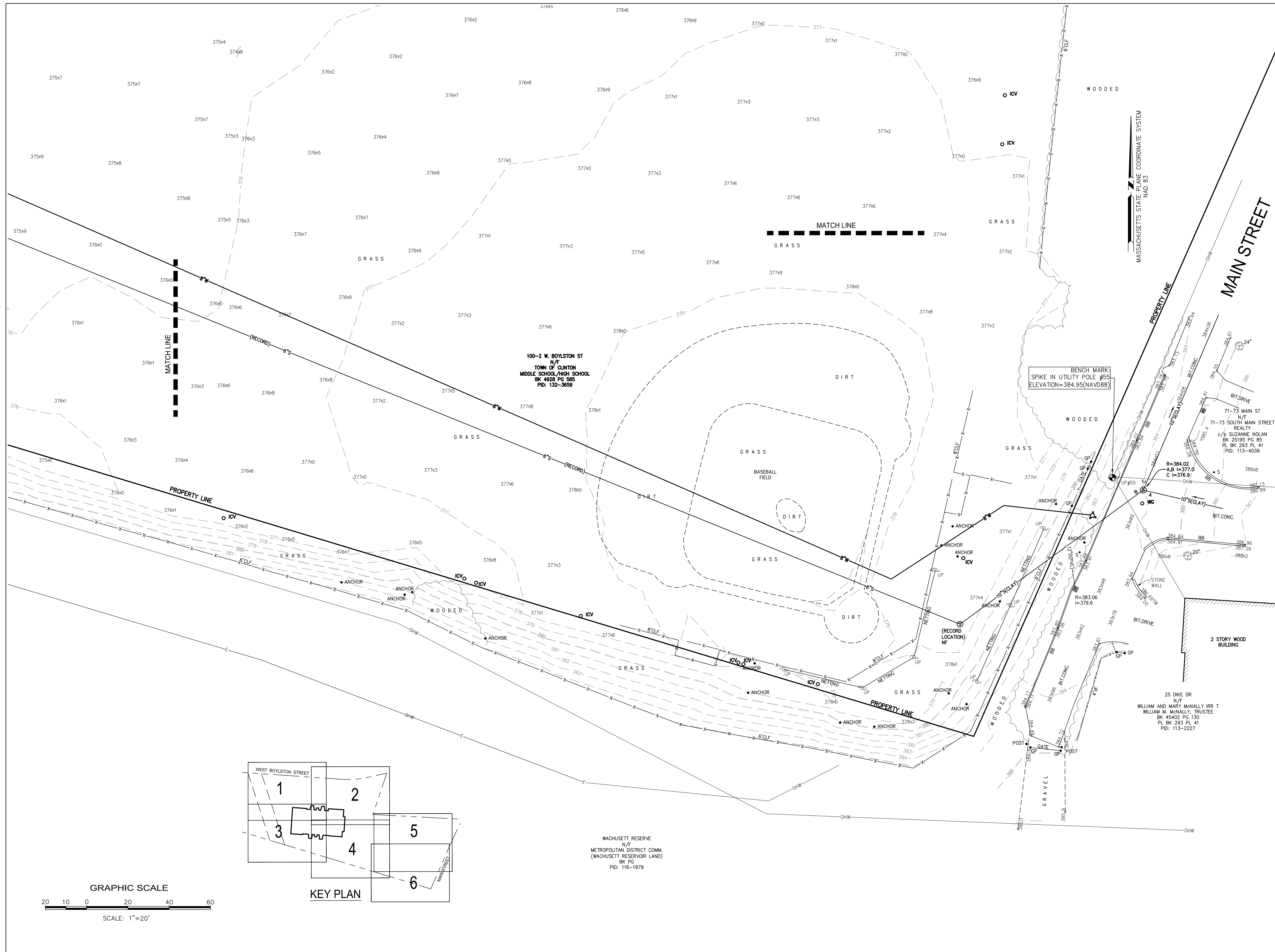
REVISIONS

No.	Description	Date

DRAFT

FILE:
JOB NO: #15181.1
SCALE: 1"=20'
DWN. BY: CPH
CKD. BY: Checker
DATE: JUNE 22, 2023

EX-5



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PROJECT

MSBA Module 3

Clinton Middle School

100W Boylston St, Clinton MA 01510

DRAWING TITLE

Existing Conditions Plan

REVISIONS

No.	Description	Date

DRAFT

FILE:
JOB NO: #15181.1
SCALE: 1"=20'
DWN. BY: CPH
CKD. BY: Checker
DATE: JUNE 22, 2023

EX-6



TOWN OF CLINTON

Office of the Selectmen
242 Church Street
Clinton, Massachusetts 01510
Tel: (978) 365-4120 • Fax: (978) 365-4130

BOARD OF SELECTMEN

Edward J. Devault
Mary Rose Dickhaut
Sean J. Kerrigan
Matthew H. Kobus
Julie K. Perusse

Michael J. Ward
Town Administrator

June 26, 2023

Lamoureux Pagano
Associates | Architects
108 Grove Street – Suite 300
Worcester, MA 01605

Clinton Middle School Deed Update

As presented earlier this year, the Town of Clinton and National Grid entered into an agreement in 1974 to relocate power lines for the construction of Clinton Middle School. Although the work was completed at that time, it was determined recently that the deed and easement documents as contemplated under the agreement inadvertently failed to be legally recorded.

Once notified about this issue, the Town of Clinton began communications with National Grid to correct the oversight. As a result, the parties have produced draft deeds and a site plan for review. Last month, the Town Administrator and Town Counsel conducted a meeting with a representative from the Right of Way Division of National Grid and established the steps necessary to complete this process. It is anticipated that these documents will be finalized and officially recorded by the end of summer.

Please let me know if need any additional information relative to this matter.

Sincerely,

Michael J. Ward
Town Administrator

cc: Robert B. Gibbons, Esq.
Clinton Town Counsel

3.3.3 FINAL EVALUATION OF ALTERNATIVES

- A. Narrative Summary
- B. Site Development Requirements
- C. Preliminary Design Options
- D. Supporting Documents
- E. Budget Comparison
- F. Summary of Merits & Limitations

3.3.3 FINAL EVALUATION OF ALTERNATIVES

A. Narrative Summary

The PDP identified the following three (3) options for further development during the Preferred Schematic Report (PSR) phase of this Feasibility Study:

- Addition/Renovation Option, AR-1; 550 and 700 student grade configurations
- Addition/Renovation Option, AR-2; 550 and 700 student grade configurations
- New Construction Option, NC-1; 550 and 700 student grade configurations

Since the PDP, an additional option was explored which is a hybrid of AR-1 and AR-2. This additional option is labeled as AR-1.5.

The individual option's narratives included in this section have the following information as appropriate for each option:

- General Summary
- Basis of Design Scope of Work
- Educational program fulfillment/Space Summary Variation
- Site & Facility Goals & Objectives
- Energy Efficiency & Utilities
- Construction Phasing Impact

Accompanying each of the option's narratives, there are drawings of the site including pedestrian and vehicular circulation, preliminary building layout, building massing, and a construction phasing diagram when relevant.

3.3.3 FINAL EVALUATION OF ALTERNATIVES

B. Site Development Requirements

INTRODUCTION

Nitsch Engineering has prepared this Site Development Requirements narrative as part of a Massachusetts School Building Authority (MSBA) Module 3 – Feasibility Study for the redevelopment of Clinton Middle School in Clinton, MA. The report corresponds to the MSBA Module 3 Preferred Schematic Report (PSR) and focuses on elements that relate specifically to the site development aspects of the Feasibility Study.

SITE DEVELOPMENT REQUIREMENTS

General

The site development requirements are based on the educational and extracurricular programming that was established by the Town of Clinton. Certain project conditions and logistics may affect the scale and fulfillment of some of the site development requirements, depending on the development alternative eventually selected for advancement. For example, the lack of available swing space for displaced students may restrict the scale and configuration of certain site development features such as access, parking, and circulation. Under any redevelopment alternative, the site development plan and phasing approach must be capable of maintaining the existing school programs in operation during construction with appropriate measures for safety of the students and separation of the contractor functions from the school activities. The following sections include site development objectives, some of which are required due to regulatory conditions as noted.

Pedestrian / Bicycle Access

The majority of students and faculty access the site by bus or car. Pedestrian and bicycle access on the site is limited to the middle school and high school buildings, and the fields across West Boylston Street. The Middle School and High School regularly share amenities in both buildings and the surrounding recreational areas. Accessible routes are required between the buildings and amenities. Additional unpaved paths provide access to the site from South Main Street and the DCR property south of the site. All pedestrian access from the public ways to the school must be compliant with ADA/AAB accessible route requirements and should be distinct and separate from vehicle accesses and circulation.

Bus Access

Access and stacking capacity for 10 full-size buses adjacent to the main school entrance is required. In addition, a drop-off area for a wheelchair accessible van is required. Bus access should ideally be separated from ordinary passenger vehicle access, although shared site entrance and exit curb cuts may be acceptable/desirable.

Passenger Vehicle Access

Access and internal circulation for passenger vehicles should be separated from bus circulation. Existing curb cuts along West Boylston Street will be maintained to the extent practical.

Emergency Vehicle Access

Access drives and internal circulation drives must be wide enough to accommodate fire apparatus and other emergency vehicles with passenger vehicles present. Access to the perimeter of the building via a 20'-wide emergency drive is needed per the requirements of NFPA 1 as amended by 527 CMR 1.00. Emergency access to both South Main Street and West Boylston Street will be maintained.

Service Vehicle Access

A service area is required for building deliveries/servicing and should be separated from bus and passenger vehicle access to the extent possible. The service area should provide access for at least 3 bays (compactor, recycling dumpster, delivery vehicle).

Parking

The existing parking area provides approximately 172 parking spaces which is sufficient for the school. Additional overflow parking is available at the High School and in the lot across West Boylston Street. The proposed development will maintain the number of parking spaces to the extent practical. Accessible parking spaces must be provided in accordance with ADA/MAAB regulations. The School Building Committee has indicated visitor parking should be provided at the front of the school.

Athletic Facilities (Site)

The elements of the on-site athletic facilities will be heavily influenced by the physical characteristics of the selected development option. The existing tennis courts and fields at the High School and across West Boylston Street will remain. The Middle School requires age-appropriate playground equipment for grades 4-8. The site will also include recreational fields, outdoor learning space, and a potential basketball court. Access to the existing DCR trails will also be maintained.

Stormwater Management

Under any redevelopment scenario, a stormwater management system meeting the requirements of the Town of Clinton requirements and the Massachusetts Department of Environmental Protection Stormwater Standards will be required for the project. The improved system will include provisions for groundwater recharge, peak flow mitigation, and water quality treatment. Existing stormwater management system disturbed by construction activities will need to be replaced.

Sanitary Sewerage

With the exception of the Code Upgrade/Base Repair option, new sanitary sewer connections from the school building will be required. A new kitchen waste service pipe and one or more ordinary sanitary service pipes are required where impacted by new construction. The kitchen waste pipe will be routed through an external grease trap prior to connection with the rest of the sewer service infrastructure. All floor drains in building areas that are accessible by motorized vehicles and equipment must be connected to a gas/oil separator per state plumbing code requirements.

Water

All site redevelopment options require installation a new dedicated fire service. The addition and new construction options require replacement of some of the water mains on site, including building services and hydrants. New irrigation is required for play fields. Temporary fire and domestic services are required where temporary modular classrooms are utilized during construction.

Natural Gas

The school building currently utilizes natural gas. Refer to the mechanical engineering narrative for information related to the building fuel system.

Electrical / Tele-comm

All site redevelopment options include new electrical and communications services. A new emergency generator is required under any development scenario. Photovoltaic arrays may be considered for the building roof and/or parking areas. Refer to the electrical systems narrative for information related to the building electric and telecommunications systems.

3.3.3 FINAL EVALUATION OF ALTERNATIVES

C. Preliminary Design Options

1. Code Upgrade Option
 - a. Narrative
 - b. Site Plan
 - c. Building Floor Plans

GENERAL SUMMARY: For purposes of this Feasibility Study, the Code Upgrade/Base Repair Option is defined as a “No-Build” solution that will maintain the status quo. It will not provide any additional square footage or address the programmatic needs described in the District’s Educational Program. The Code Upgrade/Base Repair Option addresses pre-existing code violations, energy inefficiencies, mandatory improvements required due to scope-of-work code thresholds, and the repair/replacement of existing building systems that have either 1) already failed, or 2) exceeded their life expectancy and are anticipated to fail within the next 10 years. It also addresses items that should be replaced due to their proximity to new scope of work (for instance the replacement of existing ACT, lighting, and other in/above-ceiling systems that must first be removed to install a new fire suppression system). This Option assumes that the existing Gymnasium and Cafeteria remains as is. The following Code Upgrade scope of work is based on a thorough assessment of existing building systems by the Design Team.

Proposed SF areas for this option are approximately as follows:

- **Renovation (existing building) = 130,000 GSF**

FOR BASIS OF DESIGN SCOPE OF WORK: [REFER TO SECTION 3.3.3, D, 1, a.]

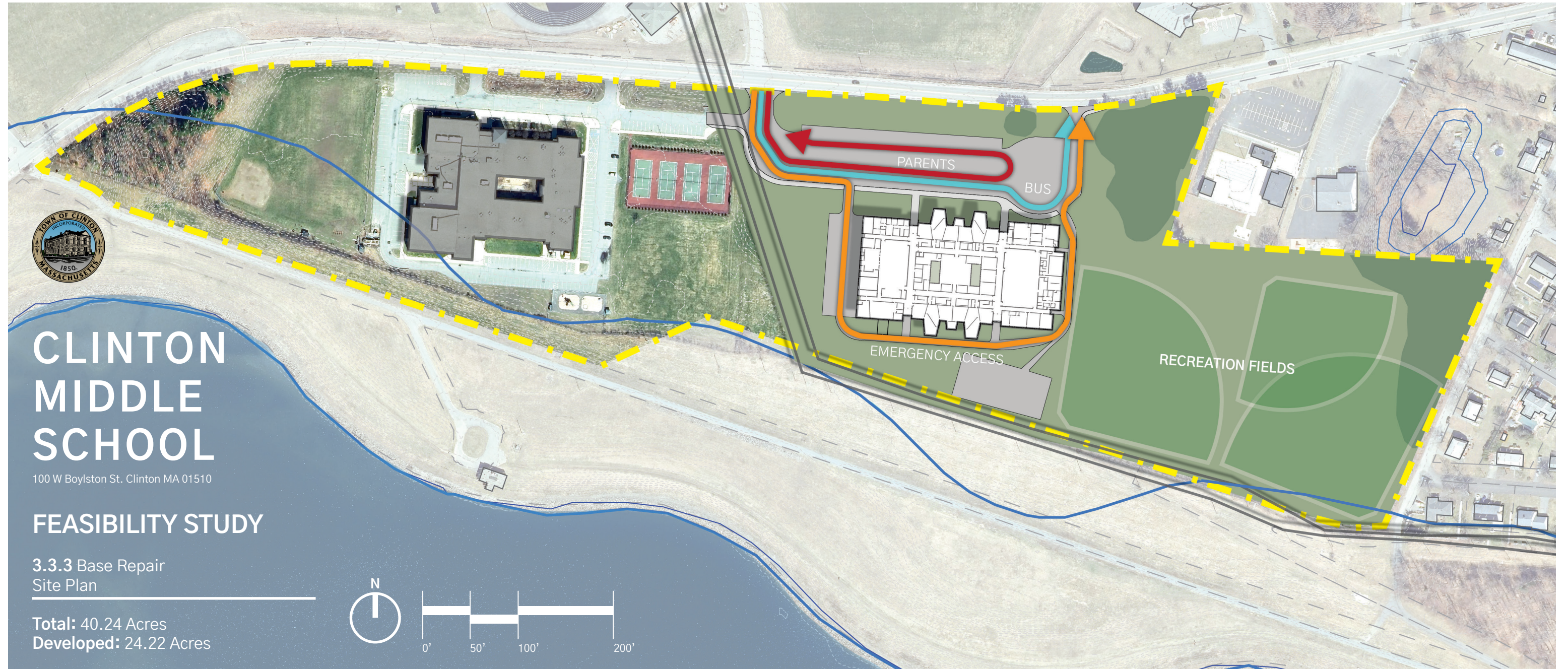
DEGREE OF EDUCATIONAL PROGRAM FULFILLMENT/SPACE SUMMARY VARIATION: The Code Upgrade Option does not, generally speaking, satisfy the Educational Program/Space Summary Requirements. Significant items of note include the following:

- Core Academic, Special Education, Vocational/Technical and several other areas are space-deficient and do not meet either MSBA guidelines or the proposed Educational Program.
- Special education spaces are clustered together rather than being distributed throughout the academic spaces.
- Access to some Classrooms requires passing through other Classrooms; this creates disruption and confusion.
- Upper (grade 7-8) and lower (grade 4-6) schools lack a clearly defined separation between them.
- There is a lack of common rooms/collaborative work areas.
- Exterior access, natural daylighting and views to the exterior are extremely limited.
- Lack of separation between public/community spaces and academic areas.
- Lack of a cohesive Administration/Guidance area; spaces are spread throughout the school.

SITE & FACILITY GOALS & OBJECTIVES: The Code Upgrade Option does not impact any of the current site amenities. The site will continue to provide significantly more parking than is required by the facility, (2) softball fields, a baseball field, open play field, (3) basketball courts, and a greenhouse. Part of the proposed scope of work is to provide a new outdoor learning space and age-appropriate play structures.

ENERGY EFFICIENCY & UTILITIES: The Code Upgrade Option would address all the new energy code requirements in respect to envelope and build system performance. However, due to added weight, these thermal improvements would prevent the existing roof structure from having the structural capacity necessary to support the installation of a photovoltaic array without significant modifications.

CONSTRUCTION PHASING IMPACT: The Code Upgrade Option scope of work involves relatively significant demolition, abatement, and renovation/reconstruction activities throughout the entire school. It is improbable that the work can be scheduled and accomplished wholly during summer vacations and/or during off-hours (second/third shifts at premium cost) to allow uninterrupted District use of existing school spaces. Although summers and off-hours will no doubt be utilized to the maximum extent possible, particularly in main circulation and common spaces (Corridors, Stairs, Bathrooms, Gym/Locker Rooms, Cafeteria/Kitchen, Administration, Media Center, etc.) it will be necessary to perform the Code Upgrade Option in multiple phases while the building remains partially occupied. Consequently, to avoid overcrowding in occupied areas, it will be necessary to draw down the student population enough to provide the Contractor with vacant areas large enough to perform work efficiently. Common methods of reducing student population include displacement of students to other District schools or leased space, or by providing temporary onsite “swing space” (i.e., modular classrooms). The District has previously concluded that suitable space in other District schools or leased buildings is unavailable; therefore temporary modular classrooms will be required. Temporary modular classrooms are considered, in terms of the MA Building Code, as permanent structures and must comply with current codes including fire protection, plumbing, energy, accessibility, and structural. They are also categorically ineligible for reimbursement by MSBA; their full cost would be borne by the Town/District.



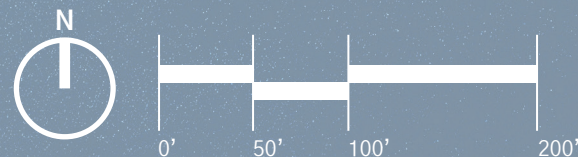
CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.3 Base Repair
Site Plan

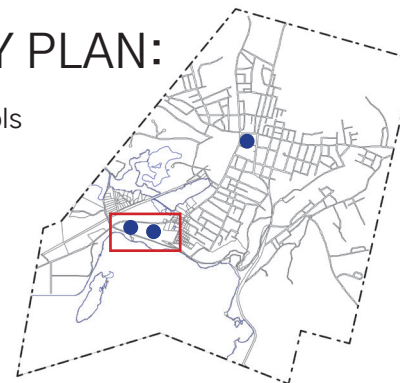
Total: 40.24 Acres
Developed: 24.22 Acres



NOTES:

QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



LEGEND:

- Parcel Property Line
- Bus Circulation
- New Construction
- Parent Circulation
- New Athletic Field
- Access Road
- Existing Building
- Pedestrian Access
- DCR Buffer Zone

CODE UPGRADE OPTION

TOTAL AREA: 130,000 GSF

1st FLOOR: 95,000 GSF
2nd FLOOR: 35,000 GSF



- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



3.3.3 FINAL EVALUATION OF ALTERNATIVES

C. Preliminary Design Options

2. Addition/Renovation Option

AR-1

- a. Narrative
- b. Site Plan
- c. Floor Plans
- d. Massing
- e. Phasing Plans
- f. Project Schedule

SUMMARY: The Addition/Renovation Option AR–1 scope of work includes renovation and selective demolition of the existing School, utilizing temporary modular classrooms and construction of modest 1–story additions, to provide a solution that meets the Educational Program requirements to the maximum extent possible. The following Addition/Renovation scope of work is based on a thorough assessment of existing building systems by the Design Team.

Proposed SF areas for this option are approximately as follows:

550 Enrollment:

- Renovation (existing building) = 120,000 GSF
- Demolition (existing building) = 10,000 GSF
- Addition = 14,000 GSF
- Total GSF =134,000 GSF**

700 Enrollment:

- Renovation (existing building) = 120,000 GSF
- Demolition (existing building) = 10,000 GSF
- Addition = 25,500 GSF
- Total GSF =145,500 GSF**

FOR BASIS OF DESIGN SCOPE OF WORK REFER TO SECTION 3.3.3, D, 1, a.

DEGREE OF EDUCATIONAL PROGRAM FULFILLMENT/SPACE SUMMARY VARIATION: The Addition/Renovation Option AR–1 will satisfy most Educational Program/Space Summary objectives. Several items of note include the following:

- The efficiency factor of a Renovation/Addition solution may be less than that of New Construction due to existing structural grids, interior/exterior walls and openings.
- Sustainability goals are more readily achieved with New Construction than with the Renovation/Addition of an existing building.
- Full building code compliance, in terms of structure, accessibility, energy and life safety, will be more difficult to achieve in an existing building than with New Construction. Variances and/or compliance alternatives may be warranted if full compliance with applicable codes is impractical.
- Adjacencies between spaces and to the exterior may not meet ideal program goals but are not seen as detrimental to the extent that a Renovation/Addition solution should be dismissed.
- In Option AR–1, the core and community use areas are renovated in place. On the one hand, this is beneficial as the existing areas of these spaces are generously sized, however they are not co-located to provide centralized use after school hours.

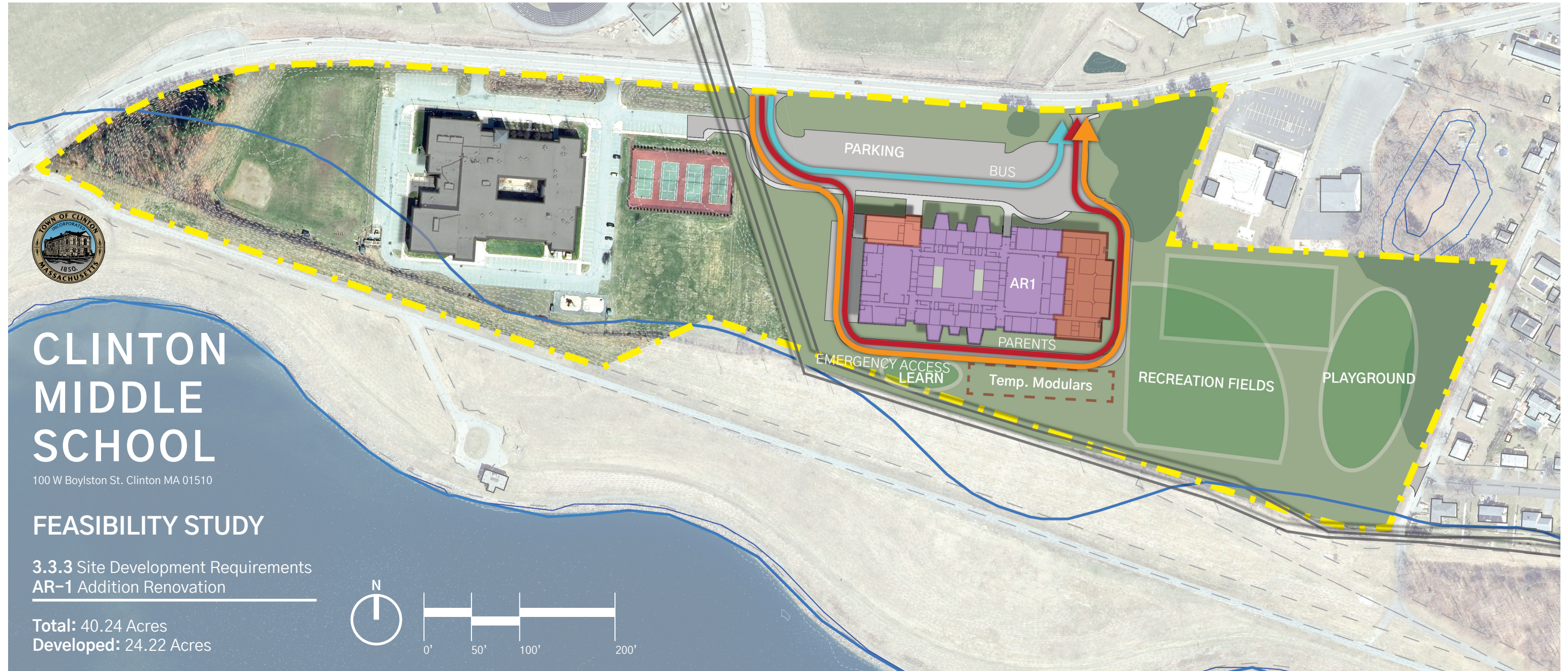
- The locations of the Cafeteria, Media center and Gymnasium do not allow access or views to the exterior, however there are opportunities for skylights and overlooks above the Media Center.
- Due to the restrictions of the existing building area and structure, the collaborative work areas would need to be remote from the classroom neighborhoods in some cases.
- The addition that would be required for the 4th grade neighborhood is very linear, and should this option be selected for further study, could be studied as more of an enclosed neighborhood.

SITE & FACILITY GOALS & OBJECTIVES: The Addition/Renovation Option AR–1 marginally impacts the current site amenities. The site will continue to provide significantly more parking than is required by the facility, (2) softball fields, a baseball field, open play field, (3) basketball courts, and a greenhouse. Part of the proposed scope of work is to provide a new outdoor learning space and age–appropriate play structures.

ENERGY EFFICIENCY & UTILITIES: The Addition/Renovation Option AR–1 would address all the new energy code requirements in respect to envelope and building system performance. However, these thermal improvements would prevent the existing roof structure from having the structural capacity necessary to support the installation of a photovoltaic array. The roof of the new addition would be able to support the installation of photovoltaic panels.

IMPACT OF CONSTRUCTION PHASING: Like (but to a greater extent than) the Code Upgrade/Base Repair Option, the Addition/Renovation Option AR–1 scope of work involves significant demolition, abatement, and renovation/reconstruction activities throughout the entire school. Since any Addition/Renovation Option must also be occupied during construction, it is assumed that the work will be done in multiple phases over a period of up to 4 years. It is improbable that the work can be scheduled and accomplished wholly during summer vacations and/or during off–hours (second/third shifts at premium cost) to allow uninterrupted District use of existing school spaces. Although summers and off–hours will no doubt be utilized to the maximum extent possible, particularly in main circulation and common spaces (Corridors, Stairs, Bathrooms, Gym/Locker Rooms, Cafeteria/Kitchen, Administration, Media Center, etc.) it will be necessary to perform the Code Upgrade Option in multiple phases while the building remains partially occupied. Consequently, to avoid overcrowding in occupied areas, it will be necessary to draw down the student population enough to provide the Contractor with vacant areas large enough to perform work efficiently. Common methods of reducing student population include displacement of students to other District schools or leased space, or by providing temporary onsite “swing space” (i.e. modular classrooms). The District has previously concluded that suitable space in

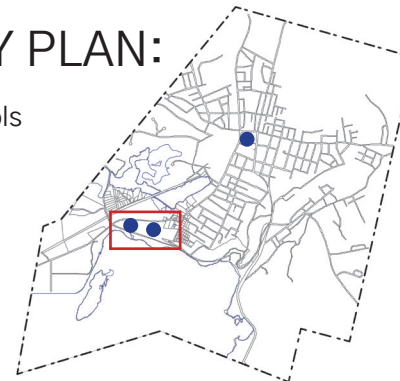
other District schools or leased buildings is unavailable; therefore temporary modular classrooms will be required. Temporary modular classrooms are considered, in terms of the MA Building Code, as permanent structures and must comply with current codes including fire protection, plumbing, energy, accessibility, and structural. Since they are also categorically ineligible for reimbursement by MSBA, their full cost would be borne by the Town/District.



NOTES:

QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



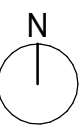
LEGEND:

- Parcel Property Line
- New Construction
- New Athletic Field
- Existing Building
- DCR Buffer Zone
- Bus Circulation
- Parent Circulation
- Access Road

550 STUDENT ENROLLMENT

TOTAL AREA: 134,000 GSF

1st FLOOR: 99,000 GSF
2nd FLOOR: 35,000 GSF



- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



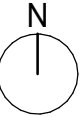
1 First Floor Plan AR-1
1" = 40'-0"



550 STUDENT ENROLLMENT

TOTAL AREA: 134,000 GSF

1st FLOOR: 99,000 GSF
2nd FLOOR: 35,000 GSF



1 Second Floor Plan AR-1
1" = 40'-0"

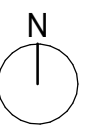
- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



700 STUDENT ENROLLMENT

TOTAL AREA: 145,500 GSF

1st FLOOR: 110,500 GSF
2nd FLOOR: 35,000 GSF



1 First Floor Plan AR-1
1" = 40'-0"

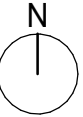
- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



700 STUDENT ENROLLMENT

TOTAL AREA: 145,500 GSF

1st FLOOR: 110,500 GSF
2nd FLOOR: 35,000 GSF



1 Second Floor Plan AR-1
1" = 40'-0"

- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION





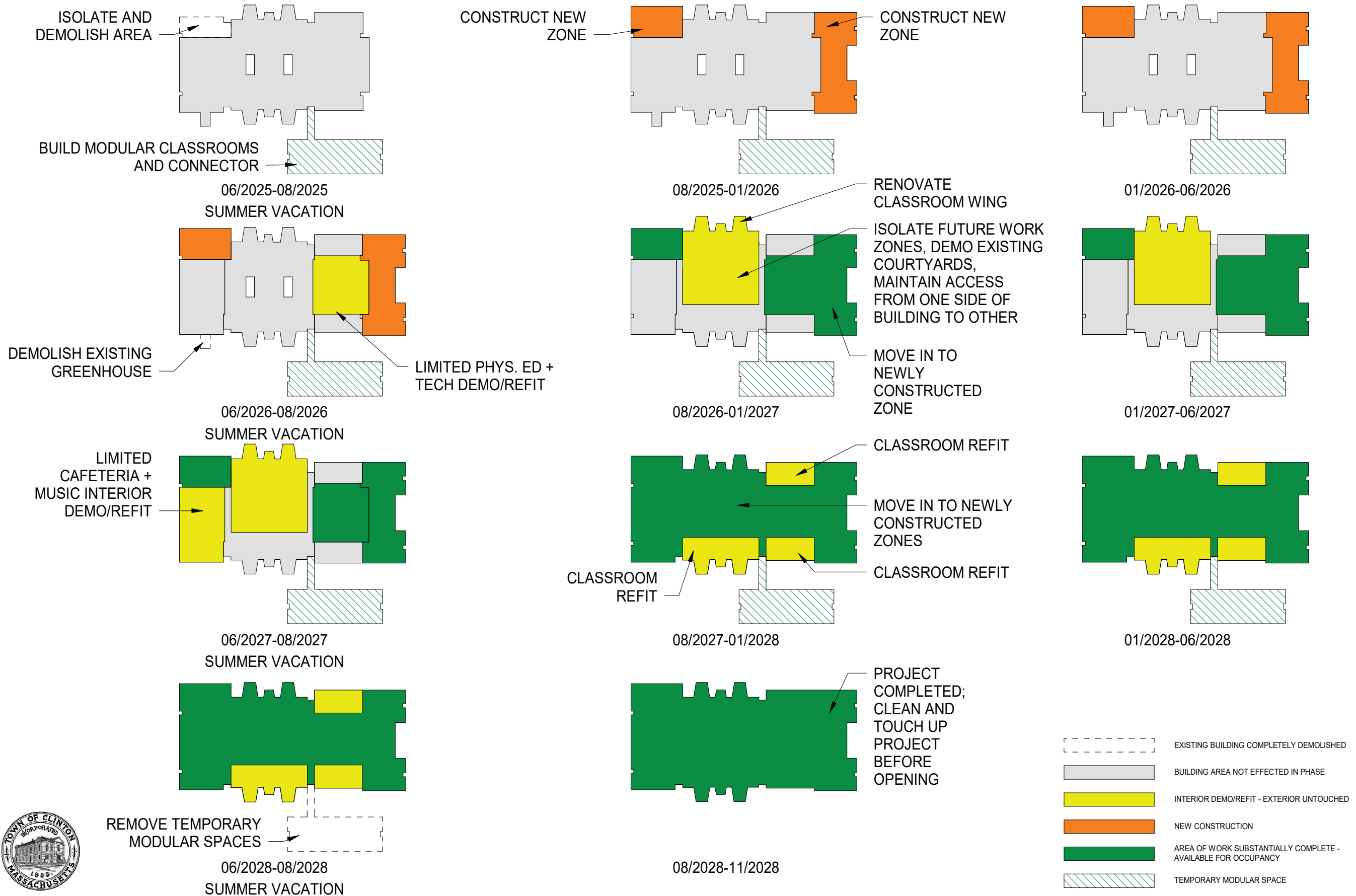
CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Addition Renovation Option: AR-1
Massing

Total: 40.24 Acres
Developed: 24.22 Acres



Clinton Middle School Project

ID	Task Name	Duration	Start	Finish	Timeline																										
					2023	2024	2025	2026	2027	2028																					
					Qtr 2	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4
1	MSBA Module 2 - 7	526 days?	Mon 8/1/22	Mon 8/5/24	[Gantt bar spanning from 8/1/22 to 8/5/24]																										
2	Mod 2 - Architect selection process	57 days	Fri 8/5/22	Mon 10/24/22	[Gantt bar from 8/5/22 to 10/24/22]																										
14	Module 3 - Feasibility Study	181 days	Wed 12/21/22	Wed 8/30/23	[Gantt bar from 12/21/22 to 8/30/23]																										
15	Preferred Design Program (PDP)	90 days	Wed 12/21/22	Tue 4/25/23	[Gantt bar from 12/21/22 to 4/25/23]																										
28	Preferred Schematic Report (PSR)	104 days	Fri 4/7/23	Wed 8/30/23	[Gantt bar from 4/7/23 to 8/30/23]																										
29	Final evaluation of of alternatives	30 days	Fri 4/7/23	Thu 5/18/23	[Gantt bar from 4/7/23 to 5/18/23]																										
30	Preferred solution	25 days	Fri 5/12/23	Thu 6/15/23	[Gantt bar from 5/12/23 to 6/15/23]																										
31	Local action and approvals	7 days	Fri 6/16/23	Mon 6/26/23	[Gantt bar from 6/16/23 to 6/26/23]																										
32	Submit PSR to MSBA	1 day	Tue 6/27/23	Tue 6/27/23	[Gantt bar from 6/27/23 to 6/27/23]																										
33	MSBA Board Approval to proceed with schematic design 8/30/23	46 days	Wed 6/28/23	Wed 8/30/23	[Gantt bar from 6/28/23 to 8/30/23]																										
34	MSBA staff review	20 days	Wed 6/28/23	Tue 7/25/23	[Gantt bar from 6/28/23 to 7/25/23]																										
35	MSBA PSR review and comment	15 days	Wed 6/28/23	Tue 7/18/23	[Gantt bar from 6/28/23 to 7/18/23]																										
36	Respond to MSBA PSR comments	5 days	Wed 7/19/23	Tue 7/25/23	[Gantt bar from 7/19/23 to 7/25/23]																										
37	Facilities assessment subcommittee review	31 days	Wed 7/19/23	Wed 8/30/23	[Gantt bar from 7/19/23 to 8/30/23]																										
38	FAS Mtg #1	1 day	Wed 7/19/23	Wed 7/19/23	[Gantt bar from 7/19/23 to 7/19/23]																										
39	FAS Mtg #2 (if required)	1 day	Wed 8/2/23	Wed 8/2/23	[Gantt bar from 8/2/23 to 8/2/23]																										
40	Respond to FAS comments	5 days	Thu 8/3/23	Wed 8/9/23	[Gantt bar from 8/3/23 to 8/9/23]																										
41	MSBA Board Approval - 8-30-23	1 day	Wed 8/30/23	Wed 8/30/23	[Gantt bar from 8/30/23 to 8/30/23]																										
42	Module 4 - Schematic Design	169 days	Thu 8/31/23	Tue 4/23/24	[Gantt bar from 8/31/23 to 4/23/24]																										
43	SD Submission Development	169 days	Thu 8/31/23	Tue 4/23/24	[Gantt bar from 8/31/23 to 4/23/24]																										
44	DESE Submittal Development	120 days	Thu 8/31/23	Wed 2/14/24	[Gantt bar from 8/31/23 to 2/14/24]																										
45	Schematic Design Binder	85 days	Thu 8/31/23	Wed 12/27/23	[Gantt bar from 8/31/23 to 12/27/23]																										
46	Schematic Design Project Manual	85 days	Thu 8/31/23	Wed 12/27/23	[Gantt bar from 8/31/23 to 12/27/23]																										
47	Schematic Design Drawings	85 days	Thu 8/31/23	Wed 12/27/23	[Gantt bar from 8/31/23 to 12/27/23]																										
48	Schematic Design Estimating	20 days	Thu 12/28/23	Wed 1/24/24	[Gantt bar from 12/28/23 to 1/24/24]																										
49	SD Estimate Reconciliation & Budget	6 days	Thu 1/25/24	Thu 2/1/24	[Gantt bar from 1/25/24 to 2/1/24]																										
50	Local actions and approvals	15 days	Fri 2/2/24	Thu 2/22/24	[Gantt bar from 2/2/24 to 2/22/24]																										
51	Submit SD to MSBA	1 day	Fri 2/23/24	Fri 2/23/24	[Gantt bar from 2/23/24 to 2/23/24]																										
52	Review and approve SD submission	25 days	Mon 2/26/24	Fri 3/29/24	[Gantt bar from 2/26/24 to 3/29/24]																										
53	MSBA Staff review	25 days	Mon 2/26/24	Fri 3/29/24	[Gantt bar from 2/26/24 to 3/29/24]																										
54	MSBA SD review and comment	15 days	Mon 2/26/24	Fri 3/15/24	[Gantt bar from 2/26/24 to 3/15/24]																										
55	Response to MSBA SD comments	10 days	Mon 3/18/24	Fri 3/29/24	[Gantt bar from 3/18/24 to 3/29/24]																										
56	Final submission review	1 day	Mon 4/1/24	Mon 4/1/24	[Gantt bar from 4/1/24 to 4/1/24]																										
57	MSBA Board approval - date TBD	15 days	Tue 4/2/24	Mon 4/22/24	[Gantt bar from 4/2/24 to 4/22/24]																										
58	MSBA Board Action Letter Issued	1 day	Tue 4/23/24	Tue 4/23/24	[Gantt bar from 4/23/24 to 4/23/24]																										
59	DESE review and approval letter	4 days	Mon 3/18/24	Thu 3/21/24	[Gantt bar from 3/18/24 to 3/21/24]																										
60	Module 5 - Funding the Project	50 days	Tue 4/23/24	Mon 7/1/24	[Gantt bar from 4/23/24 to 7/1/24]																										
61	Project scope and budget agreement	10 days	Wed 4/24/24	Tue 5/7/24	[Gantt bar from 4/24/24 to 5/7/24]																										
62	Total Project Budget & Exhibit Development	3 days	Wed 4/24/24	Fri 4/26/24	[Gantt bar from 4/24/24 to 4/26/24]																										
63	Reimbursement rate - signed Certification	3 days	Mon 4/29/24	Wed 5/1/24	[Gantt bar from 4/29/24 to 5/1/24]																										
64	Prerequisites to MSBA Execution of PS&B	3 days	Mon 4/29/24	Wed 5/1/24	[Gantt bar from 4/29/24 to 5/1/24]																										

CMS - PSR Option AR1 (700)
06.27.2023

Task		Project Summary		Manual Task		Start-only		Manual	Deadline	
Split		Inactive Task		Duration-only		Finish-only		Manual	Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual	Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone				

ID	Task Name	Duration	Start	Finish	2023												2024												2025												2026												2027												2028											
					1st Half	2nd Half	Qtr 1	Qtr 2	Qtr 3	Qtr 4	1st Half	2nd Half	Qtr 1	Qtr 2	Qtr 3	Qtr 4	1st Half	2nd Half	Qtr 1	Qtr 2	Qtr 3	Qtr 4	1st Half	2nd Half	Qtr 1	Qtr 2	Qtr 3	Qtr 4	1st Half	2nd Half	Qtr 1	Qtr 2	Qtr 3	Qtr 4	1st Half	2nd Half	Qtr 1	Qtr 2	Qtr 3	Qtr 4																																				
65	Send MSBA PS&B Package for execution	2 days	Thu 5/2/24	Fri 5/3/24																																																																								
66	PS&B Executed	2 days	Mon 5/6/24	Tue 5/7/24																																																																								
67	Local Authorization for funding (120 days)	35 days	Tue 4/23/24	Mon 6/10/24																																																																								
68	preparation & Town meeting	29 days	Tue 4/23/24	Fri 5/31/24																																																																								
69	Ballot Vote for borrowing	1 day	Mon 6/3/24	Mon 6/3/24																																																																								
70	Local funding documentation	5 days	Tue 6/4/24	Mon 6/10/24																																																																								
71	Project Funding Agreement	11 days	Tue 6/11/24	Tue 6/25/24																																																																								
72	Prerequisites to MSBA Execution of PFA	5 days	Tue 6/11/24	Mon 6/17/24																																																																								
73	Certification of legal council	5 days	Tue 6/11/24	Mon 6/17/24																																																																								
74	Certified vote copies	5 days	Tue 6/11/24	Mon 6/17/24																																																																								
75	Send MSBA PFA package fro execution	1 day	Tue 6/18/24	Tue 6/18/24																																																																								
76	PFA Executed & returned to district	5 days	Wed 6/19/24	Tue 6/25/24																																																																								
77	Propay budget entered	4 days	Wed 6/26/24	Mon 7/1/24																																																																								
78	Module 6 - Detailed Design*	307 days	Tue 6/4/24	Wed 8/6/25																																																																								
79	Design Development (DD)	136 days	Tue 6/4/24	Tue 12/10/24																																																																								
80	Design Development	100 days	Tue 6/4/24	Mon 10/21/24																																																																								
81	DD Submission	1 day	Tue 10/22/24	Tue 10/22/24																																																																								
82	MSBA DD Review	21 days	Wed 10/23/24	Wed 11/20/24																																																																								
83	Address DD Review Comments	14 days	Thu 11/21/24	Tue 12/10/24																																																																								
84	60% Construction Documents	207 days	Tue 10/22/24	Wed 8/6/25																																																																								
85	60% CD Development	90 days	Tue 10/22/24	Mon 2/24/25																																																																								
86	60% CD Development Submission	1 day	Tue 2/25/25	Tue 2/25/25																																																																								
87	MSBA 60% CD Review	21 days	Wed 2/26/25	Wed 3/26/25																																																																								
88	Address 60% SD Review Comments	14 days	Thu 3/27/25	Tue 4/15/25																																																																								
89	90% Construction Documents	76 days	Tue 2/25/25	Tue 6/10/25																																																																								
90	90% CD Development	40 days	Tue 2/25/25	Mon 4/21/25																																																																								
91	90% CD Development Submission	1 day	Tue 4/22/25	Tue 4/22/25																																																																								
92	MSBA 90% CD Review	21 days	Wed 4/23/25	Wed 5/21/25																																																																								
93	Address 90% SD Review Comments	14 days	Thu 5/22/25	Tue 6/10/25																																																																								
94	100% CD Complete	72 days	Tue 4/29/25	Wed 8/6/25																																																																								
95	Complete 100% Documents for Bidding	35 days	Tue 4/29/25	Mon 6/16/25																																																																								
96	Bidding	44 days	Mon 6/2/25	Thu 7/31/25																																																																								
97	Advertise, Issue, Open Bids & Award	40 days	Wed 6/11/25	Tue 8/5/25																																																																								
98	Notice to Proceed	1 day	Wed 8/6/25	Wed 8/6/25																																																																								
99	Module 7 - Construction*	859 days	Mon 8/4/25	Thu 11/16/28																																																																								
100	Module 7: Addition and Gym	259 days	Thu 8/7/25	Tue 8/4/26																																																																								
101	Module 7 - Mid-Front of Building, Café, Media Ctnr, CR	260 days	Wed 8/5/26	Tue 8/3/27																																																																								
102	Module 7 - Reamaining Classrooms and Modular Remo	260 days	Wed 8/4/27	Tue 8/1/28																																																																								
103	Module 7 - Final Site work and Building Finishes	68 days	Wed 8/2/28	Fri 11/3/28																																																																								
104	Substantially Complete - TBD	1 day	Mon 11/6/28	Mon 11/6/28																																																																								
105	Move-In	1 day	Tue 11/7/28	Tue 11/7/28																																																																								

CMS - PSR Option AR1 (700) 06.27.2023	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

3.3.3 FINAL EVALUATION OF ALTERNATIVES

C. Preliminary Design Options

3. Addition/Renovation Option

AR-1.5

- a. Narrative
- b. Site Plan
- c. Floor Plans
- d. Massing
- e. Phasing Plans
- f. Project Schedule

SUMMARY: Addition/Renovation Option AR–1.5 is a hybrid solution combining elements of Options A/R–1 and A/R–2. The scope of work includes renovation and selective demolition of the existing School, along with the construction of a single multi–story addition serving as swing space, to provide a solution that meets the Educational Program requirements to the maximum extent possible. The following Addition/Renovation scope of work is based on a thorough assessment of existing building systems by the Design Team.

Proposed SF areas for this option are approximately as follows:

550 Enrollment:

- Renovation (existing building) = 99,000 GSF
- Demolition (existing building) = 31,000 GSF
- Addition = 44,500 GSF
- Total GSF = 143,500 GSF**

700 Enrollment:

- Renovation (existing building) = 112,000 GSF
- Demolition (existing building) = 18,000 GSF
- Addition = 38,000 GSF
- Total GSF = 150,000 GSF**

FOR BASIS OF DESIGN SCOPE OF WORK REFER TO SECTION 3.3.3, D, 1, a.

DEGREE OF EDUCATIONAL PROGRAM FULFILLMENT/SPACE SUMMARY VARIATION: The Addition/Renovation Option AR–1.5 will satisfy most Educational Program/Space Summary objectives. Several items of note include the following:

- The efficiency factor of an Addition/Renovation solution may be less than that of New Construction due to existing structural grids, interior/exterior walls and openings.
- Sustainability goals are more readily achieved with New Construction than with the Addition/Renovation of an existing building.
- Full building code compliance, in terms of structure, accessibility, energy and life safety, will be more difficult to achieve in an existing building than with New Construction. Variances and/or compliance alternatives may be warranted if full compliance with applicable codes is impractical.
- Adjacencies between spaces and to the exterior may not meet ideal program goals but are not seen as detrimental to the extent that an Addition/Renovation solution should be dismissed.

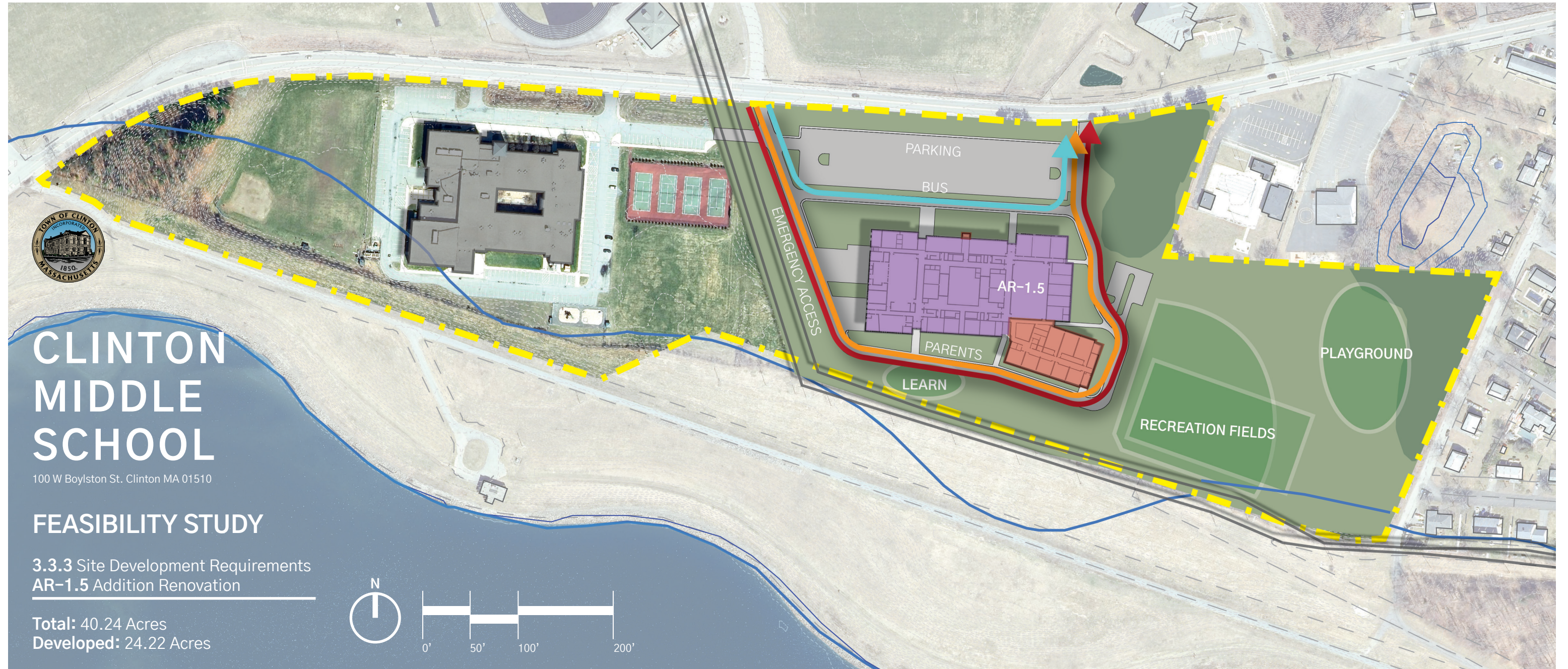
- This option provides distinct separation between the “upper school” and “lower school” as grades 7 and 8 will ultimately be located in the new wing addition whereas grade 4 will be on the first floor in the existing school and grades 5 and 6 will be on the second floor in the existing school.
- In Option AR–1.5, the core and community use areas are renovated in place. On the one hand, this is beneficial as the existing areas of these spaces are generously sized, however they are not co-located to provide centralized use after school hours. If this option is selected for further study, strategic lock off points to the academic spaces would be required.
- The locations of the Cafeteria, Media center and Gymnasium do not allow access or views to the exterior, however there are opportunities for skylights and interior overlooks above the Media Center.
- Due to the restrictions of the existing building area and structure, the collaborative work areas would need to be remote from the classroom neighborhoods in some cases.
- The landscape and site designs would need to consider options for traffic control and separation if this option is selected for further study.

SITE & FACILITY GOALS & OBJECTIVES: The Addition/Renovation Option AR–1.5 impacts the current site amenities in the following ways. The development of this option would result in the loss of (2) baseball/softball fields, the greenhouse, and (3) basketball courts. The site would continue to provide significantly more parking than is required by the facility, a baseball/softball field, open play field, and (3) basketball courts. Part of the proposed scope of work is to provide a new outdoor learning space, paved play area, and age-appropriate play structures.

ENERGY EFFICIENCY & UTILITIES: The Addition/Renovation Option AR–1.5 would address all the new energy code requirements in respect to envelope and building system performance. However, these thermal improvements would prevent the existing roof structure from having the structural capacity necessary to support the installation of a photovoltaic array. The roof of the new addition would be able to support the installation of photovoltaic panels. The location of the new addition would impact the location of existing site utilities [water/sewer] that would need to be relocated.

IMPACT OF CONSTRUCTION PHASING: Like (but to a greater extent than) the Code Upgrade/Base Repair Option, the Addition/Renovation Option AR–1.5 scope of work involves significant demolition, abatement and renovation/reconstruction activities throughout the entire school. Since any Addition/Renovation Option must also be occupied during construction, it is assumed that the work will be done in multiple phases over a period of up to 4 years. Unlike the Base Repair Option or Addition/Renovation Option A/R–1 which require temporary modular Classrooms, Option A/R–1.5 can

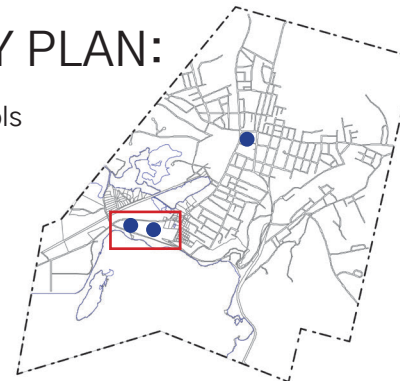
provide “swing space” by constructing and occupying a new addition in the initial phase of the project. Accordingly, the first 12–15 months of work would have much less impact to the occupants of the existing building than later phases, except for the southeast corner (where the proposed Addition connects to the existing building) which would not be available for use. Taking this approach to provide “permanent” swing space will increase the overall project duration (compared to A/R–1 and NC–1) and requires that the primary addition’s MEP systems be completed and operational before most of the existing building is renovated. In addition, later phases involving renovation of existing spaces would require dislocation of students/staff/faculty and related educational/support areas at least once and potentially more. As stated previously, summer vacations will be leveraged to maximize productivity during unoccupied phases; this will help to reduce disruption to the District’s educational delivery during the school year. Other impacts related to construction phasing are site–related. Since the proposed addition will occupy parts of the basketball courts and softball infield, there will be temporary reconfiguration of vehicular and pedestrian circulation routes. Additionally, the existing site sanitary sewer line will be impacted and requires permanent relocation. The Contractor will also need a place for storage/laydown of materials as well as parking and temporary offices. The most likely location for these is the left–field area of the current softball field, which will impact Physical Education/Athletics programs in that area for virtually the full project duration. A potential access point for the Contractor into site may be the gated entry at the intersection of S. Main Street and Dyke Drive, however this will impact use of the baseball field. There may also be, depending on scheduling and how much can be accomplished during summer months, an impact due to construction activity displacing existing pedestrian and vehicular access along the main entry driveway where the admin/guidance/medical suite is proposed.



NOTES:

QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



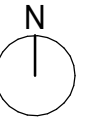
LEGEND:

- Parcel Property Line
- New Construction
- New Athletic Field
- Existing Building
- DCR Buffer Zone
- Bus Circulation
- Parent Circulation
- Access Road

550 STUDENT ENROLLMENT

TOTAL AREA: 143,500 GSF

1st FLOOR: 100,000 GSF
2nd FLOOR: 43,500 GSF



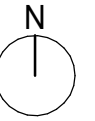
1 First Floor Plan AR-1.5
1" = 40'-0"



550 STUDENT ENROLLMENT

TOTAL AREA: 143,500 GSF

1st FLOOR: 100,000 GSF
2nd FLOOR: 43,500 GSF

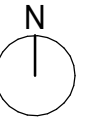


1 Second Floor Plan AR-1.5
1" = 40'-0"

700 STUDENT ENROLLMENT

TOTAL AREA: 150,000 GSF

1st FLOOR: 100,000 GSF
2nd FLOOR: 50,000 GSF



1 First Floor Plan AR-1.5
1" = 40'-0"

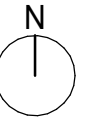
- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



700 STUDENT ENROLLMENT

TOTAL AREA: 150,000 GSF

1st FLOOR: 100,000 GSF
2nd FLOOR: 50,000 GSF



1

Second Floor Plan AR-1.5

1" = 40'-0"

- - - - BUILDING ADDITION
- CORE FACILITY
- NEW WALL
- ADMINISTRATION
- ACADEMIC
- EXISTING WALL
- BUILDING SERVICE
- CIRCULATION





CLINTON MIDDLE SCHOOL

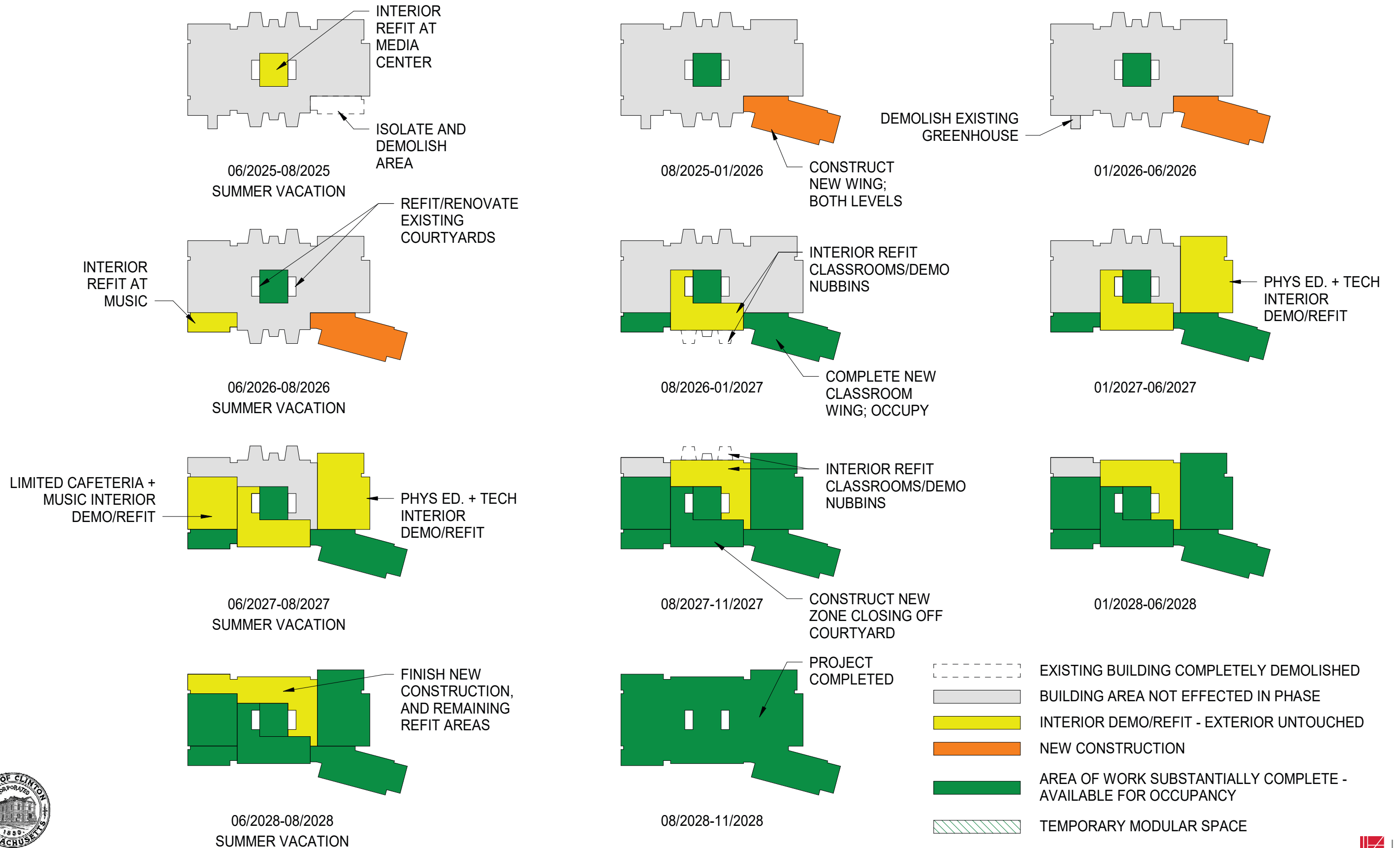
100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Addition Renovation Option: AR-1.5
Massing

Total: 40.24 Acres
Developed: 24.22 Acres





Clinton Middle School Project

ID	Task Name	Duration	Start	Finish	Timeline																											
					2023	2024	2025	2026	2027	2028																						
					Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 1	Qtr 2	2nd Half	Qtr 3	Qtr 4
1	MSBA Module 2 - 7	526 days?	Mon 8/1/22	Mon 8/5/24																												
2	Mod 2 - Architect selection process	57 days	Fri 8/5/22	Mon 10/24/22																												
14	Module 3 - Feasibility Study	181 days	Wed 12/21/22	Wed 8/30/23																												
15	Preferred Design Program (PDP)	90 days	Wed 12/21/22	Tue 4/25/23																												
28	Preferred Schematic Report (PSR)	104 days	Fri 4/7/23	Wed 8/30/23																												
29	Final evaluation of of alternatives	30 days	Fri 4/7/23	Thu 5/18/23																												
30	Preferred solution	25 days	Fri 5/12/23	Thu 6/15/23																												
31	Local action and approvals	7 days	Fri 6/16/23	Mon 6/26/23																												
32	Submit PSR to MSBA	1 day	Tue 6/27/23	Tue 6/27/23																												
33	MSBA Board Approval to proceed with schematic design 8/30/23	46 days	Wed 6/28/23	Wed 8/30/23																												
34	MSBA staff review	20 days	Wed 6/28/23	Tue 7/25/23																												
35	MSBA PSR review and comment	15 days	Wed 6/28/23	Tue 7/18/23																												
36	Respond to MSBA PSR comments	5 days	Wed 7/19/23	Tue 7/25/23																												
37	Facilities assessment subcommittee review	31 days	Wed 7/19/23	Wed 8/30/23																												
38	FAS Mtg #1	1 day	Wed 7/19/23	Wed 7/19/23																												
39	FAS Mtg #2 (if required)	1 day	Wed 8/2/23	Wed 8/2/23																												
40	Respond to FAS comments	5 days	Thu 8/3/23	Wed 8/9/23																												
41	MSBA Board Approval - 8-30-23	1 day	Wed 8/30/23	Wed 8/30/23																												
42	Module 4 - Schematic Design	169 days	Thu 8/31/23	Tue 4/23/24																												
43	SD Submission Development	169 days	Thu 8/31/23	Tue 4/23/24																												
44	DESE Submittal Development	120 days	Thu 8/31/23	Wed 2/14/24																												
45	Schematic Design Binder	85 days	Thu 8/31/23	Wed 12/27/23																												
46	Schematic Design Project Manual	85 days	Thu 8/31/23	Wed 12/27/23																												
47	Schematic Design Drawings	85 days	Thu 8/31/23	Wed 12/27/23																												
48	Schematic Design Estimating	20 days	Thu 12/28/23	Wed 1/24/24																												
49	SD Estimate Reconciliation & Budget	6 days	Thu 1/25/24	Thu 2/1/24																												
50	Local actions and approvals	15 days	Fri 2/2/24	Thu 2/22/24																												
51	Submit SD to MSBA	1 day	Fri 2/23/24	Fri 2/23/24																												
52	Review and approve SD submission	25 days	Mon 2/26/24	Fri 3/29/24																												
53	MSBA Staff review	25 days	Mon 2/26/24	Fri 3/29/24																												
54	MSBA SD review and comment	15 days	Mon 2/26/24	Fri 3/15/24																												
55	Response to MSBA SD comments	10 days	Mon 3/18/24	Fri 3/29/24																												
56	Final submission review	1 day	Mon 4/1/24	Mon 4/1/24																												
57	MSBA Board approval - date TBD	15 days	Tue 4/2/24	Mon 4/22/24																												
58	MSBA Board Action Letter Issued	1 day	Tue 4/23/24	Tue 4/23/24																												
59	DESE review and approval letter	4 days	Mon 3/18/24	Thu 3/21/24																												
60	Module 5 - Funding the Project	50 days	Tue 4/23/24	Mon 7/1/24																												
61	Project scope and budget agreement	10 days	Wed 4/24/24	Tue 5/7/24																												
62	Total Project Budget & Exhibit Development	3 days	Wed 4/24/24	Fri 4/26/24																												
63	Reimbursement rate - signed Certification	3 days	Mon 4/29/24	Wed 5/1/24																												
64	Prerequisites to MSBA Execution of PS&B	3 days	Mon 4/29/24	Wed 5/1/24																												

CMS - PSR Option AR1.5 (700)
06.27.2023

Task		Project Summary		Manual Task		Start-only		Manual	Deadline	
Split		Inactive Task		Duration-only		Finish-only		Progress		
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress		
Summary		Inactive Summary		Manual Summary		External Milestone				

3.3.3 FINAL EVALUATION OF ALTERNATIVES

C. Preliminary Design Options

4. Addition/Renovation Option

AR-2

- a. Narrative
- b. Site Plan
- c. Floor Plans
- d. Massing
- e. Phasing Plans
- f. Project Schedule

SUMMARY: The Addition/Renovation Option AR–2 scope of work includes renovation and selective demolition of the existing School, along with the construction of multi–story additions serving as swing space, to provide a solution that meets the Educational Program requirements to the maximum extent possible. The following Addition/Renovation scope of work is based on a thorough assessment of existing building systems by the Design Team.

Proposed SF areas for this option are approximately as follows:

550 Enrollment:

- Renovation (existing building) = **87,000 GSF**
- Demolition (existing building) = **43,000 GSF**
- Addition = **54,000 GSF**
- Total GSF =141,000 GSF**

700 Enrollment:

- Renovation (existing building) = **87,000 GSF**
- Demolition (existing building) = **43,000 GSF**
- Addition = **69,000 GSF**
- Total GSF =156,000 GSF**

FOR BASIS OF DESIGN SCOPE OF WORK REFER TO SECTION 3.3.3, D, 1, a.

DEGREE OF EDUCATIONAL PROGRAM FULFILLMENT/SPACE SUMMARY VARIATION: The Addition/Renovation Option AR–2 will satisfy most Educational Program/Space Summary objectives. Several items of note include the following:

- The efficiency factor of an Addition/Renovation solution may be less than that of New Construction due to existing structural grids, interior/exterior walls, and openings.
- Sustainability goals are more readily achieved with New Construction than with the Addition/Renovation of an existing building.
- Full building code compliance, in terms of structure, accessibility, energy and life safety, will be more difficult to achieve in an existing building than with New Construction. Variances and/or compliance alternatives may be warranted if full compliance with applicable codes is impractical.
- Adjacencies between spaces and to the exterior may not meet ideal program goals but are not seen as detrimental to the extent that an Addition/Renovation solution should be dismissed.
- This option provides distinct separation between the “upper school” and “lower school” as they are in separate wings on opposite sides of the building.

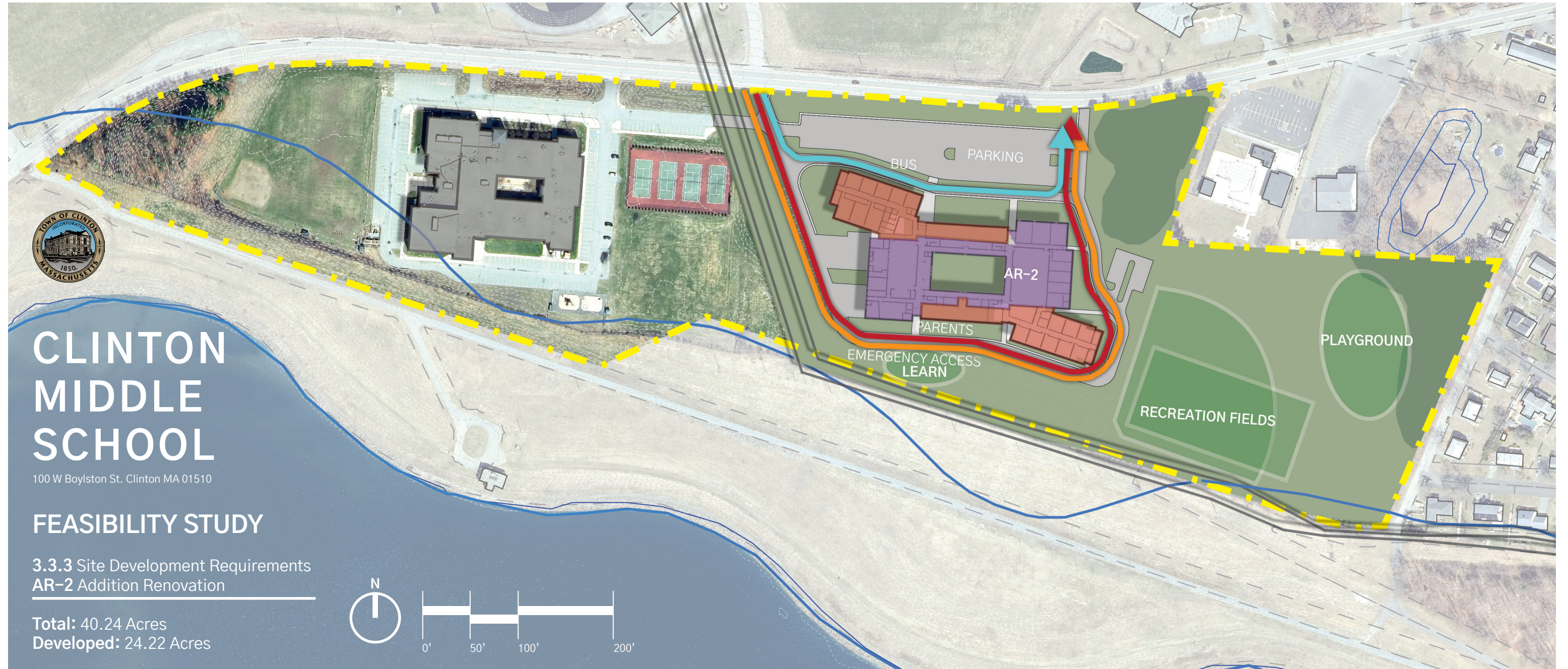
- In Option AR–2, the core and community use areas are renovated in place. On one hand, this is beneficial as the existing areas of these spaces are generously sized, however they are not co-located to provide centralized use after school hours. If this option is selected for further study, strategic lock off points at the classroom wings and STEM commons would be required.
- The locations of the Cafeteria and Gymnasium provide access to a central courtyard, but do not have direct access to the exterior/athletic fields.
- The parent and bus loops for this option are essentially overlapping. The landscape and site designs would need to consider options for traffic control and separation if this option is selected for further study.

SITE & FACILITY GOALS & OBJECTIVES: The Addition/Renovation Option AR–2 impacts the current site amenities in the following ways. The development of this option would result in the loss of (2) baseball/softball fields, the greenhouse, (3) basketball courts, and several parking spaces. The site would continue to provide sufficient parking to support the facility, a baseball/softball field, open play field, and (3) basketball courts. Part of the proposed scope of work is to provide a new outdoor learning space, paved play area, and age-appropriate play structures.

ENERGY EFFICIENCY & UTILITIES: The Addition/Renovation Option AR–2 would address all the new energy code requirements in respect to envelope and building system performance. However, these thermal improvements would prevent the existing roof structure from having the structural capacity necessary to support the installation of a photovoltaic array. The roof of the new additions would be able to support the installation of photovoltaic panels. The location of the new additions would impact the location of existing site utilities [water/sewer] that would need to be relocated.

IMPACT OF CONSTRUCTION PHASING: Like (but to a greater extent than) the Base Repair Option, the Addition/Renovation Option AR–2 scope of work involves significant demolition, abatement, and renovation/reconstruction activities throughout the entire school. Since any Addition/Renovation Option must also be occupied during construction, it is assumed that the work will be done in multiple phases over a period of up to 4 years. Unlike the Base Repair Option or Addition/Renovation Option A/R–1 which require temporary modular Classrooms, Option A/R–2 can provide “swing space” by constructing and occupying a new addition in the initial phase of the project. Accordingly, the first 12–15 months of work would have much less impact to the occupants of the existing building than later phases, except for the southeast corner (where the proposed Addition connects to the existing building) which would not be available for use. Taking this approach to provide “permanent” swing space will increase the overall project duration. In addition, later phases involving renovation of existing spaces would require

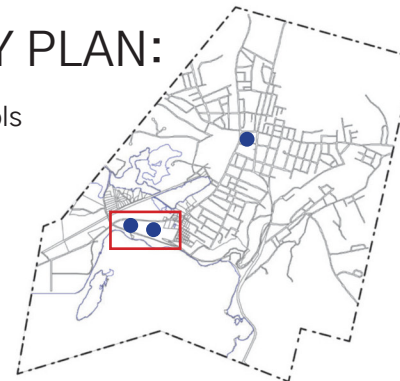
dislocation of students/staff/faculty and related educational/support areas at least once and potentially more. As stated previously, summer vacations will be leveraged to maximize productivity during unoccupied phases; this will help to reduce disruption to the District’s educational delivery during the school year. Other impacts related to construction phasing are site related. Since the proposed additions will occupy parts of the basketball courts, softball infield and main entry driveway, there will be temporary reconfiguration of vehicular and pedestrian circulation routes. Additionally, the existing site sanitary sewer line will be impacted and requires permanent relocation. The Contractor will also need a place for storage/laydown of materials as well as parking and temporary offices. The most likely location for these is the left–field area of the current softball field, which will impact Physical Education/Athletics programs in that area for virtually the full project duration. A potential access point for the Contractor into site may be the gated entry at the intersection of S. Main Street and Dyke Drive, however this will impact use of the baseball field. There will also be, to some extent depending on scheduling and how much can be accomplished during summer months, an impact due to construction activity displacing existing parking and driveways, particularly near the main entry driveway where the grade 7–8 addition is proposed.



NOTES:

QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



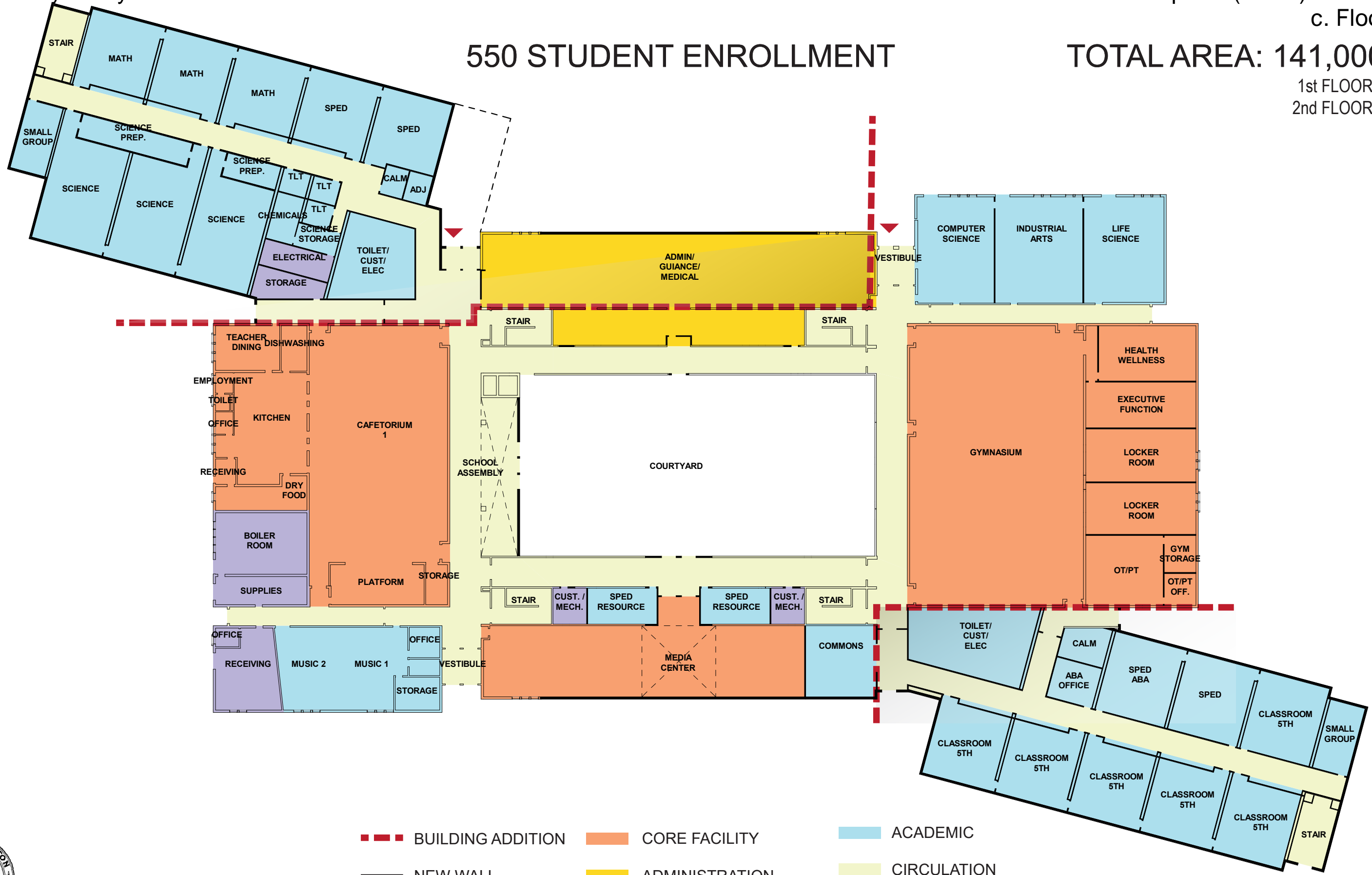
LEGEND:

- Parcel Property Line
- New Construction
- New Athletic Field
- Existing Building
- DCR Buffer Zone
- Bus Circulation
- Parent Circulation
- Access Road

550 STUDENT ENROLLMENT

TOTAL AREA: 141,000 GSF

1st FLOOR: 98,500 GSF
2nd FLOOR: 42,500 GSF



- - - BUILDING ADDITION
- CORE FACILITY
- ACADEMIC
- NEW WALL
- ADMINISTRATION
- CIRCULATION
- EXISTING WALL
- BUILDING SERVICE



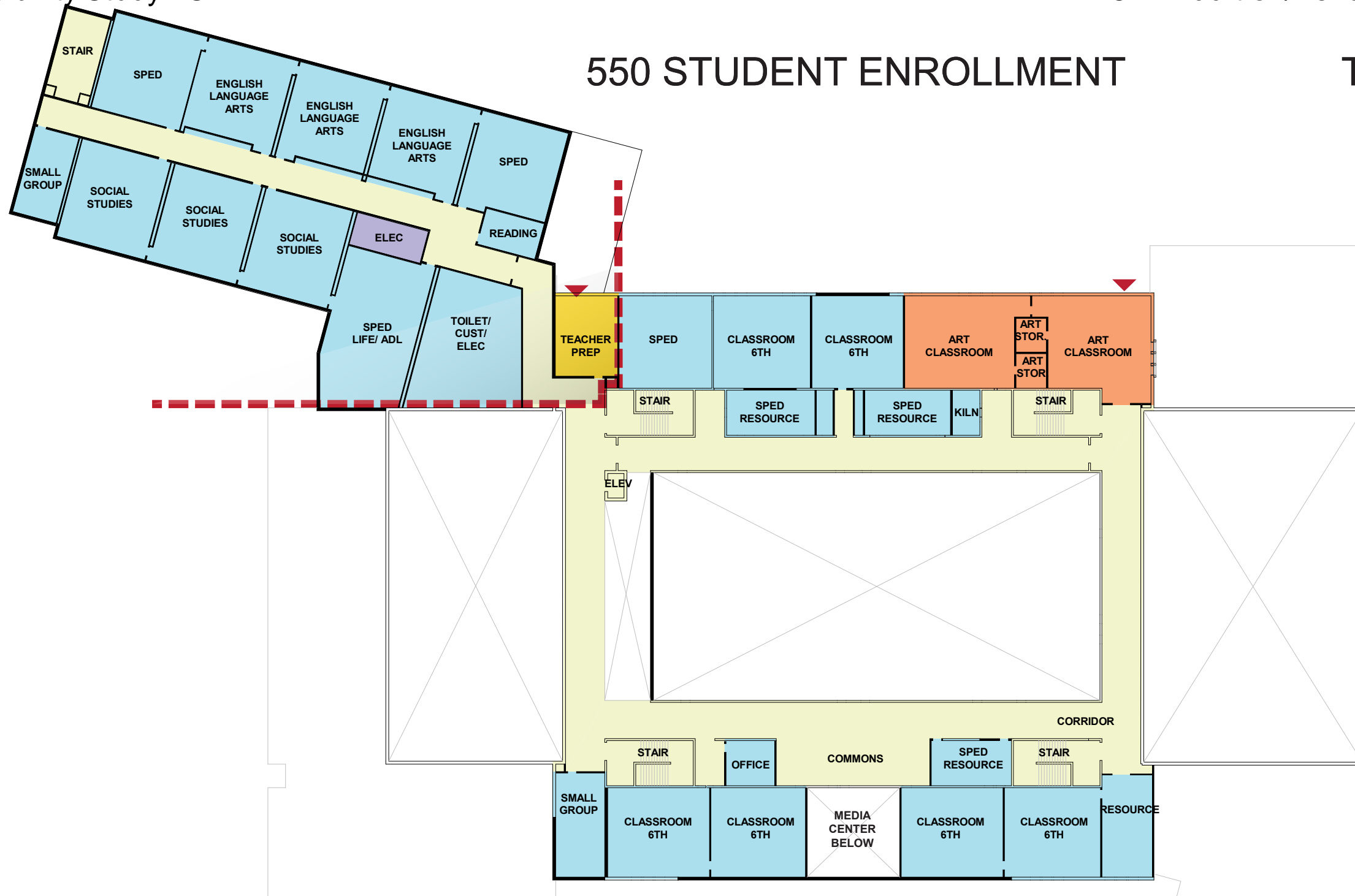
1 First Floor Plan AR-2
1" = 40'-0"



550 STUDENT ENROLLMENT

TOTAL AREA: 141,000 GSF

1st FLOOR: 98,500 GSF
2nd FLOOR: 42,500 GSF



- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



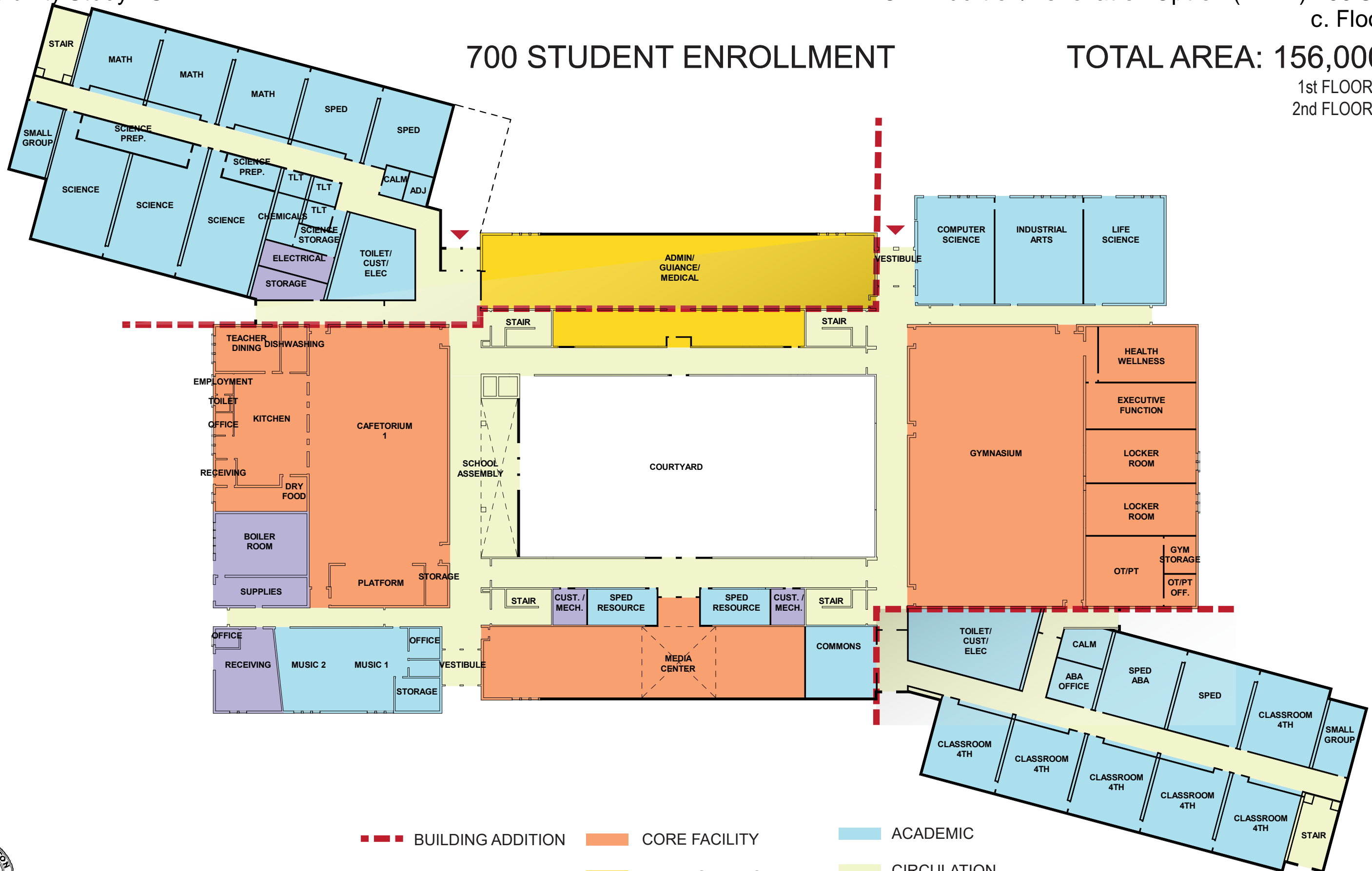
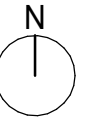
1 Second Floor Plan AR-2
1" = 40'-0"



700 STUDENT ENROLLMENT

TOTAL AREA: 156,000 GSF

1st FLOOR: 98,000 GSF
2nd FLOOR: 58,000 GSF



- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



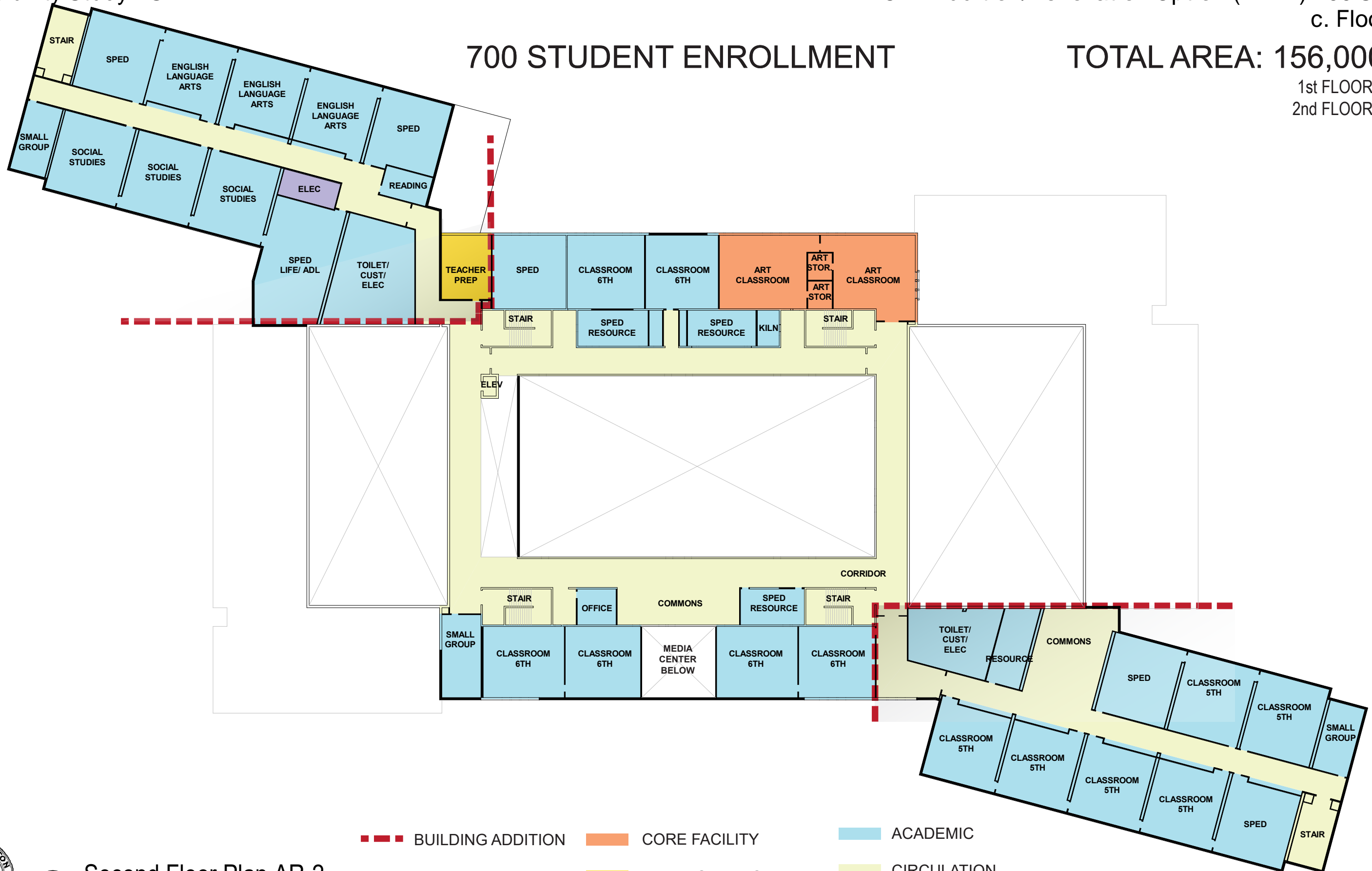
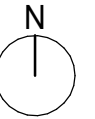
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700 STUDENT ENROLLMENT

TOTAL AREA: 156,000 GSF

1st FLOOR: 98,000 GSF
2nd FLOOR: 58,000 GSF



- BUILDING ADDITION
- NEW WALL
- EXISTING WALL
- CORE FACILITY
- ADMINISTRATION
- BUILDING SERVICE
- ACADEMIC
- CIRCULATION



1 Second Floor Plan AR-2
1" = 40'-0"





CLINTON MIDDLE SCHOOL

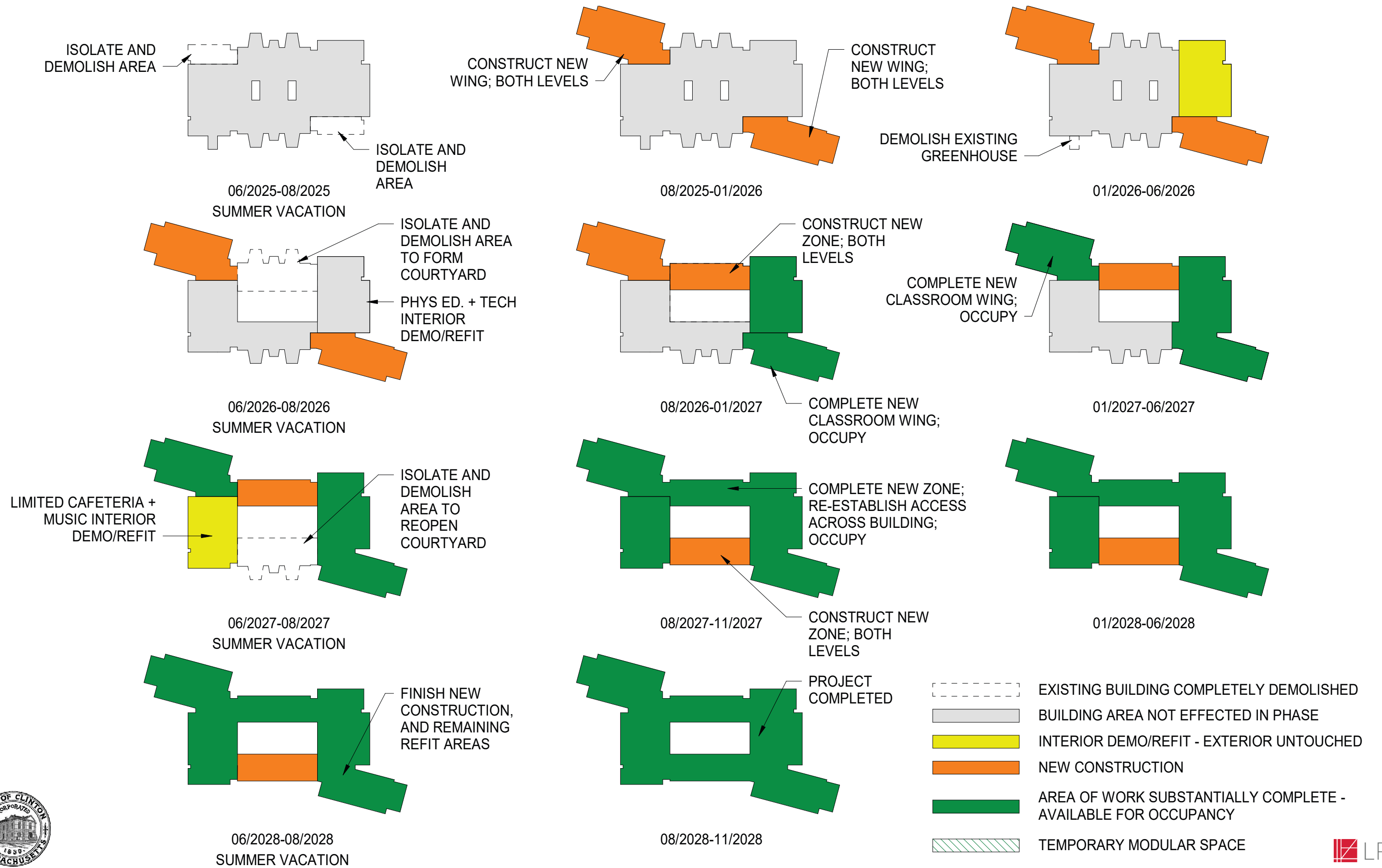
100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Addition Renovation Option: AR-2
Massing

Total: 40.24 Acres
Developed: 24.22 Acres





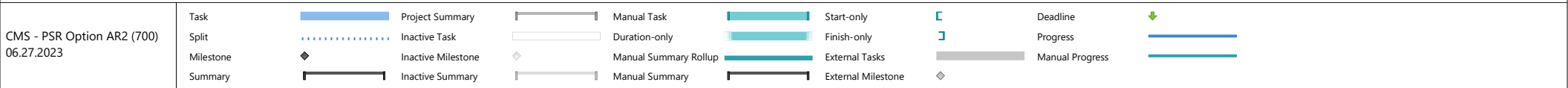
Clinton Middle School Project

ID	Task Name	Duration	Start	Finish	Timeline																															
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CMS - PSR Option AR2 (700)
06.27.2023

Task		Project Summary		Manual Task		Start-only		Manual		Deadline
Split		Inactive Task		Duration-only		Finish-only		Manual		Progress
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual		Manual Progress
Summary		Inactive Summary		Manual Summary		External Milestone				

Clinton Middle School Project



3.3.3 FINAL EVALUATION OF ALTERNATIVES

C. Preliminary Design Options

5. New Construction Option

NC-1 *

- a. Narrative
- b. Site Plan
- c. Floor Plans
- d. Massing
- e. Phasing Plans
- f. Project Schedule

SUMMARY: The New Construction Option NC–1 is based on construction of a new building located on the athletic fields to the southeast of the existing middle school. It is expected that the new building will be constructed and completed while the existing building remains fully occupied. Once the new building is complete, the existing building would be demolished in its entirety and any remaining site features (athletic fields, playgrounds, parking, driveways, etc.) would be completed. While there will be temporary construction impacts with this option, including the loss of most athletic fields/courts and the relocation of vehicular circulation/parking and site utilities, they relate primarily to the site and the result is a solution that meets most if not all of the Educational Program requirements. Proposed SF areas for this option are approximately as follows:

- **New Construction 550 Enrollment** = 119,500 GSF
- **New Construction 700 Enrollment** = 136,000 GSF
- **Demolition (existing building)** = 130,000 GSF

FOR BASIS OF DESIGN SCOPE OF WORK REFER TO SECTION 3.3.3, D, 1, a.

DEGREE OF EDUCATIONAL PROGRAM FULFILLMENT/SPACE SUMMARY VARIATION: New Construction option NC–1 will satisfy all Educational Program/Space Summary objectives.

This option meets the educational program requirements. The organization of the building lends itself readily to separation for after–hours community use. In the 700–student enrollment option, the 6th grade is on the second floor, somewhat remote from the 4th and 5th grade neighborhoods, and closer to the 7th/8th grade classrooms. An adaptation to this option was studied with a three–story wing for grades 4–6, and a two story wing for grades 7–8.

SITE & FACILITY GOALS & OBJECTIVES: The New Construction option NC–1 impacts the current site amenities in the following ways. The development of this option would result in the loss of all the baseball/softball fields, the greenhouse, and several parking spaces. The site would continue to provide sufficient parking to support the facility, an open play field, and (3) basketball courts. Part of the proposed scope of work is to provide a new outdoor learning space, paved play area, and age–appropriate play structures.

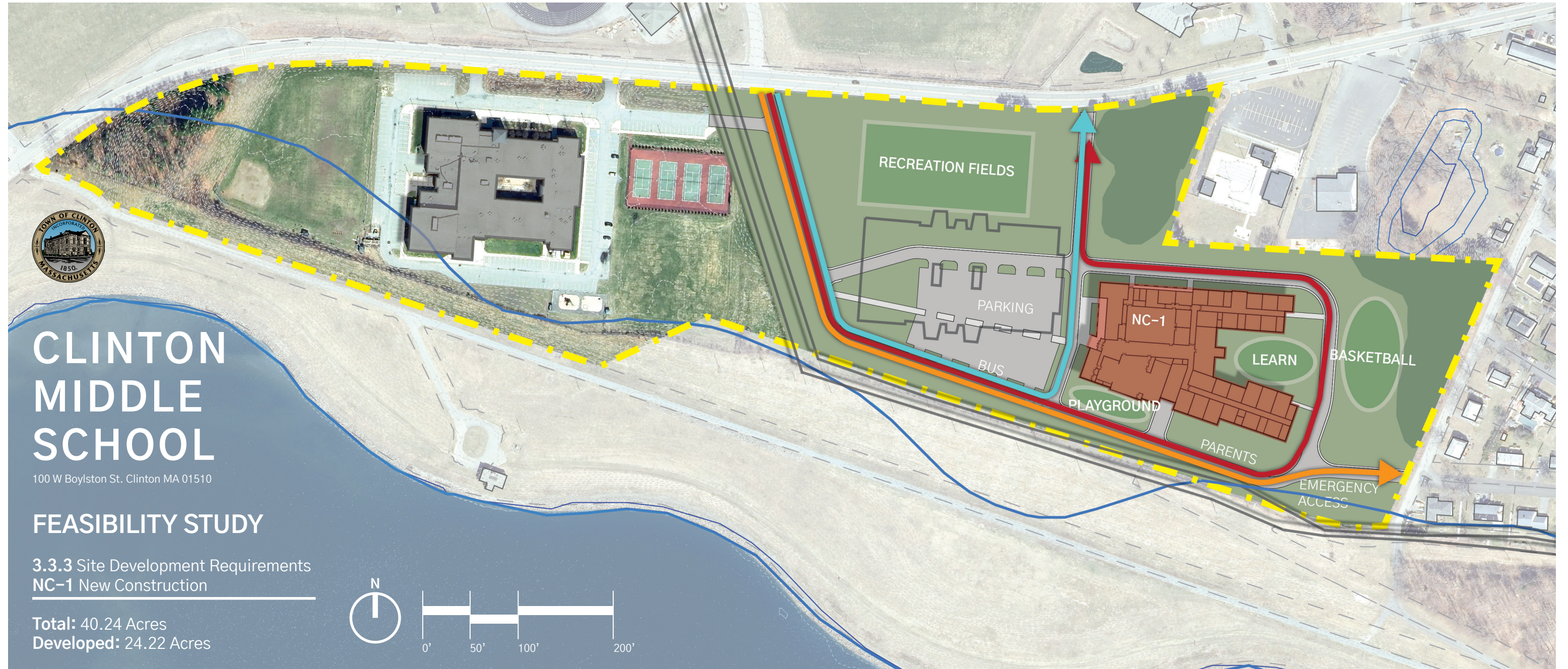
ENERGY EFFICIENCY & UTILITIES: The New Construction option NC–1 would address all the new energy code requirements in respect to envelope and building system performance. Unlike all the previous options, the entire roof structure will have the necessary structural capacity to support the

installation of a photovoltaic array. The location of the new building would impact the location of existing site utilities [water/sewer] that would need to be relocated.

IMPACT OF CONSTRUCTION PHASING: Because a new building can be constructed entirely outside the footprint of the existing building (which can remain fully occupied), the New Construction option will have less impact to students than either the Base Repair or Addition/Renovation options, all without the need for “swing space”. As noted previously, the biggest temporary construction impacts are site-related and include the following:

- Temporary loss of athletic fields and other outdoor spaces during construction.
- Relocation of pedestrian/vehicular traffic and staff/faculty parking due to the need for dedicated construction access.
- Relocation of existing site utilities

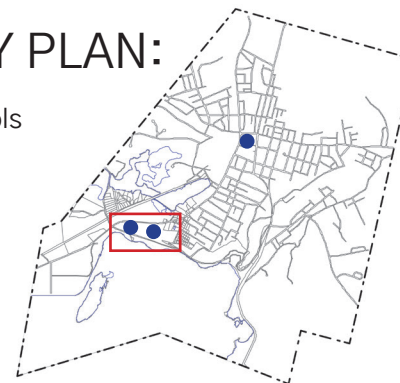
An advantage of a New Construction option is that it doesn’t have the same limitations, in terms of work area, as either the Code Upgrade/Base Repair or Renovation/Addition Options. More workers can be productive because there is a greater area to work in. Consequently, the overall duration of the project can be less than a project which has numerous phases, relocations, and temporary support facilities. Like the other options, the New Construction Option will leverage summer vacations to maximize productivity, particularly site-related, and reduce construction impacts.



NOTES:

QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



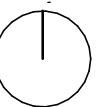
LEGEND:

- ▬ Parcel Property Line
- ▬ New Construction
- ▬ New Athletic Field
- ▬ Existing Building
- ▬ DCR Buffer Zone
- ▬ Bus Circulation
- ▬ Parent Circulation
- ▬ Access Road

550 STUDENT ENROLLMENT

TOTAL AREA: 119,500 GSF

1st FLOOR: 85,000 GSF
2nd FLOOR: 34,500 GSF



550 STUDENT ENROLLMENT

TOTAL AREA: 119,500 GSF

1st FLOOR: 85,000 GSF
2nd FLOOR: 34,500 GSF



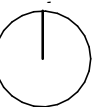
1 Second Floor Plan NC-1 R1
1" = 40'-0"



700 STUDENT ENROLLMENT

TOTAL AREA: 136,000 GSF

1st FLOOR: 84,000 GSF
2nd FLOOR: 52,000 GSF



1 First Floor Plan NC-1 R1
1" = 40'-0"



700 STUDENT ENROLLMENT

TOTAL AREA: 136,000 GSF

1st FLOOR: 84,000 GSF
2nd FLOOR: 52,000 GSF



1 Second Floor Plan NC-1 R1
1" = 40'-0"



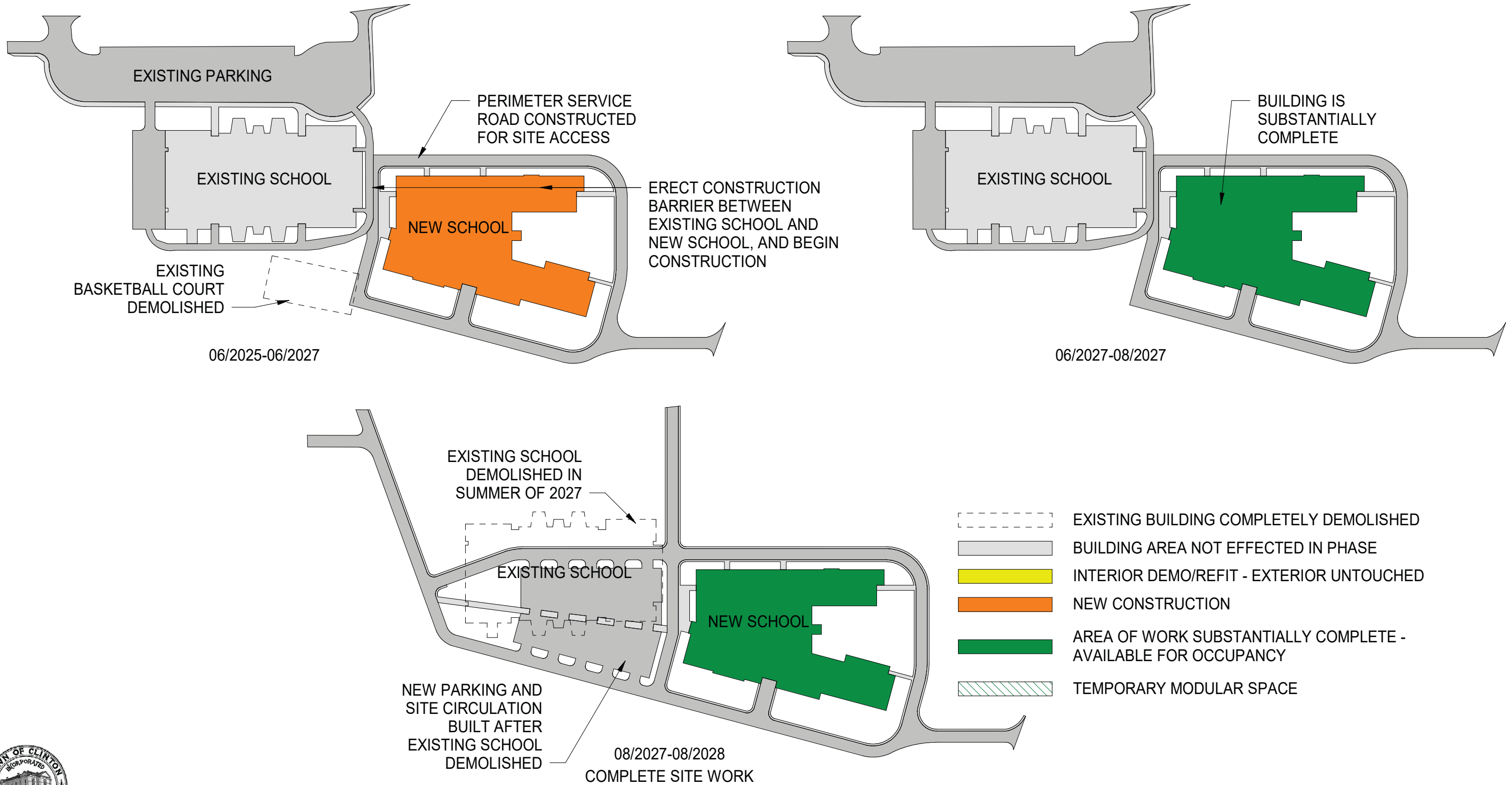
CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.2 Addition Renovation Option: NC-1
Massing

Total: 40.24 Acres
Developed: 24.22 Acres



Clinton Middle School Project

ID	Task Name	Duration	Start	Finish	Timeline																											
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CMS - PSR Option NC1 (700)
06.27.2023

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Split		Inactive Task		Duration-only		Finish-only		Manual	Progress	
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Summary		Inactive Summary		Manual Summary		External Milestone				

3.3.3 FINAL EVALUATION OF ALTERNATIVES

D. Supporting Documents

1. Basis of Design Narratives

- a. Architectural
- b. Site-Civil
- c. Site-Landscape
- d. Structural
- e. Fire Protection
- f. Plumbing
- g. HVAC
- h. Electrical
- i. Food Service
- j. Technology
- k. Sustainability

CODE UPGRADE/BASE REPAIR SCOPE OF WORK:**General:**

- This option is based on the premise that the existing School will remain fully occupied during construction and that the work will be done in multiple phases, beginning with the installation of 16 temporary modular classrooms and supporting construction (bathrooms, teacher workspace, fire suppression system, site utilities, temporary boiler and/or generator, etc.), to the south and east of the existing school, to provide swing space during the renovation. The placement of the modular swing space may require relocation of existing site utilities such as the sanitary sewer line serving the middle and high schools; it may also require temporary reconfiguration of the driveway currently used for parent pick-up. The modular swing space will provide immediate occupancy and reduce the number of students in the existing building, allowing phased demolition/renovation work to commence safely and efficiently. As previously noted, modular swing space is categorically ineligible for MSBA funding.
- Active work zones will be isolated from academic areas by temporary enclosures/partitions, and in general, should not be above or below spaces occupied by staff and students. Safe means of egress must be maintained at all times.
- Phasing will be scheduled to maximize productivity during summer vacations when the majority of common-space work (at Corridors, Stairs, Bathrooms, Gym/Locker Rooms, Cafeteria/Kitchen, Administration, Media Center, etc.), will be accomplished; it is assumed that a second shift will be utilized during some or all of those times.

Building Exterior:

- Rake out existing masonry control joints; provide new backer rod and joint sealant.
- Selectively repoint masonry at exterior walls as required.
- Provide engineered concrete repairs at broken exterior header/sill elements.
- Provide new adhered PVC roofing system throughout, including all membrane/flashing, roof edging, sheet metal work, insulation, roof vapor barrier, wood blocking and other roof accessories (ladders, hatches, etc.) as required.
- Replace all existing windows, storefront and curtainwall with new thermally broken aluminum systems, including 1" (min.) high performance insulating glass, perimeter joint sealants, insulated panels, screens, operable hardware, sheet metal work, air/vapor barrier (AVB) transitions and other accessories as required.
- Remove existing unit ventilator louvers and infill openings with non-combustible exterior wall assembly.
- Remove and replace all perimeter joint sealants at exterior penetrations and control joints.
- Replace all exterior doors with new aluminum or steel doors.
- Replace all hollow metal frames.

- Replace existing overhead doors with motorized insulated metal sectional overhead doors.
- Replace exterior door hardware (including card access and secure entry systems).
- Prepare and repaint steel lintels, plates and other exterior metal items.
- Provide new exterior ventilated rain-screen wall cladding system at existing brick masonry throughout, including fluid-applied air vapor barrier (AVB), AVB transitions to window/door openings and roof systems, rigid mineral wool board insulation, thermally broken standoff clips, metal furring, joint sealants and exterior metal, fiber cement or thin-brick wall panel system.
- Re-glaze existing greenhouse with tempered/laminated insulating glass units.
- Provide temporary modular classrooms and associated site utilities (FP, water, sewer, electrical/data, etc.).

Building Interior:

- Provide full accessibility to comply with 521 CMR including:
 - Provide an accessible route, including maneuvering clearances at doorways, to all accessible interior spaces throughout.
 - Provide new accessible hardware throughout.
 - Provide accessible Toilet Room fixtures, partitions and accessories throughout.
 - Provide accessible water fountains throughout.
 - Provide new accessible signage throughout.
 - Modify existing millwork (transaction areas, serving lines, reception desks, etc.) as required to meet dimensional requirements.
 - Renovate existing elevator with new controls, call stations, signals, 2-way emergency communications and other scope items as required.
 - Modify all stair/ramp guardrails and handrails as required to comply with dimensional requirements.
 - Provide an accessible route, via a new platform lift, from the Cafetorium to the Stage level.
 - Provide assistive listening systems at Cafetorium, Media Center, and Gymnasium.
- Replace VCT flooring throughout with new resilient flooring and base.
- Replace carpet flooring with new vinyl-backed carpeting and resilient base.
- Repaint all interior walls and finishes.
- Replace tile finishes at Bathrooms.
- Provide new toilet compartments and urinal screens at Bathrooms.
- Replace operable partitions at Gymnasium.
- Replace telescopic bleachers at Gymnasium.
- Remove existing inaccessible wood risers at Band Room and provide new portable risers.
- Repair Gymnasium equipment (basketball backstops, volleyball standards, divider curtain, etc.).
- Repair existing Corridor and Locker Room lockers throughout.

- Provide new ACT ceilings throughout.
- Provide new roller shade window treatments throughout.
- Replace wire glass with tempered or laminated safety glass at doors, frames and borrowed lites.
- Provide new markerboards and tackboards at Classrooms throughout.

Fixtures, Furnishings & Equipment (FF&E)/Technology:

- Provide new furnishings where broken or exceeded lifespan.
- Provide new student devices (Chromebooks) to maintain 1:1 ratio.
- Provide new teacher devices (laptops).
- Provide Classroom technology including short throw interactive projectors, and document cameras.
- Supplement existing hand-held radios as needed.
- Update main servers and UPS as required.
- Provide Classroom local speech reinforcement system (refer to Electrical scope).
- Provide new telecommunications infrastructure (refer to Electrical scope).
- Update Wi-Fi system (refer to Electrical scope).
- Provide digital clock/PA system (refer to Electrical scope).
- Provide access control system to support a secure main entry sequence (refer to Electrical scope).
- Update video surveillance camera system (refer to Electrical scope).

Hazardous Materials (refer also to UEC Hazardous Materials Identification Study):

- Abate exterior caulking assumed to contain PCB's.
- Abate VCT flooring/mastic throughout.
- Abate pipe insulation.
- Abate roofing system.
- Abate lab tables and sinks at Science Labs.
- Abate miscellaneous hazardous materials concealed above ceilings and behind walls at all areas to be disturbed.
- Abate light fixtures, doors, interior windows, blackboards, tackboards, sinks and other miscellaneous hazardous materials.

ADDITION/RENOVATION OPTION AR-1 SCOPE OF WORK:**General:**

- This option is based on the premise that the existing School will remain fully occupied during construction and that the work will be done in multiple phases, beginning with the installation of 16 temporary modular classrooms and supporting construction (bathrooms, teacher workspace, fire suppression system, site utilities, temporary boiler and/or generator, etc.), to the south and east of the existing school, to provide swing space during the renovation. The modular swing space will provide immediate occupancy and reduce the number of students in the existing building, allowing phased demolition/renovation work to commence safely and efficiently. As noted previously, modular swing space is categorically ineligible for MSBA funding.
- At the same time a 1-story Addition, consisting of a grade 4 neighborhood and support spaces, will be constructed on the east side of the existing building.
- Another 1-story Addition, to expand the existing Administration/Guidance/Medical area, will be constructed at the northeast corner of the building.
- The existing light wells will be capped with new skylights and their exterior walls opened up to allow natural daylighting into interior spaces.
- Active work zones will be isolated from academic areas by temporary enclosures/partitions, and in general should not be above or below spaces occupied by staff and students. Safe means of egress must be maintained at all times.
- Phasing will be scheduled to maximize productivity during summer vacations when the majority of common-space work (at Corridors, Stairs, Bathrooms, Gym/Locker Rooms, Cafeteria/Kitchen, Administration, Media Center, etc.), will be accomplished; it is assumed that a second shift will be utilized during some or all of those times. Preliminary phasing plans are included as part of the PSR supporting documents.
- Additions shall be constructed in accordance with New Construction requirements; typical.

Building Exterior:

- Rake out existing masonry control joints; provide new backer rod and joint sealant.
- Selectively repoint masonry at exterior walls as required.
- Provide engineered concrete repairs at broken exterior header/sill elements.
- Provide new adhered PVC roofing system throughout, including all membrane/flashing, roof edging, sheet metal work, insulation, roof vapor barrier, wood blocking and other roof accessories (ladders, hatches, etc.) as required.
- Provide new aluminum skylights, with tempered/laminated insulating glass units, at existing light wells.
- Replace all existing windows, storefront and curtainwall with new thermally broken aluminum systems, including 1" (min.) high performance insulating glass, perimeter joint sealants,

insulated panels, screens, operable hardware, sheet metal work, air/vapor barrier (AVB) transitions and other accessories as required.

- Remove existing unit ventilator louvers and infill openings with non-combustible exterior wall assembly.
- Remove and replace all perimeter joint sealants at exterior penetrations and control joints.
- Replace all exterior doors with new aluminum or steel doors.
- Replace all hollow metal frames.
- Replace existing overhead doors with motorized insulated metal sectional overhead doors.
- Replace exterior door hardware (including card access and secure entry systems).
- Prepare and repaint steel lintels, plates and other exterior metal items.
- Provide new exterior ventilated rain-screen wall cladding system at existing brick masonry throughout, including fluid-applied air vapor barrier (AVB), AVB transitions to window/door openings and roof systems, rigid mineral wool board insulation, thermally broken standoff clips, metal furring, joint sealants and exterior metal, fiber cement or thin-brick wall panel system.
- Demolish existing greenhouse.
- Provide temporary modular classrooms and associated site utilities (FP, water, sewer, electrical/data, etc.).

Building Interior:

- Provide Code Upgrade/Base Repair option scope of work.
- Provide full accessibility to comply with 521 CMR including:
 - Provide an accessible route, including maneuvering clearances at doorways, to all accessible interior spaces throughout.
 - Provide new accessible hardware throughout.
 - Provide accessible Toilet Room fixtures, partitions and accessories throughout.
 - Provide accessible water fountains throughout
 - Provide new accessible signage throughout
 - Modify all stair/ramp guardrails and handrails as required.
 - Provide an accessible route, via a new platform lift, from the Cafetorium to the Stage level.
 - Provide assistive listening systems at Cafetorium, Media Center, and Gymnasium.
- Replace VCT flooring throughout with new resilient flooring and base.
- Replace carpet flooring with new vinyl-backed carpeting and resilient base.
- Repaint all interior walls and finishes.
- Replace tile finishes at Bathrooms.
- Provide new toilet compartments and urinal screens at Bathrooms.
- Provide new doors and hardware throughout.
- Replace operable partitions at Gymnasium.

- Replace telescopic bleachers at Gymnasium.
- Remove existing inaccessible wood risers at Band Room and provide new portable risers.
- Provide new Gymnasium equipment (basketball backstops, volleyball standards, divider curtain, wall pads, etc.)
- Replace Corridor and Locker Room lockers throughout.
- Provide new ACT ceilings throughout.
- Provide new roller shade window treatments throughout.
- Replace wire glass with tempered or laminated safety glass at doors, frames and borrowed lites.
- Provide new markerboards and tackboards at Classrooms throughout.
- Provide new millwork/casework throughout.
- Provide new 2-stop 3500-lb. elevator.

Fixtures, Furnishings & Equipment (FF&E)/Technology:

- Provide new FF&E throughout including furnishings, equipment, maintenance items, etc.
- Provide new student devices (Chromebooks) to maintain 1:1 ratio.
- Provide new teacher devices (laptops).
- Provide Classroom technology including short throw interactive projectors, and document cameras.
- Provide new hand-held radio system.
- Provide new main servers and UPS.
- Provide Classroom local speech reinforcement system (refer to Electrical scope).
- Provide new telecommunications infrastructure (refer to Electrical scope).
- Provide new Wi-Fi system throughout including exterior learning spaces (refer to Electrical scope).
- Provide new digital clock/PA system (refer to Electrical scope).
- Provide new video surveillance, access control and security systems (refer to Electrical scope).
- Provide new VOIP telephone system (refer to Electrical scope).

Hazardous Materials (refer to UEC Basis of Design narrative):

- Abate exterior caulking assumed to contain PCB's.
- Abate VCT flooring/mastic throughout.
- Abate pipe insulation.
- Abate roofing system.
- Abate lab tables and sinks at Science Labs.
- Abate miscellaneous hazardous materials concealed above ceilings and behind walls at all areas to be disturbed.

- Abate light fixtures, doors, interior windows, blackboards, tackboards, sinks and other miscellaneous hazardous materials.

ADDITION/RENOVATION OPTION AR-1.5 SCOPE OF WORK:**General:**

- This option is based on the premise that the existing School will remain fully occupied during construction and that the work will be done in multiple phases. The project would begin with the construction of a 2-story classroom addition, consisting of grade 7-8 neighborhoods, on the southeast of the existing school to provide swing space during the renovation. The swing space in this option will be permanent construction (as opposed to the temporary modular classrooms proposed for option AR-1) and will be constructed and occupied prior to the rest of the project scope. This will allow the District to reduce the number of students in the existing building and the Contractor to begin phased demolition/renovation work safely and efficiently. While this approach eliminates the need for (and cost of) temporary modular classrooms, it also has some drawbacks. First, due to the need to completely build out the permanent classroom wing first, the total construction duration of this option will be about one year longer than that of option AR-1; this will result in greater general conditions costs and longer construction impacts to students and staff. It will also be more challenging (and expensive) to coordinate and start up the new Fire Protection, Plumbing, HVAC, and Electrical building systems that serve the swing space addition in advance of the rest of the project spaces. That said, the potential savings associated with eliminating the temporary modular classrooms could be significantly greater than the added general conditions and coordination costs noted above.
- The existing light wells will be capped with new skylights and their exterior walls opened up to allow natural daylighting into interior spaces.
- Active work zones will be isolated from academic areas by temporary enclosures/partitions, and in general should not be above or below spaces occupied by staff and students. Safe means of egress must be maintained at all times.
- Phasing will be scheduled to maximize productivity during summer vacations when the majority of common-space work (at Corridors, Stairs, Bathrooms, Gym/Locker Rooms, Cafeteria/Kitchen, Administration, Media Center, etc.), will be accomplished; it is assumed that a second shift will be utilized during some or all of those times. Preliminary phasing plans are included as part of the PSR supporting documents.
- Additions shall be constructed in accordance with New Construction requirements; typical.

Building Exterior:

- Rake out existing masonry control joints; provide new backer rod and joint sealant.
- Selectively repoint masonry at exterior walls as required.
- Provide engineered concrete repairs at broken exterior header/sill elements.

- Provide new adhered PVC roofing system throughout, including all membrane/flashing, roof edging, sheet metal work, insulation, roof vapor barrier, wood blocking and other roof accessories (ladders, hatches, etc.) as required.
- Provide new aluminum skylights, with tempered/laminated insulating glass units, at existing light wells.
- Replace all existing windows, storefront and curtainwall with new thermally broken aluminum systems, including 1” (min.) high performance insulating glass, perimeter joint sealants, insulated panels, screens, operable hardware, sheet metal work, air/vapor barrier (AVB) transitions and other accessories as required.
- Remove existing unit ventilator louvers and infill openings with non-combustible exterior wall assembly.
- Remove and replace all perimeter joint sealants at exterior penetrations and control joints.
- Replace all exterior doors with new aluminum or steel doors.
- Replace all hollow metal frames.
- Replace existing overhead doors with motorized insulated metal sectional overhead doors.
- Replace exterior door hardware (including card access and secure entry systems).
- Prepare and repaint steel lintels, plates and other exterior metal items.
- Provide new exterior ventilated rain-screen wall cladding system at existing brick masonry throughout, including fluid-applied air vapor barrier (AVB), AVB transitions to window/door openings and roof systems, rigid mineral wool board insulation, thermally broken standoff clips, metal furring, joint sealants and exterior metal, fiber cement or thin-brick wall panel system.
- Demolish existing greenhouse.

Building Interior:

- Provide Code Upgrade/Base Repair option scope of work.
- Provide full accessibility to comply with 521 CMR including:
 - Provide an accessible route, including maneuvering clearances at doorways, to all accessible interior spaces throughout.
 - Provide new accessible hardware throughout.
 - Provide accessible Toilet Room fixtures, partitions and accessories throughout.
 - Provide accessible water fountains throughout
 - Provide new accessible signage throughout
 - Modify all stair/ramp guardrails and handrails as required.
 - Provide an accessible route, via a new platform lift, from the Cafetorium to the Stage level.
 - Provide assistive listening systems at Cafetorium, Media Center, and Gymnasium.
- Replace VCT flooring throughout with new resilient flooring and base.
- Replace carpet flooring with new vinyl-backed carpeting and resilient base.

- Repaint all interior walls and finishes.
- Replace tile finishes at Bathrooms.
- Provide new toilet compartments and urinal screens at Bathrooms.
- Provide new doors and hardware throughout.
- Replace operable partitions at Gymnasium.
- Replace telescopic bleachers at Gymnasium.
- Remove existing inaccessible wood risers at Band Room and provide new portable risers.
- Provide new Gymnasium equipment (basketball backstops, volleyball standards, divider curtain, wall pads, etc.)
- Replace Corridor and Locker Room lockers throughout.
- Provide new ACT ceilings throughout.
- Provide new roller shade window treatments throughout.
- Replace wire glass with tempered or laminated safety glass at doors, frames and borrowed lites.
- Provide new markerboards and tackboards at Classrooms throughout.
- Provide new millwork/casework throughout.
- Provide new 2-stop 3500-lb. elevator.

Fixtures, Furnishings & Equipment (FF&E)/Technology:

- Provide new FF&E throughout including furnishings, equipment, maintenance items, etc.
- Provide new student devices (Chromebooks) to maintain 1:1 ratio.
- Provide new teacher devices (laptops).
- Provide Classroom technology including short throw interactive projectors, and document cameras.
- Provide new hand-held radio system.
- Provide new main servers and UPS.
- Provide Classroom local speech reinforcement system (refer to Electrical scope).
- Provide new telecommunications infrastructure (refer to Electrical scope).
- Provide new Wi-Fi system throughout including exterior learning spaces (refer to Electrical scope).
- Provide new digital clock/PA system (refer to Electrical scope).
- Provide new video surveillance, access control and security systems (refer to Electrical scope).
- Provide new VOIP telephone system (refer to Electrical scope).

Hazardous Materials (refer to UEC Basis of Design narrative):

- Abate exterior caulking assumed to contain PCB's.
- Abate VCT flooring/mastic throughout.
- Abate pipe insulation.

- Abate roofing system.
- Abate lab tables and sinks at Science Labs.
- Abate miscellaneous hazardous materials concealed above ceilings and behind walls at all areas to be disturbed.
- Abate light fixtures, doors, interior windows, blackboards, tackboards, sinks and other miscellaneous hazardous materials.

ADDITION/RENOVATION OPTION AR-2 SCOPE OF WORK:**General:**

- This option is based on the premise that the existing School will remain fully occupied during construction and that the work will be done in multiple phases. The project would begin with the construction of a 2-story classroom addition, consisting of grade 4-5 neighborhoods, on the southeast of the existing school to provide swing space during the renovation. The swing space in this option will be permanent construction (as opposed to the temporary modular classrooms proposed for option AR-1) and will be constructed and occupied prior to the rest of the project scope. This will allow the District to reduce the number of students in the existing building and the Contractor to begin phased demolition/renovation work safely and efficiently. While this approach eliminates the need for (and cost of) temporary modular classrooms, it also has some drawbacks. First, due to the need to completely build out the permanent classroom wing first, the total construction duration of this option will be about one year longer than that of option AR-1; this will result in greater general conditions costs and longer construction impacts to students and staff. It will also be more challenging (and expensive) to coordinate and start up the new Fire Protection, Plumbing, HVAC, and Electrical building systems that serve the swing space addition in advance of the rest of the project spaces. That said, the potential savings associated with eliminating the temporary modular classrooms could be significantly greater than the added general conditions and coordination costs noted above.
- Another 2-story Addition, consisting of a grade 7-8 neighborhood with support spaces, will be constructed at the northwest corner of the existing building.
- The central core Media Center and Science Labs will be demolished to create a new exterior courtyard that will bring natural daylighting into adjacent 1st and 2nd floor level spaces. A portion of the south classroom area will also require demolition to allow for heavy equipment to access the new courtyard area. The perimeter walls of the courtyard will require new concrete frost walls.
- Active work zones will be isolated from academic areas by temporary enclosures/partitions, and in general should not be above or below spaces occupied by staff and students. Safe means of egress must be maintained at all times.
- Phasing will be scheduled to maximize productivity during summer vacations when the majority of common-space work (at Corridors, Stairs, Bathrooms, Gym/Locker Rooms, Cafeteria/Kitchen, Administration, Media Center, etc.), will be accomplished; it is assumed that a second shift will be utilized during some or all of those times. Preliminary phasing plans are included as part of the PSR supporting documents.
- Additions shall be constructed in accordance with New Construction requirements; typical.

Building Exterior:

- Rake out existing masonry control joints; provide new backer rod and joint sealant.

- Selectively repoint masonry at exterior walls as required.
- Provide engineered concrete repairs at broken exterior header/sill elements.
- Provide new adhered PVC roofing system throughout, including all membrane/flashing, roof edging, sheet metal work, insulation, roof vapor barrier, wood blocking and other roof accessories (ladders, hatches, etc.) as required.
- Replace all existing windows, storefront and curtainwall with new thermally broken aluminum systems, including 1” (min.) high performance insulating glass, perimeter joint sealants, insulated panels, screens, operable hardware, sheet metal work, air/vapor barrier (AVB) transitions and other accessories as required.
- Remove existing unit ventilator louvers and infill openings with non-combustible exterior wall assembly.
- Remove and replace all perimeter joint sealants at exterior penetrations and control joints.
- Replace all exterior doors with new aluminum or steel doors.
- Replace all hollow metal frames.
- Replace existing overhead doors with motorized insulated metal sectional overhead doors.
- Replace exterior door hardware (including card access and secure entry systems).
- Prepare and repaint steel lintels, plates and other exterior metal items.
- Provide new exterior ventilated rain-screen wall cladding system at existing brick masonry throughout, including fluid-applied air vapor barrier (AVB), AVB transitions to window/door openings and roof systems, rigid mineral wool board insulation, thermally broken standoff clips, metal furring, joint sealants and exterior metal, fiber cement or thin-brick wall panel system.

Building Interior:

- Provide Code Upgrade/Base Repair option scope of work.
- Provide full accessibility to comply with 521 CMR including:
 - Provide an accessible route, including maneuvering clearances at doorways, to all accessible interior spaces throughout.
 - Provide new accessible hardware throughout.
 - Provide accessible Toilet Room fixtures, partitions and accessories throughout.
 - Provide accessible water fountains throughout
 - Provide new accessible signage throughout
 - Modify all stair/ramp guardrails and handrails as required.
 - Provide an accessible route, via a new platform lift, from the Cafetorium to the Stage level.
 - Provide assistive listening systems at Cafetorium, Media Center, and Gymnasium.
- Replace VCT flooring throughout with new resilient flooring and base.
- Replace carpet flooring with new vinyl-backed carpeting and resilient base.
- Repaint all interior walls and finishes.

- Replace tile finishes at Bathrooms.
- Provide new toilet compartments and urinal screens at Bathrooms.
- Provide new doors and hardware throughout.
- Replace operable partitions at Gymnasium.
- Replace telescopic bleachers at Gymnasium.
- Remove existing inaccessible wood risers at Band Room and provide new portable risers.
- Provide new Gymnasium equipment (basketball backstops, volleyball standards, divider curtain, wall pads, etc.)
- Replace Corridor and Locker Room lockers throughout.
- Provide new ACT ceilings throughout.
- Provide new roller shade window treatments throughout.
- Replace wire glass with tempered or laminated safety glass at doors, frames and borrowed lites.
- Provide new markerboards and tackboards at Classrooms throughout.
- Provide new millwork/casework throughout.
- Provide new 2-stop 3500-lb. elevator.

Fixtures, Furnishings & Equipment (FF&E)/Technology:

- Provide new FF&E throughout including furnishings, equipment, maintenance items, etc.
- Provide new student devices (Chromebooks) to maintain 1:1 ratio.
- Provide new teacher devices (laptops).
- Provide Classroom technology including short throw interactive projectors, and document cameras.
- Provide new hand-held radio system.
- Provide new main servers and UPS.
- Provide Classroom local speech reinforcement system (refer to Electrical scope).
- Provide new telecommunications infrastructure (refer to Electrical scope).
- Provide new Wi-Fi system throughout including exterior learning spaces (refer to Electrical scope).
- Provide new digital clock/PA system (refer to Electrical scope).
- Provide new video surveillance, access control and security systems (refer to Electrical scope).
- Provide new VOIP telephone system (refer to Electrical scope).

Hazardous Materials (refer to UEC Basis of Design narrative):

- Abate exterior caulking assumed to contain PCB's.
- Abate VCT flooring/mastic throughout.
- Abate pipe insulation.
- Abate roofing system.

- Abate lab tables and sinks at Science Labs.
- Abate miscellaneous hazardous materials concealed above ceilings and behind walls at all areas to be disturbed.
- Abate light fixtures, doors, interior windows, blackboards, tackboards, sinks and other miscellaneous hazardous materials.

NEW CONSTRUCTION NC-1 SCOPE OF WORK:**General:**

- It is assumed that the work will begin with construction of the new building, including associated sitework infrastructure, on the softball/baseball fields southeast of the existing Middle School. We anticipate that most of the existing athletic fields will be utilized by the Contractor for material laydown/storage, worker/equipment parking areas and temporary office trailers. During this time the existing building would remain fully occupied and function, at least internally, much like it does presently. Externally, construction access would impact vehicular traffic and parking around the existing building and most athletic fields and courts would be unavailable. We expect that the Contractor will access the site via the easternmost curb cut off West Boylston; however, construction access may also be possible from the southeast corner of the site adjacent to the intersection of South Main Street and Dyke Drive. Similar to the Code Upgrade/Base Repair and Addition/Renovation options, summer vacation months will be leveraged to maximize productivity for work (i.e. sitework such as repaving, new site utilities, drainage infrastructure, etc.) that would disturb school vehicular/pedestrian traffic.

Building Exterior/Interior:

Provide new construction as follows:

- Exterior walls: Rainscreen system including metal stud back-up walls, glass fiber reinforced gypsum board, self-adhered air/vapor barrier (AVB), AVB transitions to window/door openings and roof systems, mineral wool rigid insulation, thermally broken standoff clips, metal furring, joint sealants and masonry or metal/fiber cement/thin masonry wall panel system.
- Roofing: Adhered PVC roofing system throughout, including all membrane/flashing, roof edging, sheet metal work, insulation, roof vapor barrier, wood blocking and other roof accessories (ladders, hatches, etc.) as required
- Windows, Storefront and Curtainwall: Thermally broken aluminum systems, including 1" (min.) high performance insulating glass, perimeter joint sealants, insulated panels, screens, operable hardware, sheet metal work, air/vapor barrier (AVB) transitions, solar shading devices, window treatments and other accessories as required.
- Interior partitions: Metal stud and Gypsum Wall Board (GWB) assemblies as required for structural and acoustical requirements; Concrete Masonry Units CMU at Gymnasium, and other high-abuse areas.
- Doors, Frames and Hardware: Hollow metal and solid-core wood veneer doors; custom welded steel frames and borrowed lites; and lever type mortise hardware, electrified at exterior entries.
- Millwork/Casework:
 - Classroom units with storage shelving, tall wardrobe and material storage units, and lockable/open low storage cabinets.
 - Wall paneling system at Lobby.

- Custom cabinetry at main Administrative offices, Media Center, Cafetorium/Stage, and other locations as required.
- Finishes:
 - Corridors, Stairs and Cafetorium: Linoleum flooring and resilient base, resilient stair treads, ceramic wall tile to 5' with painted GWB above, ACT.
 - Classrooms: Linoleum flooring, resilient base, painted GWB, ACT.
 - Kitchen: Quarry tile flooring/base, FRP wall paneling, washable ceiling tile system.
 - Administrative/Guidance Offices and Media Center: Modular carpet flooring, resilient base, painted GWB, ACT.
 - Cafetorium and Stage: Linoleum flooring, resilient base, wood and acoustic wall paneling, acoustic ceiling panels and exposed painted structure above.
 - Gymnasium: Resilient tongue and groove maple flooring system (competition court), vented resilient base, painted CMU to 12' with abuse-resistant GWB above, wall padding, acoustical wall panels, painted acoustical cellular roof deck.
 - Locker Rooms: Seamless epoxy flooring/base, painted CMU walls, wood fiber tile ceilings.
 - Bathrooms: Seamless epoxy flooring/base, ceramic tile and painted GWB walls, ACT.
 - STEM/STEAM Rooms: Linoleum flooring, resilient base, painted GWB walls, exposed painted structure above.
- Demolish existing building in its entirety after new construction is complete and ready for occupancy.

Fixtures, Furnishings & Equipment (FF&E)/Technology

- Provide FF&E throughout including furnishings, equipment, maintenance items, etc.
- Provide student devices (Chromebooks) to maintain 1:1 ratio.
- Provide new teacher devices (laptops).
- Provide Classroom technology including short throw interactive projectors, and document cameras.
- Provide hand-held radio system.
- Provide main servers and UPS.
- Provide Classroom local speech reinforcement system (refer to Electrical scope).
- Provide telecommunications infrastructure (refer to Electrical scope).
- Provide Wi-Fi system throughout including exterior learning spaces (refer to Electrical scope).
- Provide digital clock/PA system (refer to Electrical scope).
- Provide video surveillance, access control and security systems (refer to Electrical scope).
- Provide VOIP telephone system (refer to Electrical scope).

Hazardous Materials (refer to UEC Basis of Design narrative):

- Abate entire existing building prior to demolition.
- Provide radon mitigation system at slab-on-grade areas.

For Basis of Design Narratives relative to each option, please refer to the following:

- Site - Civil; refer to Nitsch Engineering Basis of Design narrative in Section 3.3.3, D, 1, b.
- Site - Landscape; refer to Studio 2112 Basis of Design narrative in Section 3.3.3, D, 1, c.
- Food Services; refer to Colburn & Guyette Basis of Design narrative in Section 3.3.3, D, 1, i.
- Structural; refer to Bolton & DiMartino Basis of Design narrative in Section 3.3.3, D, 1, d.
- Fire Protection; refer to Sensible Solutions Basis of Design narrative in Section 3.3.3, D, 1, e.
- Plumbing; refer to Seaman Engineering Corp. Basis of Design narrative in Section 3.3.3, D, 1, f.
- HVAC; refer to Seaman Engineering Corp. Basis of Design narrative in Section 3.3.3, D, 1, g.
- Electrical; refer to ART Engineering Basis of Design narrative in Section 3.3.3, D, 1, h.
- Technology; refer to Edvance Technology Basis of Design narrative in Section 3.3.3, D, 1, j.
- Sustainability; refer to The Green Engineer Basis of Design narrative in Section 3.3.3, D, 1, k.

INTRODUCTION

Nitsch Engineering has prepared this Final Evaluation of Alternatives narrative as part of a Massachusetts School Building Authority (MSBA) Module 3 – Feasibility Study for the redevelopment of Clinton Middle School in Clinton, MA. The report corresponds to the MSBA Module 3 Preferred Schematic Report (PSR) and focuses specifically on the site development aspects of redevelopment of the site. The improvement items referenced in this section and those listed under all development alternatives are related to site construction only. Refer to the architectural narrative by LPA|A, Studio 2112, and MEP consultants for additional improvements.

SITE ASSESSMENT

Code Upgrade/Base Repair Option

General

The Code Upgrade Option represents the improvements required to align the existing school facility with current codes and standards, and to repair or replace aspects of the facility that have exceeded their useful life or have already failed. The Base Repair Option for the Clinton Middle School project include renovation of the existing 130,000 sf building.

Certain aspects of the building renovation effort will result in disruption of the site, including installation of temporary modular classrooms during the construction phase to the south and east of the existing school to facilitate swing space, and related or unrelated building service utility construction. Regardless of the site disruption related to the building renovation, the deteriorated condition of most of the site pavements, lack of accessible routes, and other aspects of the Site that are in disrepair or do not comply with current codes and standards will require significant site construction under any redevelopment scenario.

Vehicular Access Improvements

The parking lot provides approximately 172 spaces, which requires a minimum of 6 accessible parking spaces, at least one of which must be van accessible. Two accessible spaces were observed in the west parking lot. Three parking spaces near the main building entrance have accessible parking signs, but no striping. Pavement markings near the northeast corner of the building indicate this may have been used for 3–4 accessible spaces, but do not have any signage. The existing pavements and bituminous curbs in some areas of the Site are in a deteriorated condition, including cracking and extensive patching.

Recommended vehicular access improvements include:

- Remove accessible signage from the non-compliant parking spaces;
- Reconstruct the pavement outside the main entrance to meet slope requirements for 3 standard and 1 van accessible parking spaces;
- Construct a new pedestrian ramp across from the new accessible parking spaces;
- Reclaim, repave, and restripe all parking and access drives and service areas;
- Reconstruct existing pedestrian ramps to comply with current standards; and
- Provide improved exterior wayfinding and directional signage;
- Provide new driveway access as needed to replace space lost due to modular construction.

Site Utilities

Some aspects of the site and building renovation work will require associated site utility improvements. Site utility improvements are expected to include:

- Retrofit or replace existing stormwater collection structures (catch basins) to comply with current standards for deep sumps and hoods;
- Install water quality structures downstream of catch basins that collect stormwater runoff from vehicular areas;
- Install stormwater detention systems to mitigate increases of impervious areas on the site;
- Install new drainage and irrigation for play fields;
- Install new exterior grease trap for kitchen waste;
- Provide new site lighting;
- Provide new dedicated fire protection water service;
- Replace existing electrical and communications services;
- Replace existing generator; and
- Provide temporary site utilities (domestic water and fire protection, sanitary sewer, electric/communications) to serve the modular classrooms.

Addition/Renovation Options A/R-1**General**

The A/R-1 Option includes renovation and selective demolition of the school. This Option includes demolition of approximately 10,000 square feet, and additions totalling approximately 25,500 square feet to the northwest and east of the existing building. A/R-1 includes installation of temporary modular classrooms during the construction phase to the south and east of the existing school to facilitate swing space, and related or unrelated building service utility construction.

Vehicular Access Improvements

The parking lot provides approximately 172 spaces, which requires a minimum of 6 accessible parking spaces, at least one of which must be van accessible. Two accessible spaces were observed in the west parking lot. Three parking spaces near the main building entrance have accessible parking signs, but no striping. Pavement markings near the northeast corner of the building indicate this may have been used for 3-4 accessible spaces, but do not have any signage. The existing pavements and bituminous curbs in some areas of the Site are in a deteriorated condition, including cracking and extensive patching. The addition to the east of the building will affect vehicular access in that area. Recommended vehicular access improvements include:

- Remove accessible signage from the non-compliant parking spaces;
- Reconstruct the pavement outside the main entrance to meet slope requirements for 3 standard and 1 van accessible parking spaces;
- Construct a new pedestrian ramp across from the new accessible parking spaces;
- Reclaim, repave, and restripe all parking and access drives and service areas;
- Salvage and reinstall existing granite curb;
- Reconstruct existing pedestrian ramps to comply with current standards;
- Provide improved exterior wayfinding and directional signage;
- Reconstruct driveway along the east of the building;
- Provide new driveway access as needed to replace space lost due to modular construction;
- Install new granite curbing and retaining walls along the east of the parking area to accommodate the new driveway.

Site Utilities

Some aspects of the site and building renovation work will require associated site utility improvements. Site utility improvements are expected to include:

- Retrofit or replace existing stormwater collection structures (catch basins) to comply with current standards for deep sumps and hoods;
- Install water quality structures downstream of catch basins that collect stormwater runoff from vehicular areas;
- Install new drainage and irrigation for play fields;
- Install new exterior grease trap for kitchen waste;
- Provide new site lighting;
- Provide new dedicated fire protection water service;
- Replace existing electrical and communications services;
- Replace existing generator;
- Relocate existing water, stormwater, and sewer mains impacted by the new additions;
- Adjust stormwater basin north of the existing parking lot to accommodate northwest addition. Reconstruction of this basin is anticipated to require additional retaining walls;
- Install stormwater detention systems to mitigate increases of impervious areas on the site and modifications to existing stormwater basins; and
- Provide temporary site utilities (domestic water and fire protection, sanitary sewer, electric/communications) to serve the modular classrooms.

Addition/Renovation Option A/R-1.5**General**

The A/R-1.5 Option includes renovation and selective demolition of the school. This Option includes demolition of approximately 18,000 square feet, and additions totalling approximately 38,000 square feet.

Vehicular Access Improvements

The parking lot provides approximately 172 spaces, which requires a minimum of 6 accessible parking spaces, at least one of which must be van accessible. Two accessible spaces were observed in the west parking lot. Three parking spaces near the main building entrance have accessible parking signs, but no striping. Pavement markings near the northeast corner of the building indicate this may have been used for 3–4 accessible spaces, but do not have any signage. The existing pavements and bituminous curbs in some areas of the Site are in a deteriorated condition, including cracking and extensive patching. The addition to the southeast of the building will affect vehicular access in that area. Reconfiguration of the main parking lot will require reconstruction of portions of that lot. Recommended vehicular access improvements include:

- Remove accessible signage from the non-compliant parking spaces;
- Reconstruct the pavement outside the main entrance to meet slope requirements for 3 standard and 1 van accessible parking spaces;
- Construct a new pedestrian ramp across from the new accessible parking spaces;
- Reclaim, repave, and restripe all parking and access drives and service areas;
- Salvage and reinstall existing granite curb;
- Reconstruct existing pedestrian ramps to comply with current standards;
- Provide improved exterior wayfinding and directional signage;
- Reconstruct driveway along the southeast of the building;
- Provide new separated bus drop-off along the north of the building;
- Provide new driveway access as needed to replace space lost due to modular construction;
- Install new granite curbing and retaining walls along the east of the parking area to accommodate the new driveway.

Site Utilities

Some aspects of the site and building renovation work will require associated site utility improvements. Site utility improvements are expected to include:

- Retrofit or replace existing stormwater collection structures (catch basins) to comply with current standards for deep sumps and hoods;
- Install water quality structures downstream of catch basins that collect stormwater runoff from vehicular areas;
- Install new drainage and irrigation for play fields;
- Install new exterior grease trap for kitchen waste;

- Provide new site lighting;
- Provide new dedicated fire protection water service;
- Replace existing electrical and communications services;
- Replace existing generator;
- Relocate existing water, stormwater, and sewer mains impacted by the new addition;
- Adjust stormwater basin north of the existing parking lot to accommodate parking lot reconstruction. Reconstruction of this basin is anticipated to require additional retaining walls;
- Install new stormwater collection systems for adjusted vehicular areas;
- Install stormwater detention systems to mitigate increases of impervious areas on the site and accommodate modifications to existing stormwater basins; and
- Provide temporary site utilities (domestic water and fire protection, sanitary sewer, electric/communications) to serve the modular classrooms.

Addition/Renovation Option A/R-2

General

The A/R-2 Option includes renovation and selective demolition of the school. This Option includes demolition of approximately 43,000 square feet, and additions totalling approximately 69,000 square feet to the southeast and northwest of the existing building.

Vehicular Access Improvements

The addition to the northwest will affect the existing parking lot and vehicle circulation. The reconstructed parking lot will need to include accessible parking spaces as required by ADA regulations. The addition to the southeast of the building will affect vehicle circulation in that area. The existing pavements and bituminous curbs in some areas of the Site are in a deteriorated condition, including cracking and extensive patching. Recommended vehicular access improvements include:

- Remove accessible parking signage from the non-compliant parking spaces;
- Reconstruct the pavement outside the main entrance to meet slope requirements for required number of accessible parking spaces;
- Salvage and reinstall existing granite curb;
- Construct a new pedestrian ramp across from the new accessible parking spaces;

- Reclaim, repave, and restripe all parking and access drives and service areas;
- Reconstruct existing pedestrian ramps to comply with current standards;
- Provide improved exterior wayfinding and directional signage;
- Provide new driveway access as needed and accommodate the new addition; and
- Install new granite curbing and retaining walls along the east and north of the parking area to accommodate the new driveways.

Site Utilities

Some aspects of the site and building renovation work will require associated site utility improvements. Site utility improvements are expected to include:

- Retrofit or replace existing stormwater collection structures (catch basins) to comply with current standards for deep sumps and hoods;
- Install water quality structures downstream of catch basins that collect stormwater runoff from vehicular areas;
- Install new drainage and irrigation for play fields;
- Install new exterior grease trap for kitchen waste;
- Provide new site lighting;
- Provide new dedicated fire protection water service;
- Replace existing electrical and communications services;
- Replace existing generator;
- Relocate existing water, stormwater, and sewer mains impacted by the new additions;
- Adjust stormwater basin north of the existing parking lot to accommodate northwest addition. Reconstruction of this basin is anticipated to require additional retaining walls;
- Install stormwater detention systems to mitigate increases of impervious areas on the site and accommodate modifications to existing stormwater basins; and
- Provide temporary site utilities (domestic water and fire protection, sanitary sewer, electric/communications) to serve the modular classrooms.

New Construction Option NC-1**General**

The NC-1 Option includes demolition of the existing school and construction of a 136,000 square foot building east of the existing building. New play fields will be located north of the existing building. A new parking area will be constructed south of the new play fields.

Vehicular Access Improvements

This Option proposes new vehicle circulation throughout the site. All vehicles will enter through the existing curb cut at the northwest corner of the site and travel along the south of the new parking lot. Bus circulation will then head north between the new building and new parking area. Parent circulation will continue along the west, east, and north of the new building. All vehicles will exit through the existing curb cut at the northeast corner of the site. Additional emergency vehicle access will be maintained through the existing gated access at the southeast corner of the site onto South Main Street.

Vehicular access improvements include:

- Construct new driveways and parking area as described above, including full depth asphalt pavement and associated granite curbing, signage, and striping; and
- Install new retaining walls along the east and north of the parking area to accommodate the new driveways and play fields.

Site Utilities

These Options require installation of all new site utilities. A new stormwater management system that complies with the requirements of the MA DEP Stormwater Standards will be required for the project. The stormwater systems will include provisions for peak flow management, groundwater recharge, and water quality treatment. The Site is expected to include both surface and structured/subsurface stormwater retention systems. Pretreatment of flows to these systems will be achieved by use of Best Management Practices (BMP's) such as deep sump hooded catch basins, water quality structures, and bioretention areas.

Site utility improvements are expected to include:

- Cut and cap services to the existing building at the utility mains;
- Relocate existing water and sewer mains from below the new building footprint;
- Provide new utility connections to the new building;

- Provide new stormwater management systems, including drainage and irrigation for play fields;
- Reconstruct stormwater basin north of the existing parking area to replace the existing stormwater storage volume. Assume the new stormwater system will be constructed using StormTrap concrete storage systems or similar. Assume 42,000 cubic feet of storage is required;
- Install new exterior grease trap for kitchen waste;
- Provide new site lighting; and
- Install new generator.

CODE UPGRADE / BASE REPAIR SUMMARY: The Code Upgrade Base Repair scope of work includes replacement of circulation paths for code compliance, lighting improvements to comply with code, and pedestrian crossing improvements at vehicular interfaces for improved safety. Site amenity upgrades include basketball court material replacements, and drainage improvements at recreation fields. The scope also includes perimeter fence replacement to maintain site security.

CODE UPGRADE / BASE REPAIR SCOPE OF WORK:

General:

Provide code compliant accessible paths throughout the site, including access to the edge of all public amenity areas. Provide code compliant lighting at all site areas. Provide site safety measures during construction with potential access to the shared outdoor space west of the building for PE classes and/or to the existing fields east of the building, as construction laydown allows.

Site

- Replace perimeter fence at east and south property line.
- Replace all pathways with min 5ft wide 4,000 psi cast in place concrete.
- Provide accessible entry landings and automatic push buttons at accessible entry doors.
- Provide accessible path to all site amenity areas including to edge of basketball courts and to edge of recreation fields.
- Provide accessible path from building to parent pick-up/drop-off vehicular access point.
- Provide code compliant lighting at paths between building and parking lot to meet minimum light levels.
- Replace existing basketball court surface material, subgrade and hoops.
- Provide compliant pedestrian ramps with detectable warning strips at all pedestrian crossings within vehicular drives and parking lots.

CODE UPGRADE / BASE REPAIR IMPACT OF CONSTRUCTION:

The landscape code upgrade/base repair scope will provide universal access as grades allow, which will impact circulation throughout the site. All circulation will be improved for code and safety compliance. During construction, existing site amenities will be unavailable during their replacement. Some recreation field space may also be unavailable due to needs for construction staging and laydown areas. Exterior programming and PE space could likely be coordinated with the High School and will be further studied once a scheme is chosen.

RENOVATION/ADDITION OPTION A/R-1 SUMMARY: The Renovation/Addition Option A/R-1 scope of work includes replacement and extension of circulation paths for code compliance and universal access, lighting improvements to comply with code, and pedestrian crossing improvements at vehicular interfaces for improved safety. Entry plazas include unit paving to reinforce hierarchy and wayfinding as well as seating and landscaping improvements. Rain garden plantings provide a buffer between the parking and the road. Site amenity upgrades include basketball court replacement, drainage improvements at recreation fields, and a new playground and outdoor classroom. Service area improvements include screening at dumpsters. The scope also includes perimeter fence replacement to maintain site security.

RENOVATION/ADDITION OPTION A/R-1 SCOPE OF WORK:

General:

Provide hierarchy in entry sequence, paths, and design, to clarify and reinforce the new entry at the northwest corner of the building at the parking lot. Incorporate crime prevention through environmental design (CPTED) best practices. Provide site safety measures during construction with potential access to the shared outdoor space west of the building for PE classes and/or to the existing field further east, as construction laydown allows.

Site

- Provide rain garden planting at the existing drainage area between the parking lot and roadway.
- Define entry plaza with 50% concrete pavement and 50% unit pavers, planters, benches, and site lighting (250 sf).
- Replace all pathways with min 5ft wide 4,000 psi cast in place concrete.
- Provide community space / outdoor classroom plaza at northwest side (between High School and Middle School) with 50% concrete and 50% unit pavers, fixed seat walls, raised planters, shade trees, power and water access (2,000 sf).
- Replace recreation fields with below grade drainage, sand-based well draining soils, backstops, storage, and chain link fence at perimeter including ball safety netting.
- Provide playground equipment for 8-10 year old age group with parkour and physical challenge/obstacle type play areas. Include poured in place rubber surfacing, shade trees, fixed benches, lighting, and cast in place concrete paths and circulation (5,000 sf).
- Replace basketball court at temporary modular locations.
- Provide 15 bike racks.
- Provide 5 trash/recycling receptacles.
- Provide louvered fence, 8ft height dumpster enclosures on concrete pads.
- Replace perimeter fence at east and south property line.

RENOVATION/ADDITION OPTION A/R-1 IMPACT OF CONSTRUCTION:

The landscape Addition/Renovation Option AR-1 scope will provide universal access as grades allow, which will impact circulation throughout the site. All circulation will be improved for code and safety compliance. During construction, existing site amenities will be unavailable during their replacement. Some recreation field space may also be unavailable due to needs for construction staging and laydown areas. Exterior programming and PE space could likely be coordinated with the High School and will be further studied once a scheme is chosen.

RENOVATION/ADDITION OPTION A/R-1.5 SUMMARY: The Renovation/Addition Option A/R-1.5 scope of work includes replacement and extension of circulation paths for code compliance and universal access, lighting improvements to comply with code, and pedestrian crossing improvements at vehicular interfaces for improved safety. Entry plazas include unit paving to reinforce hierarchy and wayfinding as well as seating and landscaping improvements. Rain garden plantings provide a buffer between the parking and the road. Site amenity upgrades include basketball court replacement, drainage improvements at recreation fields, and a new playground and outdoor classroom. Service area improvements include screening at dumpsters. The scope also includes perimeter fence replacement to maintain site security.

RENOVATION/ADDITION OPTION A/R-1.5 SCOPE OF WORK:**General:**

Provide hierarchy in entry sequence, paths, and design, to clarify and reinforce the existing entry at the northwest corner of the building at the parking lot. Incorporate crime prevention through environmental design (CPTED) best practices. Provide site safety measures during construction with potential access to the shared outdoor space south of the building for PE classes and/or to the existing field at the east end of the site, as construction laydown allows.

Site

- Provide rain garden planting at the existing drainage area between the parking lot and roadway.
- Define entry plaza with 50% concrete pavement and 50% unit pavers, planters, benches, and site lighting (300 sf).
- Replace all pathways with min 5ft wide 4,000 psi cast in place concrete.
- Provide community space plaza at northwest building corner (between existing school and parking lot) with 50% concrete and 50% unit pavers, fixed seat walls, raised planters, shade trees, power and water access. (1,000 sf)

- Replace recreation fields with below grade drainage, sand-based well draining soils, backstops, storage, and chain link fence at perimeter including ball safety netting.
- Provide playground equipment for 8–10 year old age group with parkour and physical challenge/obstacle type play areas. Include poured in place rubber surfacing, shade trees, fixed benches, lighting, and cast in place concrete paths and circulation (5,000 sf).
- Replace basketball court at temporary modular locations.
- Provide 15 bike racks.
- Provide 5 trash/recycling receptacles.
- Provide louvered fence, 8ft height dumpster enclosures on concrete pads.
- Replace perimeter fence at east and south property line.

RENOVATION/ADDITION OPTION A/R-1.5 IMPACT OF CONSTRUCTION:

The landscape Addition/Renovation Option AR-1 scope will provide universal access as grades allow, which will impact circulation throughout the site. All circulation will be improved for code and safety compliance. During construction, existing site amenities may be unavailable during their replacement. Phased site reconstruction in conjunction with phased building renovation will prioritize continuity of program wherever possible. Some recreation field space may also be unavailable due to needs for construction staging and laydown areas. Exterior programming and PE space could likely be coordinated with the High School and will be further studied once a scheme is chosen.

RENOVATION/ADDITION OPTION A/R-2 SUMMARY: The Renovation/Addition Option A/R-2 scope of includes replacement and extension of circulation paths for code compliance and universal access, lighting improvements to comply with code, and pedestrian crossing improvements at vehicular interfaces for improved safety. Entry plazas include unit paving to reinforce hierarchy and wayfinding as well as seating and landscaping improvements. Rain garden plantings provide a buffer between the parking and the road. Site amenity upgrades include basketball court replacement, drainage improvements at recreation fields, and a new playground and outdoor classroom. Service area improvements include screening at dumpsters. The scope also includes perimeter fence replacement to maintain site security.

RENOVATION/ADDITION OPTION A/R-2 SCOPE OF WORK:**General:**

Provide hierarchy in entry sequence, paths, and design, to clarify and reinforce the new entry at the north side of the building at the parking lot. Incorporate crime prevention through environmental design (CPTED) best practices. Provide site safety measures during construction with potential

access to the shared outdoor space west of the building for PE classes and/or to the existing field at the east end of the site, as construction laydown allows.

Site

- Provide rain garden planting at the existing drainage area between the new parking lot and roadway.
- Provide tree line between access drive and power lines with overhead-safe tree species.
- Define entry plaza with 50% concrete pavement and 50% unit pavers, planters, benches, and site lighting. (750 sf)
- Replace all pathways with min 5ft wide 4,000 psi cast in place concrete.
- Provide community space plaza at west edge of recreation fields (adjacent to east parking lot) with 50% concrete and 50% unit pavers, fixed seat walls, raised planters, shade trees, power and water access. (1,000 sf)
- Replace recreation fields with below grade drainage, sand-based well draining soils, backstops, storage, and chain link fence at perimeter including ball safety netting.
- Provide playground equipment for 8–10 year old age group at east end of site with parkour and physical challenge/obstacle type place areas. Include poured in place rubber surfacing, shade trees, fixed benches, lighting, and cast in place concrete paths and circulation. (5,000 sf)
- Replace basketball court at temporary modular locations.
- Provide outdoor classroom / maker space at courtyard. (11,715 sf)
- Provide 15 bike racks.
- Provide 5 trash/recycling receptacles.
- Provide service access area at west side of the building.
- Provide louvered fence, 8ft height dumpster enclosures on concrete pads.
- Replace perimeter fence at east and south property line.

RENOVATION/ADDITION OPTION A/R-2 IMPACT OF CONSTRUCTION:

The landscape Addition/Renovation Option AR-2 scope will provide universal access as grades allow, which will impact circulation throughout the site. All circulation will be improved for code and safety compliance. During construction, existing site amenities will be unavailable during their replacement. Some recreation field space may also be unavailable due to needs for construction staging and laydown areas. Exterior programming and PE space could likely be coordinated with the High School and will be further studied once a scheme is chosen.

NEW CONSTRUCTION OPTION NC-1 SUMMARY: The New Construction Option NC-1 scope of work includes replacement and extension of circulation paths for code compliance and universal access, lighting improvements to comply with code, and pedestrian crossing improvements at vehicular interfaces for improved safety. Entry plazas include unit paving to reinforce hierarchy and wayfinding as well as seating and landscaping improvements. Rain garden plantings provide a buffer between the new recreation field and the road. Reconfiguration for improved constructability and improved program relationships. Site amenity upgrades include basketball court replacement/relocation, drainage improvements at recreation fields, and a new playground and outdoor learning classroom. Service area improvements include screening at dumpsters. The scope also includes perimeter fence replacement to maintain site security.

NEW CONSTRUCTION OPTION NC-1 SCOPE OF WORK:

General:

Provide hierarchy in entry sequence, paths, and design, to clarify and reinforce the new entry at the northwest corner of the building at the parking lot. Incorporate crime prevention through environmental design (CPTED) best practices. Provide site safety measures during construction with potential access to the shared outdoor space west of the power lines for PE classes and/or to the existing field further east, as construction laydown allows.

Site

- Provide new west side parking lot, with separated bus loop.
- All vehicular access is separated from parking for improved efficiency.
- Provide tree islands at parking to reduce heat island effect, improve biodiversity and carbon sequestration.
- Provide entry plaza connecting all spaces at the west side of the building with 50% concrete pavement and 50% unit pavers, planters, benches, and site lighting. (1,200 sf)
- Provide new multi-purpose field at existing parking lot location, with below surface drainage, sand-based well draining soils, pathway access, and fixed seating.
- Provide landscape buffer and raingarden plantings within existing drainage channel (between road and recreation field).
- Provide playground for 8-10 year old age group south of building with parkour and physical challenge/obstacle type play areas. Include poured in place rubber surfacing, shade trees, fixed benches, and lighting. Provide perimeter fence and screening between playground and service area. (2,000 sf)
- Provide outdoor classroom / maker space at east side of building open to east site beyond, with 50% concrete and 50% unit pavers, fixed seat walls, raised planters, shade trees, power and water access. (3,500 sf)

- Provide (2) basketball courts at east end of site.
- Replace all pathways with min 5ft wide 4,000 psi cast in place concrete.
- Replace perimeter fence at east and south property line.
- Provide 15 bike racks.
- Provide 5 trash/recycling receptacles.
- Provide louvered fence, 8ft height dumpster enclosures on concrete pads at south side service area.

NEW CONSTRUCTION OPTION NC-1 IMPACT OF CONSTRUCTION:

The landscape New Construction Option NC-1 scope will include temporary loss of athletic fields and basketball courts while the new building construction is in progress. Once the new building is complete and the existing building is demolished, a new recreation field and new basketball courts will be constructed. Upon completion of the new building, new circulation paths will be reconfigured to provide universal access as grades allow, which will impact circulation throughout the site. All circulation will be improved for code and safety compliance. This scheme requires fewer temporary circulation improvements since the existing building circulation will remain primarily as is while the new footprint is built, but larger impacts to site amenities during building construction. During construction exterior programming and PE space could likely be coordinated with the High School and will be further studied once a scheme is chosen.

General Information

We have reviewed the three general design options presented for the Clinton Middle School feasibility study by Lamoureux Pagano Associates| Architects, and offer the following description of each structural system. Also, we will present the basic structural scope and implications of each design option. The design options are:

1. Code Upgrade/Base Repair
2. Renovation and Addition (AR-1, AR-1.5 & AR-2)
3. New Construction on Existing Site (NC-1)

1. Code Upgrade/Base Repair

The “Code Upgrade/Base Repair” option includes completing regular building maintenance, repairing/replacement of existing building systems that have reached their life expectancy or failed, and addressing pre-existing building code violations. Maintenance and updating building systems will be completed with fixtures that serve the same purpose. The “Code Upgrade/Base Repair” option will need to conform to Level 3 Work of the International Existing Building Code, 2015 Edition, as modified by the Massachusetts State Building Code, Ninth Edition.

Existing Structural Systems:

The building structure consists of:

- Foundations:
 - Concrete foundation walls with continuous spread footings.
 - Walls reinforced with (2) #5’s top and bottom.
 - Continuous wall footings are plain concrete with no reinforcing.
 - Reinforced spread footings and wall pier reinforcing added below steel columns.
 - Interior steel columns are supported on reinforced concrete spread footings.
 - Design soil bearing pressure of 5,000 psf.
- Floors (On-grade):
 - 4” Concrete slab-on-grade reinforced with welded-wire-fabric (WWF)
 - 6” Concrete slab-on-grade reinforced with WWF at Boiler Room and Outside Equipment Room.
- Columns:
 - Structural steel tube columns (Common sizes include TS4x4, TS4x6, TS5x5).

- 8” Steel W columns at perimeter of Gymnasium and Cafetorium.
- Walls:
 - Exterior walls: 8” Concrete Masonry Units (CMU) with 4” brick veneer.
 - Interior walls: 4”, 6”, and 8” unreinforced CMU partitions.
- Second Floor:
 - Steel joists (Type J) at 24” o.c. supported on steel girders.
 - 3” Concrete slab on galvanized metal deck and reinforced with welded-wire-fabric (WWF).
- Roof:
 - Roof is framed with steel joists (Type J and LJ) at a maximum spacing of 5’-0” o.c. and supported on wide-flange steel girders.
 - Metal roof deck generally consisting of 1 ½” metal decking. 1 ½” and 3” acoustic metal deck is used at select locations (Shops, Gymnasium, Music Rooms).
 - Roof expansion joints created by breaking metal deck and adding slip joints to beams/girders at select locations.

Structural Scope:

The structural scope of the Code Upgrade/Base Repair option is fairly limited and will consist of correcting pre-existing Code violations and general repairs. Structural work will include:

- Replacing deficient mechanical systems will include replacing equipment with similar equipment. The weights should remain unchanged, but should heavier equipment be required, the structural capacity of existing framing would need to be reviewed and new support framing will likely be required. Framing may be stubbed above the roof at existing columns to avoid impacting the existing framing significantly.
- Regular maintenance to the structure will include repointing masonry veneer, re-caulking brick expansion joints, and repairing pre-cast concrete lintels/window frames with spalled concrete and rusting reinforcing. Most of the brick veneer appears sound and stable, so maintenance will be limited to select locations of thermal cracking, rusting steel lintels, and window frame deterioration.
- Roof system will be replaced with a new adhered PVC roof system. Existing building construction joints at the roof framing will need to be maintained in the new roofing system with bulb expansion joints.
- Existing unreinforced masonry walls will need to be adequately braced at the second floor and roof diaphragms to resist lateral seismic forces. New restraint angles will be spaced at 32” o.c. along the length of interior partitions.

Comments:

As part of the “Code Upgrade/Base Repair” option, the building will be re-roofed and existing mechanical/electrical equipment will be repaired, or replaced with similar equipment. The structural scope of work will be fairly limited through most of the building and will generally include maintenance work at the masonry veneer. Since the work area will include the entire building, the work will need to comply with Code requirements for Level 3 Work, as described in the International Existing Building Code. Interior masonry partitions will need to be secured to the second floor/roof framing to conform to current seismic code requirements.

The building will continue to perform as currently used, but due to lack of renovation, addition, or additional structural improvement, the “Code Upgrade/Base Repair” option will limit future flexibility, such as, modifying room sizes.

2. Renovation and Addition (AR-1, AR-1.5 & AR-2)

The three “Renovation and Addition” options includes partial demolition of the existing building, renovation of the existing building, and additions. Due to the substantial renovation work involved within the existing building, the renovation portion of the “Renovation and Addition” options will need to conform to the International Existing Building Code for Level 3 Work, as modified by Chapter 34 of the Massachusetts State Building Code. The new construction portion of the project will need to conform to the current International Building Code, as modified by the Massachusetts State Building Code.

Existing Structural Systems:

- Structural systems of the existing building are similar to “Code Upgrade/Base Repair” option.

Renovation Scope of Work:

- Scope of work at “Renovation and Addition AR-1”:
 - Limited demolition at interface of new Northwest Addition (Admin/Guidance).
 - Limited demolition at interface of new East Addition (550: Offices/Stem and 700: Grade 4 Wing; See Architectural plans).
 - Limited demolition at both interior courtyards to allow for installation of structural supports for new skylight roof system over courtyards.
 - Construct new additions at Northwest and East sides of building (Administration/Guidance, Grade 4 Classrooms, Offices/Stem). Construct new Courtyard foundation and framing to support new skylight system. Northwest and East Additions will be structurally isolated from the existing building to avoid impacting the existing lateral force-resisting system, where feasible. Otherwise, courtyard additions

will be structurally attached to the existing building and will require installing new reinforced CMU shear walls to resist current seismic loads.

- Scope of work will likely require installing several new reinforced CMU walls near the limits of the demolition/addition to provide seismic resistance at the altered spaces.
- Scope of work at “Renovation and Addition AR-1.5”:
 - Demolition at North & South sides of building to remove existing framing & foundations at existing building bump-outs. Limited demolition at Southeast side of building at limits of new classroom addition interface. New foundations and framing will be installed to cap existing building at bump-outs.
 - Construct new two-story classroom wing.
 - Scope of work will warrant a full upgrade of the seismic force-resisting system. Work will include demolition of existing interior unreinforced CMU partitions and construction of new reinforced CMU walls throughout the building.
- Scope of work at “Renovation and Addition AR-2”:
 - Significant demolition at North, Northwest, South and Southeast sides of building to remove existing framing & foundations at existing building bump-outs and at limits of new additions. New foundations and framing will be installed to cap existing building and allow for new additions and to be built separate from the existing building.
 - Significant demolition at the two courtyard spaces. Demolition to include both courtyards, Media Center, and surrounding space to form a single large courtyard.
 - Construct two new classroom wings and a new administration space (refer to Architectural information for layout).
 - Construct new foundation walls at perimeter of new interior courtyard with exterior wall system. Floor and roof will need to be infilled between new courtyard walls and existing column line locations.
 - Scope of work will warrant a full upgrade of the seismic force-resisting system. Work will include demolition of existing interior unreinforced CMU partitions and construction of new reinforced CMU walls throughout the building.

New Addition Structural Systems (AR-1, AR-1.5 & AR-2):

- Where feasible, additions will be seismically isolated from the existing building by installing building expansion joints. The existing building will be capped with reinforced CMU walls and the addition will be structurally isolated.
- Foundations:
 - Interior concrete spread footings at column locations.
 - Continuous reinforced concrete frost wall and footing at exterior walls at level site areas.

- Concrete retaining walls at sloped site conditions.
- Existing site conditions must be reviewed by a Geotechnical Engineer to confirm the conditions are adequate for shallow foundations. It is our understanding that the adjacent High School required removal of organic materials and structural fill at the footprint of the school. Similar requirements should be anticipated.
- Columns:
 - HSS tube columns (HSS6x6)
- Framed Floors:
 - Wide-flange steel beams made composite with headed shear studs.
 - Composite metal deck.
 - Concrete fill with welded-wire-fabric reinforcing.
- Roof:
 - Wide flange steel beams.
 - Metal roof deck
- Lateral Force Resisting System:
 - Concentrically braced steel frames using HSS tube members.

Structural Scope at Existing Buildings (AR-1, AR-1.5 & AR-2):

- Scope of work at “Renovation and Addition AR-1”:
 - Seismic anchorage of interior CMU partitions must be reviewed similar to the “Code Upgrade/Base Repair” option. We anticipate that interior masonry partitions will require seismic restraints throughout the existing building.
 - Support of new, or replaced, rooftop mechanical equipment will be similar to the “Code Upgrade/Base Repair” option.
 - Complete regular maintenance at exterior envelope, including: re-pointing veneer, painting steel lintels, repairing pre-cast concrete lintels, and caulking brick expansion joints.
 - Existing seismic force-resisting systems will need to be reviewed at limits of demolition/addition to confirm demolition does not negatively impact the existing building. We anticipate new reinforced CMU walls will need to be installed near the limits of the additions to “cap” the end of the existing building due to the removal of existing exterior masonry walls.
- Scope of work at “Renovation and Addition AR-1.5”:
 - Seismic anchorage of interior CMU partitions must be reviewed similar to the “Code Upgrade/Base Repair” option. We anticipate that approximately 50% of the interior masonry partitions will require seismic restraints throughout the existing building.

- The remaining 50% of the interior masonry walls will be either removed for special coordination or replaced with reinforced CMU walls to upgrade the seismic force-resisting system. We anticipate that approximately 20% of the walls will be outright removed, and 30% will be removed and replaced with new concrete foundations and reinforced CMU in order to resist the Code mandated seismic forces due to the extent of the structural alteration taking place.
- Support of new, or replaced, rooftop mechanical equipment will be similar to the “Code Upgrade/Base Repair” option. Due to the extent of the renovation, we anticipate significant HVAC equipment upgrades and propose that equipment should be located on the new construction portions of the project, where feasible.
- Complete regular maintenance at exterior masonry envelope, including: re-pointing veneer, painting steel lintels, repairing pre-cast concrete lintels, and caulking brick expansion joints.
- Removal of building bump-outs at the North and South sides of the building will require installing new foundation walls and exterior wall systems to cap the existing building where the demolition takes place. The foundations will be of adequate depth to provide frost protection.
- Scope of work at “Renovation and Addition AR-2”:
 - Interior masonry walls are to be removed and replaced with reinforced CMU walls attached to the structural steel framing in order to resist the Code mandated seismic forces due to the extent of the structural alteration taking place. We anticipate that 30% of the existing walls will need to be replaced and will require new concrete strip footings.
 - Support of new, or replaced, rooftop mechanical equipment will be similar to the “Code Upgrade/Base Repair” option. Due to the extent of the renovation, we anticipate significant HVAC equipment upgrades and propose that equipment should be located on the new construction portions of the project, where feasible.
 - Complete regular maintenance at exterior masonry envelope, including: re-pointing veneer, painting steel lintels, repairing pre-cast concrete lintels, and caulking brick expansion joints.
 - New courtyard will require demolition of existing courtyards, interior framing/slabs; then new construction of exterior walls and infill floor/roof framing back to existing column lines. Work will be difficult due to existing joist framing requiring removal/infill.

Comments: From a structural point of view, the “Renovation and Addition” options are the most involved due to the significant renovation of the existing building, phasing of construction, and the integration of the new construction. At a minimum, the existing building will need to be brought into

compliance with the International Existing Building Code, as modified by Chapter 34 of the MSBC to increase basic life safety to the minimum requirements of the Code. We anticipate structural modifications to the existing building will be required due to the proposed renovation, especially for AR-2 where significant structural modifications are expected at most of the building. Structural modifications will likely include redesigning the lateral force-resisting system to resist current seismic loads (new reinforced CMU walls), providing support for new mechanical systems, and laterally supporting existing masonry partitions.

Construction requirements for AR-2 will likely require access of heavy equipment in the center of the building to complete the work in the courtyard space. Access will require selective demolition of floor/roof framing between 2 column lines to create a corridor for equipment. After the demolition and courtyard construction, then reconstruction of the floor/roof between the 2 column lines will need to be completed.

It should be noted that the renovation will increase the life safety of the existing building, but it will not fully bring the existing building up to standards of the current Building Code due to lesser quality materials and design practices used at the time of original construction. Also, even though the renovation will extend the life of the existing building, the building should not be expected to last as long or perform as well as the newly constructed additions or a new building. Similar to the “Code Upgrade/Base Repair” option, the brick veneer will need to be repointed at deteriorated locations. Other structural damage, or deteriorated conditions, may be discovered after finishes are removed for renovation and will need to be corrected at that time.

3. New Construction on Existing Site (NC-1)

The “New Construction on Existing Site” options consist of building an entirely new school on the same site as the existing school. Refer to Architectural sketches and descriptions for floor areas and building configurations. Construction will take place while the existing school remains in use in order to limit the cost of relocating the students during construction. The school will consist of a one-story administration/gymnasium/cafeteria core and (2) two-story academic wings. The building will use standard construction methods and materials.

Structural Systems:

- Foundations:
 - Interior concrete spread footings at columns.
 - Continuous reinforced concrete frost wall and footing at exterior walls at level site areas.

- Concrete retaining walls at sloped site conditions.
- Foundation systems are assumed based on existing conditions and must be verified by a qualified Geotechnical Engineer.
- Columns:
 - Steel tube columns (HSS6x6 & HSS7x7) at 1 & 2-story portions of the building.
 - Wide flange steel columns (W8) at perimeter of Gymnasium and Cafetorium.
- Framed Floors:
 - Wide-flange steel beams made composite with headed shear studs.
 - Composite metal deck.
 - Concrete fill reinforced with welded-wire-fabric.
- Walls:
 - Light gauge steel studs (non-bearing) will be used at interior partitions and exterior walls.
 - Reinforced CMU will be used at elevator shafts, locker rooms, gymnasium, and other high-abuse areas.
- Roof:
 - Wide flange steel beams.
 - Metal roof deck.
 - Designed to support photovoltaic panels.
- Lateral Force Resisting System:
 - Centrally braced steel frames using HSS tube members.

Comments: The “New Construction on Existing Site” option is a flexible option, from a structural point of view. This option will also allow for increased life safety and more flexibility for sustainable design, relative to the “Code Upgrade/Base Repair” or “Renovation and Addition” options. Construction materials and systems will be designed in compliance with the current Massachusetts State Building Code.

Conclusions:

We have reviewed the five design options (Code Upgrade/AR-1/AR-1.5/AR-2/NC-1) and it our professional opinion that all four options are structurally feasible. The “Code Upgrade” option requires very few structural modifications due to the limited nature of the work. Minor structural work will be required to address the interior partitions and general deterioration of the building. The “AR-1, AR-1.5 & AR-2” options will require demolishing portions of the existing building, then building significant additions. Completing this work will require structural modifications to install building expansion joints and installing new seismic bracing for existing CMU walls within the remaining portion of the building. The additions will be structurally isolated to avoid impacting the existing building. Option AR-2 is far

more involved, structurally, and requires a full upgrade of the building seismic system with reinforced CMU walls and foundations due to the extensive alteration to the existing building. The new construction option (NC-1) is fairly straight forward; a new school will be constructed on the same site, adjacent to the existing school using current construction techniques. This option provides the most flexibility, from a structural point of view, allowing the school construction to conform to the full extent of the current Building Code and provide for the academic needs of the school district.

EXECUTIVE SUMMARY

The purpose of this study is to evaluate the need, feasibility, and cost-impacts of adding a fire-protection (FP) sprinkler system to either the existing (renovated) building, or to a newly constructed building on the existing, Clinton Middle School (CMS) site.

The existing building structure, layout, and various hazard levels were summarized in the FP existing conditions report (dated 2-3-23). That same report noted available street water flow and pressure from the 12” W Boylston St main was “sufficient” (73 psi static pressure, 67 psi residual pressure, with 1210 gpm flowing) in 1996. Current flow and pressure are expected to be somewhat better than these numbers, as the formerly-dead-end 12” main is now connected to other mains at both ends. A new flow test will be provided during the schematic design phase to confirm current available flow and pressure.

Table 1 below summarizes the basic fire protection requirements for each option considered in this report. The options are: 1. Code Upgrade/Base Repair, 2. Addition-Renovation Option #1 (AR-1), AR-1.5, and AR-2, and New construction-1 (NC-1).

TABLE 1

Option	Sprinklers Required?	Number of Wet Risers	Standpipe Required?	Hose Valves Required	Fire Pump Required?
Code Upgrade/Base Repair	Yes	2	No	No	No
AR-1	Yes	2	No	No	No
AR-1.5	Yes	2	No	No	No
AR-2	Yes	3	No	No	No
NC-1	Yes	2	Possible if 3-story wing used for Grades 4-6	2 at stage if over 1,000 sqft. At stairs and roof if standpipe required	Yes If standpipe required, and CFD rejects manual-wet-standpipe

All options require an NFPA 13 sprinkler system with protection through-out the building. No options require standpipes, with the possible exception of NC1, if the final configuration includes a 3-story wing. NOTE: standpipes would only be code required for NC1 if the top floor were 30' or more above "lowest fire department access" (generally speaking, this is the lowest, adjacent, paved-grade). The local fire department, however, could request a "non-required standpipe" in the 3-story wing if the top floor was under, but close to 30' above lowest FD access. The purpose of the standpipe is to make it easier for the fire department to get their water-filled hoses to the furthest parts of the building without dragging them 30' or more vertically up the stairs. But it is not much easier to drag water-filled hoses 28' or 29' vertically upstairs.

No options require a fire pump, unless a standpipe is required, and CMR does not permit a manual-wet standpipe to be used. A "manual-wet-standpipe means the required standpipe flow and pressure are provided by the fire department pumper rather than city pressure.

Based on this study, the following work is recommended.

- 1) Provide a new, NFPA 13 system through-out (all options).
- 2) Provide stairwell stand-pipes if the top floor level is 30 ft. or more above lowest fire department access.
- 3) Confirm with the Clinton Fire Dept. (CFD) that they would accept a manual-wet-standpipe and fire-dept.-connection (FDC) to serve any possible standpipes.
- 4) Provide a new, schematic-design phase flow test at the existing site.
- 5) Keep all storage heights less than 12', and keep storage confined to designated storage rooms, with appropriate FP coverage.
- 6) Connect new FP system alarms to a new central Fire Alarm Control Panel (FACP) provided under Electrical.
- 7) Provide new Kitchen Exhaust Hood and Hood FP system, provided under Kitchen Equipment
- 8) With the addition of a fire sprinkler system "through-out" the building, very few portable fire extinguishers will be required. Any non-required extinguishers should be removed, to minimize maintenance costs.

Maintenance:

- 1) Train in-house personnel, and provide required, regular, sprinkler system and fire extinguisher inspections using in-house inspectors
- 2) Provide additional required maintenance and testing of FP and fire extinguisher systems, alarms and flow via maintenance contract.

CONSTRUCTION OPTIONS

Based on the preliminary design program (PDP) submission, the Town and MSBA have concurred that the following options should be evaluated in more detail. These are:

- 1) Code Upgrade/Base Repair of the existing middle school
- 2) AR-1: Complete Renovation of the existing middle school with a modest addition
- 3) AR-1.5 – Complete Renovation of the existing middle school with a modest addition
- 4) AR-2: Complete Renovation of the existing middle school with a modest addition
- 5) NC-1: New construction on existing site, with demolition of the existing school to follow once the new school is occupied.

FIRE PROTECTION RECOMMENDATIONS AND COST ISSUES

Code Upgrade/Base Repair – This level of work would require that all current FP code requirements be met by the existing building

Provide a new, NFPA 13, wet, fire protection system thru-out the building.

Standpipes: Not Required

Stage Hose Valves – not required – has a “platform” not a stage

Fire Dept. Connection: 4” Storz on a 30 degree elbow down.

Fire Pump: Not Required

Phasing: As the building will be occupied during the construction period, work will have to be done in phases. Phasing will increase FP contractor costs as follow:

- mobilizing and de-mobilizing for each phase,
- testing new piping by phase,
- purchasing materials by phase,
- obtaining inspections by phase,
- addressing punch items by phase.
- draining down existing piping to connect new piping, and re-filling.

AR-1, AR-1.5, and AR-2: Full Renovation with Additions to the Building: This level of work would require that all current FP code requirements be met by the existing building as well as any addition. Fire Protection work includes:

Provide a new, NFPA 13, wet, fire protection system thru-out the original building and new addition.

Standpipes: Not required.

Stage Hose Valves - not required - has a "platform" not a stage

Fire Dept. Connection: 4" Storz on a 30 degree elbow down.

Fire Pump: Not Required

Phasing: As the building will be occupied during the construction period, work will have to be done in phases. Phasing will increase FP contractor costs as follow:

- mobilizing and de-mobilizing for each phase,
- testing new piping by phase,
- purchasing materials by phase,
- obtaining inspections by phase,
- addressing punch items by phase.
- draining down existing piping to connect new piping, and re-filling.

NC-1: New Construction – existing site: All new educational use buildings over 12,000 sqft must meet all current FP code requirements, including a new NFPA 13 wet sprinkler system through-out the building. Fire Protection work for this option includes:

Provide a new, NFPA 13, wet, fire protection system thru-out the new school building.

Standpipes: Required if the top floor level is 30' or more above the "lowest fire department access". Generally speaking, this is the lowest, adjacent paved-grade. May be required (or requested by CFD) if a 3-story wing slightly under 30' above lowest FD access is included in the design.

Stage Hose Valves – 1 on each side required if stage is over 1000 sqft.

Fire Dept. Connection: 4" Storz on a 30 degree elbow down.

Fire Pump: The most recent flow test available near this site is from 1996, and it showed moderate pressure (73 psi static, 67 psi residual) and good flow –(1,200 gpm). This flow and pressure are adequate for the sprinkler system, but not for standpipes.

Standpipes require a much higher water-pressure and flow than a sprinkler system. NFPA 14 (which governs the installation of standpipes) specifically states it is not their intent to require fire pumps for standpipes if the city pressure is sufficient for the sprinkler systems. Thus, NFPA 14 permits the use of a manual-wet Fire Department Connection (i.e. fire dept. pumper will provide the required pressures) for feeding the standpipes – ***if approved by the local fire department***. NFPA 14 requires (in a fully sprinkled building) that 1000 gpm stand-pipe water flow rate be calculated, with 100 psi outlet pressure at the most remote hose valve.

A manual-wet-FDC could provide sufficient pressure for the standpipes. If approved by CFD, this is the expected design for any standpipes that may be required. With a manual-wet-FDC, no fire-pump would be required.

Phasing: As the newly constructed building will be completed and occupied prior to any work in the existing building, there will be no additional FP costs for "phasing".

GENERAL RECOMMENDATIONS IMPACTING FP COSTS

General: The following general recommendations apply to all options being considered.

Code Upgrade/base-repair: renovation,
AR-1, AR-1.5, and AR-2: renovation-addition,
NC-1: new-construction

General Storage issues: Plan for all storage heights to be less than 12'. Review available storage areas and storage needs. Organize storage to keep it confined to designated storage rooms, with appropriate FP coverage.

Special Storage Issues: Provide listed flammable storage cabinets for the storage of all flammable or combustible liquids or chemicals. Do not permit any plastic shelving. Metal shelving has the best fire resistance, wood shelving is acceptable.

Flammability Standards: Ensure that all (existing and) new furniture and window coverings meet 527 CMR flammability standards.

Fire Signaling: Connect all new FP system alarms to a new central Fire Alarm Control Panel (FACP – provided under electrical).

Maintenance:

Training and inspections: Train in-house personnel, and provide required monthly inspections using in-house inspectors

FP Maintenance Contract: Provide additional code-required maintenance and testing of FP systems alarms and flow via maintenance contract.

Storage: The following specific storage recommendations apply to all options being considered:

Code Upgrade/base-repair: renovation,
AR-1, AR-1.5, and AR-2: renovation-addition,
NC-1: new-construction

With attentive planning and design, the “hazard level” of storage can be minimized, to reduce FP cost and complexity.

Miscellaneous Storage has separate, and generally less stringent requirements for FP protection than regular storage. Thus, it is advantageous to adjust storage room design to ensure anything stored within

would be considered “miscellaneous storage”. NFPA requirements for “miscellaneous storage” are in plain text below, comments re school design are in bold.

Storage must be incidental to the building’s main use. **All storage rooms in E-use buildings qualify.**

Height from the floor to the top of storage must not exceed 12’. **This can be best assured if the ceiling height is 12’ or less.**

Storage areas cannot exceed 10% of the total building area, or 4,000 sqft, whichever is less. **Make total sqft of storage rooms less than 4,000 sqft, and less than 10% of building’s area..**

Each individual storage area / pile cannot exceed 1000 sqft. **Make all storage rooms under 1,000 sqft.**

If there are several “piles” of storage in a large open room, each 1,000 sqft pile must be 25’ or more from the next pile. **In storage rooms over 1,000 sqft do not use any “caged” sub-rooms. Provide solid walls for any sub-rooms.**

Miscellaneous Storage Hazard Levels: The sizing of FP pipe is based on how large an area of sprinklers is assumed would activate in a fire, and how many gallons-per-minute (gpm) of water flow is required per sqft of operating area.

As the “hazard level” increases, both the design operating area, and the required gpm/sqft also increase. Thus “extra-hazard” (EH1 and EH2) areas have a much, much higher total water flow (minimum 1250 to 1500) than “ordinary hazard” (OH1 or OH2) areas (minimum 475 to 550 gpm). This results in larger FP piping including the riser, backflow, and underground service.

EH areas also require a larger number of (more closely spaced) sprinklers to be installed, further increasing costs. The recommendations in bold below would keep the storage areas “ordinary hazard”.

Schools very often store materials in large plastic bins, which are virtually always Group A plastics. Group A plastics are the highest hazard of all “solid” materials typically found in a school. If a plastic bin contains ordinary hazards such as paper, wood, clothing, etc, (so the “bin” is less than 25% of the total volume), the “package” is considered an ordinary hazard.

Use plastic bins primarily for storing ordinary hazard materials such as metals, paper, cardboard, foods, wood, leather, natural fibers, etc.

Wherever possible, use sturdy, cardboard cartons (closed on all sides) to store Group A plastic materials, and keep the top of plastic storage under 10' AFF.

If plastic materials must be stored “exposed” or in plastic bins, keep the top of storage under 5' AFF thru-out the entire plastic-storage area.

Storage that contains more than 25% (by volume) Group A plastics should be stored in a separate EH storage room (see adjacent hazards below)

Flammable Liquids Storage Issues: **Provide listed flammable storage cabinets for the storage of all flammable or combustible liquids or chemicals.**

Adjacent hazards: Sometimes there is a small area of high hazard storage located within a room that is mostly a lower hazard. An example is a “wire-cage” for off-season sports equipment, located within a receiving room. A fairly large percentage of sports equipment these days is made of plastic – most frequently Group A plastics.

If the higher hazard is not separated from the surrounding, lower hazard area by a solid wall and ceiling, then the higher hazard determines the design area and gpm/sqft for both the high hazard area plus a 15'-on-all-sides buffer area.

If the small high-hazard area is separated by a solid wall and ceiling, the design operating area is determined by the larger, surrounding (lower-hazard) room, and there is no 15' extension of the higher hazard gpm/sqft.

Where an area containing more-than-25%-by-volume-plastic storage occurs within a larger room containing paper, wood, foods, natural fibers, or metal stored materials, provide a solid wall and ceiling around the plastic storage area.

How Materials are Stored: FP requirements vary depending on how materials are store: Different methods are listed below, from less hazardous, to more hazardous.

Solid piled, palletized, bin-box, and shelf storage are lower hazard ways of storing.

- Solid piled means materials stacked on top of each other, directly on the floor.
- Palletized means materials stored on top of pallets, often in solid-piled stacks.

- Bin-box means materials stored in 5-sided wood, metal, or cardboard boxes, with the open side facing the aisle, and little or no horizontal or vertical space around individual boxes.
- Shelf storage means stored on shelves 30" or less in depth, with minimum 30" aisles between shelves.

Store materials in solid piles, or on shelving less than 30" deep wherever possible. Metal shelves preferred. Wood acceptable. NO plastic shelving.

For all exposed (uncartoned) plastic materials, and for ordinary materials over 10' high, Back-to-back shelving and rack-storage are higher hazard ways of storing.

Try to avoid back-to-back shelving and rack storage where-ever top of storage is over 10' high, and avoid it for any exposed-plastic storage. To avoid them, use solid piled storage, or shelf storage under 30" deep (aisle to aisle).

Ceilings: The following ceiling recommendations apply to all options being considered.

Ceiling Height: NFPA allows a ceiling height modifier to the basic design area, if quick response sprinklers are used. It only applies to light and ordinary hazard spaces, under 20' high, wet systems, with no unprotected ceiling pockets.

If ceiling height is less than 10' for an "ordinary hazard (OH)" storage room, the design area can be reduced by 40%. This reduces total design flow by 40%, allowing smaller pipe to be used. **In an OH storage situation, a ceiling height 10' or under is very helpful.**

As the ceiling height increases up to 20', the design area reduction decreases in proportion, down to a low of 25%. Still helpful, though with any ceiling over 12', we would be at greater risk of losing "miscellaneous storage" status.

NFPA has a ceiling slope modifier to the basic design area:

For ceiling slopes over 2:12, the design area must be increased by 30%. **Use only flat ceilings in storage areas.**

SUMMARY

Although the systems at the Clinton Middle School appear to be well maintained, many are nearing 50 years of age and as such have exceeded their useful service life. For the base repair and add/reno options, there is significant work in the existing building to first bring it up to code and second to ensure that the installed systems are relatively new so that they will last for another 50 years. The codes have changed through the years to try to conserve water or reduce gas usage in buildings so the plumbing options need to address these.

The following basis of design summary describes proposed approaches for the three main options 1) Base Repair, 2) Additions and Renovations with sub options and 3) New Construction with associated sub options.

BASE REPAIR - NO BUILD OPTION

Distribution & Conveying Systems

The water distribution system is more than 45 years of age and most likely has some lead containing piping, fittings and/or solder as well as thinning pipe walls. As such, we suggest the entire domestic water distribution system be replaced in its entirety. The new distribution system would consist of copper piping with lead-free fittings and products. This system needs to be insulated.

The domestic water service entrance needs to be modified to include a backflow preventer on the incoming water service. The site irrigation system already has a backflow preventer installed. Note that additional plumbing fixtures may require a change to the water piping size to the building as it is currently 3" domestic water and 4" site irrigation. With the addition of toilet rooms and other plumbing fixtures, the water demand increases and therefore the water piping may throughout the building may need to increase in size.

All sanitary sewer and rainwater conductors located above the grade floor slab shall be replaced in their entirety unless examined and found to be in good condition. Underground waste piping shall be examined via camera inspection and if found to be in good condition shall be retained and reused. If required, the piping shall be jet-cleaned and/or scoured with an auger to create smoother pipe walls. All sanitary sewer and rainwater conductors shall be constructed of cast iron. The duriron acid waste piping must be tested to verify that it is still viable. The acid neutralizing system is outside in a manhole which needs to be evacuated and the limestone chips replaced and should be replaced every two years

maximum. The garages with overhead doors will need to have drains added inside and a new piping system to one or more gas/sand traps that connect to the sewer line. These can be piped together or in groups since they are not adjacent to one another. This gas/sand trap(s) needs to be vented back into the building and through the roof. Finally, the vent stacks all need to be extended to be 24" above the roof surface as they are not currently.

All waste from the kitchen(s) shall be piped to a large (1,500 gallon+/-) exterior grease trap prior to discharge to the municipal sewer system. Note that disposers and hand sinks do not need to be piped through a grease trap but sometimes hand sinks are included. Disposers are not allowed to be piped to the grease trap.

Domestic Hot Water

High efficiency (93%+) gas-fired condensing boiler shall be used to replace the existing atmospheric gas boiler. This is piped to an indirect fired storage tank which was installed in 2017. The boiler and storage tank support the buildings domestic hot water needs. Alternatively, CO2 water heaters with larger storage tanks could be used to replace the gas-fired domestic water heating system. Note that as additional plumbing fixtures are added, the water heating system needs to grow larger to support it. If CO2 water heaters or other forms of heat pump water heaters are used, then more hot water storage will be required since these systems take longer to recover.

The existing water tempering valve stations shall be replaced with new digital mixing valves. Per the existing, one mixing valve serves the school and one serves the high temperature kitchen equipment (i.e. dishwasher). The mixing valves are provided near the water heater to maintain water heater temperatures above 140°F to prevent bacterial growth in the tank while delivering 125°F water to service fixtures for sanitation and 110°F hot water to public lavatory sinks and other student and public use fixtures to prevent scalding. Note that the dishwasher has an electric booster heater which typically heats incoming water from 110°F to 180°F. Also, the 3-bay sinks typically use chemicals to disinfection instead of 140°F which is too hot to handle. Therefore, high temperature water is no longer required to serve commercial kitchens.

Fixtures

Planned renovations will most likely require removal of the existing fixtures. Once removed the fixtures should be replaced with code compliant water conserving fixtures. In addition, to achieve improved LEED® compliance and further water savings we recommend ultra-low flush water closets and urinals

be utilized. The ultra low flush water closets use 1.28 gallons per flush as opposed to the 1.6 gallon per flush allowed by today's code and the urinals use 1 pint (0.13 gallons) per flush as opposed to the current 1 gallon per flush allowed. The combination of these two can result in substantial savings overtime. However, these fixtures should only be used when connecting to new well pitched (more than code minimum) sewer lines as the low flow fixtures do have a tendency to result in line blockages if the sewer line pitch or conditions is not good (i.e. older, rougher sanitary waste piping).

Lavatory faucets shall be of the low flow metered type controlled by either a manually operated or electrically wired or battery powered sensor operated faucet. Use of these faucets promotes good hygiene as well as water conservation.

Handicap accessibility improvements are required throughout the school. Several restrooms were upgraded, but not all. This will involve relocating or removing fixtures to make room for their handicap counterparts. Typically, handicap water closets and urinals are mounted at 17" from the floor to the rim while handicap lavatories and sinks are mounted at 34" from the floor to the rim. Note that if six or more toilet stalls are provided in a toilet room, at least one alternate accessible toilet stall is required in addition to the standard accessible toilet stall.

The piping at all janitor's sinks shall be evaluated. We observed that many of these faucets had connections to chemical dispensing systems which were piped to the outlet of the faucet. This hose connection is allowed, but the dispensers required a dual check valve with an atmospheric vent installed at the water inlet. Also a pressure bleeder device must be installed which will visually free flow water through the atmosphere from the faucet connection to a sink or drain.

All water coolers must be checked for lead content and accessibility. Per MAAB, a handicap water cooler is a bi-level water cooler. These need to be recessed into the walls or have wing-walls installed around them so that they do not project into the corridors which are accessible routes. The water coolers may or may not have integral bottle fillers which are popular. Water coolers must be provided at 1 per 75 students per the MA Plumbing Code, so for 550 students, this is 8 water coolers and for 700 students, this is 10 water coolers.

New Science Labs and Science Prep Rooms in the AR-2 alternatives (550 and 700 students), but not the AR-1's. These science rooms are in different locations than the existing and are nowhere near the existing acid waste piping system and existing acid neutralizing manhole. Since the science rooms could use chemicals (acids and alkalis), these need to be neutralized before being discharged to the sewer system. There are two methods that are used. One is passive neutralization which is flowing the effluent

through limestone chips, then the pH is monitored as it is released. The other is active neutralization which uses stronger acids and alkalis to neutralize the chemicals in the tank. The contents are typically stored and tested to ensure that the pH levels are within acceptable limits. The current piping arrangement is with passive neutralization in an outside manhole.

Natural Gas Service:

The existing gas service to the building currently supports the heating boilers, domestic water heaters, the kitchen cooking equipment and the science lab gas turrets. The projected new load, gas-fired heating boilers, water heaters and cooking equipment is expected to be near the same as the current load and may be less due to proposed building thermal improvements as well as more efficient heating and hot water boilers. Once loads are confirmed a review with the local gas utility (Eversource) shall take place to confirm adequate supply. It must also be determined why there are separate gas meters for the boilers vs. the rest of the building as typically there is one gas meter per building.

Sustainable Opportunities:

Many of the proposed fixtures and control sequences noted above minimize water usage and conserve energy however, further optimization may be obtained by investigating the use of storm water recovery systems. These systems collect, filter and utilize storm water to supply water to water closets and urinals throughout the building. A life cycle evaluation must be performed to ascertain the initial first costs, annual operating costs and projected savings associated with such a system.

The use of ultra-efficient low flow fixtures, which are plumbing fixtures with highly reduced water volumes, can cause issues with the plumbing piping. There are water closets that have a flushing rate of 0.8 – 1.1 gallons per flush and waterless urinals. Along with the lavatories, which are rated for 0.35 gallons per minute (GPM), the overall flow rate through the piping system is reduced. The problem is that the flushed contents need to be carried in the water down the piping system to outside. If there is reduced water, the water actually flows faster than the “waste” and leaves it behind causing pipe clogs. The piping system sizing, which has been the code requirement from the building, is based on water closets that flush at 3.5 gallons per flush, urinals that flush at 1.0 gallons per flush and lavatories that flow at 1.0 GPM. When the flow rates were reduced, then pipe sizing tables did not change, thus causing a problem worldwide.

One other option is to reduce the overall gas usage in a building by using electric cooking appliances in lieu of gas-fired appliances. They work just as well but don't use natural gas.

RENOVATION & ADDITION OPTIONS AR1 & AR2

The AR-1 and AR-2 building occupancy and estimated square footages are as follows:

AR-1 550 Enrollment:

▪ Renovation (existing building)	= 120,000 GSF
▪ Demolition (existing building)	= 10,000 GSF
▪ <u>Addition</u>	= 14,000 GSF
Total GSF	=134,000 GSF

AR-1 700 Enrollment:

▪ Renovation (existing building)	= 120,000 GSF
▪ Demolition (existing building)	= 10,000 GSF
▪ <u>Addition</u>	= 25,500 GSF
Total GSF	=145,500 GSF

AR-2 550 Enrollment:

▪ Renovation (existing building)	= 87,000 GSF
▪ Demolition (existing building)	= 43,000 GSF
▪ <u>Addition</u>	= 54,000 GSF
Total GSF	=141,000 GSF

AR-2 700 Enrollment:

▪ Renovation (existing building)	= 87,000 GSF
▪ Demolition (existing building)	= 43,000 GSF
▪ <u>Addition</u>	= 69,000 GSF
Total GSF	=156,000 GSF

Distribution & Conveying Systems

The water distribution system is more than 45 years of age and most likely has some lead containing piping, fittings and/or solder as well as thinning pipe walls. As such, we suggest the entire domestic water distribution system be replaced in its entirety. The new distribution system would consist of copper piping with lead-free fittings and products. This system needs to be insulated.

The domestic water service entrance needs to be modified to include a backflow preventer on the incoming water service. The site irrigation system already has a backflow preventer installed. Note that additional plumbing fixtures may require a change to the water piping size to the building as it is currently 3" domestic water and 4" site irrigation. With the addition of toilet rooms and other plumbing fixtures, the water demand increases and therefore the water piping may throughout the building may need to increase in size.

All sanitary sewer and rainwater conductors located above the grade floor slab shall be replaced in their entirety unless examined and found to be in good condition. Underground waste piping shall be examined via camera inspection and if found to be in good condition shall be retained and reused. If required, the piping shall be jet-cleaned and/or scoured with an auger to create smoother pipe walls. All sanitary sewer and rainwater conductors shall be constructed of cast iron. The duriron acid waste piping must be tested to verify that it is still viable. The acid neutralizing system is outside in a manhole which needs to be evacuated and the limestone chips replaced and should be replaced every two years maximum. The garages with overhead doors will need to have drains added inside and a new piping system to one or more gas/sand traps that connect to the sewer line. These can be piped together or in groups since they are not adjacent to one another. This gas/sand trap(s) needs to be vented back into the building and through the roof. Finally, the vent stacks all need to be extended to be 24" above the roof surface as they are not currently.

All waste from the kitchen(s) shall be piped to a large (1,500 gallon+/-) exterior grease trap prior to discharge to the municipal sewer system. Note that disposers and hand sinks do not need to be piped through a grease trap but sometimes hand sinks are included. Disposers are not allowed to be piped to the grease trap.

Domestic Hot Water

High efficiency (93%+) gas-fired condensing boiler shall be used to replace the existing atmospheric gas boiler. This is piped to an indirect fired storage tank which was installed in 2017. The boiler and storage tank support the buildings domestic hot water needs. Alternatively, CO2 water heaters with larger storage tanks could be used to replace the gas-fired domestic water heating system. Note that as additional plumbing fixtures are added, the water heating system needs to grow larger to support it. If CO2 water heaters or other forms of heat pump water heaters are used, then more hot water storage will be required since these systems take longer to recover.

The existing water tempering valve stations shall be replaced with new digital mixing valves. Per the existing, one mixing valve serves the school and one serves the high temperature kitchen equipment (i.e. dishwasher). The mixing valves are provided near the water heater to maintain water heater temperatures above 140°F to prevent bacterial growth in the tank while delivering 125°F water to service fixtures for sanitation and 110°F hot water to public lavatory sinks and other student and public use fixtures to prevent scalding. Note that the dishwasher has an electric booster heater which typically heats incoming water from 110°F to 180°F. Also, the 3-bay sinks typically use chemicals to disinfection instead of 140°F which is too hot to handle. Therefore, high temperature water is no longer required to serve commercial kitchens.

Fixtures

Planned renovations will most likely require removal of the existing fixtures. Once removed the fixtures should be replaced with code compliant water conserving fixtures. In addition, to achieve improved LEED® compliance and further water savings we recommend ultra-low flush water closets and urinals be utilized. The ultra low flush water closets use 1.28 gallons per flush as opposed to the 1.6 gallon per flush allowed by today's code and the urinals use 1 pint (0.13 gallons) per flush as opposed to the current 1 gallon per flush allowed. The combination of these two can result in substantial savings overtime. However, these fixtures should only be used when connecting to new well pitched (more than code minimum) sewer lines as the low flow fixtures do have a tendency to result in line blockages if the sewer line pitch or conditions is not good (i.e. older, rougher sanitary waste piping).

Lavatory faucets shall be of the low flow metered type controlled by either a manually operated or electrically wired or battery powered sensor operated faucet. Use of these faucets promotes good hygiene as well as water conservation.

Handicap accessibility improvements are required throughout the school. Several restrooms were upgraded, but not all. This will involve relocating or removing fixtures to make room for their handicap counterparts. Typically, handicap water closets and urinals are mounted at 17" from the floor to the rim while handicap lavatories and sinks are mounted at 34" from the floor to the rim. Note that if six or more toilet stalls are provided in a toilet room, at least one alternate accessible toilet stall is required in addition to the standard accessible toilet stall.

The piping at all janitor's sinks shall be evaluated. We observed that many of these faucets had connections to chemical dispensing systems which were piped to the outlet of the faucet. This hose connection is allowed, but the dispensers required a dual check valve with an atmospheric vent installed

at the water inlet. Also a pressure bleeder device must be installed which will visually free flow water through the atmosphere from the faucet connection to a sink or drain.

All water coolers must be checked for lead content and accessibility. Per MAAB, a handicap water cooler is a bi-level water cooler. These need to be recessed into the walls or have wing-walls installed around them so that they do not project into the corridors which are accessible routes. The water coolers may or may not have integral bottle fillers which are popular. Water coolers must be provided at 1 per 75 students per the MA Plumbing Code, so for 550 students, this is 8 water coolers and for 700 students, this is 10 water coolers.

New Science Labs and Science Prop Rooms in the AR-2 alternatives (550 and 700 students), but not the AR-1's. These science rooms are in different locations than the existing and are nowhere near the existing acid waste piping system and existing acid neutralizing manhole. Since the science rooms could use chemicals (acids and alkalis), these need to be neutralized before being discharged to the sewer system. There are two methods that are used. One is passive neutralization which is flowing the effluent through limestone chips, then the pH is monitored as it is released. The other is active neutralization which uses stronger acids and alkalis to neutralize the chemicals in the tank. The contents are typically stored and tested to ensure that the pH levels are within acceptable limits. The current piping arrangement is with passive neutralization in an outside manhole.

Natural Gas Service:

The existing gas service to the building currently supports the heating boilers, domestic water heaters, the kitchen cooking equipment and the science lab gas turrets. The projected new load, gas-fired heating boilers, water heaters and cooking equipment is expected to be near the same as the current load and may be less due to proposed building thermal improvements as well as more efficient heating and hot water boilers. Once loads are confirmed a review with the local gas utility (Eversource) shall take place to confirm adequate supply. It must also be determined why there are separate gas meters for the boilers vs. the rest of the building as typically there is one gas meter per building.



Sustainable Opportunities:

Many of the proposed fixtures and control sequences noted above minimize water usage and conserve energy however, further optimization may be obtained by investigating the use of storm water recovery systems. These systems collect, filter and utilize storm water to supply water to water closets and urinals throughout the building. A life cycle evaluation must be performed to ascertain the initial first costs, annual operating costs and projected savings associated with such a system.

The use of ultra-efficient low flow fixtures, which are plumbing fixtures with highly reduced water volumes, can cause issues with the plumbing piping. There are water closets that have a flushing rate of 0.8 – 1.1 gallons per flush and waterless urinals. Along with the lavatories, which are rated for 0.35 gallons per minute (GPM), the overall flow rate through the piping system is reduced. The problem is that the flushed contents need to be carried in the water down the piping system to outside. If there is reduced water, the water actually flows faster than the “waste” and leaves it behind causing pipe clogs. The piping system sizing, which has been the code requirement from the building, is based on water closets that flush at 3.5 gallons per flush, urinals that flush at 1.0 gallons per flush and lavatories that flow at 1.0 GPM. When the flow rates were reduced, then pipe sizing tables did not change, thus causing a problem worldwide.

One other option is to reduce the overall gas usage in a building by using electric cooking appliances in lieu of gas-fired appliances. They work just as well but don't use natural gas.

NEW CONSTRUCTION OPTION NC1

The new construction building occupancy and estimated square footages are as follows:

- New Construction 550 Enrollment = 121,500 GSF
- New Construction 700 Enrollment = 136,000 GSF
- Demolition (existing building) = 130,000 GSF

Distribution & Conveying Systems

The water distribution system throughout the building shall consist of copper piping with lead-free fittings and products. Alternate piping material is polypropylene, a plastic material, that is allowed by the MA Plumbing Code. All water distribution piping within the building needs to be insulated.

All sanitary sewer and rainwater conductors shall be constructed of cast iron. Note that the storm drainage system will incorporate overflow roof drains that discharge to grade. An acid waste system consisting of acid rated piping and a neutralizing system shall be provided for the science labs. This system could either be a passive neutralization system utilizing a limestone chip tank or an active neutralization system utilizing chemical additions to the effluent to neutralize the solution.

All waste from the kitchen(s) shall be piped to a large (1,500 gallon+/-) exterior grease trap prior to discharge to the municipal sewer system. Note that disposers and hand sinks do not need to be piped through a grease trap but sometimes hand sinks are included. Disposers are not allowed to be piped to the grease trap.

Domestic Hot Water

High efficiency (93%+) gas-fired condensing boiler/water heaters and tanks shall be used to support the buildings domestic hot water needs. In addition, this system shall be coupled to the heat output of thermal solar panels, if selected. A second option is to utilize CO2 water heaters with storage to reduce the gas usage. A third option is to utilize heat pump water heaters with storage. The use of these supplemental systems will be dependent on their life cycle cost and require further study to using natural gas water heating.

Dual water tempering valve stations shall be provided at the water heater system to maintain water heater temperatures above 140°F to prevent bacterial growth in the tank while delivering 125°F water

to service fixtures for sanitation and 110°F hot water to public lavatory sinks and other student and public use fixtures to prevent scalding. The tempering valves shall be designed as electronic. Note that we have provided point of use mixing valves for each lavatory or groups of lavatories on previous projects, which would allow the water temperature throughout the school to be 120°F – 125°F.

Fixtures

All fixtures shall be of the code compliant water conserving type. In addition, to achieve improved LEED® compliance and further water savings we recommend ultra-low flush water closets and urinals be utilized. The ultra low flush water closets use 1.28 gallons per flush as opposed to the 1.6 gallon per flush allowed by today's code and the urinals use 1 pint (0.13 gallons) per flush as opposed to the current 1 gallon per flush allowed. The combination of these two can result in substantial savings overtime. However, these fixtures should only be used when connecting to well-pitched (more than code minimum) sewer lines as the low flow fixtures do have a tendency to result in line blockages if the sewer line pitch is not good. This works well for site on a hill, but not so much for relatively flat sites. Plumbing fixtures meeting the Massachusetts Architectural Access Board requirements must be used per the architectural design. Furthermore, gender neutral restrooms, which could be single user, handicap accessible restrooms, should be considered for the design. This would include the locker room design with showers.

Lavatory faucets shall be of the low flow metered type controlled by either a manually operated or electrically wired or battery powered sensor operated faucet. Use of these faucets promotes good hygiene as well as water conservation.

Showers are required in the locker rooms when there are athletic programs. These shall be individual shower stalls in lieu of gang showers. Each shower shall have an individual shower control and have a flow rate of 2.0 GPM. Each shower stall shall have a separate drain or use a common trench drain with the floor sloped to the drain.

Mop sinks shall be provided at a minimum one per floor. If chemical systems are used, then need to be separately piped or have a backflow preventer installed on the incoming water supply. These may connect to the faucet but there are further requirements per the MA Plumbing Board.

Water coolers / drinking fountains must be installed throughout the building. Per MAAB, a handicap water cooler is a bi-level water cooler. These need to be recessed into the walls or have wing-walls installed around them so that they do not project into the corridors which are accessible routes. The

water coolers may or may not have integral bottle fillers which are popular. Water coolers must be provided at 1 per 75 students per the MA Plumbing Code, so for 550 students, this is 8 water coolers and for 700 students, this is 10 water coolers.

Kitchen Equipment is furnished by the Kitchen Equipment Contractor but much of it requires plumbing (water/sanitary/gas connections). The plumbing shall be coordinated with the proposed kitchen plan to serve all of the proposed equipment. Point-of-use grease interceptors are required for the dishwasher, 3-bay sink, scullery sinks exceeding 10" deep, pre-rinse sink and kettles. These are then piped to an exterior grease trap before being discharge to the town sewer system. Prep sinks are not required to be piped through any grease trap but should utilize an indirect waste piping connection with a floor sink for the drain. Floor drains should be spaced in the kitchen at the cooking line and ware-washing areas. If gas is used for commercial cooking, then the gas feed required a gas interlock to the kitchen hood suppression system and a gas solenoid valve for the CO detection system.

Science Rooms require additional plumbing as well as emergency eyewash and shower fixtures to ensure safety of the students and staff. The piping for science rooms is a separate system, which was noted earlier. Gas turrets in the classroom required additional shut-off's for emergency and non-emergency use. Emergency eyewash and shower fixtures are required when chemicals or open flame are used in science labs. The emergency showers require 20 gallons per minute (GPM) of tempered water, which is water between 60°F & 90°F, that needs to flow for 15 minutes. Eye/face wash systems are less demanding at 4 GPM tempered water. Therefore, this tempered water requirement demands a high volume of stored hot water as the code requires two showers to flow for the duration (i.e. 600 gallons of tempered water in 15 minutes).

It must be confirmed with the school staff if compressed air is required for the school. If so, an air compressor system and piping distribution system needs to be installed.

Natural Gas Service:

All proposed sites appear to have gas service located either on property or on the public way abutting the property. It is anticipated that the gas service shall support, if applicable, the heating boilers, domestic water heaters, kitchen equipment and make-up air systems. Once loads are confirmed a review with the local gas utility (Eversource) shall take place to confirm adequate supply. There should be one gas meter installed for the building. Depending on the size of the incoming gas service through the wall, a gas-fire valve may need to be installed on the gas main to automatically shut off the gas via

a fusible link. Therefore, when the temperature at this gas valve reaches a high enough temperature, it closes.

Sustainable Opportunities:

Many of the proposed fixtures and control sequences noted above minimize water usage and conserve energy however, further optimization may be obtained by investigating the use of storm water recovery systems. These systems collect, filter and utilize storm water to supply water to water closets and urinals throughout the building. A life cycle evaluation must be performed to ascertain the initial first costs, annual operating costs and projected savings associated with such a system.

Use of vacuum tube thermal solar panels or CO2 water heaters shall be further considered, if desired, as part of a life cycle study analysis.

End of Plumbing Narrative

SUMMARY

Although the systems at the Clinton Middle School appear to be well maintained, many are nearing 50 years of age and as such have exceeded their useful service life. For all base repair and add/reno options, significant improvements to the buildings thermal envelope are planned such as new insulated glazing and improved wall and roof insulation. With these thermal improvements, the building is better able to be serviced by non-fossil fuel-based heating systems such as heat pumps. However, as the current site has natural gas, a gas-fired back-up heat option may be considered especially for the no-build and add/reno options and with further evaluation of on-site emergency generator capacity which may be challenged by an all-electric heated building.

The following basis of design summary describes proposed approaches for the three main options 1) Base Repair, 2) Additions and Renovations with sub options and 3) New Construction with associated sub options.

BASE REPAIR - NO BUILD OPTION

Many of the original heating and ventilation systems are beyond their useful expected service life of 20+ years as described earlier. Although some improvements have been made to sections of the building to supplement these original systems such as heat pumps and variable speed drives they do not satisfy the full environmental (thermal and ventilation) needs of the spaces.

In addition, being an older structure with limited insulation, albeit some thermal improvements are proposed, we recommend utilizing a hybrid configuration of both high efficiency boilers and heat pumps coupled to a new hydronic system in lieu of going with a completely electric based system. The hydronic based system allows for improve future compatibility with new technology as current refrigerants are undergoing a phase out process and being replaced with new refrigerants which have some flammability level. This flammability level increases the concern of the use of large refrigerant based systems with distribution throughout the building.

The proposed new hydronic system would feed out to the various building terminals and would incorporate air to water chiller/heater heat pumps which can generate chilled water, hot water or both simultaneously if needed based on building demand. Current advances in technology also allow variable refrigerant flow (VRF) heat pumps to generate chilled water and hot water which may be considered in the final design. As design progresses evaluation of 2-pipe or 4-pipe system shall be reviewed albeit 4-pipe provides the most flexibility. A high efficiency (93%+) gas-fired condensing boiler(s) would be utilized to allow for back-up during extreme conditions or power failures.

As noted previously, advances are being made in hybrid VRF and to hydronic systems. Mitsubishi will be introducing a product summer of 2023 which utilized high efficiency heat recovery VRF to generate both chilled water and hot water known as HVRF. The refrigerant runs to branch selector boxes complete with heat exchangers and pumps which then directs either chilled water or hot water to various indoor fan coil units. Although literature if not available yet on this system it is expected to present a possible good option to reduce the amount of refrigerant within a building while providing very high efficiencies. This option shall be reviewed further once more information is available.

The new hydronic system would be designed for low temperature (125°F maximum) hot water and elevated temperature (57°F minimum) chilled water so as to maximize heat pump chiller/heaters and boiler efficiency. These temperatures also allow for future integration to improved air to water heat pumps as technology advances.

Fresh air to all spaces shall be provided by new dedicated outdoor air systems (DOAS) consisting of high efficiency packaged rooftop heat pump units. These units shall provide tempered, filtered and dehumidified air to all spaces served. The units shall incorporate high efficiency heat pump cycles, hot gas reheat or heat pipes, total energy recovery wheels, variable speed supply and exhaust fans and back-up heat consisting of electric heat or gas-fired furnace. These DOAS units shall be independent of the central hydronic hot and chilled water system.

Fresh air to each space shall be controlled via variable air volume (VAV) and fan-powered variable air terminals. In classrooms and many other areas, to achieve improved room air rotation and filtration, we recommend DOAS style fan powered variable air volume (FVAV) terminals fitted with MERV 13 filtration, hot water coils and sensible only chilled water coils. Distribution to the rooms shall be either mixed air or optimally via displacement ventilation with low wall supply diffusers although it is understood that low displacement diffusers may be difficult to retrofit in existing rooms.

Although earlier conversations with school personnel did not reflect a need for building wide cooling, if this is desired the system should be configured to allow for chilled water for future compatibility with centralized the air to water heat pump chiller/heaters.

The following is a general outline of the systems to be implemented for the Base Repair Option:

1. Provide a 120-ton modular air to water heat pump chiller heater to support the chilled and hot water needs of the classrooms (2-story area) throughout the building. If fossil fuels are allowed, in addition, a 2 million BTUH high efficiency condensing gas-fired boiler shall be

provided to supplement the heat pump heating water loop during extreme cold conditions or during power outages presuming generator capacity is limited. Note: Pending review of the Mitsubishi HVRF system (when data becomes available), this chiller/heater and boiler may be replaced by multiple HVRF systems.

2. Provide a new hot water and chilled water piping system serving areas throughout the classroom portions of the building. System shall include variable speed pumps for energy efficient flow control. System hot water temperature should be designed for no higher than 125°F to maximize heating plant efficiency and allow for extended heat pump operation. System chilled water shall be designed for no lower than 57°F for maximum chiller efficiency.
3. Provide packaged rooftop DOAS units to support fresh air requirements to most building areas. Units shall include total energy recovery ventilation, active cooling/dehumidification control and heat pump heating. Approx. quantity and size shall be as listed below but shall be dependent on final building and space programming. When “primary system” is noted it indicates that that system provides full cooling and heating for the space as well as fresh air.
 - (4) 4,000 CFM unit for general classrooms
 - (2) 2,000 CFM unit for the gymnasium space (ducted to air handlers)
 - (1) 3,000 CFM unit for the cafeteria (ducted to air handler)
 - (1) 3,500 CFM unit for second floor Science Labs
 - (1) 1,000 CFM unit for second floor Art room (primary system)
 - (2) 1,500 CFM units for the locker rooms (primary system)
 - (1) 1,500 CFM unit for Wood Shop (primary system)
 - (1) 1,500 CFM unit for Metal Shop (primary system)
 - (1) 2,000 CFM unit for Music Room (primary system)
 - (1) 800 CFM unit for Main Office
4. For the admin office provide an 8-ton VRF heat pump system connected to a branch selector and five (5) ducted fan coil units to serve the respective zones in that area.
5. For gymnasium space, provide three (3) split air handling units tied to VRF heat pumps. Provide supply duct distribution throughout the gym and connect to existing low return systems. Minimum fresh air shall be introduced thru two packages rooftop DOAS system which shall incorporate CO2 reset control.
6. For media center provide one (1) split air handling unit tied to VRF heat pump. Connect to duct distribution serving media center. Minimum fresh air shall be introduced thru package rooftop DOAS system which shall incorporate CO2 reset control.

7. For cafeteria provide one (1) split air handling unit tied to VRF heat pump. Connect to existing duct distribution serving cafeteria. Minimum fresh air shall be introduced thru package rooftop DOAS system which shall incorporate CO2 reset control.
8. Remove all existing unit ventilators and permanently seal the wall openings.
9. Provide a complete ducted supply and return/exhaust system to support the ventilation needs of all building areas with systems as described herein. Where viable, existing ductwork may be internally cleaned, sealed, insulated and reused.
10. For the 2-story classroom section of the building, provide a fully ducted supply and return/exhaust air system to each classroom connected to respective DOAS units. Each classroom shall include a DOAS style FVAV terminal with hot water and sensible cooling chilled water coil. Air distribution to the rooms shall be either mixed air or optimally via displacement ventilation with low wall supply diffusers although it is understood that low displacement diffusers may be difficult to retrofit in existing rooms.
11. Existing heat pump fan coil units serving the second-floor classrooms shall be removed in all areas except the science rooms where they shall be retained for thermal comfort control. Provide EMS control interface boards to allow existing units to be controlled by the building EMS. Heat pump units no longer used may be repurposed to support VRF and/or hydronic systems via refrigerant to water HX noted herein pending compatibility review.
12. Provide a comprehensive building wide energy management system. In areas where heat pumps and hydronic heat provide heat the system shall control both to optimize efficient operation. System shall incorporate energy saving routines such as demand ventilation reset, room by room occupancy control, intelligent start/stop, etc...

RENOVATON & ADDITION OPTION AR-1 & AR-2

As noted in the base repair option many of the original heating and ventilation systems are beyond their useful expected service life of 20+ years as described earlier. Although some improvements have been made to sections of the building to supplement these original systems such as heat pumps and variable speed drives, they do not satisfy the full environmental (thermal and ventilation) needs of the spaces.

In addition, being an older structure with limited insulation, albeit some thermal improvements are proposed, we recommend utilizing a hybrid configuration of both high efficiency boilers and heat pumps coupled to a new hydronic system in lieu of going with a completely electric based system. The hydronic based system allows for improved future compatibility with new technology as current refrigerants are undergoing a phase out process and being replaced with new refrigerants which have some flammability level. This flammability level increases the concern of the use of large refrigerant based systems with distribution throughout the building. All new addition portions of the building would utilize HVAC systems not relying on any on-site fossil fuels.

The proposed new hydronic system would feed out to the various building terminals and would incorporate air to water chiller/heater heat pumps which can generate chilled water, hot water or both simultaneously if needed based on building demand. Current advances in technology also allow variable refrigerant flow (VRF) heat pumps to generate chilled water and hot water which may be considered in the final design. As design progresses evaluation of 2-pipe or 4-pipe system shall be reviewed albeit 4-pipe provides the most flexibility. If fossil fuels are allowed, a high efficiency (93%+) gas-fired condensing boiler(s) may be utilized to allow for back-up during extreme conditions or power failures. However, to avoid fossil fuels there are ways to reduce power demand for heating during a power failure other than the use of a fossil fueled boiler plant.

As noted previously, advances are being made in hybrid VRF and hydronic systems. Mitsubishi will be introducing a product, summer of 2023, which utilized high efficiency heat recovery VRF to generate both chilled water and hot water known as HVRF. The refrigerant runs to branch selector boxes complete with heat exchangers and pumps which then directs either chilled water or hot water to various indoor fan coil units. Although final literature is not available yet on this system it is expected to present a possible good option to reduce the amount of refrigerant within a building while providing very high efficiencies. This option shall be reviewed further once more information is available.

The new hydronic system would be designed for low temperature (125°F maximum) hot water and elevated temperature (57°F minimum) chilled water so as to maximize heat pump chiller/heaters and

boiler efficiency. These temperatures also allow for future integration to improved air to water heat pumps as technology advances.

Fresh air to all spaces shall be provided by new dedicated outdoor air systems (DOAS) consisting of high efficiency packaged rooftop heat pump units. These units shall provide tempered, filtered and dehumidified air to all spaces served. The units shall incorporate high efficiency heat pump cycles, hot gas reheat or heat pipes, total energy recovery wheels, variable speed supply and exhaust fans and back-up heat consisting of electric heat or gas-fired furnace. These DOAS units shall be independent of the central hydronic hot and chilled water system.

Fresh air to each space shall be controlled via variable air volume (VAV) and fan-powered variable air terminals. In classrooms and many other areas, to achieve improved room air rotation and filtration, we recommend DOAS style fan powered variable air volume (FVAV) terminals fitted with MERV 13 filtration, hot water coils and sensible only chilled water coils. Distribution to the rooms shall be either mixed air or optimally via displacement ventilation with low wall supply diffusers although it is understood that low displacement diffusers may be difficult to retrofit in existing rooms.

Although earlier conversations with school personnel did not reflect a need for building wide cooling, if this is desired the system should be configured to allow for chilled water for future compatibility with centralized the air to water heat pump chiller/heaters.

The AR-1 and AR-2 building occupancy and estimated square footages are as follows:

AR-1 550 Enrollment:

- Renovation (existing building) = 120,000 GSF
- Demolition (existing building) = 10,000 GSF
- Addition = 14,000 GSF
- Total GSF = 134,000 GSF

AR-1 700 Enrollment:

- Renovation (existing building) = 120,000 GSF
- Demolition (existing building) = 10,000 GSF
- Addition = 25,500 GSF
- Total GSF = 145,500 GSF

AR-2 550 Enrollment:

- Renovation (existing building) = 87,000 GSF

Feasibility Study PSR

D.1 Basis of Design Narratives

g. HVAC

▪ Demolition (existing building)	= 43,000 GSF
▪ Addition	= 54,000 GSF
Total GSF	=141,000 GSF

AR-2 700 Enrollment:

▪ Renovation (existing building)	= 87,000 GSF
▪ Demolition (existing building)	= 43,000 GSF
▪ Addition	= 69,000 GSF
Total GSF	=156,000 GSF

The following is a general outline of the systems to be implemented for the Renovation & Addition Options:

1. Provide a modular air to water heat pump chiller heater to support the chilled and hot water needs of the classrooms (2-story area) throughout the building as well as the addition. Chiller/heater shall be tentatively sized as follows:
 - 120-ton for AR-1 (550)
 - 150-ton for AR-1 (700)
 - 150-ton for AR-2 (550)
 - 150-ton for AR-2 (700)

In addition, a high efficiency condensing gas-fired boiler(s) shall be provided to supplement the heat pump heating water loop during extreme cold conditions or during power outages presuming generator capacity is limited. Tentative boiler capacity shall be as follows and should be considered maximum values:

- 2 million BTUH for AR-1 (550)
- 2 million BTUH for AR-1 (700)
- 1.5 million BTUH for AR-2 (550)
- 1.5 million BTUH for AR-2 (700)

Note: Pending review of the Mitsubishi HVRF system (when data becomes available), this chiller/heater and boiler could be replaced by multiple HVRF systems.

2. Provide a new hot water and chilled water piping system serving areas throughout the classroom portions of the building and the new addition. System shall include variable speed pumps for energy efficient flow control. System hot water temperature should be designed for no higher than 125°F to maximize heating plant efficiency and allow for extended heat pump

operation. System chilled water shall be designed for no lower than 57°F for maximum chiller efficiency.

3. Provide packaged rooftop DOAS units to support fresh air requirements to most building areas. Units shall include total energy recovery ventilation, active cooling/dehumidification control and heat pump heating. Approx. quantity and size shall be as listed below but shall be dependent on final building and space programming . When “primary system” is noted it indicates that that system provides full cooling and heating for the space as well as fresh air.
 - (4) 4,000 CFM unit for general classrooms
 - (2) 2,000 CFM unit for the gymnasium space (ducted to air handlers)
 - (1) 3,000 CFM unit for the cafeteria (ducted to air handler)
 - (1) 3,500 CFM unit for second floor Science Labs
 - (1) 1,000 CFM unit for second floor Art room (primary system)
 - (2) 1,500 CFM units for the locker rooms (primary system)
 - (1) 1,500 CFM unit for Wood Shop (primary system)
 - (1) 1,500 CFM unit for Metal Shop (primary system)
 - (1) 2,000 CFM unit for Music Room (primary system)
 - (1) 800 CFM unit for Main Office
 - Other units pending floor plan of addition
4. For the admin office in existing building provide an 8-ton VRF heat pump system connected to a branch selector and five (5) ducted fan coil units to serve the respective zones in that area.
5. For gymnasium space, provide three (3) split air handling units tied to VRF heat pumps. Provide supply duct distribution throughout the gym and connect to existing low return systems. Minimum fresh air shall be introduced thru two packages rooftop DOAS system which shall incorporate CO2 reset control.
6. For media center provide one (1) split air handling unit tied to VRF heat pump. Connect to duct distribution serving media center. Minimum fresh air shall be introduced thru package rooftop DOAS system which shall incorporate CO2 reset control.
7. For cafeteria provide one (1) split air handling unit tied to VRF heat pump. Connect to existing duct distribution serving cafeteria. Minimum fresh air shall be introduced thru package rooftop DOAS system which shall incorporate CO2 reset control.
8. Remove all existing unit ventilators and permanently seal the wall openings.
9. Provide a complete ducted supply and return/exhaust system to support the ventilation needs of all building areas with systems as described herein. Where viable, existing ductwork may be internally cleaned, sealed, insulated and reused.

10. For the 2-story classroom section of the building as well as addition spaces (pending addition floor plan review), provide a fully ducted supply and return/exhaust air system to each classroom connected to respective DOAS units. Each classroom shall include a DOAS style FVAV terminal with hot water and sensible cooling chilled water coil. Air distribution to the rooms shall be either mixed air or optimally via displacement ventilation with low wall supply diffusers.
11. Existing heat pump fan coil units serving the existing second floor classrooms shall be removed in all areas except the science rooms where they shall be retained for thermal comfort control. Provide EMS control interface boards to allow existing units to be controlled by the building EMS. Heat pump units no longer used may be repurposed to support VRF and/or hydronic systems via refrigerant to water HX noted herein pending compatibility review.
12. Provide a comprehensive building wide energy management system. In areas where heat pumps and hydronic heat provide heat the system shall control both to optimize efficient operation. System shall incorporate energy saving routines such as demand ventilation reset, room by room occupancy control, intelligent start/stop, etc...

NEW CONSTRUCTION OPTION 1, 2, 3, 4 & 5 (550-700)

We propose new hydronic based hot water and chilled water system for most building areas which allow for improve future compatibility with new technology as current refrigerants are undergoing a phase out process and being replaced with new refrigerants which have some flammability level. This flammability level increases the concern of the use of large refrigerant based systems with distribution throughout the building. All building HVAC systems would not use any on-site fossil fuels.

The proposed new hydronic system would feed out to the various building terminals and would incorporate air to water chiller/heater heat pumps which can generate chilled water, hot water or both simultaneously if needed based on building demand. Current advances in technology also allow variable refrigerant flow (VRF) heat pumps to generate chilled water and hot water which may be considered in the final design. As design progresses evaluation of 2-pipe or 4-pipe system shall be reviewed albeit 4-pipe provides the most flexibility.

As noted previously, advances are being made in hybrid VRF and to hydronic systems. Mitsubishi will be introducing a product summer of 2023 which utilized high efficiency heat recovery VRF to generate both chilled water and hot water known as HVRF. The refrigerant runs to branch selector boxes complete with heat exchangers and pumps which then directs either chilled water or hot water to various indoor fan coil units. Although literature if not available yet on this system it is expected to present a possible good option to reduce the amount of refrigerant within a building while providing very high efficiencies. This option shall be reviewed further once more information is available.

The new hydronic system would be designed for low temperature (125°F maximum) hot water and elevated temperature (57°F minimum) chilled water so as to maximize heat pump chiller/heaters. These temperatures also allow for future integration to improved air to water heat pumps as technology advances.

Fresh air to all spaces shall be provided by new dedicated outdoor air systems (DOAS) consisting of high efficiency packaged rooftop heat pump units. These units shall provide tempered, filtered and dehumidified air to all spaces served. The units shall incorporate high efficiency heat pump cycles, hot gas reheat or heat pipes, total energy recovery wheels, variable speed supply and exhaust fans and back-up heat consisting of electric heat. These DOAS units shall be independent of the central hydronic hot and chilled water system.

Fresh air to each space shall be controlled via variable air volume (VAV) and fan-powered variable air terminals. In classrooms and many other areas, to achieve improved room air rotation and filtration, we

recommend DOAS style fan powered variable air volume (FVAV) terminals fitted with MERV 13 filtration, hot water coils and sensible only chilled water coils. Distribution to the rooms shall be either mixed air or optimally via displacement ventilation with low wall supply diffusers.

Although earlier conversations with school personnel did not reflect a need for building wide cooling, if this is desired the system should be configured to allow for chilled water for future compatibility with centralized the air to water heat pump chiller/heaters.

The new construction building occupancy and estimated square footages are as follows:

- New Construction 550 Enrollment = 121,500 GSF
- New Construction 700 Enrollment = 136,000 GSF
- Demolition (existing building) = 130,000 GSF

The following is a general outline of the systems to be implemented for the New Construction Options:

1. Provide a modular air to water heat pump chiller heater to support the chilled and hot water needs of many areas of the building. Chiller/heater shall be tentatively sized for 150–tons. Options for back–up to the hydronic loop during extreme cold conditions or during power outages if generator capacity is limited shall be reviewed as design develops. Note: Pending review of the Mitsubishi HVRF system (when data becomes available), this chiller/heater and boiler could be replaced by multiple HVRF systems.
2. Provide a new hot water and chilled water piping system serving areas throughout the building. System shall include variable speed pumps for energy efficient flow control. System hot water temperature should be designed for no higher than 125°F to maximize heating plant efficiency and allow for extended heat pump operation. System chilled water shall be designed for no lower than 57°F for maximum chiller efficiency (unless HVRF is used).
3. Provide packaged rooftop DOAS units to support fresh air requirements to most building areas. Units shall include total energy recovery ventilation, active cooling/dehumidification control and heat pump heating. Approx. quantity and size shall be dependent on final building programming layout but as a minimum shall be configured to support areas as listed below. When “primary system” is noted it indicates that that system provides full cooling and heating for the space as well as fresh air.
 - Multiple DOAS units for general classrooms
 - Dedicated units for the gymnasium space (primary system)
 - Dedicated unit for the cafeteria (primary system)

- Dedicated unit(s) for Science Labs
 - Dedicated unit(s) for Art rooms
 - Dedicated units for the locker rooms (primary system)
 - Dedicated units for Trade Shop as applicable (primary system)
 - Dedicated unit for Main Office
 - Dedicated unit for Media center (primary system)
 - Other units pending final floor plans
4. Provide a complete ducted supply and return/exhaust system to support the ventilation needs of all building areas with systems as described herein. Each room shall be connected to respective DOAS unit with control via a VAV terminal. For classrooms and various other multi-occupant spaces system shall include a DOAS style FVAV terminal with hot water and sensible cooling chilled water coil. Air distribution to the rooms shall be either mixed air or optimally via displacement ventilation with low wall supply diffusers.
5. Provide a comprehensive building wide energy management system. In areas where heat pumps and hydronic heat provide heat the system shall control both to optimize efficient operation. System shall incorporate energy saving routines such as demand ventilation reset, room by room occupancy control, intelligent start/stop, etc...

Code Upgrade / Base Repair – Immediate Upgrades / Life Safety Systems

INTRODUCTION

The following is a basis of design for the Code Upgrade and Base Repair of the existing facility totaling ±130,000 GSF Middle School, Grades 5 – 8. The Code Upgrade/Base Repair Option addresses pre-existing code violations, energy inefficiencies, mandatory improvements required due to scope-of-work code thresholds, and the repair/replacement of existing building systems that have either 1) already failed, or 2) exceeded their life expectancy and are anticipated to fail within the next 10 years. It also addresses items that should be replaced due to their proximity to new scope of work (for instance the replacement of existing ACT, lighting, data/communication, life safety and other in/above-ceiling systems that must first be removed to install a new fire suppression system). The summary includes design of a fire alarm and building emergency notification and evacuation instruction system.

BASIS OF DESIGN

1.1 UTILITIES

- A. Provide 2–4” Schedule 40 electrical primary duct bank to a utility company padmount transformer located on the exterior of the building. The primary duct bank shall be encased in 3” of concrete.
- B. Provide secondary electrical service conductors, main switchboard, and distribution equipment in the main electrical room.
- C. The electrical service shall be 4000A, 65kAIC, 480/277V, 3–phase, 4–wire fed by ten sets of 600kCMIL copper cables in 10–4” Schedule 40 PVC conduits.
- D. Provide 4–4” Schedule 40 PVC telecommunications underground duct system to the entrance facility. The telecommunications duct bank will be encased in 3” of concrete when running under vehicular traffic areas and roadways.

1.2 ELECTRICAL SERVICE

- A. Provide 4000A MCB, GFP, 480/277V, 65KAIC switchboard.
- B. Provide 480/277V and 208/120V panelboards, and distribution feeders.
- C. Provide 480V to 208/120V stepdown transformers.

1.3 EMERGENCY POWER

- A. Provide 500kW/625kVA to 700kW/875kVA emergency/standby generator with 48-hour diesel tank and integral duct mounted 150kW load bank.
- B. Provide (1) 400A manual transfer switch, (1) 1,600A generator dock, (1) 1,200A automatic transfer switches and distribution equipment. Emergency equipment shall be separated from normal and standby power equipment per the Massachusetts Electrical Code.
- C. All emergency equipment and feeders must be installed in 2-hour rated rooms or must be 2-hour rated listed assembly.
- D. The emergency power system shall be divided into two branches:
 - 1. Life safety branch: all life safety branch equipment shall be installed in 2-hour rated rooms. All life safety branch feeders shall be 2-hour rated MI cables. The life safety branch shall supply power to:
 - a. Egress and exit lighting.
 - b. Alarm and alerting systems.
 - c. Emergency communications systems.
 - d. Elevator cab lighting.
 - 2. Standby branch: shall power the entire community side of the building. Additionally, the standby branch shall supply power to:
 - a. Boilers, associated controls, and associated pumps to keep building from freezing.
 - b. Telecom and server room lighting, power, and HVAC systems.
 - c. Building management system (BMS).
 - d. Power outlets at roof equipment, mechanical room, loading area, cafeteria, and kitchen.
 - e. Kitchen and cafeteria.
 - f. Selected mechanical loads.

1.4 SUB-METERING

- A. Provide a multipoint sub-metering system capable of providing electrical consumption data for lighting, general purpose power and HVAC power loads.



- B. The meter shall calculate the electrical usage of electrical loads with the use of remote current transformers. The meter shall be microprocessor-based. The meter shall be capable of sampling each power waveform calculating power factor and harmonic content to achieve 0.5% accurate readings. The meter shall save the Kilowatt hour and Max demand readings, indefinitely, in non-volatile RAM during power outages, without the use of batteries until, at such time, the meter is re-energized.
- C. The meter shall contain Modbus RS485 RTU communications as a standard feature. The meters' communication wires to be Daisy Chain, Parallel, Star-wired together then connected to a RS485/RS232 converter, which then connects to the Building Management System (BMS).

1.5 INTERIOR LIGHTING AND LIGHTING CONTROL SYSTEM

- A. Provide a high efficiency lighting system in all interior spaces as well as on the exterior of the building. The design aim is to deliver a lighting system with a light power density not exceeding 0.5W/sq. ft. Linear direct/indirect fixtures shall be LED; recessed fixtures shall be LED; exterior light fixtures shall be LED.
- B. Interior lighting shall be controlled with an automatic control device to shut off building lighting in all spaces. This automatic control device shall function on either:
 - 1. A scheduled basis using a time-of-day operated control device that turns lighting off at specific programmed times; or
 - 2. An occupant sensor that shall turn lighting off within 30 minutes of an occupant leaving a space; or
 - 3. An unscheduled basis by occupant intervention.
- C. Each space enclosed by ceiling-height partitions shall have at least one control device to independently control the general lighting within the space. Each control device shall be activated either manually by an occupant or automatically by sensing an occupant.
- D. Each perimeter office space enclosed by ceiling-height partitions shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% or shall be provided with automatic daylighting controls.
- E. Each perimeter classroom space shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% and shall be provided with automatic daylighting controls. The classrooms shall have the ability to dim or switch off lights at the

presentation/teaching front wall. The lighting controls shall be integrated with the HVAC controls.

- F. Provide LED emergency egress and exit lighting fed from the emergency life safety branch of the emergency/standby system.

1.6 FIRE ALARM AND PUBLIC SAFETY DAS SYSTEM

- A. Provide an addressable fire alarm system with voice evacuation and connection to the fire department.
- B. The design of the fire alarm system shall be based on engineering criteria as defined by NFPA 72 and The Massachusetts State Building Code 780 CMR. The system shall be supported by standby batteries. The batteries shall support 24-hours of full supervisory operation followed by 15 minutes of alarm.
- C. Provide combination audiovisual signaling appliances as required per NFPA 72. Standalone devices may be used to augment combination units when necessary. The audiovisual notification appliances shall be located in all egress pathways, classrooms, public and common areas. Provide visual devices in all offices. The devices shall follow the Americans with Disabilities Act (ADA).
- D. Manual pull stations shall be located within 5 ft. of each means of egress and mounted at 44 in. above the floor to the activating lever of the box. The pull stations will mechanically latch upon operation and remain so until manually reset by a key common to all system locks.
- E. Photoelectric smoke detectors shall be located in all egress pathways spaced 30 feet on center, and 15 feet from all stairwells and opposing walls. Smoke detectors shall also be located at the top, bottom of each stairway; mechanical equipment; electrical; transformer; telephone equipment; elevator machine; or similar room. Elevator recall smoke detectors will be in the elevator lobby on each floor.
- F. Sprinkler tamper and flow devices shall be wired for trouble and alarm indication into the fire alarm control panel.
- G. Provide public safety radio distributed antenna system.

1.7 TELECOMMUNICATIONS CABLING INFRASTRUCTURE

- A. Provide a telecommunications cabling infrastructure in compliance with the latest TIA standards. The utility company services will be terminated in a telecommunications entrance

facility (EF). Fire rated plywood backboards, grounding, equipment racks, 110-type punch down blocks, patch panels, conduit sleeves, and corridor cable tray system will be provided in the EF, the telecommunications equipment room (TER) and the telecommunications rooms (TR). The pathway system, racks and equipment will be sized for complete utilization of the service entrance cables and all voice and data outlets plus room for minimum of 50% growth.

- B. Voice and data outlets will be provided in all administration areas and in the classrooms. Voice and data horizontal cabling will be Category 6A, unshielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Wireless access point cabling will be Category 6A, shielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Each end of each cable will be labeled.
- C. Backbone cables will be provided between the EF, TER and each TR. Copper backbone cables will be voice grade Category 3 cable. Optical fiber cables will be 24-strand (50/125 μ m) OM4 multimode laser optimized cable. The cables will be terminated in fiber optic patch panels at both ends. The circuits will be tested for insertion loss at both ends at 1310 and 1550nm. High-resolution Optical Time Domain Reflectivity (OTDR) tests will be performed on each fiber at one end.

Addition/Renovation Option A/R-1

INTRODUCTION

The following is a basis of design for the Code Upgrade of 120,000 GSF of existing facility, demolition of 10,000 GSF, and addition of 14,000 GSF totaling $\pm 134,000$ GSF for 550-Enrollment Middle School, Grades 5 – 8. The addition of 25,000 GSF totaling $\pm 145,000$ GSF for a 700-Enrollment Middle School for Grades 4 – 8. The Renovation/Addition Option A/R-1 scope of work includes renovation and selective demolition of the existing School, utilizing temporary modular classrooms and construction of a modest 1-story addition, to provide a solution that meets the Educational Program requirements to the maximum extent possible. The PDP proposes an electrical service to accommodate power needs for power, lighting, HVAC, as well spare capacity for future expansion. The summary includes design of a fire alarm and building emergency notification and evacuation instruction system. The summary includes the design of a code-compliant tele/data infrastructure to support Wi-Fi, networked phone system, networked AV teaching tools and an integrated and networked security system.

BASIS OF DESIGN

1.1 UTILITIES

- A. Provide 2-4" Schedule 40 electrical primary duct bank to a utility company padmount transformer located on the exterior of the building. The primary duct bank shall be encased in 3" of concrete.
- B. Provide secondary electrical service conductors, main switchboard, and distribution equipment in the main electrical room.
- C. The electrical service shall be 4000A, 65kAIC, 480/277V, 3-phase, 4-wire fed by ten sets of 600kCMIL copper cables in 10-4" Schedule 40 PVC conduits.
- D. Provide 4-4" Schedule 40 PVC telecommunications underground duct system to the entrance facility. The telecommunications duct bank will be encased in 3" of concrete when running under vehicular traffic areas and roadways.

1.2 ELECTRICAL SERVICE

- A. Provide 4000A MCB, GFP, 480/277V, 65KAIC switchboard.
- B. Provide 480/277V and 208/120V panelboards, and distribution feeders.



- C. Provide 480V to 208/120V stepdown transformers.

1.3 EMERGENCY POWER

- A. Provide 500kW/625kVA to 700kW/875kVA emergency/standby generator with 48-hour diesel tank and integral duct mounted 150kW load bank.
- B. Provide (1) 400A manual transfer switch, (1) 1,600A generator dock, (1) 1,200A automatic transfer switches and distribution equipment. Emergency equipment shall be separated from normal and standby power equipment per the Massachusetts Electrical Code.
- C. All emergency equipment and feeders must be installed in 2-hour rated rooms or must be 2-hour rated listed assembly.
- D. The emergency power system shall be divided into two branches:
 - 1. Life safety branch: all life safety branch equipment shall be installed in 2-hour rated rooms. All life safety branch feeders shall be 2-hour rated MI cables. The life safety branch shall supply power to:
 - a. Egress and exit lighting.
 - b. Alarm and alerting systems.
 - c. Emergency communications systems.
 - d. Elevator cab lighting.
 - 2. Standby branch: shall power the entire community side of the building. Additionally, the standby branch shall supply power to:
 - a. Boilers, associated controls, and associated pumps to keep building from freezing.
 - b. Telecom and server room lighting, power, and HVAC systems.
 - c. Building management system (BMS).
 - d. Power outlets at roof equipment, mechanical room, loading area, cafeteria, and kitchen.
 - e. Kitchen and cafeteria.
 - f. Selected mechanical loads.

1.4 SUB-METERING

- A. Provide a multipoint sub-metering system capable of providing electrical consumption data for lighting, general purpose power and HVAC power loads.
- B. The meter shall calculate the electrical usage of electrical loads with the use of remote current transformers. The meter shall be microprocessor-based. The meter shall be capable of sampling each power waveform calculating power factor and harmonic content to achieve 0.5% accurate readings. The meter shall save the Kilowatt hour and Max demand readings, indefinitely, in non-volatile RAM during power outages, without the use of batteries until, at such time, the meter is re-energized.
- C. The meter shall contain Modbus RS485 RTU communications as a standard feature. The meters' communication wires to be Daisy Chain, Parallel, Star-wired together then connected to a RS485/RS232 converter, which then connects to the Building Management System (BMS).

1.5 INTERIOR LIGHTING AND LIGHTING CONTROL SYSTEM

- A. Provide a high efficiency lighting system in all interior spaces as well as on the exterior of the building. The design aim is to deliver a lighting system with a light power density not exceeding 0.5W/sq. ft. Linear direct/indirect fixtures shall be LED; recessed fixtures shall be LED; exterior light fixtures shall be LED.
- B. Interior lighting shall be controlled with an automatic control device to shut off building lighting in all spaces. This automatic control device shall function on either:
 - 1. A scheduled basis using a time-of-day operated control device that turns lighting off at specific programmed times; or
 - 2. An occupant sensor that shall turn lighting off within 30 minutes of an occupant leaving a space; or
 - 3. An unscheduled basis by occupant intervention.
- C. Each space enclosed by ceiling-height partitions shall have at least one control device to independently control the general lighting within the space. Each control device shall be activated either manually by an occupant or automatically by sensing an occupant.
- D. Each perimeter office space enclosed by ceiling-height partitions shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% or shall be provided with automatic daylighting controls.



- E. Each perimeter classroom space shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% and shall be provided with automatic daylighting controls. The classrooms shall have the ability to dim or switch off lights at the presentation/teaching front wall. The lighting controls shall be integrated with the HVAC controls.
- F. Provide LED emergency egress and exit lighting fed from the emergency life safety branch of the emergency/standby system.

1.6 EXTERIOR LIGHTING

- A. Pedestrian walkways shall be designed for illuminance value at the ground plane of
- B. 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- C. All parking lots shall be designed for illuminance value at the ground plane of 1.0 foot-candles, the minimum illuminance shall not be lower than 0.2 foot-candles.
- D. Roadways shall be designed for illuminance value at the ground plane of 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- E. Pedestrian walkway lighting shall be LED bollard fixtures; parking and roadway lighting shall be LED fixtures mounted on 20 ft. aluminum poles.

1.7 GENERAL PURPOSE POWER

- A. Provide three general purpose duplex receptacles and one double duplex receptacle with USB charging ports for offices.
- B. Provide two double duplex receptacles with USB charging ports and eight general purpose power receptacles in classrooms. Provide two duplex receptacles on dedicated circuits for tablet charging carts.
- C. Provide a duplex receptacle for each projector.
- D. Provide one general purpose duplex receptacle in utility and storage rooms.
- E. Multiple service floor outlets or fire rated poke-through devices shall be provided for equipment and appliances in the commons areas when the equipment is to be placed on worktables, counters, systems furniture, or cabinets that are not against fixed walls.

- F. Multi-outlet raceway or surface mounted wiring devices shall be provided where it is not feasible to install recessed outlets.
- G. All receptacles in offices and classrooms shall have at least 50% of the outlets controlled via vacancy sensor and/or time clock integrated with the lighting control system.

1.8 FIRE ALARM AND PUBLIC SAFETY DAS SYSTEM

- A. Provide an addressable fire alarm system with voice evacuation and connection to the fire department.
- B. The design of the fire alarm system shall be based on engineering criteria as defined by NFPA 72 and The Massachusetts State Building Code 780 CMR. The system shall be supported by standby batteries. The batteries shall support 24-hours of full supervisory operation followed by 15 minutes of alarm.
- C. Provide combination audiovisual signaling appliances as required per NFPA 72. Standalone devices may be used to augment combination units when necessary. The audiovisual notification appliances shall be located in all egress pathways, classrooms, public and common areas. Provide visual devices in all offices. The devices shall follow the Americans with Disabilities Act (ADA).
- D. Manual pull stations shall be located within 5 ft. of each means of egress and mounted at 44 in. above the floor to the activating lever of the box. The pull stations will mechanically latch upon operation and remain so until manually reset by a key common to all system locks.
- E. Photoelectric smoke detectors shall be located in all egress pathways spaced 30 feet on center, and 15 feet from all stairwells and opposing walls. Smoke detectors shall also be located at the top, bottom of each stairway; mechanical equipment; electrical; transformer; telephone equipment; elevator machine; or similar room. Elevator recall smoke detectors will be in the elevator lobby on each floor.
- F. Sprinkler tamper and flow devices shall be wired for trouble and alarm indication into the fire alarm control panel.
- G. Provide public safety radio distributed antenna system.

1.9 IN-BUILDING CELLULAR AMPLIFICATION SYSTEM

- A. Provide in-building cellular amplification system to boost cellular signals in all occupiable areas of the building.

1.10 TELECOMMUNICATIONS CABLING INFRASTRUCTURE

- A. Provide a telecommunications cabling infrastructure in compliance with the latest TIA standards. The utility company services will be terminated in a telecommunications entrance facility (EF). Fire rated plywood backboards, grounding, equipment racks, 110-type punch down blocks, patch panels, conduit sleeves, and corridor cable tray system will be provided in the EF, the telecommunications equipment room (TER) and the telecommunications rooms (TR). The pathway system, racks and equipment will be sized for complete utilization of the service entrance cables and all voice and data outlets plus room for minimum of 50% growth.
- B. Voice and data outlets will be provided in all administration areas and in the classrooms. Voice and data horizontal cabling will be Category 6A, unshielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Wireless access point cabling will be Category 6A, shielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Each end of each cable will be labeled.
- C. Backbone cables will be provided between the EF, TER and each TR. Copper backbone cables will be voice grade Category 3 cable. Optical fiber cables will be 24-strand (50/125µm) OM4 multimode laser optimized cable. The cables will be terminated in fiber optic patch panels at both ends. The circuits will be tested for insertion loss at both ends at 1310 and 1550nm. High-resolution Optical Time Domain Reflectivity (OTDR) tests will be performed on each fiber at one end.

1.11 VOICE/DATA COMMUNICATIONS EQUIPMENT

- A. Provide data network switches based on Cisco with 10Gbps technology.
- B. Provide wireless access points based on Cisco access points.
- C. Provide MITEL telephone system and handsets based on MITEL 5300 Series IP handsets.

1.12 PUBLIC ADDRESS & CLOCK SYSTEM

- A. A public address (PA) and clock system will be provided throughout the building.
- B. Basis of Design uses the existing *Simplex 5100 Series*.
- C. Speakers will be in classrooms, administration areas, assembly areas and in public and common areas. Classroom speakers will be talk back type. Two emergency call stations will be provided in each classroom and in all instructional and public areas.

- D. The system will provide the front office with the ability to make announcements throughout the building premises, to a limited area, or to an individual room. Any telephone handset in the building can initiate a page. In the front office, the administrative staff can select whether they want to initiate or respond to a call via the PA attendant handset, make announcements or play background music through the speaker. The system will be capable of supporting multiple and simultaneous communications.
- E. A master time & control system will be provided. The system will comprise a master clock that controls and synchronizes the time on peripheral clocks located throughout the school. The system will also control other peripheral devices such as bells, etc. and utilize the school public address system to sound pre-programmed tones for class changes. Clocks will be provided in classrooms, offices, public and assembly areas, and in administration areas.

1.13 AUDIO-VIDEO SYSTEMS

- A. Provide sound and projection system in the Gymnasium.
- B. Provide sound and projection system in the Cafetorium.

1.14 SPEECH REINFORCEMENT SYSTEM

- A. Provide speech reinforcement system in each classroom and instructional space. The basis of design shall be Lightspeed Flexcat + Topcat Classroom Audio 2-way Communication System (see specifications).
- B. The speech reinforcement system shall consist of:
- C. Six (6) tabletop speaker pods with integrated speaker and microphone enabling 2- way communication with each student group.
- D. Pendant-style Flexmike® teacher microphone utilizing Access Technology (1.9 GHz) for transmission. IR not acceptable.
- E. Two (2) microphones allow team-teaching to the whole group or to individual small groups.
- F. Wireless Media Connector utilizing Access Technology (1.9 GHz) to integrate with and wirelessly transmit all classroom multimedia to be played through the Topcat.
- G. In ceiling, all-in-one whole group audio system to enable communication to the whole class with Access technology and integrated amplifier and speaker system.



1.15 SECURITY SYSTEMS:

- A. Provide video surveillance system based on EXACQ Vision Video Management System or approved Clinton School District system.
- B. Provide access control based on N2 MicroNode with HID 26-bit cards and fobs or approved Clinton School District system.
- C. Provide intrusion detection system based on DMP or approved Clinton School District system.

1.16 LIGHTNING PROTECTION SYSTEM

- A. Provide Faraday lightning protection system with UL MasterLabel.

1.17 ELECTRIC VEHICLE CHARGING STATION

- A. Provide a dual electric vehicle charging station to charge two electrical vehicles simultaneously.
- B. Basis of design shall be ChargePoint Model CT4021-GW1 Dual Port Bollard USA Gateway Station with Concrete Mounting Kit CY4001-CCM and cellular communications.

Addition/Renovation Option A/R-1.5

INTRODUCTION

The following is a basis of design for the Code Upgrade of 112,000 GSF of existing facility, demolition of 18,000 GSF, and addition of 38,000 GSF totaling $\pm 150,000$ GSF for a 700-Enrollment Middle School for Grades 4 – 8. The Renovation/Addition Option A/R-1.5 scope is a hybrid of A/R-1 and A/R-2 and includes renovation and selective demolition of the existing School, along with the construction of multi-story additions serving as swing space, to provide a solution that meets the Educational Program requirements to the maximum extent possible. The PDP proposes an electrical service to accommodate power needs for power, lighting, HVAC, as well spare capacity for future expansion. The summary includes design of a fire alarm and building emergency notification and evacuation instruction system. The summary includes the design of a code-compliant tele/data infrastructure to support Wi-Fi, networked phone system, networked AV teaching tools and an integrated and networked security system.

BASIS OF DESIGN

1.1 UTILITIES

- A. Provide 2-4" Schedule 40 electrical primary duct bank to a utility company padmount transformer located on the exterior of the building. The primary duct bank shall be encased in 3" of concrete.
- B. Provide secondary electrical service conductors, main switchboard, and distribution equipment in the main electrical room.
- C. The electrical service shall be 4000A, 65kAIC, 480/277V, 3-phase, 4-wire fed by ten sets of 600kCMIL copper cables in 10-4" Schedule 40 PVC conduits.
- D. Provide 4-4" Schedule 40 PVC telecommunications underground duct system to the entrance facility. The telecommunications duct bank will be encased in 3" of concrete when running under vehicular traffic areas and roadways.

1.2 ELECTRICAL SERVICE

- A. Provide 4000A MCB, GFP, 480/277V, 65KAIC switchboard.
- B. Provide 480/277V and 208/120V panelboards, and distribution feeders.
- C. Provide 480V to 208/120V stepdown transformers.



1.3 EMERGENCY POWER

- A. Provide 500kW/625kVA to 700kW/875kVA emergency/standby generator with 48-hour diesel tank and integral duct mounted 150kW load bank.
- B. Provide (1) 400A manual transfer switch, (1) 1,600A generator dock, (1) 1,200A automatic transfer switches and distribution equipment. Emergency equipment shall be separated from normal and standby power equipment per the Massachusetts Electrical Code.
- C. All emergency equipment and feeders must be installed in 2-hour rated rooms or must be 2-hour rated listed assembly.
- D. The emergency power system shall be divided into two branches:
 1. Life safety branch: all life safety branch equipment shall be installed in 2-hour rated rooms. All life safety branch feeders shall be 2-hour rated MI cables. The life safety branch shall supply power to:
 - a. Egress and exit lighting.
 - b. Alarm and alerting systems.
 - c. Emergency communications systems.
 - d. Elevator cab lighting.
 2. Standby branch: shall power the entire community side of the building. Additionally, the standby branch shall supply power to:
 - a. Boilers, associated controls, and associated pumps to keep building from freezing.
 - b. Telecom and server room lighting, power, and HVAC systems.
 - c. Building management system (BMS).
 - d. Power outlets at roof equipment, mechanical room, loading area, cafeteria, and kitchen.
 - e. Kitchen and cafeteria.
 - f. Selected mechanical loads.

1.4 SUB-METERING

- A. Provide a multipoint sub-metering system capable of providing electrical consumption data for lighting, general purpose power and HVAC power loads.
- B. The meter shall calculate the electrical usage of electrical loads with the use of remote current transformers. The meter shall be microprocessor-based. The meter shall be capable of sampling each power waveform calculating power factor and harmonic content to achieve 0.5% accurate readings. The meter shall save the Kilowatt hour and Max demand readings, indefinitely, in non-volatile RAM during power outages, without the use of batteries until, at such time, the meter is re-energized.
- C. The meter shall contain Modbus RS485 RTU communications as a standard feature. The meters' communication wires to be Daisy Chain, Parallel, Star-wired together then connected to a RS485/RS232 converter, which then connects to the Building Management System (BMS).

1.5 INTERIOR LIGHTING AND LIGHTING CONTROL SYSTEM

- A. Provide a high efficiency lighting system in all interior spaces as well as on the exterior of the building. The design aim is to deliver a lighting system with a light power density not exceeding 0.5W/sq. ft. Linear direct/indirect fixtures shall be LED; recessed fixtures shall be LED; exterior light fixtures shall be LED.
- B. Interior lighting shall be controlled with an automatic control device to shut off building lighting in all spaces. This automatic control device shall function on either:
 - 1. A scheduled basis using a time-of-day operated control device that turns lighting off at specific programmed times; or
 - 2. An occupant sensor that shall turn lighting off within 30 minutes of an occupant leaving a space; or
 - 3. An unscheduled basis by occupant intervention.
- C. Each space enclosed by ceiling-height partitions shall have at least one control device to independently control the general lighting within the space. Each control device shall be activated either manually by an occupant or automatically by sensing an occupant.
- D. Each perimeter office space enclosed by ceiling-height partitions shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% or shall be provided with automatic daylighting controls.



- E. Each perimeter classroom space shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% and shall be provided with automatic daylighting controls. The classrooms shall have the ability to dim or switch off lights at the presentation/teaching front wall. The lighting controls shall be integrated with the HVAC controls.
- F. Provide LED emergency egress and exit lighting fed from the emergency life safety branch of the emergency/standby system.

1.6 EXTERIOR LIGHTING

- A. Pedestrian walkways shall be designed for illuminance value at the ground plane of
- B. 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- C. All parking lots shall be designed for illuminance value at the ground plane of 1.0 foot-candles, the minimum illuminance shall not be lower than 0.2 foot-candles.
- D. Roadways shall be designed for illuminance value at the ground plane of 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- E. Pedestrian walkway lighting shall be LED bollard fixtures; parking and roadway lighting shall be LED fixtures mounted on 20 ft. aluminum poles.

1.7 GENERAL PURPOSE POWER

- A. Provide three general purpose duplex receptacles and one double duplex receptacle with USB charging ports for offices.
- B. Provide two double duplex receptacles with USB charging ports and eight general purpose power receptacles in classrooms. Provide two duplex receptacles on dedicated circuits for tablet charging carts.
- C. Provide a duplex receptacle for each projector.
- D. Provide one general purpose duplex receptacle in utility and storage rooms.
- E. Multiple service floor outlets or fire rated poke-through devices shall be provided for equipment and appliances in the commons areas when the equipment is to be placed on worktables, counters, systems furniture, or cabinets that are not against fixed walls.

- F. Multi-outlet raceway or surface mounted wiring devices shall be provided where it is not feasible to install recessed outlets.
- G. All receptacles in offices and classrooms shall have at least 50% of the outlets controlled via vacancy sensor and/or time clock integrated with the lighting control system.

1.8 FIRE ALARM AND PUBLIC SAFETY DAS SYSTEM

- A. Provide an addressable fire alarm system with voice evacuation and connection to the fire department.
- B. The design of the fire alarm system shall be based on engineering criteria as defined by NFPA 72 and The Massachusetts State Building Code 780 CMR. The system shall be supported by standby batteries. The batteries shall support 24-hours of full supervisory operation followed by 15 minutes of alarm.
- C. Provide combination audiovisual signaling appliances as required per NFPA 72. Standalone devices may be used to augment combination units when necessary. The audiovisual notification appliances shall be located in all egress pathways, classrooms, public and common areas. Provide visual devices in all offices. The devices shall follow the Americans with Disabilities Act (ADA).
- D. Manual pull stations shall be located within 5 ft. of each means of egress and mounted at 44 in. above the floor to the activating lever of the box. The pull stations will mechanically latch upon operation and remain so until manually reset by a key common to all system locks.
- E. Photoelectric smoke detectors shall be located in all egress pathways spaced 30 feet on center, and 15 feet from all stairwells and opposing walls. Smoke detectors shall also be located at the top, bottom of each stairway; mechanical equipment; electrical; transformer; telephone equipment; elevator machine; or similar room. Elevator recall smoke detectors will be in the elevator lobby on each floor.
- F. Sprinkler tamper and flow devices shall be wired for trouble and alarm indication into the fire alarm control panel.
- G. Provide public safety radio distributed antenna system.

1.9 IN-BUILDING CELLULAR AMPLIFICATION SYSTEM

- A. Provide in-building cellular amplification system to boost cellular signals in all occupiable areas of the building.



1.10 TELECOMMUNICATIONS CABLING INFRASTRUCTURE

- A. Provide a telecommunications cabling infrastructure in compliance with the latest TIA standards. The utility company services will be terminated in a telecommunications entrance facility (EF). Fire rated plywood backboards, grounding, equipment racks, 110-type punch down blocks, patch panels, conduit sleeves, and corridor cable tray system will be provided in the EF, the telecommunications equipment room (TER) and the telecommunications rooms (TR). The pathway system, racks and equipment will be sized for complete utilization of the service entrance cables and all voice and data outlets plus room for minimum of 50% growth.
- B. Voice and data outlets will be provided in all administration areas and in the classrooms. Voice and data horizontal cabling will be Category 6A, unshielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Wireless access point cabling will be Category 6A, shielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Each end of each cable will be labeled.
- C. Backbone cables will be provided between the EF, TER and each TR. Copper backbone cables will be voice grade Category 3 cable. Optical fiber cables will be 24-strand (50/125µm) OM4 multimode laser optimized cable. The cables will be terminated in fiber optic patch panels at both ends. The circuits will be tested for insertion loss at both ends at 1310 and 1550nm. High-resolution Optical Time Domain Reflectivity (OTDR) tests will be performed on each fiber at one end.

1.11 VOICE/DATA COMMUNICATIONS EQUIPMENT

- A. Provide data network switches based on Cisco with 10Gbps technology.
- B. Provide wireless access points based on Cisco access points.
- C. Provide MITEL telephone system and handsets based on MITEL 5300 Series IP handsets.

1.12 PUBLIC ADDRESS & CLOCK SYSTEM

- A. A public address (PA) and clock system will be provided throughout the building.
- B. Basis of Design uses the existing *Simplex 5100 Series*.
- C. Speakers will be in classrooms, administration areas, assembly areas and in public and common areas. Classroom speakers will be talk back type. Two emergency call stations will be provided in each classroom and in all instructional and public areas.

- D. The system will provide the front office with the ability to make announcements throughout the building premises, to a limited area, or to an individual room. Any telephone handset in the building can initiate a page. In the front office, the administrative staff can select whether they want to initiate or respond to a call via the PA attendant handset, make announcements or play background music through the speaker. The system will be capable of supporting multiple and simultaneous communications.
- E. A master time & control system will be provided. The system will comprise a master clock that controls and synchronizes the time on peripheral clocks located throughout the school. The system will also control other peripheral devices such as bells, etc. and utilize the school public address system to sound pre-programmed tones for class changes. Clocks will be provided in classrooms, offices, public and assembly areas, and in administration areas.

1.13 AUDIO-VIDEO SYSTEMS

- A. Provide sound and projection system in the Gymnasium.
- B. Provide sound and projection system in the Cafetorium.

1.14 SPEECH REINFORCEMENT SYSTEM

- A. Provide speech reinforcement system in each classroom and instructional space. The basis of design shall be Lightspeed Flexcat + Topcat Classroom Audio 2-way Communication System (see specifications).
- B. The speech reinforcement system shall consist of:
- C. Six (6) tabletop speaker pods with integrated speaker and microphone enabling 2- way communication with each student group.
- D. Pendant-style Flexmike® teacher microphone utilizing Access Technology (1.9 GHz) for transmission. IR not acceptable.
- E. Two (2) microphones allow team-teaching to the whole group or to individual small groups.
- F. Wireless Media Connector utilizing Access Technology (1.9 GHz) to integrate with and wirelessly transmit all classroom multimedia to be played through the Topcat.
- G. In ceiling, all-in-one whole group audio system to enable communication to the whole class with Access technology and integrated amplifier and speaker system.



1.15 SECURITY SYSTEMS:

- A. Provide video surveillance system based on EXACQ Vision Video Management System or approved Clinton School District system.
- B. Provide access control based on N2 MicroNode with HID 26-bit cards and fobs or approved Clinton School District system.
- C. Provide intrusion detection system based on DMP or approved Clinton School District system.

1.16 LIGHTNING PROTECTION SYSTEM

- A. Provide Faraday lightning protection system with UL MasterLabel.

1.17 ELECTRIC VEHICLE CHARGING STATION

- A. Provide a dual electric vehicle charging station to charge two electrical vehicles simultaneously.
- B. Basis of design shall be ChargePoint Model CT4021-GW1 Dual Port Bollard USA Gateway Station with Concrete Mounting Kit CY4001-CCM and cellular communications.

Addition/Renovation Option A/R-2

INTRODUCTION

The following is a basis of design for the Code Upgrade of 87,000 GSF of existing facility, demolition of 43,000 GSF, and addition of 54,000 GSF totaling $\pm 141,000$ GSF for 550-Enrollment Middle School, Grades 5 – 8. The addition of 69,000 GSF totaling $\pm 156,000$ GSF for a 700-Enrollment Middle School for Grades 4 – 8. The Renovation/Addition Option A/R-2 scope of work includes renovation and selective demolition of the existing School, along with the construction of multi-story additions serving as swing space, to provide a solution that meets the Educational Program requirements to the maximum extent possible. The PDP proposes an electrical service to accommodate power needs for power, lighting, HVAC, as well spare capacity for future expansion. The summary includes design of a fire alarm and building emergency notification and evacuation instruction system. The summary includes the design of a code-compliant tele/data infrastructure to support Wi-Fi, networked phone system, networked AV teaching tools and an integrated and networked security system.

BASIS OF DESIGN

1.18 UTILITIES

- A. Provide 2-4" Schedule 40 electrical primary duct bank to a utility company padmount transformer located on the exterior of the building. The primary duct bank shall be encased in 3" of concrete.
- B. Provide secondary electrical service conductors, main switchboard, and distribution equipment in the main electrical room.
- C. The electrical service shall be 4000A, 65kAIC, 480/277V, 3-phase, 4-wire fed by ten sets of 600kCMIL copper cables in 10-4" Schedule 40 PVC conduits.
- D. Provide 4-4" Schedule 40 PVC telecommunications underground duct system to the entrance facility. The telecommunications duct bank will be encased in 3" of concrete when running under vehicular traffic areas and roadways.

1.19 ELECTRICAL SERVICE

- A. Provide 4000A MCB, GFP, 480/277V, 65KAIC switchboard.
- B. Provide 480/277V and 208/120V panelboards, and distribution feeders.

- C. Provide 480V to 208/120V stepdown transformers.

1.20 EMERGENCY POWER

- A. Provide 500kW/625kVA to 700kW/875kVA emergency/standby generator with 48-hour diesel tank and integral duct mounted 150kW load bank.
- B. Provide (1) 400A manual transfer switch, (1) 1,600A generator dock, (1) 1,200A automatic transfer switches and distribution equipment. Emergency equipment shall be separated from normal and standby power equipment per the Massachusetts Electrical Code.
- C. All emergency equipment and feeders must be installed in 2-hour rated rooms or must be 2-hour rated listed assembly.
- D. The emergency power system shall be divided into two branches:
 - 1. Life safety branch: all life safety branch equipment shall be installed in 2-hour rated rooms. All life safety branch feeders shall be 2-hour rated MI cables. The life safety branch shall supply power to:
 - a. Egress and exit lighting.
 - b. Alarm and alerting systems.
 - c. Emergency communications systems.
 - d. Elevator cab lighting.
 - 2. Standby branch: shall power the entire community side of the building. Additionally, the standby branch shall supply power to:
 - a. Boilers, associated controls, and associated pumps to keep building from freezing.
 - b. Telecom and server room lighting, power, and HVAC systems.
 - c. Building management system (BMS).
 - d. Power outlets at roof equipment, mechanical room, loading area, cafeteria, and kitchen.
 - e. Kitchen and cafeteria.
 - f. Selected mechanical loads.

1.21 SUB-METERING

- A. Provide a multipoint sub-metering system capable of providing electrical consumption data for lighting, general purpose power and HVAC power loads.
- B. The meter shall calculate the electrical usage of electrical loads with the use of remote current transformers. The meter shall be microprocessor-based. The meter shall be capable of sampling each power waveform calculating power factor and harmonic content to achieve 0.5% accurate readings. The meter shall save the Kilowatt hour and Max demand readings, indefinitely, in non-volatile RAM during power outages, without the use of batteries until, at such time, the meter is re-energized.
- C. The meter shall contain Modbus RS485 RTU communications as a standard feature. The meters' communication wires to be Daisy Chain, Parallel, Star-wired together then connected to a RS485/RS232 converter, which then connects to the Building Management System (BMS).

1.22 INTERIOR LIGHTING AND LIGHTING CONTROL SYSTEM

- A. Provide a high efficiency lighting system in all interior spaces as well as on the exterior of the building. The design aim is to deliver a lighting system with a light power density not exceeding 0.5W/sq. ft. Linear direct/indirect fixtures shall be LED; recessed fixtures shall be LED; exterior light fixtures shall be LED.
- B. Interior lighting shall be controlled with an automatic control device to shut off building lighting in all spaces. This automatic control device shall function on either:
 - 1. A scheduled basis using a time-of-day operated control device that turns lighting off at specific programmed times; or
 - 2. An occupant sensor that shall turn lighting off within 30 minutes of an occupant leaving a space; or
 - 3. An unscheduled basis by occupant intervention.
- C. Each space enclosed by ceiling-height partitions shall have at least one control device to independently control the general lighting within the space. Each control device shall be activated either manually by an occupant or automatically by sensing an occupant.
- D. Each perimeter office space enclosed by ceiling-height partitions shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% or shall be provided with automatic daylighting controls.



- E. Each perimeter classroom space shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% and shall be provided with automatic daylighting controls. The classrooms shall have the ability to dim or switch off lights at the presentation/teaching front wall. The lighting controls shall be integrated with the HVAC controls.
- F. Provide LED emergency egress and exit lighting fed from the emergency life safety branch of the emergency/standby system.

1.23 EXTERIOR LIGHTING

- A. Pedestrian walkways shall be designed for illuminance value at the ground plane of
- B. 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- C. All parking lots shall be designed for illuminance value at the ground plane of 1.0 foot-candles, the minimum illuminance shall not be lower than 0.2 foot-candles.
- D. Roadways shall be designed for illuminance value at the ground plane of 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- E. Pedestrian walkway lighting shall be LED bollard fixtures; parking and roadway lighting shall be LED fixtures mounted on 20 ft. aluminum poles.

1.24 GENERAL PURPOSE POWER

- A. Provide three general purpose duplex receptacles and one double duplex receptacle with USB charging ports for offices.
- B. Provide two double duplex receptacles with USB charging ports and eight general purpose power receptacles in classrooms. Provide two duplex receptacles on dedicated circuits for tablet charging carts.
- C. Provide a duplex receptacle for each projector.
- D. Provide one general purpose duplex receptacle in utility and storage rooms.
- E. Multiple service floor outlets or fire rated poke-through devices shall be provided for equipment and appliances in the commons areas when the equipment is to be placed on worktables, counters, systems furniture, or cabinets that are not against fixed walls.

- F. Multi-outlet raceway or surface mounted wiring devices shall be provided where it is not feasible to install recessed outlets.
- G. All receptacles in offices and classrooms shall have at least 50% of the outlets controlled via vacancy sensor and/or time clock integrated with the lighting control system.

1.25 FIRE ALARM AND PUBLIC SAFETY DAS SYSTEM

- A. Provide an addressable fire alarm system with voice evacuation and connection to the fire department.
- B. The design of the fire alarm system shall be based on engineering criteria as defined by NFPA 72 and The Massachusetts State Building Code 780 CMR. The system shall be supported by standby batteries. The batteries shall support 24-hours of full supervisory operation followed by 15 minutes of alarm.
- C. Provide combination audiovisual signaling appliances as required per NFPA 72. Standalone devices may be used to augment combination units when necessary. The audiovisual notification appliances shall be located in all egress pathways, classrooms, public and common areas. Provide visual devices in all offices. The devices shall follow the Americans with Disabilities Act (ADA).
- D. Manual pull stations shall be located within 5 ft. of each means of egress and mounted at 44 in. above the floor to the activating lever of the box. The pull stations will mechanically latch upon operation and remain so until manually reset by a key common to all system locks.
- E. Photoelectric smoke detectors shall be located in all egress pathways spaced 30 feet on center, and 15 feet from all stairwells and opposing walls. Smoke detectors shall also be located at the top, bottom of each stairway; mechanical equipment; electrical; transformer; telephone equipment; elevator machine; or similar room. Elevator recall smoke detectors will be in the elevator lobby on each floor.
- F. Sprinkler tamper and flow devices shall be wired for trouble and alarm indication into the fire alarm control panel.
- G. Provide public safety radio distributed antenna system.

1.26 IN-BUILDING CELLULAR AMPLIFICATION SYSTEM

- A. Provide in-building cellular amplification system to boost cellular signals in all occupiable areas of the building.



1.27 TELECOMMUNICATIONS CABLING INFRASTRUCTURE

- A. Provide a telecommunications cabling infrastructure in compliance with the latest TIA standards. The utility company services will be terminated in a telecommunications entrance facility (EF). Fire rated plywood backboards, grounding, equipment racks, 110-type punch down blocks, patch panels, conduit sleeves, and corridor cable tray system will be provided in the EF, the telecommunications equipment room (TER) and the telecommunications rooms (TR). The pathway system, racks and equipment will be sized for complete utilization of the service entrance cables and all voice and data outlets plus room for minimum of 50% growth.
- B. Voice and data outlets will be provided in all administration areas and in the classrooms. Voice and data horizontal cabling will be Category 6A, unshielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Wireless access point cabling will be Category 6A, shielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Each end of each cable will be labeled.
- C. Backbone cables will be provided between the EF, TER and each TR. Copper backbone cables will be voice grade Category 3 cable. Optical fiber cables will be 24-strand (50/125µm) OM4 multimode laser optimized cable. The cables will be terminated in fiber optic patch panels at both ends. The circuits will be tested for insertion loss at both ends at 1310 and 1550nm. High-resolution Optical Time Domain Reflectivity (OTDR) tests will be performed on each fiber at one end.

1.28 VOICE/DATA COMMUNICATIONS EQUIPMENT

- A. Provide data network switches based on Cisco with 10Gbps technology.
- B. Provide wireless access points based on Cisco access points.
- C. Provide MITEL telephone system and handsets based on MITEL 5300 Series IP handsets.

1.29 PUBLIC ADDRESS & CLOCK SYSTEM

- A. A public address (PA) and clock system will be provided throughout the building.
- B. Basis of Design uses the existing *Simplex 5100 Series*.
- C. Speakers will be in classrooms, administration areas, assembly areas and in public and common areas. Classroom speakers will be talk back type. Two emergency call stations will be provided in each classroom and in all instructional and public areas.

- D. The system will provide the front office with the ability to make announcements throughout the building premises, to a limited area, or to an individual room. Any telephone handset in the building can initiate a page. In the front office, the administrative staff can select whether they want to initiate or respond to a call via the PA attendant handset, make announcements or play background music through the speaker. The system will be capable of supporting multiple and simultaneous communications.
- E. A master time & control system will be provided. The system will comprise a master clock that controls and synchronizes the time on peripheral clocks located throughout the school. The system will also control other peripheral devices such as bells, etc. and utilize the school public address system to sound pre-programmed tones for class changes. Clocks will be provided in classrooms, offices, public and assembly areas, and in administration areas.

1.30 AUDIO-VIDEO SYSTEMS

- A. Provide sound and projection system in the Gymnasium.
- B. Provide sound and projection system in the Cafetorium.

1.31 SPEECH REINFORCEMENT SYSTEM

- A. Provide speech reinforcement system in each classroom and instructional space. The basis of design shall be Lightspeed Flexcat + Topcat Classroom Audio 2-way Communication System (see specifications).
- B. The speech reinforcement system shall consist of:
- C. Six (6) tabletop speaker pods with integrated speaker and microphone enabling 2- way communication with each student group.
- D. Pendant-style Flexmike® teacher microphone utilizing Access Technology (1.9 GHz) for transmission. IR not acceptable.
- E. Two (2) microphones allow team-teaching to the whole group or to individual small groups.
- F. Wireless Media Connector utilizing Access Technology (1.9 GHz) to integrate with and wirelessly transmit all classroom multimedia to be played through the Topcat.
- G. In ceiling, all-in-one whole group audio system to enable communication to the whole class with Access technology and integrated amplifier and speaker system.



1.32 SECURITY SYSTEMS:

- A. Provide video surveillance system based on EXACQ Vision Video Management System or approved Clinton School District system.
- B. Provide access control based on N2 MicroNode with HID 26-bit cards and fobs or approved Clinton School District system.
- C. Provide intrusion detection system based on DMP or approved Clinton School District system.

1.33 LIGHTNING PROTECTION SYSTEM

- A. Provide Faraday lightning protection system with UL MasterLabel.

1.34 ELECTRIC VEHICLE CHARGING STATION

- A. Provide a dual electric vehicle charging station to charge two electrical vehicles simultaneously.
- B. Basis of design shall be ChargePoint Model CT4021-GW1 Dual Port Bollard USA Gateway Station with Concrete Mounting Kit CY4001-CCM and cellular communications.

New Construction on Existing Site Option

INTRODUCTION

The New Construction Options are based on construction of a new Middle School, Grades 5 – 8, totaling ±121,000 GSF for 550 Enrollment and ±136,000 GSF for 700 Enrollment for Grades 4 – 8. The options include building on different parts of the site and assumes that the new building will be constructed while the existing building remains fully occupied. Once the new building is complete, the ±130,000 GSF existing building would be demolished in its entirety and any remaining site features (athletic fields, playgrounds, parking, driveways, etc.) would be completed. The PDP proposes an electrical service to accommodate power needs for power, lighting, HVAC, as well spare capacity for future expansion. The summary includes design of a fire alarm and building emergency notification and evacuation instruction system. The summary includes the design of a code-compliant tele/data infrastructure to support Wi-Fi, networked phone system, networked AV teaching tools and an integrated and networked security system.

BASIS OF DESIGN

1.1 UTILITIES

- A. Provide 2-4” Schedule 40 electrical primary duct bank to a utility company padmount transformer located on the exterior of the building. The primary duct bank shall be encased in 3” of concrete.
- B. Provide secondary electrical service conductors, main switchboard, and distribution equipment in the main electrical room.
- C. The electrical service shall be 4000A, 65kAIC, 480/277V, 3-phase, 4-wire fed by ten sets of 600kCMIL copper cables in 10-4” Schedule 40 PVC conduits.
- D. Provide 4-4” Schedule 40 PVC telecommunications underground duct system to the entrance facility. The telecommunications duct bank will be encased in 3” of concrete when running under vehicular traffic areas and roadways.

1.2 ELECTRICAL SERVICE

- A. Provide 4000A MCB, GFP, 480/277V, 65KAIC switchboard.
- B. Provide 480/277V and 208/120V panelboards, and distribution feeders.
- C. Provide 480V to 208/120V stepdown transformers.



1.3 EMERGENCY POWER

- A. Provide 500kW/625kVA to 700kW/875kVA emergency/standby generator with 48-hour diesel tank and integral duct mounted 150kW load bank.
- B. Provide (1) 400A manual transfer switch, (1) 1,600A generator dock, (1) 1,200A automatic transfer switches and distribution equipment. Emergency equipment shall be separated from normal and standby power equipment per the Massachusetts Electrical Code.
- C. All emergency equipment and feeders must be installed in 2-hour rated rooms or must be 2-hour rated listed assembly.
- D. The emergency power system shall be divided into two branches:
 1. Life safety branch: all life safety branch equipment shall be installed in 2-hour rated rooms. All life safety branch feeders shall be 2-hour rated MI cables. The life safety branch shall supply power to:
 - a. Egress and exit lighting.
 - b. Alarm and alerting systems.
 - c. Emergency communications systems.
 - d. Elevator cab lighting.
 2. Standby branch: shall power the entire community side of the building. Additionally, the standby branch shall supply power to:
 - a. Boilers, associated controls, and associated pumps to keep building from freezing.
 - b. Telecom and server room lighting, power, and HVAC systems.
 - c. Building management system (BMS).
 - d. Power outlets at roof equipment, mechanical room, loading area, cafeteria, and kitchen.
 - e. Kitchen and cafeteria.
 - f. Selected mechanical loads.

1.4 SUB-METERING

- A. Provide a multipoint sub-metering system capable of providing electrical consumption data for lighting, general purpose power and HVAC power loads.
- B. The meter shall calculate the electrical usage of electrical loads with the use of remote current transformers. The meter shall be microprocessor-based. The meter shall be capable of sampling each power waveform calculating power factor and harmonic content to achieve 0.5% accurate readings. The meter shall save the Kilowatt hour and Max demand readings, indefinitely, in non-volatile RAM during power outages, without the use of batteries until, at such time, the meter is re-energized.
- C. The meter shall contain Modbus RS485 RTU communications as a standard feature. The meters' communication wires to be Daisy Chain, Parallel, Star-wired together then connected to a RS485/RS232 converter, which then connects to the Building Management System (BMS).

1.5 INTERIOR LIGHTING AND LIGHTING CONTROL SYSTEM

- A. Provide a high efficiency lighting system in all interior spaces as well as on the exterior of the building. The design aim is to deliver a lighting system with a light power density not exceeding 0.5W/sq. ft. Linear direct/indirect fixtures shall be LED; recessed fixtures shall be LED; exterior light fixtures shall be LED.
- B. Interior lighting shall be controlled with an automatic control device to shut off building lighting in all spaces. This automatic control device shall function on either:
 - 1. A scheduled basis using a time-of-day operated control device that turns lighting off at specific programmed times; or
 - 2. An occupant sensor that shall turn lighting off within 30 minutes of an occupant leaving a space; or
 - 3. An unscheduled basis by occupant intervention.
- C. Each space enclosed by ceiling-height partitions shall have at least one control device to independently control the general lighting within the space. Each control device shall be activated either manually by an occupant or automatically by sensing an occupant.
- D. Each perimeter office space enclosed by ceiling-height partitions shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% or shall be provided with automatic daylighting controls.



- E. Each perimeter classroom space shall have a manual control to allow the occupant to uniformly reduce the connected lighting load by at least 50% and shall be provided with automatic daylighting controls. The classrooms shall have the ability to dim or switch off lights at the presentation/teaching front wall. The lighting controls shall be integrated with the HVAC controls.
- F. Provide LED emergency egress and exit lighting fed from the emergency life safety branch of the emergency/standby system.

1.6 EXTERIOR LIGHTING

- A. Pedestrian walkways shall be designed for illuminance value at the ground plane of
- B. 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- C. All parking lots shall be designed for illuminance value at the ground plane of 1.0 foot-candles, the minimum illuminance shall not be lower than 0.2 foot-candles.
- D. Roadways shall be designed for illuminance value at the ground plane of 0.6 foot-candles, the minimum illuminance shall not be lower than 0.15 foot-candles.
- E. Pedestrian walkway lighting shall be LED bollard fixtures; parking and roadway lighting shall be LED fixtures mounted on 20 ft. aluminum poles.

1.7 GENERAL PURPOSE POWER

- A. Provide three general purpose duplex receptacles and one double duplex receptacle with USB charging ports for offices.
- B. Provide two double duplex receptacles with USB charging ports and eight general purpose power receptacles in classrooms. Provide two duplex receptacles on dedicated circuits for tablet charging carts.
- C. Provide a duplex receptacle for each projector.
- D. Provide one general purpose duplex receptacle in utility and storage rooms.
- E. Multiple service floor outlets or fire rated poke-through devices shall be provided for equipment and appliances in the commons areas when the equipment is to be placed on worktables, counters, systems furniture, or cabinets that are not against fixed walls.

- F. Multi-outlet raceway or surface mounted wiring devices shall be provided where it is not feasible to install recessed outlets.
- G. All receptacles in offices and classrooms shall have at least 50% of the outlets controlled via vacancy sensor and/or time clock integrated with the lighting control system.

1.8 FIRE ALARM AND PUBLIC SAFETY DAS SYSTEM

- A. Provide an addressable fire alarm system with voice evacuation and connection to the fire department.
- B. The design of the fire alarm system shall be based on engineering criteria as defined by NFPA 72 and The Massachusetts State Building Code 780 CMR. The system shall be supported by standby batteries. The batteries shall support 24-hours of full supervisory operation followed by 15 minutes of alarm.
- C. Provide combination audiovisual signaling appliances as required per NFPA 72. Standalone devices may be used to augment combination units when necessary. The audiovisual notification appliances shall be located in all egress pathways, classrooms, public and common areas. Provide visual devices in all offices. The devices shall follow the Americans with Disabilities Act (ADA).
- D. Manual pull stations shall be located within 5 ft. of each means of egress and mounted at 44 in. above the floor to the activating lever of the box. The pull stations will mechanically latch upon operation and remain so until manually reset by a key common to all system locks.
- E. Photoelectric smoke detectors shall be located in all egress pathways spaced 30 feet on center, and 15 feet from all stairwells and opposing walls. Smoke detectors shall also be located at the top, bottom of each stairway; mechanical equipment; electrical; transformer; telephone equipment; elevator machine; or similar room. Elevator recall smoke detectors will be in the elevator lobby on each floor.
- F. Sprinkler tamper and flow devices shall be wired for trouble and alarm indication into the fire alarm control panel.
- G. Provide public safety radio distributed antenna system.

1.9 IN-BUILDING CELLULAR AMPLIFICATION SYSTEM

- A. Provide in-building cellular amplification system to boost cellular signals in all occupiable areas of the building.

1.10 TELECOMMUNICATIONS CABLING INFRASTRUCTURE

- A. Provide a telecommunications cabling infrastructure in compliance with the latest TIA standards. The utility company services will be terminated in a telecommunications entrance facility (EF). Fire rated plywood backboards, grounding, equipment racks, 110-type punch down blocks, patch panels, conduit sleeves, and corridor cable tray system will be provided in the EF, the telecommunications equipment room (TER) and the telecommunications rooms (TR). The pathway system, racks and equipment will be sized for complete utilization of the service entrance cables and all voice and data outlets plus room for minimum of 50% growth.
- B. Voice and data outlets will be provided in all administration areas and in the classrooms. Voice and data horizontal cabling will be Category 6A, unshielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Wireless access point cabling will be Category 6A, shielded, twisted pair, 8 conductor copper cable from each jack to the nearest telecommunications closet. Each end of each cable will be labeled.
- C. Backbone cables will be provided between the EF, TER and each TR. Copper backbone cables will be voice grade Category 3 cable. Optical fiber cables will be 24-strand (50/125µm) OM4 multimode laser optimized cable. The cables will be terminated in fiber optic patch panels at both ends. The circuits will be tested for insertion loss at both ends at 1310 and 1550nm. High-resolution Optical Time Domain Reflectivity (OTDR) tests will be performed on each fiber at one end.

1.11 VOICE/DATA COMMUNICATIONS EQUIPMENT

- A. Provide data network switches based on Cisco with 10Gbps technology.
- B. Provide wireless access points based on Cisco access points.
- C. Provide MITEL telephone system and handsets based on MITEL 5300 Series IP handsets.

1.12 PUBLIC ADDRESS & CLOCK SYSTEM

- A. A public address (PA) and clock system will be provided throughout the building.
- B. Basis of Design uses the existing *Simplex 5100 Series*.
- C. Speakers will be in classrooms, administration areas, assembly areas and in public and common areas. Classroom speakers will be talk back type. Two emergency call stations will be provided in each classroom and in all instructional and public areas.

- D. The system will provide the front office with the ability to make announcements throughout the building premises, to a limited area, or to an individual room. Any telephone handset in the building can initiate a page. In the front office, the administrative staff can select whether they want to initiate or respond to a call via the PA attendant handset, make announcements or play background music through the speaker. The system will be capable of supporting multiple and simultaneous communications.
- E. A master time & control system will be provided. The system will comprise a master clock that controls and synchronizes the time on peripheral clocks located throughout the school. The system will also control other peripheral devices such as bells, etc. and utilize the school public address system to sound pre-programmed tones for class changes. Clocks will be provided in classrooms, offices, public and assembly areas, and in administration areas.

1.13 AUDIO-VIDEO SYSTEMS

- A. Provide sound and projection system in the Gymnasium.
- B. Provide sound and projection system in the Cafetorium.

1.14 SPEECH REINFORCEMENT SYSTEM

- A. Provide speech reinforcement system in each classroom and instructional space. The basis of design shall be Lightspeed Flexcat + Topcat Classroom Audio 2-way Communication System (see specifications).
- B. The speech reinforcement system shall consist of:
- C. Six (6) tabletop speaker pods with integrated speaker and microphone enabling 2- way communication with each student group.
- D. Pendant-style Flexmike® teacher microphone utilizing Access Technology (1.9 GHz) for transmission. IR not acceptable.
- E. Two (2) microphones allow team-teaching to the whole group or to individual small groups.
- F. Wireless Media Connector utilizing Access Technology (1.9 GHz) to integrate with and wirelessly transmit all classroom multimedia to be played through the Topcat.
- G. In ceiling, all-in-one whole group audio system to enable communication to the whole class with Access technology and integrated amplifier and speaker system.



1.15 SECURITY SYSTEMS:

- A. Provide video surveillance system based on EXACQ Vision Video Management System or approved Clinton School District system.
- B. Provide access control based on N2 MicroNode with HID 26-bit cards and fobs or approved Clinton School District system.
- C. Provide intrusion detection system based on DMP or approved Clinton School District system.

1.16 LIGHTNING PROTECTION SYSTEM

- A. Provide Faraday lightning protection system with UL MasterLabel.

1.17 ELECTRIC VEHICLE CHARGING STATION

- A. Provide a dual electric vehicle charging station to charge two electrical vehicles simultaneously.
- B. Basis of design shall be ChargePoint Model CT4021-GW1 Dual Port Bollard USA Gateway Station with Concrete Mounting Kit CY4001-CCM and cellular communications.

END OF NARRATIVE

CODE UPGRADE/BASE REPAIR – NO BUILD OPTION

INTRODUCTION

For purposes of this Feasibility Study, the Code Upgrade/Base Repair Option is defined as a “No-Build” solution that will maintain the status quo. It will not provide any additional square footage or address the programmatic needs of the foodservice operation. The Code Upgrade/Base Repair Option addresses pre-existing code violations, energy inefficiencies, mandatory improvements required due to scope-of-work code thresholds. The following Code Upgrade scope of work is based on a thorough assessment of the kitchen and serving area by the Foodservice Consultant.

BUILDING ASSESSMENT

General

The kitchen is in very good condition for its age and use. It appears that it has been well maintained and is without major infrastructural issues.



Kitchen



Serving

General Kitchen Interior Space

The walls are painted concrete masonry block construction in good condition. Provide a new coat of epoxy paint to seal the block and make certain walls are easily cleanable. Floors are quarry tile and in good condition. Provide a thorough cleaning and seal grout. Ceiling is standard ACT. Replace tiles with new mylar-faced non-porous and easily cleanable ceiling tiles. Lighting is surfaced mounted lensed fluorescent fixtures. They appear to provide adequate lighting for the operation. Verify all lights are operational and replace bulbs as necessary.

Storage

The dry storage is appropriately sized for the operation. Currently there is tiered wood shelving along one wall and low dunnage style shelving on the opposite wall. The wood shelving should be removed and replaced with new chrome full-height wire shelving. Wood construction does not meet health code requirements. The walk-in cooler and freezer are in good condition for their age and have no signs of issues. There is no closure panel from the top of the box to the ceiling, which is typical to prevent build-up of dust and debris. A matching aluminum panel should be provided and secured to box/ceiling.



Dry Storage – Wood Shelving



Walk-in Cooler/Freezer

Food Preparation

The amount of workspace is adequate for the operation. The basic ancillary equipment such as slicers and mixers are provided. The worktables are old and have either painted galvanized legs (chipping) or wood tops, or both. The wood tops and galvanized legs are not approved by most health departments, as they are not easily cleanable surfaces. All worktables should be replaced with full stainless-steel construction, heavy-duty drawers, bottom shelves, and convenience outlets mounted to the underside of the top, or in the backsplash. Overshelves and utensil racks are accessories typically provided but not desired by all individuals and should be confirmed.

See photos on the following page.



Cooking

The exhaust ventilators and the interior grease filters appear to be original and are constructed of a mix of galvanized and stainless steel. Both should be constructed of all stainless steel. There are two hoods in a back-to-back configuration. The hood depth and length are not sized appropriately for the equipment below on both sides. New ventilators will be more energy efficient. Existing air volume should be tested to confirm the correct exhaust air is being provided for the current cooking equipment. The fan and duct should be evaluated for condition, sizing with equipment, and current code compliance. A wet chemical fire suppression system is present. The tank system should be evaluated for reuse and new drops over the equipment should be provided with the new exhaust ventilators. All the cooking equipment with the exception of the kettle are new within the last few years. The older kettle is powered by the new steamer. The kettle appears in good condition and could be reused for this option. There is room for additional equipment under one hood, assuming the exhaust air volume can handle it, and it is desired.



Exhaust Ventilator



Cooking Equipment

Serving Line

The existing serving equipment is adequate in overall size. However, the equipment has past its useful life, is not configured with correct food holding equipment, and does not meet current operational or code requirements. The existing equipment base cabinet is constructed of galvanized painted metal that is chipping in areas and does not meet health code requirements. The wood cutting board does not meet health code requirements. There is no refrigerated holding equipment for cold food serving. The ratio of hot, cold, and flat utility counter does not meet current requirements. Sections of glass on the sneeze guards have been removed to meet current serving methods. This does not meet health code. New serving counters should be provided with all stainless-steel construction, hot wells, refrigerated cold wells, appropriate amount of flat counter, code compliant sneeze guards and cutting boards and built-in convenience outlets. There are two point-of-sale systems on matching stainless-steel carts at each end of the serving line. New matching base cabinets should be provided for the POS system with power and data.



Cabinet Base – operator side



Wood cutting board/Painted Base Cabinet

Tray & Pot Washing

The 3-bay pot sink is sized appropriately overall and constructed of all stainless-steel. The sink bays are sized for proper cleaning of pots and pans and the side drainboards are sized adequately as well. A thorough cleaning of the sink exterior should be performed. A wall shelf with pot hooks, which is typical at this location, should be installed over the pot sink for additional storage and drying of utensils. The existing grease trap is recessed under the left drainboard. It should be evaluated for proper sizing and code compliance. The tray wash area is sized well for the operation. The tray drop-off window is adequately sized with a soiled dishtable and drain trough attached, leading to the dish machine. There is no pre-rinse sink prior to the dishmachine. Typically, there is a sink and pre-rinse faucet located just before the dishmachine. There is a pre-rinse faucet installed at the drop-off window. Based on its close

proximity to the open window, overspray onto the student side is a concern. There is an undershelf on the soiled table that is galvanized metal, also the legs are the same material. The undershelf and legs should be replaced with stainless steel. The clean dishtable is good size after the dishmachine. Similar to the clean table, the legs should be replaced with all stainless steel. No undershelf is provided under the clean table, dunnage shelving is in place in lieu of the shelf, and the remainder is open base to accommodate the booster heater for the dishmachine. The dishmachine is older but appears in fair condition. It is sized appropriately for the operation and vented properly from the machine to the ceiling with pant-leg ducts.



Tray Wash



Pot Wash

Ancillary Spaces

The dedicated mopsink/janitorial space is open and adjacent to the delivery area with a partial height tile wall for separation. This is not best practice and should be enclosed or relocated. There is no hose hanger keeping the hose off the floor. No locked chemical storage is provided for cleaning supplies in this area to meet health code.

The office is small but sufficient. Foodservice has its own laundry within the traywash area. The equipment appears newer and has a stainless-steel laundry sink and table on either side. Small cubby style lockers are present in the vestibule to the restroom. Replace it with new 2-tier lockable lockers.

MSBA Module 3

Feasibility Study PSR

3.3.3. FINAL EVALUATION OF ALTERNATIVES

D.1 Updated Basis of Design Narratives

i. Food Service



FS Janitorial Area



FS Office



Laundry



ACT Ceiling

END OF REPORT

RENOVATION/ADDITION OPTION

SUMMARY: The Renovation/Addition Option scope of work includes renovation and selective demolition of the existing School, along with the construction of multi-story additions serving as swing space. However, as the existing kitchen and serving area square footage meets the MSBA guidelines, no additional square footage is required in this option for foodservice. The following Renovation/Addition scope of work is based on a thorough assessment of the existing kitchen and serving areas by the Foodservice Design Consultant.

Proposed kitchen and serving square footage for this option are as follows:

- Renovation = 1,900 SF (existing)
- Addition = 0 GSF

General Kitchen Interior Space

The general layout of the kitchen and serving areas are good in size, flow and adjacencies for the operation. Therefore, it is not necessary to make major changes in this option. The walls are painted concrete masonry block construction in good condition. Provide a new coat of epoxy paint to seal the block and make certain walls are easily cleanable. In the Pot and Tray Wash areas, provide smooth FRP panels over existing block walls for increased moisture protection and cleanability. Floors are quarry tile and in good condition. Provide a thorough cleaning and seal grout. Ceiling is standard ACT. Replace tiles with new mylar-faced non-porous and easily cleanable ceiling tiles. Lighting is surfaced mounted lensed fluorescent fixtures. Replace with recessed LED fixtures in ceiling grid.

Storage

The dry storage is appropriately sized for the operation. Currently there is tiered wood shelving along one wall and low dunnage style shelving on the opposite wall. The wood shelving should be removed and replaced with new chrome tiered wire shelving. Wood construction does not meet health code requirements. The floor is painted concrete and is worn in high-traffic locations exposing bare concrete. A new epoxy floor coating should be applied with a non-slip additive and transitioned to meet the existing tile kitchen floor. The walk-in cooler and freezer are in good condition for their age and have no signs of issues. There is no closure panel from the top of the box to the ceiling, which is typical to prevent build-up of dust and debris. A matching aluminum panel should be provided and secured to box/ceiling. A remote monitoring system should be installed on the refrigeration system that is connected

through a data connection for operational/temperature issue notification to building management personnel.

Food Preparation

The amount of workspace is adequate for the operation. The basic ancillary equipment such as slicers and mixers are provided. The addition of a 20 Qt. mixer and commercial food processor would be beneficial to the food prep operation. The existing worktables are old and have either painted galvanized legs (chipping) or wood tops, or both. The wood tops and galvanized legs are not approved by most health departments, as they are not easily cleanable surfaces. All worktables should be replaced with full stainless-steel construction, heavy-duty drawers, bottom shelves, and convenience outlets mounted to the underside of the top, or in the backsplash. Overshelves and utensil racks are accessories typically provided but not desired by all individuals and should be confirmed.

Cooking

The exhaust ventilators and the interior grease filters appear to be original and are constructed of a mix of galvanized and stainless steel. Both should be constructed of all stainless steel. There are two hoods in a back-to-back configuration. The hood depth and length are not sized appropriately for the equipment below on both sides. New exhaust ventilators should be provided of all stainless steel and meet all applicable health and mechanical codes. The hood(s) depth and length will be sized appropriately for the equipment below. New ventilators will be energy efficient and specified with a demand control system, if required. A new wet chemical fire suppression system will be specified and pre-piped within the exhaust hood canopy. The tank system will be wall mounted and be tied into the building management system. Existing air volume should be tested to confirm the correct exhaust air is being provided for the current cooking equipment. The fan and duct should be evaluated for condition, sizing with equipment and current code compliance. All the cooking equipment except for the kettle are new within the last couple of years. Therefore, replacement is not necessary, except for the kettle. The older kettle is powered by a new steamer. Replace the kettle with a self-contained (not powered by steamer) 40 gal. tilting kettle. Provide appropriately sized recessed floor trough drains for both the new kettle and existing skillet. There is room for additional equipment under the current hood space, assuming the exhaust air volume can handle it, and it is desired, recommend replacing the existing 2-burner range with a full size 4-burner range and oven base. Currently there is no wall or chase between each side of cooking equipment with exposed electrical and plumbing utilities. A half-height stainless-steel utility distribution chase should be provided for organization, flexibility and cleanability behind cooking equipment.

Serving Line

The existing serving equipment is adequate in overall size. However, the equipment has past its useful life, is not configured with correct food holding equipment, and does not meet current operational or code requirements. The existing equipment base cabinet is constructed of galvanized painted metal that is chipping in areas and does not meet health code requirements. The wood cutting board does not meet health code requirements. There is no refrigerated holding equipment for cold food serving. The ratio of hot, cold, and flat utility counter does not meet current requirements. Sections of glass on the sneeze guards have been removed to meet current serving methods. This does not meet health code. New serving counters should be provided with all stainless-steel construction, hot wells, refrigerated cold wells, appropriate amount of flat counter, code compliant sneeze guards and cutting boards and built-in convenience outlets. There are two point-of-sale systems on matching stainless-steel carts at each end of the serving line. New matching base cabinets should be provided for the POS system with power and data.

Tray & Pot Washing

The 3-bay pot sink is sized appropriately overall and constructed of all stainless-steel. The sink bays are sized for proper cleaning of pots and pans and the side drainboards are sized adequately as well. A thorough cleaning of the sink exterior should be performed. A wall shelf with pot hooks, which is typical at this location, should be installed over the pot sink for additional storage and drying of utensils. The existing grease trap is recessed under the left drainboard. It should be evaluated for proper sizing and code compliance. The tray wash area is sized well for the operation. The tray drop-off window is adequately sized with a soiled dishtable and drain trough attached, leading to the dish machine. There is no pre-rinse sink prior to the dishmachine. Typically, there is a sink and pre-rinse faucet located just before the dishmachine. There is a pre-rinse faucet installed at the drop-off window. Based on its close proximity to the open window, overspray onto the student side is a concern. There is an undershelf on the soiled table that is galvanized metal, also the legs are the same material. The undershelf and legs should be replaced with stainless steel. The clean dishtable is good size after the dishmachine. Similar to the clean table, the legs should be replaced with all stainless steel. No undershelf is provided under the clean table, dunnage shelving is in place in lieu of the shelf, and the remainder is open base to accommodate the booster heater for the dishmachine. The dishmachine is sized appropriately and in working order, although older and will reach its useful life expectancy in the coming years. In the renovation scenario, it is recommended to rework the soiled dishtable adding a scrap sink with a rack-guide, disposer, and pre-rinse faucet to the soiled table just before the dishmachine. Provide a new similar sized conveyor type dishmachine and rework the clean dish table as necessary based on the addition to the sink and new dishmachine. Provide new stainless-steel vent ducts (2) from dishmachine to condensate duct above ceiling.

Ancillary Spaces

The dedicated mop sink/janitorial space is open and adjacent to the delivery area with a partial height tile wall for separation. This is not best practice and should be enclosed or relocated. There is no hose hanger keeping the hose off the floor. No locked chemical storage is provided for cleaning supplies in this area. Explore the option of removing the mop area from its current location and incorporating a small mop closet into the traywash area while renovating that space. Foodservice has its own laundry within the traywash area. Consider adding another closet adjacent to the mop closet for the laundry equipment.

The office is small but sufficient. Provide more modern and efficient furniture for the space. There is one staff restroom within the kitchen. There is a vestibule between the kitchen and restroom which has a few small cubby style lockers for staff. The restroom should be verified for code compliance. Replace the lockers with new 2-tier lockable lockers, one for each staff member.

END OF REPORT

NEW CONSTRUCTION

SUMMARY: The New Build Option scope of work includes the construction of a completely new multi-story building to accommodate all of the program needs for the staff and students. Based on the projected population and associated MSBA guidelines, we estimate approximately 2,000 square feet will be allocated to the new kitchen and serving space. The following new build scope of work is based on current trends in middle school dining, discussions with stakeholders, and the industry experience of the Foodservice Design Consultant.

Proposed kitchen and serving square footage for this option are as follows:

- New building/kitchen and serving = Approximately 2,000SF

General Kitchen Interior Space

The general layout of the kitchen and serving areas will allow for optimal flow from receiving to storage, prep, cooking and serving. Pot washing will be near cooking and prep. The tray- drop for students will be strategically located on the exit path from the dining room. Trash, recycling, and compost will be incorporated into this area as well. The walls shall be drywall with either epoxy paint or covered in smooth FRP panels. Stainless-steel wall panels will be located behind cooking surfaces. The floors will be poured epoxy or sheet vinyl with a slight grit for a non-slip finish. Ceiling will be ACT mylar-faced non-porous easily cleanable ceiling tiles. Lighting will be recessed LED fixtures in a ceiling grid.

Storage

The dry storage will be appropriately sized for the operation. Shelving within the storage room to be full height tiered chrome wire shelving or low chrome dunnage racks for bulk storage. The walk-in cooler and freezer will be sized for the population, meals per week, and government commodity deliveries. Exterior will have a closure panel from the top of the box to the ceiling, Insulated wall panels with diamond plate protection, where required. The floor will be comprised of a concrete wearing slab and matching floor material over the insulated floor panels, equal in elevation to the kitchen finish floor. A remote monitoring system on the refrigeration system that is connected through a data connection for operational/temperature issue notification to building management personnel. Anti-microbial coated shelving for the interior food storage.

Food Preparation

Worktables will be full stainless-steel construction, heavy-duty drawers, bottom shelves, and convenience outlets mounted to the underside of the top, in the backsplash, or wall mounted. Overshelves and utensil racks provided on tables for added storage and efficiency.

Ancillary equipment such as slicers, mixers and food processors will be provided. Carts and dollies will be specified and sized for the operation.

Cooking

The exhaust ventilators will be constructed of all stainless steel and meet all applicable health and mechanical codes. The hood(s) depth and length will be sized appropriately for the equipment below. New ventilators will be energy efficient and specified with a demand control system, if required. A wet chemical fire suppression system will be specified and pre-piped within the exhaust hood canopy. The tank system will be wall mounted and be tied into the building management system. All the cooking equipment except for the kettle are new within the couple of years. Therefore, purchasing all new equipment is not required, except for the kettle, which was not replaced with the new equipment. Replace the existing kettle with a self-contained (not powered by steamer) 40 gal. tilting kettle. Provide appropriately sized recessed floor trough drains for both the new kettle and existing skillet. Additionally, provide a full size 4-burner range and oven base. Provide a half-height stainless- steel utility distribution chase with full-height end panels for organization, flexibility and cleanability behind cooking equipment.

Serving Line

New serving counters will be all stainless-steel construction. Within the counters, hot wells, refrigerated cold wells, appropriate amount of flat counter, code compliant sneeze guards and cutting boards and built-in convenience outlets will be provided for proper food holding, display and serving. Behind the serving line on the operator side will be a stainless-steel back support counter. In line with the counter will be reach-in refrigerators and hot holding cabinets for back-up to support the lunch service periods. Two point-of-sale systems on matching cabinets will be provided with electrical/data for associated equipment.

Tray & Pot Washing

A 3-bay pot sink will be constructed of all stainless-steel with sink bays that are sized for proper cleaning of pots and pans. A wall shelf with pot hooks, which is typical at this location, will be installed over the pot sink for additional storage and drying of utensils. Full-height pot shelving will be in

close proximity to the pot sink. The tray wash area will be sized for the operation. The tray drop-off window will be adequately sized with a soiled dishtable and drain trough attached. Within the table, before the dishmachine, will be a scrap-sink with a rack guide and pre-rinse faucet over the sink. The dishmachine will be a rack conveyor style machine, sized appropriately for the operation. The dishmachine will have new stainless-steel vent ducts (2) from dishmachine to a condensate duct above the ceiling. After the dishmachine will be a stainless-steel clean dishtable with a undershelf and table limit switch to stop dishmachine conveyor when clean table is full of dish racks.

Ancillary Spaces

A dedicated mop sink/janitorial closet will be provided for the operation. In addition to the mop sink, there will be a shelving unit(s) for chemical storage. Foodservice will have its own laundry equipment (residential washer/dryer) within the kitchen. A manager's office will be provided and sized for the number of people required in the office on a regular basis. Staff restrooms within the kitchen will be provided per code. There should be a vestibule between the kitchen and restroom. Full-height 2-tier lockers will be provided in the kitchen, one for each staff member.

END OF REPORT

Notes: Clinton Middle School Visit

Meeting Date: 3/2/23

Attendees: Eric Moore – LPA, Christina Bazelmans – LPA, Scott Goodrich – Edvance, Chris Tahan – CPS, Brian Sharon – CPS

Structured Cabling System

The school is currently comprised of an MDF room with four satellite closets feeding back to the MDF over Fiber. Two of these closets are actual rooms and two are cubby storage areas with limited access from the hallway. Fully equipped rooms, with adequate space for equipment racks, power distribution, cable management, environmental conditioning, and room for carrying on administrative functions should be part of any building project.

Category 6A copper cabling is the standard for all new renovation and construction projects with OM4 multimode fiber optic and single mode fiber between all satellite closets and the main distribution room.

Networking and Wireless

Currently the standard for local area network switches is Extreme Networks. The wireless network currently relies on access devices from Cisco Meraki. Access points are located in all classrooms and educational spaces as well as large assembly spaces such as the library/media Center, Gymnasium and Cafeteria. These two manufacturers should be listed as proprietary manufacturers within the construction project, with the Owner providing the specific model numbers for each the time of design.

Telephone System

The Current Middle School is standardized on Mitel for its' phone System, which is only 4–5 years old. It was installed and is supported by Metropolitan Telephone. A building project would assess reuse and/or refreshing with all new telephone equipment.

Display Technology

Epson Projectors are used throughout classrooms. It provides the appropriate size display for classrooms. The newest projectors available from Epson should be considered for any building project. Teacher connections to the projectors are provided at the wall near the teacher's desk location and include HDMI and USB connections. Pathways for cabling and blocking for the projectors should be provided during construction, with the latest technology purchased during the equipment phase.

Document Cameras are used with the projectors and should be purchased during the equipment phase.

Discussed that Speech Reinforcement Systems are currently a standard for new classroom designs.

It was mentioned that it would be beneficial having a display device in the classroom in place of the clock, which could be used to not only display time, but also informational messages and emergency notifications.

Chromebook Technology

School utilizes Chromebooks for Grades 5–8. Fifth graders are issued a new Chromebook when entering the Middle School, which are managed onsite in charging carts while in fifth and sixth grades. When student reach seventh grade they are allowed to take the Chromebook home with them where they manage charging and use time. Chromebooks are then refreshed in 4 years when students become freshman at the High School, where they are issued a new Chromebook for their four years of High School.

Therefore, any building project may only have to carry account for the purchase of the incoming fifth grade Chromebooks and Chromebook Charging carts.

A determination will need to be made on how the project addresses Chromebooks for the fourth grade if this grade is incorporated into the building project.

The basis of their current Chromebooks for students is the HP Chromebook 11 for Students

Chromebooks for Teachers are also refreshed every 4 years and the building project may or may not have to account for new Chromebooks, depending on how recent they were refreshed for Teachers when a new school opens. Teacher Chromebooks are higher end devices with touch capability and are based on Acer or Asus. For budgeting purposes, new teacher Chromebooks should be included in the project.

Security

Exacq Technologies is their current platform for Surveillance. Various camera manufacturers are used throughout the building without any real standard for camera technology.

Intrusion Alarm systems are currently being evaluated for other schools in the district and there does not appear to be a proprietary standard at the current time. A building project would allow for determining standard that could integrate with the access control and surveillance systems.

Access Control is limited and there does not appear to be a standard currently. Access control platforms from Genetec and Evo are in use in the district. The building project would allow for setting a standard for access control that could be integrated with the surveillance and intrusion detection systems. This would provide greater partitioning and control of interior spaces during a lockdown, while also providing routine control of exterior doors and spaces.

Integrating vape detection into the overall security system should also be considered.

Building projects are the best time to establish proprietary standards within the district for an Integrated Security Systems platform involving surveillance, access control and intrusion detection. Standardizing on an integrated platform from Motorola/Avigilon was well received.

Motorola radios are used within the building between key administrative personnel.

Servers

The school has some legacy server resources housed in the MDF, but most of their information storage has moved to the cloud.

Technology provided during the project.

We reviewed the technology that will be included as part of a typical construction (renovation) project and the technology that would be purchased during the equipment phase.

Technology provided during construction phase includes the Structured Cabling System; Public Address and Clock System; Large venue Audio Visual Systems; classroom Speech Reinforcement Systems; Network Switches and Wireless; Telephone System; Security System (Surveillance, Access Control and Intrusion Alarm), and; Hand Held Radios.

Technology provided during the equipment phase includes Core IT equipment; user IT equipment such as Chromebooks, computers, tablets, charging printers, etc., and the POS system; Instructional Display Technologies; Digital Signage, and; Portable AV equipment.

Internet Service Provider and Current Vendors

Technology vendors include CDWG, Insight, Custom Computer, and Whalley to name a few.

CELT is their Internet Service Provider providing Crown Castle 5G internet pipe that is split between the Middle School and High School, with 600Mb of Comcast internet being provided as a backup.

Maintaining this connection between the High School and Middle and/or re-establishing it will be an

important part of the project during design. The cost of providing a separate internet service to the High School independent of the Middle School should also be evaluated at the time of design.

Ockers handles some of their AV equipment.

AKuity/ICS handles their Extreme Networks switch equipment.

Custom Computer handles their Wireless.

Proprietary Technology

It will be important to identify the list of proprietary technology that will be required so that the School Building Committee can approve them for the project. Proprietary systems as determined from our meeting will likely include the following systems: network switches (Extreme Networks), wireless access devices (Cisco Meraki), telephone system (Mitel), and possibly the integrated security system manufacture, as yet to be determined (possibly Avigilon).

The Clinton Middle School has identified environmental sustainability as an important goal for this project. This goal is one that is shared by the members of the design team. The team is committed to meeting the minimum MSBA Sustainable Requirements with a project team goal to qualify for the additional 2% reimbursement from the MSBA under the Green Schools Program.

Clinton Middle School has not yet confirmed whether the project will pursue LEED v4 or NE-CHPS. Once this decision has been made and the project is approved to proceed, the project will be registered USGBC or CHPS.

The goals and targets for a sustainable project include designing an energy-efficient building with minimal environmental impact that actively serves as an educational tool, (interactive/hands-on in some cases) for its inhabitants, including staff, educators, students and visitors. Sustainable features will be further reviewed and refined as the design develops.

Making sustainable choices for the built environment requires the collaboration of all design disciplines in an integrated process. Sustainable design and energy efficiency decisions impact not only the building and grounds, but also the end users – students and educators, building visitors and those that will be responsible for operations and maintenance. The entire project team, including Clinton Public Schools representatives have met to collectively review and discuss sustainable design and energy efficiency.

The Sustainability workshop gave the team the opportunity to brainstorm ideas, and to create a shared set of sustainable goals and expectations for the project that are in alignment with the LEED for Schools v4 or NE-CHPS rating system. The outcome of this workshop included a preliminary set of sustainability goals. The workshop was an important part of the Integrated Design Process and will continue to inform the team's work moving forward.

The project will actively promote environmental stewardship. The site of the project is a previously developed site that is bound by Sandy Pond to the south. At the workshop the team discussed building siting, stormwater management, and preserving the natural landscape and the educational opportunities the site can offer.

The building systems are currently being studied by the design team and will be selected to maximize energy efficiency while providing essential heating, cooling and ventilation needs. Plumbing fixtures with low flush and flow rates and high efficiency commercial kitchen equipment will be specified to minimize the demand for potable water for sewage conveyance and process uses.

Materials and products used in the construction of the project will carry product disclosure declarations, have recycled content and be regionally obtained to the greatest extent possible. Finishes will be low VOC compliant to provide a healthy interior learning environment.

The interior layout will reflect the school's curriculum and will provide a highly collaborative learning environment while maximizing access to daylight and views.

3.3.3 FINAL EVALUATION OF ALTERNATIVES

- D. Supporting Documents
 - 2. Permitting Requirements
(all options)

PRELIMINARY PERMITTING CONSIDERATIONS

Zoning Conditions

The Site is located within the R-2 Residential zoning district. The existing school use is allowed by right in this district. No portion of the Site appears to be located within any overlay districts. The Clinton Zoning By-Law indicates municipal facilities are exempt from all dimensional requirements of the By-Law.

Wetlands Protection Act (310 CMR 10.00)

The Wetlands Protection Act ensures the protection of Massachusetts' inland and coastal wetlands, tidelands, great ponds, rivers, and floodplains. It regulates activities in coastal and wetlands areas and contributes to the protection of ground and surface water quality, the prevention of flooding, and storm damage and the protection of wildlife and aquatic habitat.

A review of the Massachusetts Department of Environmental Protection (DEP) wetland layers available on the Oliver Map provided by Massachusetts Geographic Information System (MassGIS) indicates that a wetland area is located northeast of the site, with a 100-foot buffer zone extending into the site. Work within the buffer zone would require permitting through the Clinton Conservation Commission. It is not anticipated work will be required within the buffer zone.

Floodplain

Based on the Flood Insurance Rate Map (FIRM) the site is located outside area of 0.2% Annual Chance/500-year Flood Hazard.

Surface Water Supply Protection (310 CMR 22.20)

The Massachusetts DEP ensures the protection of surface waters used as sources of drinking water supply from contamination by regulating land use and activities within critical areas of surface water sources and tributaries and associated surface water bodies to these surface water sources.

A review of the Massachusetts DEP resource layers available on the MassGIS, appear to indicate the site is located within Zone A Surface Water Supply Protection Zone. Zone A represents "a) the land area between the surface water source and the upper boundary of the bank; b) the land area within a 400 foot lateral distance from the upper boundary of the bank of a Class A surface water source, as defined in 314

CMR 4.05(3)(a); and c) the land area within a 200 foot lateral distance from the upper boundary of the bank of a tributary or associated surface water body.” Restrictions include limitation on storage of potentially hazardous materials, as well as the location of sewer conveyance and treatment systems. The Clinton Conservation Commission has indicated they do not have any local bylaws governing work within Zone A.

The site is adjacent to the Wachusett Reservoir, which is a Public Water Supply. The site does not drain towards the reservoir. A request for an Advisory Ruling for Watershed Protection Act (WSPA) jurisdiction was filed with The Massachusetts Department of Conservation and Recreation (DCR), Division of Water Supply Protection in March 2023. DCR has confirmed the site is located outside areas of jurisdiction and no further action is needed.

Wellhead Protection Areas

The Massachusetts DEP ensures the protection of drinking water supplies from contamination by regulating land use and activities within wellhead protection areas. A review of the Massachusetts DEP resource layers available on the MassGIS, appear to indicate the site is NOT located within Wellhead Protection Areas.

Natural Heritage & Endangered Species Program

The Natural Heritage & Endangered Species Program is responsible for the conservation and protection of hundreds of species that are not hunted, fished, trapped, or commercially harvested in the state, as well as the protection of the natural communities that make up their habitats. A review of the MassGIS data layers, appear to indicate the site is NOT within the protection areas.

USEPA NPDES

Construction activities that disturb more than one acre are regulated under the United States Environmental Protection Agency’s (EPA) National Pollution Discharge Elimination System (NPDES) Program. In Massachusetts, the USEPA issues NPDES permits to operators of regulated construction sites. Regulated projects are required to develop and implement stormwater pollution prevention plans in order to obtain permit coverage. Any proposed site modifications over one acre will require a NPDES permit.

MEPA

Nitsch Engineering has reviewed Massachusetts Environmental Policy Act (MEPA) thresholds related to Land, Water, Wastewater, Transportation, and Areas of Critical Environmental Concern (ACEC). The project is not expected to exceed the thresholds related to these categories.

National Register of Historic Places (NRHP)

According to the National Register of Historic Places (NRHP), the Wachusett Dam Historic District forms the mouth of the Wachusett Reservoir. This district consists of a dam, waste weir and spillway, two bridges, a listening arrestor chamber, and gate chamber/powerhouse all of which is located in Clinton Massachusetts. The property ID is 89002269. The site is located outside the boundary of the Historic Place.

Massachusetts Department of Transportation (MassDOT)

Roadways located within a MassDOT State Highway Layout are subject to review by MassDOT. The State Highway Layout Map indicates Route 110 is NOT within the State Highway Layout.

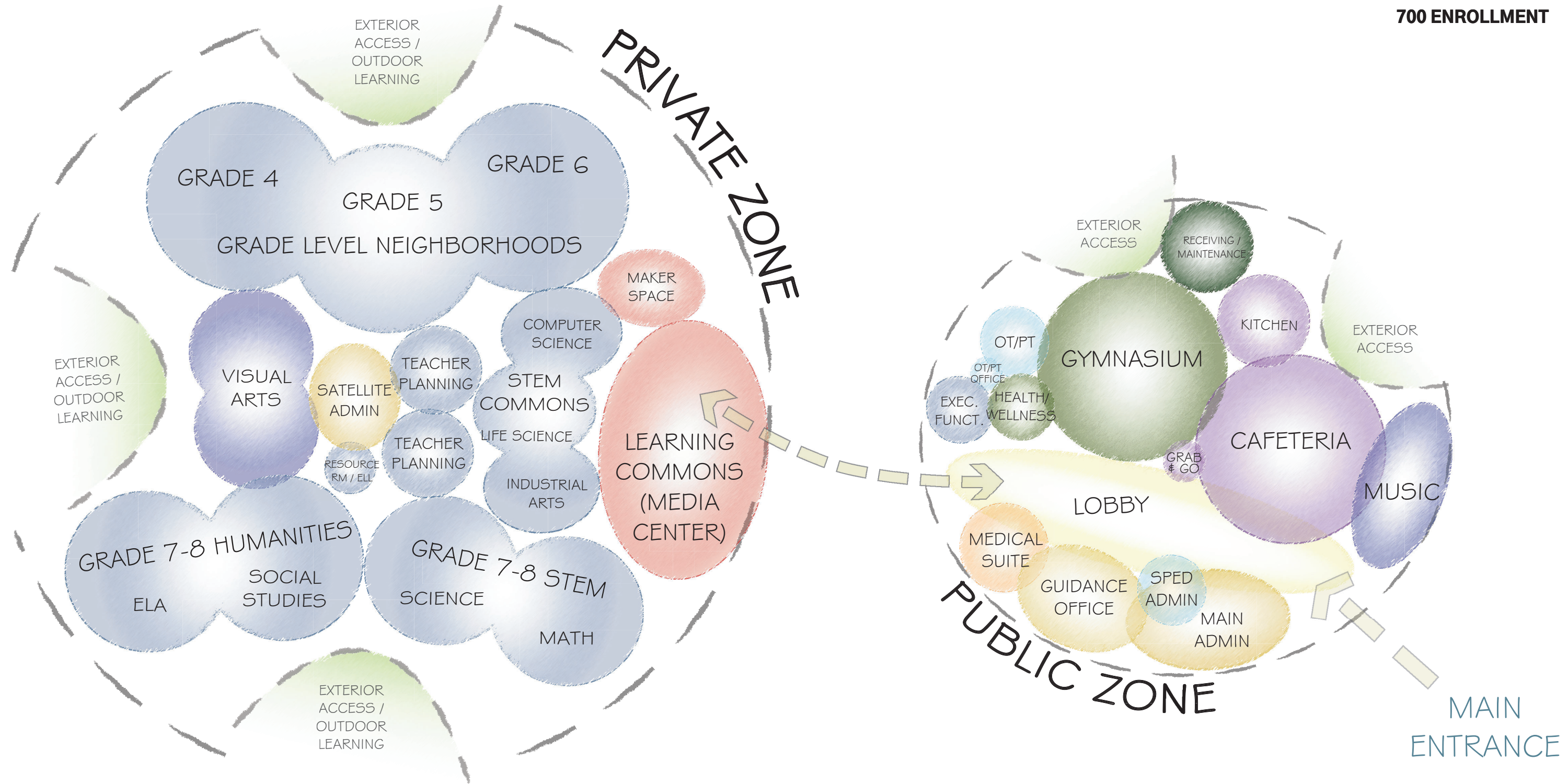
SITE PERMITTING SCHEDULE

Permit	Permitting Authority	Anticipated Filing Date	Status
Site Plan Review	Planning Board	Completion of Design Development Phase	Not started
Request for Determination of Applicability/Notice of Intent	Conservation Commission	Completion of Design Development Phase	If needed
Watershed Protection Act Request for Watershed Determination of Applicability	DCR	March 2023	Complete
NPDES Notice of Intent	EPA	14 calendar days prior to construction	Not started

3.3.3 FINAL EVALUATION OF ALTERNATIVES

D. Supporting Documents

3. Adjacency Diagrams
(all options)

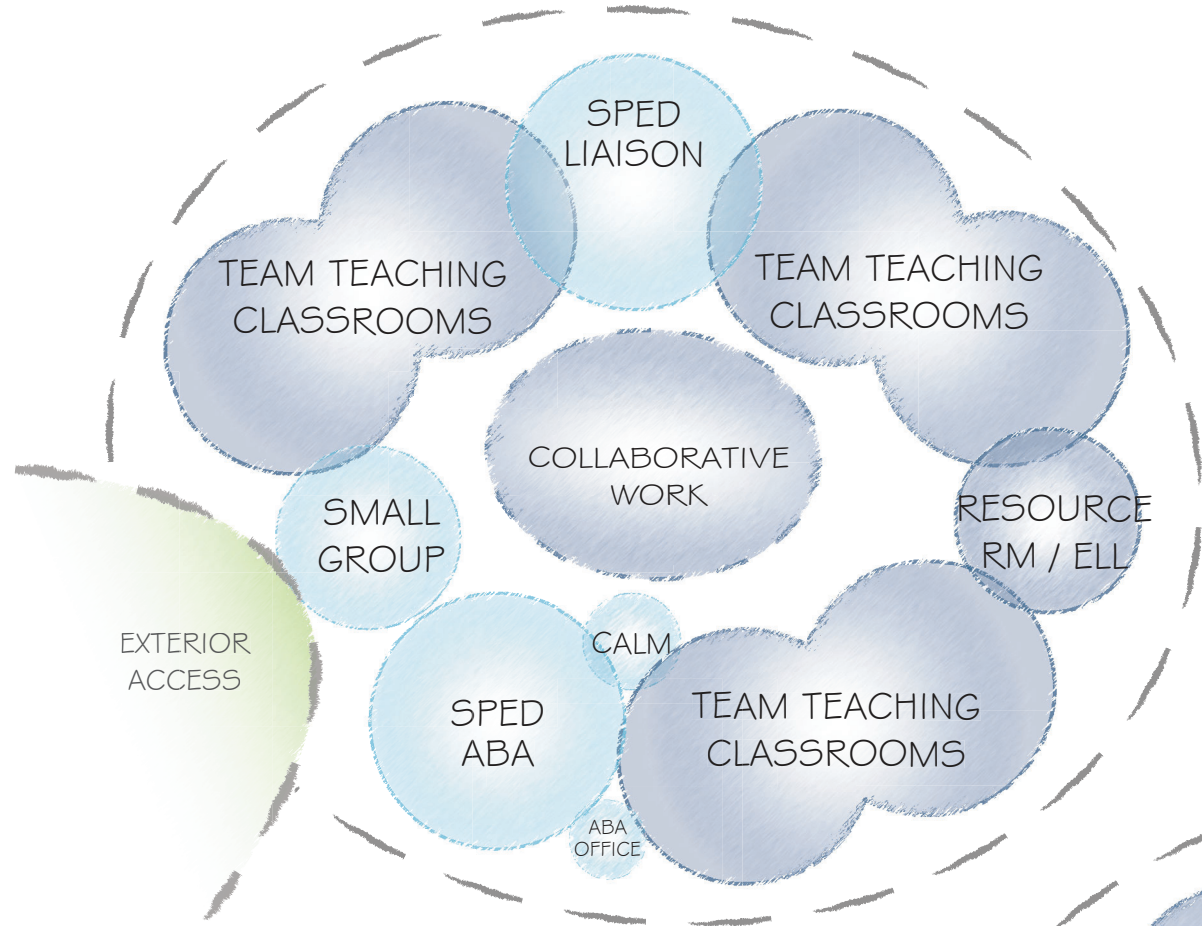


LEGEND

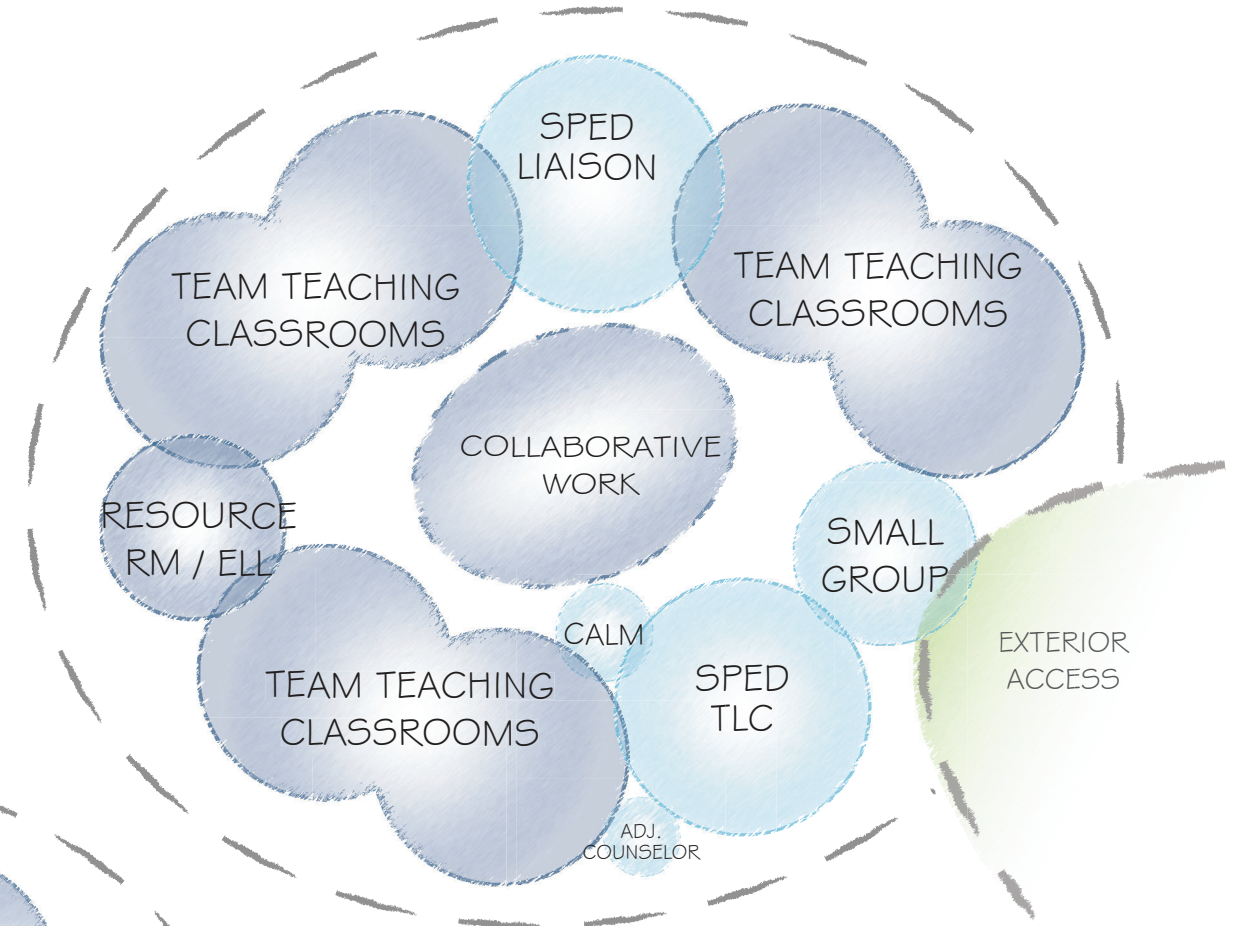
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|-------------------|--------------|-----------------------|------------------|-------------------|
| CORE ACADEMIC | MEDIA CENTER | DINING & FOOD SERVICE | ADMIN & GUIDANCE | BUILDING SERVICES |
| SPECIAL EDUCATION | ART & MUSIC | HEALTH & PE | MEDICAL | OTHER |

Clinton Middle School
100 W Boylston St, Clinton, MA 01510

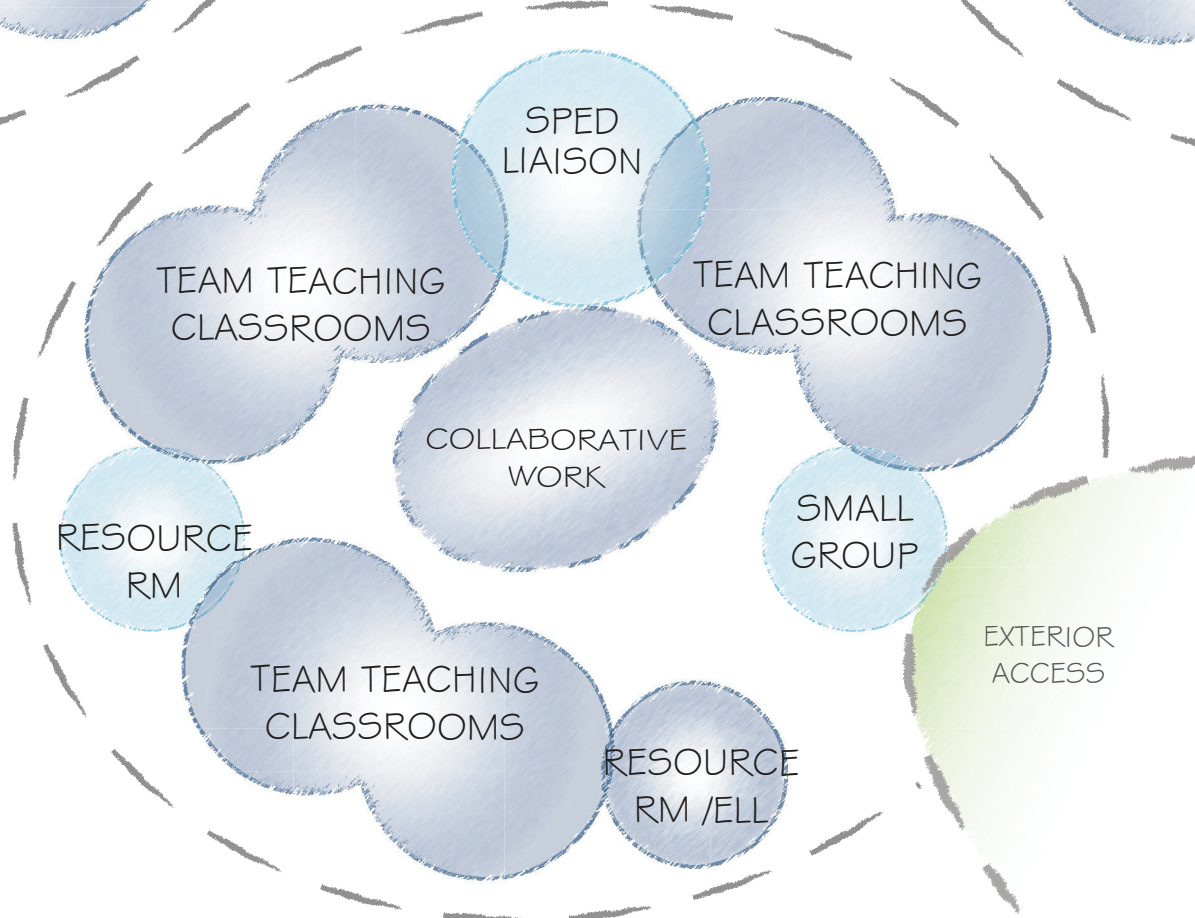
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GRADE 5

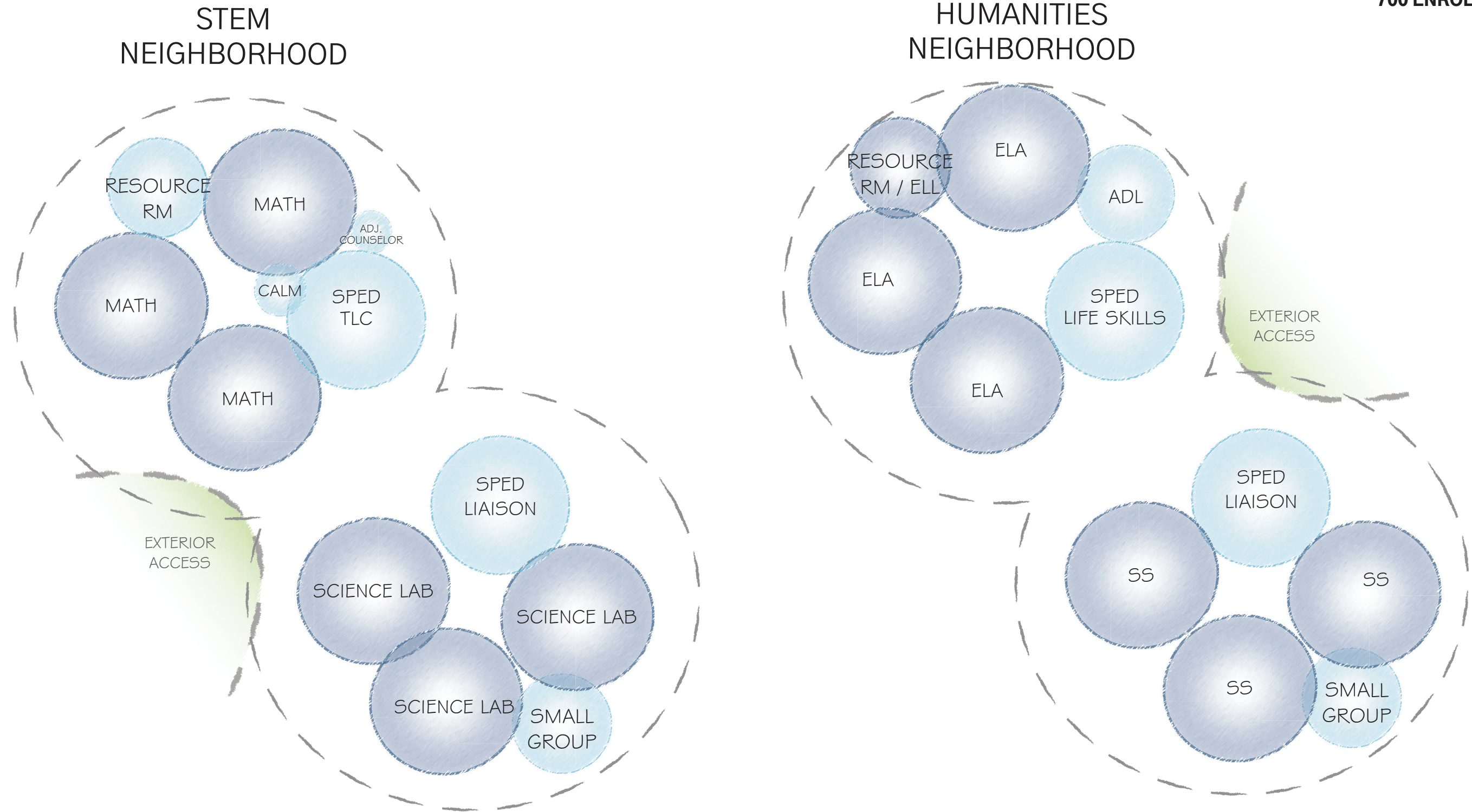


GRADE 6



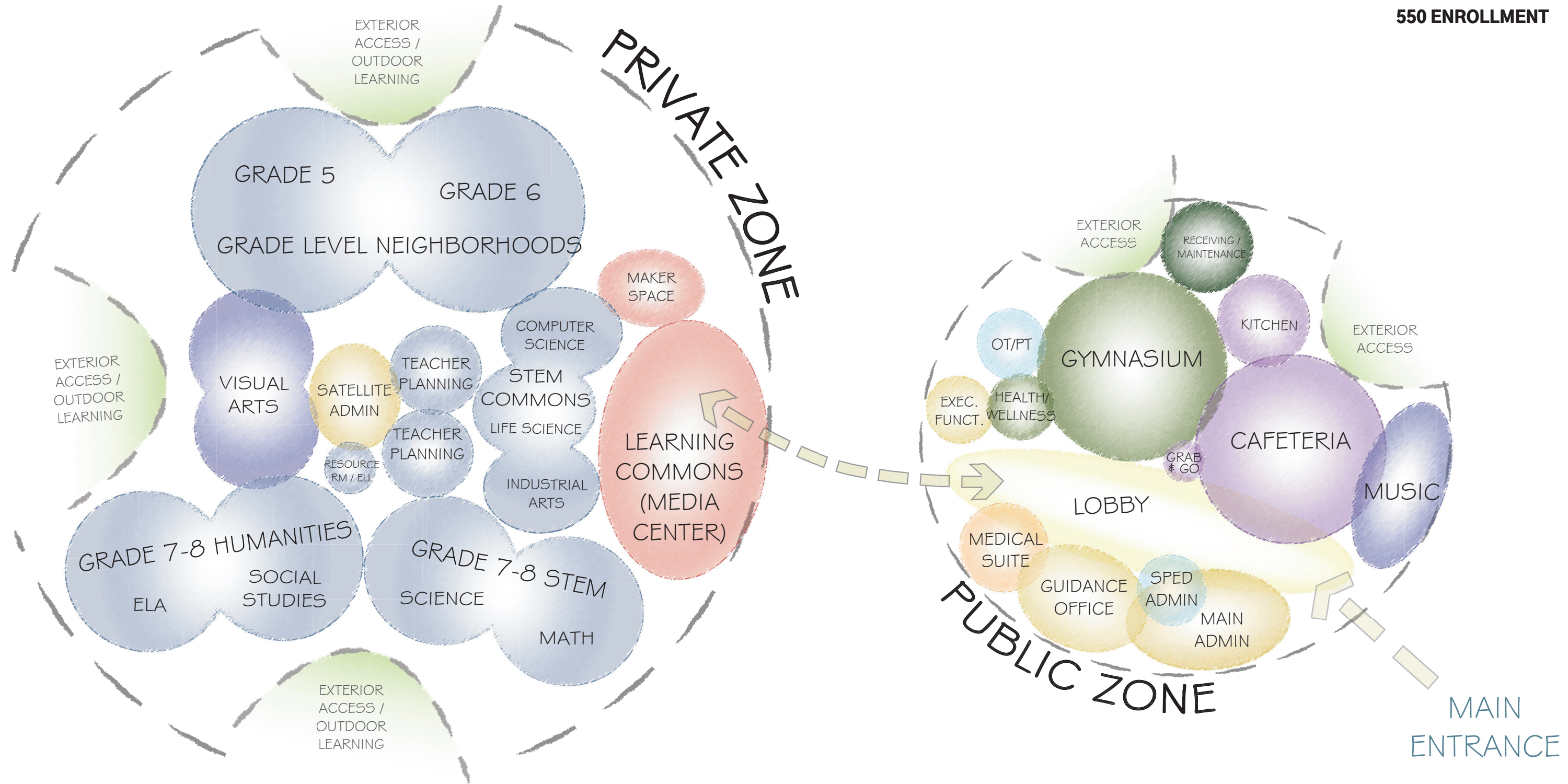
LEGEND

- | | | | |
|--|-----------------------|--|------------------|
| | CORE ACADEMIC | | MEDIA CENTER |
| | SPECIAL EDUCATION | | ART & MUSIC |
| | DINING & FOOD SERVICE | | ADMIN & GUIDANCE |
| | HEALTH & PE | | MEDICAL |
| | BUILDING SERVICES | | OTHER |



LEGEND

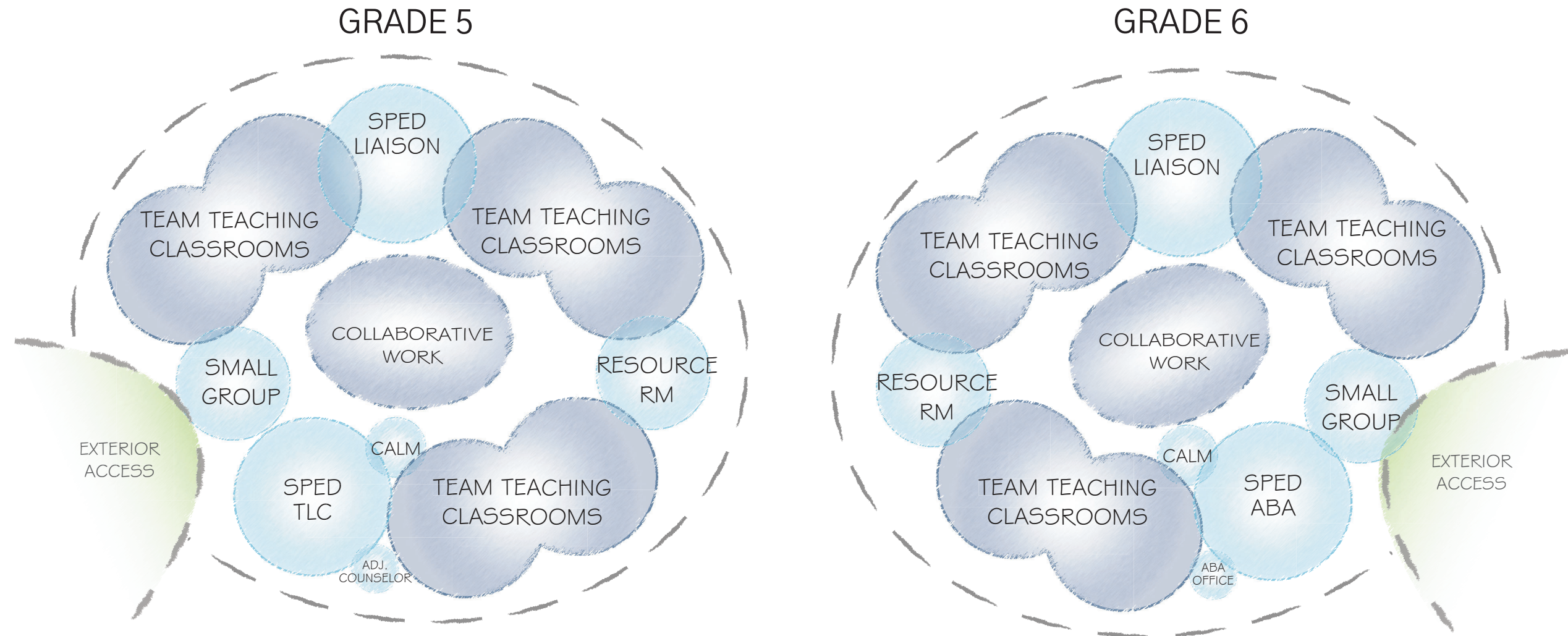
- CORE ACADEMIC
- SPECIAL EDUCATION
- MEDIA CENTER
- ART & MUSIC
- DINING & FOOD SERVICE
- HEALTH & PE
- ADMIN & GUIDANCE
- MEDICAL
- BUILDING SERVICES
- OTHER



LEGEND

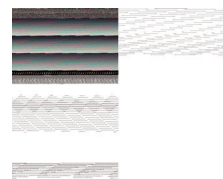
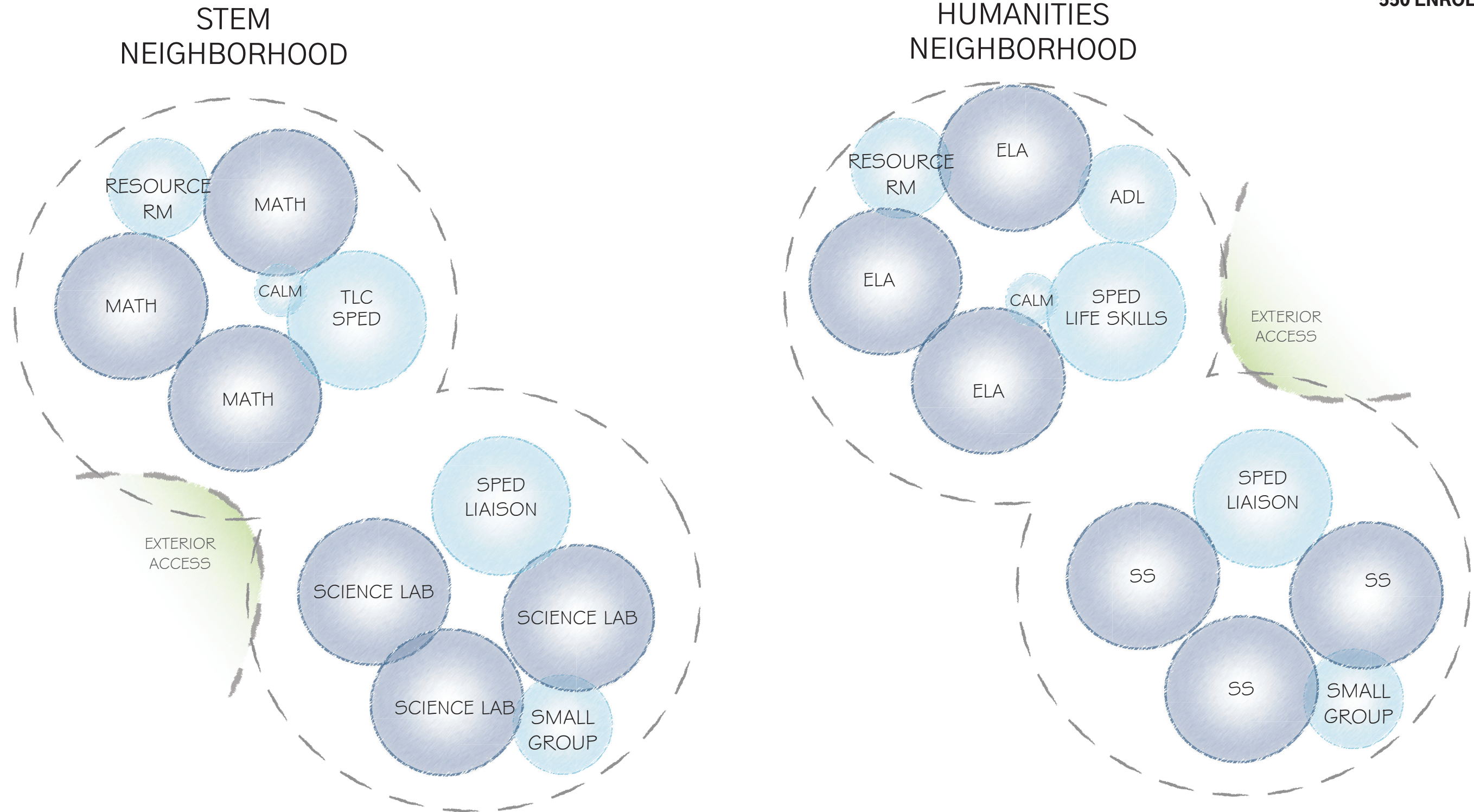
- CORE ACADEMIC
- MEDIA CENTER
- DINING & FOOD SERVICE
- ADMIN & GUIDANCE
- BUILDING SERVICES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PE
- MEDICAL
- OTHER

Clinton Middle School
100 W Boylston St, Clinton, MA 01510



LEGEND

	CORE ACADEMIC		MEDIA CENTER
	SPECIAL EDUCATION		ART & MUSIC
	DINING & FOOD SERVICE		ADMIN & GUIDANCE
	HEALTH & PE		MEDICAL
	BUILDING SERVICES		OTHER



Clinton Middle School
 100 W Boylston St, Clinton, MA 01510

LEGEND

- | | | | | |
|-------------------|--------------|-----------------------|------------------|-------------------|
| CORE ACADEMIC | MEDIA CENTER | DINING & FOOD SERVICE | ADMIN & GUIDANCE | BUILDING SERVICES |
| SPECIAL EDUCATION | ART & MUSIC | HEALTH & PE | MEDICAL | OTHER |

3.3.3 FINAL EVALUATION OF ALTERNATIVES

D. Supporting Documents

4. AHJ Review Meeting
Narrative

On Tuesday, May 23rd, 2023, LPA|A met with the local authorities having jurisdiction (AHJ) for the Town of Clinton. The authorities included the following:

- James Salmon– Town Building Inspector
- Brian Coyne– Chief of Police
- Michael Lutes– Fire Chief
- Michael Ward– Town Administrator
- Steven Meyer– Superintendent of Schools

The purpose of the meeting was to introduce the local authorities to the project in a one-on-one setting and give them the opportunity to provide their initial feedback. Since this meeting occurred prior to the town selecting the preferred option, the understanding amongst attendees is that any comments would be more general in nature that would apply to base repair, AR-1, AR-2, and NC-1 options. Once the preferred option is selected and approved, there will be at least one more subsequent meeting to review the preferred option during the Schematic Design phase and allow the AHJs to get into more detail on what should be incorporated into the design.

During the meeting, LPA|A reviewed each option, showing preliminary site and floor plans from the PSR, to the attendees. Some of the comments received by the AHJs include the following:

- Both Police and Fire Chiefs do not feel it necessary to allow site access from South Main Street once construction concludes.
- Under the base repair option, a new roof, new boilers, and a new fire suppression system are among repair and upgrade scope items that should be considered immediately.
- At minimum, a BDA system would be needed for radio communications throughout the building. Adequate cellular phone coverage should be part of scope as well.
- The Building Inspector raised the issue of the new energy code taking effect July 1, 2023. All new work under any option selected would need to be designed back on the new energy code.
- All interior walls under the add/reno options will receive, at minimum, new coating of paint unless budgeting is a concern at which point, LPA|A will carefully consider which walls can remain without a new finish under the scope of work.

- The Building Inspector noted that consideration should be given to material lay-down areas on the site.
- A discussion ensued on the size of the Gymnasium. The existing gymnasium is larger than allowed by MSBA and is an advantage to any add/reno options. The gymnasium will be designed for just over 7,000sf in the new construction option. This would allow partial use of bleachers during a game and full use of bleachers in an assembly venue.
- A discussion ensued about use of bulletproof glass. While no final decision was made, LPA|A noted the cost associated with bulletproof glass and that there are other methods that can be incorporated into the design such as laminated safety glass and design of metal frames. While these options are NOT direct substitutes for bulletproof glass, they are measures that can be utilized to help slow down an intruder from entering a building quickly. Further discussion will take place in a subsequent phase on whether the town would like to install bulletproof glass.
- The Chief of Police made it clear that he does not want to sacrifice safety of the occupants in the design of the school, for the sake of saving money. LPA|A advised that there will be security systems (intrusion detection, cameras, etc.) that will be part of the base scope of work.
- The Chief of Police advised that the town uses the ALICE response protocol for active shooter/threat response.
- Discussion ensued over whether the building would be designated as an emergency shelter or warming center. LPA|A noted the added cost associated with meeting these categories, in particular, the emergency shelter. There would be added cost due to emergency power requirements, required showers, and required seismic upgrades to name a few.

3.3.3 FINAL EVALUATION OF ALTERNATIVES

- E. Budget Comparison
 - 1. Narrative
 - 2. Reconciled Cost Estimates
 - a. LPAA Estimate
 - b. OPM Estimate
 - 3. Preliminary Design Pricing Table

The Budget Comparison process during the Final Evaluation of Alternatives was informed and impacted by several factors as follows:

- The PSR budget estimates were calculated assuming the Ch. 149a Construction Manager at Risk delivery method would be used, aligning with the PDP estimates.
- The project duration, in terms of months, varies depending on the option; phased/occupied Base Repair and Renovation/Addition are longer in duration due to limitations associated with working in an occupied building and the potential use of swing space.
- The number of developable athletic fields, vehicular parking, and circulation with each option varies; therefore, the site costs are not comparable.
- **The reconciled estimates produce by the Architect's & OPM's cost estimators are for construction only and exclude other project costs** (i.e. Designer and OPM fees, escalation of non-construction items, legal fees, Owner's project contingency, furnishings/fixtures/equipment, technology/computer equipment, surveys, construction testing, printing, etc.)
- **Total Project Budget (TPB) costs were established by the OPM to include the aforementioned excluded project costs.** These TPB's served as the basis of the "Estimated Local Share" range shared with the Town and District, during public meetings, for their consideration.

Clinton Middle School
Clinton, MA

June 20, 2023

PSR ESTIMATE
GRAND SUMMARY

AR - 1 (550)	\$106,932,884
AR - 1 (700)	\$114,610,450
AR - 1.5 (550)	\$109,948,813
AR - 1.5 (700)	\$110,440,704
AR - 2 (550)	\$115,997,760
AR - 2 (700)	\$124,625,541
NC - 1 (550)	\$106,734,479
NC - 1 (700)	\$114,550,816
BASE REPAIR	\$87,649,799

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

ADDITION RENOVATION AR - 1 550

	GSF		COST PER S.F.	TOTAL
ADDITION	14,000	GSF	\$521.37	\$7,299,130
RENOVATION	120,000	GSF	\$382.16	\$45,858,844
DEMOLITION	10,000		\$12.00	\$120,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$9,065,867
TEMPORARY CLASSROOM SWING SPACE				\$6,000,000
TOTAL DIRECT COST				----- \$70,095,091
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$8,411,411
CM CONTINGENCY		3%		\$2,355,195
ESCALATION (bid summer 2025)		12.25%		\$9,617,047
GENERAL CONDITIONS	42	MOS	\$165,000	\$6,930,000
GENERAL REQUIREMENTS/PHASING		5.0%		\$4,870,437
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,045,584
PROFIT		2.5%		\$2,608,119
TOTAL CONSTRUCTION COST				----- \$106,932,884
COST PER SF				\$798.01

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

ADDITION RENOVATION AR - 1 700

	GSF		COST PER S.F.	TOTAL
ADDITION	25,500	GSF	\$475.28	\$12,119,586
RENOVATION	120,000	GSF	\$381.51	\$45,781,202
DEMOLITION	10,000		\$12.00	\$120,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$9,741,206
TEMPORARY CLASSROOM SWING SPACE				\$6,000,000
TOTAL DIRECT COST				\$75,513,244
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$9,061,589
CM CONTINGENCY		3%		\$2,537,245
ESCALATION (bid summer 2025)		12.25%		\$10,360,417
GENERAL CONDITIONS	42	MOS	\$165,000	\$6,930,000
GENERAL REQUIREMENTS/PHASING		5.0%		\$5,220,125
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,192,452
PROFIT		2.5%		\$2,795,377
TOTAL CONSTRUCTION COST				\$114,610,450
COST PER SF				\$787.70

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

ADDITION RENOVATION AR - 1.5 550

	GSF		COST PER S.F.	TOTAL
ADDITION	44,500	GSF	\$521.37	\$23,200,806
RENOVATION	99,000	GSF	\$382.16	\$37,833,546
DEMOLITION	31,000		\$12.00	\$372,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$9,065,867
TEMPORARY CLASSROOM SWING SPACE				n/a
TOTAL DIRECT COST				\$72,223,470
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$8,666,816
CM CONTINGENCY		3%		\$2,426,709
ESCALATION (bid summer 2025)		12.25%		\$9,909,060
GENERAL CONDITIONS	42	MOS	\$165,000	\$6,930,000
GENERAL REQUIREMENTS/PHASING		5.0%		\$5,007,803
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,103,277
PROFIT		2.5%		\$2,681,678
TOTAL CONSTRUCTION COST				\$109,948,813
COST PER SF				\$766.19

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

ADDITION RENOVATION AR - 1.5 700

	GSF		COST PER S.F.	TOTAL
ADDITION	38,000	GSF	\$475.28	\$18,060,560
RENOVATION	112,000	GSF	\$382.16	\$42,801,588
DEMOLITION	18,000		\$12.00	\$216,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$9,741,206
TEMPORARY CLASSROOM SWING SPACE				n/a
TOTAL DIRECT COST				----- \$72,570,604
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$8,708,472
CM CONTINGENCY		3%		\$2,438,372
ESCALATION (bid summer 2025)		12.25%		\$9,956,687
GENERAL CONDITIONS	42	MOS	\$165,000	\$6,930,000
GENERAL REQUIREMENTS/PHASING		5.0%		\$5,030,207
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,112,687
PROFIT		2.5%		\$2,693,676
TOTAL CONSTRUCTION COST				----- \$110,440,704
COST PER SF				\$736.27

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

ADDITION RENOVATION AR - 2 550

	GSF		COST PER S.F.	TOTAL
ADDITION	54,000	GSF	\$462.57	\$24,978,746
RENOVATION	87,000	GSF	\$435.64	\$37,900,534
DEMOLITION	43,000		\$12.00	\$516,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$11,345,757
TEMPORARY CLASSROOM SWING SPACE				n/a
TOTAL DIRECT COST				\$76,492,286
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$9,179,074
CM CONTINGENCY		3%		\$2,570,141
ESCALATION (bid summer 2025)		12.25%		\$10,494,742
GENERAL CONDITIONS	42	MOS	\$165,000	\$6,930,000
GENERAL REQUIREMENTS/PHASING		5.0%		\$5,283,312
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,218,991
PROFIT		2.5%		\$2,829,214
TOTAL CONSTRUCTION COST				\$115,997,760
COST PER SF				\$822.68

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

ADDITION RENOVATION AR - 2 700

	GSF		COST PER S.F.	TOTAL
ADDITION	69,000	GSF	\$450.85	\$31,108,329
RENOVATION	87,000	GSF	\$435.20	\$37,862,682
DEMOLITION	43,000		\$12.00	\$516,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$11,342,757
TEMPORARY CLASSROOM SWING SPACE				n/a
TOTAL DIRECT COST				\$82,581,017
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$9,909,722
CM CONTINGENCY		3%		\$2,774,722
ESCALATION (bid summer 2025)		12.25%		\$11,330,116
GENERAL CONDITIONS	42	MOS	\$165,000	\$6,930,000
GENERAL REQUIREMENTS/PHASING		5.0%		\$5,676,279
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,384,037
PROFIT		2.5%		\$3,039,647
TOTAL CONSTRUCTION COST				\$124,625,541
COST PER SF				\$798.88

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

NEW CONSTRUCTION - NC 1 (550)

	GSF		COST PER S.F.	TOTAL
NEW CONSTRUCTION	119,500	GSF	\$499.11	\$59,643,471
DEMOLITION	130,000		\$9.00	\$1,170,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$10,386,885
TEMPORARY CLASSROOM SWING SPACE				n/a
TOTAL DIRECT COST				----- \$72,951,606
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$8,754,193
CM CONTINGENCY		3%		\$2,451,174
ESCALATION (bid summer 2025)		12.25%		\$10,008,960
GENERAL CONDITIONS	30	MOS	\$165,000	\$4,950,000
GENERAL REQUIREMENTS		3.0%		\$2,973,478
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,041,788
PROFIT		2.5%		\$2,603,280
TOTAL CONSTRUCTION COST				----- \$106,734,479
COST PER SF				\$893.18

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

NEW CONSTRUCTION - NC 1 (700)

	GSF		COST PER S.F.	TOTAL
NEW CONSTRUCTION	136,000	GSF	\$480.05	\$65,286,665
DEMOLITION	130,000		\$9.00	\$1,170,000
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITWORK				\$10,366,885
TEMPORARY CLASSROOM SWING SPACE				n/a
TOTAL DIRECT COST				----- \$78,574,800
CM CHPTR 149a				
DESIGN CONTINGENCY		12%		\$9,428,976
CM CONTINGENCY		3%		\$2,640,113
ESCALATION (bid summer 2025)		12.25%		\$10,780,463
GENERAL CONDITIONS	30	MOS	\$165,000	\$4,950,000
GENERAL REQUIREMENTS		3.0%		\$3,191,231
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$2,191,312
PROFIT		2.5%		\$2,793,922
TOTAL CONSTRUCTION COST				----- \$114,550,816
COST PER SF				\$842.29

PSR
Clinton Middle School
Clinton, MA

20-Jun-23

Designer: Lamoureux Pagano Associates Architects

BASE REPAIR

	GSF		COST PER S.F.	TOTAL
RENOVATION	130,000	GSF	\$328.34	\$42,684,750
HAZARDOUS WASTE REMOVAL				\$1,751,250
SITework		ALLOW		\$5,000,000
TEMPORARY CLASSROOM SWING SPACE				\$6,000,000
TOTAL DIRECT COST				\$55,436,000
CM CHPTR 149a				
DESIGN CONTINGENCY		15%		\$8,315,400
CM CONTINGENCY		3%		\$1,912,542
ESCALATION (bid summer 2025)		12.25%		\$7,809,547
GENERAL CONDITIONS	48	MOS	\$165,000	\$7,920,000
GENERAL REQUIREMENTS		3.0%		\$2,441,805
BUILDING PERMIT	waived	0%		\$0
P&P BOND & GL INSURANCE		2%		\$1,676,706
PROFIT		2.5%		\$2,137,800
TOTAL CONSTRUCTION COST				\$87,649,799
COST PER SF				\$674.23

PROJECT: Clinton Middle School
 LOCATION: Clinton, MA
 CLIENT: Lamoureux Pagano Associates Architects
 DATE: 20-Jun-23

No.: 22025

SUMMARY

A. SUBSTRUCTURE

A10 - FOUNDATIONS

A1010 STANDARD FOUNDATIONS
 A1020 SPECIAL FOUNDATIONS
 A1030 SLAB ON GRADE

A20 - BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION
 A2020 BASEMENT WALLS

B. SHELL

B10 - SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION
 B1020 ROOF CONSTRUCTION

B20 - EXTERIOR ENCLOSURE

B2010 EXTERIOR WALLS
 B2020 EXTERIOR WINDOWS
 B2030 EXTERIOR DOORS

B30 - ROOFING

B3010 ROOF COVERINGS
 B3020 ROOF OPENINGS

C. INTERIORS

C10 - INTERIOR CONSTRUCTION

C1010 PARTITIONS
 C1020 INTERIOR DOORS
 C1030 FITTINGS

C20 - STAIRS

C2010 STAIR CONSTRUCTION
 C2020 STAIR FINISHES

C30 - INTERIOR FINISHES

C3010 WALL FINISHES
 C3020 FLOOR FINISHES
 C3030 CEILING FINISHES

	NEW 550 STUDENT ESTIMATE TOTAL	NEW 700 STUDENTS ESTIMATE TOTAL
	\$2,680,637	\$2,689,037
	\$0	\$0
	\$1,100,912	\$1,100,912
	\$0	\$0
	\$0	\$0
	\$2,106,850	\$2,960,350
	\$4,320,470	\$4,363,970
	\$5,807,988	\$5,802,253
	\$2,252,790	\$2,269,383
	\$93,850	\$93,850
	\$2,984,512	\$2,964,438
	\$4,250	\$4,250
	\$5,258,769	\$5,817,369
	\$876,450	\$973,950
	\$1,774,070	\$2,020,915
	\$164,900	\$213,200
	\$24,228	\$32,304
	\$1,260,125	\$1,481,125
	\$1,452,000	\$1,632,000
	\$1,331,000	\$1,496,000

Clinton Middle School New Construction - PSR

D. SERVICES

D10 - CONVEYING

D1010 ELEVATORS & LIFTS

D20 - PLUMBING

D2010 PLUMBING

D30 - HVAC

D3010 HVAC

D40 - FIRE PROTECTION

D4010 SPRINKLERS

D50 - ELECTRICAL

D5010 ELECTRICAL SERVICE & DISTRIBUTION

D5020 LIGHTING & BRANCH WIRING

D5030 COMMUNICATION & SECURITY

D5090 OTHER ELECTRICAL SYSTEMS

E. EQUIPMENT & FURNISHINGS

E10 - EQUIPMENT

E1010 COMMERCIAL EQUIPMENT

E1090 OTHER EQUIPMENT

E20 - FURNISHINGS

E 2010 FIXED FURNISHINGS

E2020 MOVABLE FURNISHINGS

F. SPECIAL CONSTRUCTION & DEMOLITION

F10 - SPECIAL CONSTRUCTION

F1010 SPECIAL STRUCTURES

F1020 INTEGRATED CONSTRUCTION

F1030 SPECIAL CONSTRUCTION SYSTEMS

F1040 SPECIAL FACILITIES

F1050 SPECIAL CONTROLS & INSTRUMENTATION

F20 - SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

F2020 HAZARDOUS COMPONENTS ABATEMENT

	NEW 550 STUDENT ESTIMATE TOTAL	NEW 700 STUDENTS ESTIMATE TOTAL
	\$210,000	\$210,000
	\$3,478,750	\$3,910,000
	\$11,132,000	\$12,512,000
	\$968,000	\$1,088,000
	\$1,466,000	\$1,816,000
	\$1,651,650	\$1,856,400
	\$1,776,350	\$1,963,700
	\$2,712,556	\$3,046,096
	\$800,000	\$800,000
	\$257,150	\$275,900
	\$1,697,214	\$1,893,263
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0
	\$0	\$0

Clinton Middle School New Construction - PSR

G. BUILDING SITEWORK

G10 - SITE PREPARATION

G1010 SITE CLEARING

G1020 SITE DEMOLITION & RELOCATIONS

G1030 SITE EARTHWORK

G1040 HAZARDOUS WASTE REMEDIATION

G20 - SITE IMPROVEMENTS

G2010 ROADWAYS

G2020 PARKING LOTS

G2030 PEDESTRIAN PAVING

G2040 SITE DEVELOPMENT

G2050 LANDSCAPING

G30 - SITE MECHANICAL UTILITIES

G3010 WATER SUPPLY

G3020 SANITARY SEWER

G3030 STORM SEWER

G3040 HEATING DISTRIBUTION

G3050 COOLING DISTRIBUTION

G3060 FUEL DISTRIBUTION

G3090 OTHER SITE MECHANICAL UTILITIES

G40 - SITE ELECTRICAL UTILITIES

G4010 ELECTRICAL DISTRIBUTION

G4020 SITE LIGHTING

TOTAL DIRECT COST

	NEW 550 STUDENT ESTIMATE TOTAL	NEW 700 STUDENTS ESTIMATE TOTAL
	\$220,980	\$220,980
	\$719,353	\$719,353
	\$1,240,629	\$1,240,629
	\$0	\$0
	\$1,691,807	\$1,691,807
	\$0	\$0
	\$668,225	\$668,225
	\$1,595,352	\$1,575,352
	\$1,149,827	\$1,149,827
	\$204,660	\$204,660
	\$186,750	\$186,750
	\$1,756,602	\$1,756,602
	\$0	\$0
	\$0	\$0
	\$49,250	\$49,250
	\$0	\$0
	\$424,900	\$424,900
	\$478,550	\$478,550
	-----	-----
	\$70,030,356	\$75,653,550

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
<u>A. SUBSTRUCTURE</u>						
A10 - FOUNDATIONS						
A1010 STANDARD FOUNDATIONS						
<u>033000 CAST IN PLACE CONCRETE</u>						
Foundations :						
Wall Footing 1' x 3':	\$525.00	CY	145	\$76,125	145	\$76,125
Frost wall - 4' x 16"	\$1,100.00	CY	361	\$397,100	361	\$397,100
Interior Foundations	\$1,200.00	CY	25	\$30,000	32	\$38,400
Perm Column Footing 22" x 7'-0"sq	\$625.00	CY	246	\$153,750	246	\$153,750
Int Column Footing 24" x 9'-6"sq.	\$625.00	CY	442	\$276,250	442	\$276,250
Elev Mat - 18"	\$650.00	CY	9	\$5,850	9	\$5,850
Elev pit wall	\$1,100.00	CY	7	\$7,700	7	\$7,700
Grade Beam (500 lf avg.)	\$700.00	CY	92	\$64,400	92	\$64,400
Pilasters	\$1,200.00	CY	55	\$66,000	55	\$66,000
Equipment pads	\$7,500.00	LS	1	\$7,500	1	\$7,500
Anchor bolt and grout	\$245.00	EA	135	\$33,075	135	\$33,075
<u>072100 INSULATION</u>						
2" Rigid ext. found. insul w/prot.bd	\$4.05	SF	7,312	\$29,614	7,312	\$29,614
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>						
Foundation dampproofing	\$2.30	SF	7,312	\$16,818	7,312	\$16,818
Elev Pit Watrproofing	\$6,500.00	EA	1	\$6,500	1	\$6,500
<u>310000 EARTHWORK</u>						
Ground Improvement Allowance	8.00	FTP	84,000	\$672,000	84,000	\$672,000
Perimeter Found Drain	\$44.00	LF	1,850	\$81,400	1,850	\$81,400
Under slab Drain	\$1.25	SF	84,000	\$105,000	84,000	\$105,000

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Foundation Earthwork:						
Foundation excavation / backfill	\$5.00	SF	84,000	\$420,000	84,000	\$420,000
Dewatering	\$20,000.00	LS	1	\$20,000	1	\$20,000
Building Earthwork						
Structural Fill - 1'	\$68.00	CY	3,111	\$211,556	3,111	\$211,556

				\$2,680,637	\$2,689,037	
A1030 SLAB ON GRADE						
<u>310000 EARTHWORK</u>						
12" Gravel base	\$48.00	CY	3,111	\$149,328	3,111	\$149,328
<u>033000 CAST IN PLACE CONCRETE</u>						
5" Slab on Grade:						
3500 psi, NW, (incl. placement)	\$305.00	CY	1,296	\$395,280	1,296	\$395,280
Welded wire fabric	\$2.60	SF	84,000	\$218,400	84,000	\$218,400
Control Joint	\$3.50	LF	5,600	\$19,600	5,600	\$19,600
Trowel Finish	\$2.50	SF	84,000	\$210,000	84,000	\$210,000
<u>072100 INSULATION</u>						
4" Rigid Slab Insul. - 2' perm.	\$4.35	SF	3,656	\$15,904	3,656	\$15,904
<u>072616 BELOW GRADE VAPOR RETARDER</u>						
Stegro vapor barrier	\$1.10	SF	84,000	\$92,400	84,000	\$92,400

				\$1,100,912	\$1,100,912	
TOTAL A10 FOUNDATIONS				\$3,781,548	\$3,789,948	

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
<u>B. SHELL</u>						
B10 - SUPERSTRUCTURE						
B1010 FLOOR CONSTRUCTION						
<u>051200 STRUCTURAL STEEL</u>						
New Construction:						
Floor frame (14 lbs/sf)	\$5,450.00	TONS	255.500	\$1,392,475	360.500	\$1,964,725
Shear stud	\$5.50	EA	3,650	\$20,075	5,150	\$28,325
<u>033000 CAST IN PLACE CONCRETE</u>						
5 1/2" NW Deck fill	\$9.40	SF	36,500	\$343,100	51,500	\$484,100
<u>053100 STEEL DECKING</u>						
2" x 18 Ga. comp deck	\$5.90	SF	36,500	\$215,350	51,500	\$303,850
<u>072100 INSULATION</u>						
Spray on fireproofing - structure	\$2.90	SF	36,500	\$105,850	51,500	\$149,350
Intumescent - allow	\$30,000.00	LS	1	\$30,000	1	\$30,000
				-----		-----
				\$2,106,850		\$2,960,350
B1020 ROOF CONSTRUCTION						
<u>033000 CAST IN PLACE CONCRETE</u>						
6" NW Deck fill - Mech Equip.	\$9.00	SF	6,500	\$58,500	6,500	\$58,500
<u>051200 STRUCTURAL STEEL</u>						
New Construction:						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Roof frame (14 lbs/sf)	\$5,450.00	TONS	616.00	\$3,357,200	616.00	\$3,357,200
Roof screen frame (300 lf @ 110 lbs/lf)	\$5,600.00	TONS	16.50	\$92,400	16.50	\$92,400
Galv. RTU dunnage	\$5,600.00	TONS	4	\$22,400	4	\$22,400
Frame Entry Canopies (1200 sf @ 20 ll	\$5,200.00	TONS	12	\$62,400	12	\$62,400
053100 STEEL DECKING						
1 1/2" x 18 Ga roof deck - typ.	\$5.60	SF	80,700	\$451,920	80,700	\$451,920
3" x 18 Ga acoust. deck - gym/aux. gym	\$12.00	SF	7,300	\$87,600	7,300	\$87,600
1 1/2" x 20 Ga canopy roof deck	\$6.00	SF	1,200	\$7,200	1,200	\$7,200
072100 INSULATION						
Spray on fireproofing - structure	\$2.90	SF	36,500	\$105,850	51,500	\$149,350
Intumescent - allow	\$75,000.00	LS	1	\$75,000	1	\$75,000
				-----		-----
				\$4,320,470		\$4,363,970
TOTAL B10 SUPERSTRUCTURE				\$6,427,320		\$7,324,320
B20 - EXTERIOR ENCLOSURE						
B2010 EXTERIOR WALLS						
040001 MASONRY*						
Masonry Veneer:						
Brick Veneer - 40%	\$43.00	SF	21,793	\$937,099	21,975	\$944,925
Canopy col. -complete	\$4,800.00	EA	12	\$57,600	12	\$57,600
Stainless steel masonry flashing	\$29.00	LF	2,800	\$81,200	2,800	\$81,200
Architectural Precast:	\$68.00	LF	726	\$49,395	726	\$49,395
Precast Window Sill						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
CMU Exterior Wall: 8" CMU Elev.	\$38.00	SF	315	\$11,970	315	\$11,970
<u>054000 COLD FORMED METAL FRAMING</u>						
8" x 18 Ga. stud @ typical wall	\$15.00	SF	43,271	\$649,065	43,635	\$654,525
1/2" Dens glass sheathing-ext. wall	\$4.50	SF	43,271	\$194,720	43,635	\$196,358
3" Soffit/eave framing	\$25.00	LF	2,524	\$63,100	2,228	\$55,700
6" Overhang soffit frame	\$9.50	SF	2,290	\$21,755	2,290	\$21,755
3" Canopy ceiling framing	\$7.00	SF	1,200	\$8,400	1,200	\$8,400
1/2" Dens glass sheathing -soffit	\$4.50	SF	2,290	\$10,305	2,290	\$10,305
1/2" Dens glass sheathing -canopy	\$4.50	SF	1,200	\$5,400	1,200	\$5,400
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>						
Misc. Ext Metals	\$0.50	SF	21,793	\$10,897	21,975	\$10,988
<u>071326 AIR & VAPOR BARRIERS</u>						
Air & vapor barrier - wall	\$9.50	SF	43,586	\$414,067	43,950	\$417,525
Air & vapor barrier - soffit	\$9.50	SF	2,290	\$21,755	2,290	\$21,755
<u>072100 INSULATION</u>						
Exterior Wall: Spray foam at perm openings	\$6.00	LF	9,080	\$54,480	9,156	\$54,936
3" Mineral wool Insul.	\$4.12	SF	43,586	\$179,574	43,950	\$181,074
2" Spray foam	\$4.65	SF	43,271	\$201,210	43,635	\$202,903
Bldg Soffit: 3" Rigid Insul.	\$3.90	SF	2,290	\$8,931	2,290	\$8,931
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>						
Exterior Sealants	\$0.42	SF	43,586	\$18,306	43,950	\$18,459
<u>074213 PERFORMED CLADDING</u>						
Wall Panel: Architectural Metal panel - 40%	\$95.00	SF	21,793	\$2,070,335	21,793	\$2,070,335

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Alum. 16 ga Panel :						
Canopy ceiling	\$45.00	SF	1,200	\$54,000	1,200	\$54,000
Overhang soffit	\$45.00	SF	2,290	\$103,050	2,290	\$103,050
Roof Eave Cladding	\$75.00	LF	2,524	\$189,300	2,228	\$167,100
Roof Screen:						
10' H Metal Panel Equipment Screen	\$65.00	SF	3,000	\$195,000	3,000	\$195,000
<u>092116 GYPSUM WALLBOARD</u>						
1 Lyr 5/8" gyp @ ext. wall	\$4.15	SF	43,271	\$179,575	43,635	\$181,085
<u>090007 PAINTING*</u>						
Exterior painting	\$0.22	SF	43,271	\$9,520	43,635	\$9,600
<u>101400 IDENTIFYING DEVICES (EXT. BLD MTD SIGNAGE)</u>						
24" Alum bldg mtd letter - allow	\$420.00	EA	19	\$7,980	19	\$7,980
				-----		-----
				\$5,807,988		\$5,802,253
B2020 EXTERIOR WINDOWS						
<u>061000 ROUGH CARPENTRY</u>						
P.T. - perim blocking	\$14.00	LF	9,080	\$127,120	9,156	\$128,184
<u>071326 AIR & VAPOR BARRIERS</u>						
Flex flashing - perim	\$10.00	LF	9,080	\$90,800	9,156	\$91,560
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>						
Window Caulking	\$12.75	LF	9,080	\$115,770	9,156	\$116,739

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
<u>080001 METAL WINDOWS*</u>						
DBL Glazing Exterior Alum Window - 20%	\$150.00	SF	10,896	\$1,634,400	10,988	\$1,648,200
Alum. Curtainwall - premium	\$45.00	SF	2,000	\$90,000	2,000	\$90,000
Security glazing - premium	\$35.00	SF	1,200	\$42,000	1,200	\$42,000
Sun Shading: Typical Classroom Window	\$150,000.00	LS	1	\$150,000	1	\$150,000
<u>109000 MISCELLANEOUS SPECIALTIES</u>						
Alum louvers - allow	\$135.00	SF	20	\$2,700	20	\$2,700
				-----		-----
				\$2,252,790		\$2,269,383
 B2030 EXTERIOR DOORS						
<u>080001 METAL WINDOWS*</u>						
7' Alum. Doors (Incl. Hardware):						
Main Entry - dbl	\$12,000.00	EA	2	\$24,000	2	\$24,000
Main Entry - sgl	\$6,000.00	EA	1	\$6,000	1	\$6,000
Media Center/Café Entries - dbl	\$12,000.00	EA	2	\$24,000	2	\$24,000
Stair Egress - dbl	\$12,000.00	EA	2	\$24,000	2	\$24,000
Auto opener - allow	\$9,000.00	PR	1	\$9,000	1	\$9,000
*Storefront at entries W /B 2020						
Security Glazing Premium	\$750.00	LVS	5	\$3,750	5	\$3,750
<u>081113 HOLLOW METALWORK</u>						
Insulated HM Doors and Frame: Custodial - dbl	\$2,700.00	EA	1	\$2,700	1	\$2,700
<u>090007 PAINTING*</u>						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Paint HM Door & frame - dbl	\$400.00	EA	1	\$400	1	\$400
				-----		-----
				\$93,850		\$93,850
TOTAL B20 - EXTERIOR ENCLOSURE				\$8,154,628		\$8,165,486
B30 - ROOFING						
B3010 ROOF COVERINGS						
<u>061000 ROUGH CARPENTRY</u>						
Roof Blocking - main bldg	\$1.45	SF	88,000	\$127,600	88,000	\$127,600
Roof Blocking - canopy	\$1.20	SF	1,200	\$1,440	1,200	\$1,440
<u>070002 ROOFING AND FLASHING*</u>						
PVC roof - canopy	\$26.00	SF	1,200	\$31,200	1,200	\$31,200
PVC roof w/ 8" rigid insul	\$30.00	SF	88,000	\$2,640,000	88,000	\$2,640,000
Roof walkway pad (2'x2')	\$6.15	SF	4,000	\$24,600	4,000	\$24,600
Alum. Trim :						
Perimeter wall Coping	\$36.00	LF	2,524	\$90,864	2,228	\$80,208
Base Flashing	\$34.00	LF	712	\$24,208	435	\$14,790
Misc. flashing	\$0.50	SF	89,200	\$44,600	89,200	\$44,600
				-----		-----
				\$2,984,512		\$2,964,438
B3020 ROOF OPENINGS						
<u>077200 ROOF ACCESSORIES</u>						
Roof hatch	\$4,250.00	EA	1	\$4,250	1	\$4,250

*Mechanical equip screen is included with B1020 & B2010

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
				\$4,250		\$4,250
TOTAL B30 ROOFING				\$2,988,762		\$2,968,688
<u>C. INTERIORS</u>						
C10 - INTERIOR CONSTRUCTION						
C1010 PARTITIONS						
<u>040001 MASONRY*</u>						
8" CMU Elev Shaft	\$44.00	SF	921	\$40,524	921	\$40,524
12" CMU - Gym	\$39.00	SF	4,872	\$190,008	4,872	\$190,008
8" CMU - Mech Receiving	\$36.75	SF	4,784	\$175,812	4,784	\$175,812
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>						
CMU angle brace frame - 4' 0C	\$125.00	EA	182	\$22,750	182	\$22,750
Loose lintels	\$0.65	SF	10,577	\$6,875	10,577	\$6,875
<u>061000 ROUGH CARPENTRY</u>						
Interior blocking	\$1.00	GSF	121,000	\$121,000	136,000	\$136,000
Misc. rough carpentry	\$1.00	GSF	121,000	\$121,000	136,000	\$136,000
Clean Saftey and Laborer	\$4.00	GSF	121,000	\$484,000	136,000	\$544,000
<u>072100 INSULATION</u>						
Firestopping	\$0.85	GSF	121,000	\$102,850	136,000	\$115,600
<u>081113 HOLLOW METALWORK</u>						
Interior H.M Windows, Sidelites and Transoms (INC. GLAZING):						
Door sidelight (2' x 7')	\$1,200.00	EA	47	\$56,400	55	\$66,000
Admin sidelight (1'x8')	\$1,200.00	EA	4	\$4,800	4	\$4,800
Rated Stair window	\$390.00	SF	200	\$78,000	200	\$78,000

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Misc. window/sidelight & transom	\$90.00	SF	1,000	\$90,000	1,000	\$90,000
<u>083323 SPECIAL DOORS</u>						
Access panels	\$0.25	GSF	121,000	\$30,250	136,000	\$34,000
<u>080001 METAL WINDOWS*</u>						
Interior Aluminum Storefront:						
Vestibule and Entries	\$110.00	SF	750	\$82,500	750	\$82,500
Administration area	\$110.00	SF	750	\$82,500	750	\$82,500
General Building Area	\$0.50	GSF	121,000	\$60,500	136,000	\$68,000
<u>092116 GYPSUM WALLBOARD</u>						
Drywall Partitions:						
GWB assemblies	\$29.00	GSF	121,000	\$3,509,000	136,000	\$3,944,000
Operable Partition:						
Stage - 10'		n/a				
				-----		-----
				\$5,258,769		\$5,817,369
 C1020 INTERIOR DOORS						
<u>081113 HOLLOW METALWORK</u>						
<u>081416 WOOD AND PLASTIC DOORS</u>						
<u>087100 DOOR HARDWARE</u>						
Interior Door frame and Hardware	\$6.50	GSF	121,000	\$786,500	136,000	\$884,000
<u>080001 METAL WINDOWS*</u>						
Aluminum (Frame, Door, Glass, Glazing and Hdw):						
Vest - dbl	\$12,000.00	PR	2	\$24,000	2	\$24,000
Vest - sgl	\$5,500.00	EA	1	\$5,500	1	\$5,500
Main office -sgl	\$2,975.00	EA	2	\$5,950	2	\$5,950

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
<u>083323 SPECIAL DOORS</u>						
Dish drop window	\$5,000.00	EA	1	\$5,000	1	\$5,000
Kitchen OH grille	\$4,500.00	EA	1	\$4,500	1	\$4,500
Security Gate and Grill	\$45,000.00	LS	1	\$45,000	1	\$45,000
				-----		-----
				\$876,450		\$973,950
 C1030 FITTINGS						
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>						
Second Floor Railing	\$400.00	LF	18	\$7,200	198	\$79,200
Ramp and Stair Stage Railing	\$350.00	LF	85	\$29,750	85	\$29,750
Misc. metals	\$2.00	GSF	121,000	\$242,000	136,000	\$272,000
 <u>062000 FINISH CARPENTRY</u>						
Utility & closet shelving	\$5,000.00	LS	1	\$5,000	1	\$5,000
Typ. window sill/apron (nic cw-gym)	\$65.00	LF	1,816	\$118,040	1,831	\$119,015
Commons Area Millwork	\$75,000.00	LOC	3	\$225,000	3	\$225,000
Stage Proscenium and Trim	\$35,000.00	LS	1	\$35,000	1	\$35,000
Misc. wood trim	\$1.00	GSF	121,000	\$121,000	136,000	\$136,000
Media Center Built-in	\$30,000.00	LS	1	\$30,000	1	\$30,000
Raised Stage Platform and steps	\$45.00	SF	1,700	\$76,500	1,700	\$76,500
Stage Stair and Ramp	\$65.00	SF	420	\$27,300	420	\$27,300
Custom Casework:						
Admin casework	\$25,000.00	LS	1	\$25,000	1	\$25,000
Circulation desk	\$15,000.00	LS	1	\$15,000	1	\$15,000
 <u>088000 GLASS & GLAZING</u>						
Impact Resistant Mirror-Allow:						
OT/PT Room (1 EA)	\$4,000.00	EA	1	\$4,000	1	\$4,000
Music rm (2 EA)	\$2,500.00	EA	2	\$5,000	2	\$5,000

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Music practice rm (3 EA)	\$2,500.00	EA	2	\$5,000	2	\$5,000
<u>102113 COMPARTMENTS & CUBICLES</u>						
Solid Plastic Toilet Partitions:						
Std. partition	\$1,385.00	EA	12	\$16,620	18	\$24,930
HC partition	\$1,590.00	EA	16	\$25,440	20	\$31,800
Urinal Screen	\$450.00	EA	4	\$1,800	6	\$2,700
<u>102813 TOILET & BATH ACCESSORIES</u>						
Building Toilet Accessories	\$0.92	GSF	121,000	\$111,320	136,000	\$125,120
*Excludes classroom accessories						
<u>101100 MARKERBOARDS & TACKBOARDS</u>						
Marker board tackboard	\$1.30	GSF	121,000	\$157,300	136,000	\$176,800
Glass Display Case	\$1,000.00	LF	25	\$25,000	25	\$25,000
<u>109000 MISCELLANEOUS SPECIALTIES</u>						
Kitchen staff locker(12"wx15" D x 6'h)	\$350.00	EA	6	\$2,100	6	\$2,100
Custodian staff(12"wx15" D x 6'h)	\$350.00	EA	3	\$1,050	3	\$1,050
Student Lockers	\$450.00	EA	550	\$247,500	700	\$315,000
PE Locker	\$375.00	EA	150	\$56,250	150	\$56,250
Wall & corner guards - allow	\$5,000.00	LS	1	\$5,000	1	\$5,000
Fire extinguisher and cab - allow	\$550.00	EA	25	\$13,750	30	\$16,500
Cubicle curtain track w/ curtain - health	\$1,500.00	EA	2	\$3,000	2	\$3,000
Misc. specialties	\$0.25	GSF	121,000	\$30,250	136,000	\$34,000
<u>101400 IDENTIFYING DEVICES</u>						
Building directory - allow	\$5,000.00	EA	1	\$5,000	1	\$5,000
Dedication plaque	\$3,500.00	EA	1	\$3,500	1	\$3,500
Interior Signage	\$0.40	GSF	121,000	\$48,400	136,000	\$54,400
Environmental graphics	\$50,000.00	LS	1	\$50,000	1	\$50,000

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
				-----		-----
				\$1,774,070		\$2,020,915
TOTAL C10 - INTERIOR CONSTRUCTION				\$7,909,289		\$8,812,234
C20 - STAIRS						
C2010 STAIR CONSTRUCTION						
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>						
Metal Pan Stair w/Rails:						
Egress corridor stair	\$45,000.00	FLT	2	\$90,000	3	\$135,000
Main Lobby Stair	\$65,000.00	FLT	1	\$65,000	1	\$65,000
<u>033000 CAST IN PLACE CONCRETE</u>						
Conc stair pan fill - full flt	\$3,300.00	FLTS	3	\$9,900	4	\$13,200
				-----		-----
				\$164,900		\$213,200
C2020 STAIR FINISHES						
<u>090005 RESILIENT FLOORING*</u>						
Rubber treads and risers	\$22.00	LF	324	\$7,128	432	\$9,504
Rubber landing tile	\$25.00	SF	216	\$5,400	288	\$7,200
<u>090007 PAINTING*</u>						
Paint stair & rails - full flt	\$3,900.00	FLTS	3	\$11,700	4	\$15,600
				-----		-----
				\$24,228		\$32,304

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
TOTAL C20 - STAIRS				\$189,128		\$245,504
C30 - INTERIOR FINISHES						
C3010 WALL FINISHES						
Wood Wall Panel - First Flr Lobby	\$75.00	SF	1,697	\$127,275	1,697	\$127,275
Wood Wall Panel - media cntr	\$75.00	SF	500	\$37,500	500	\$37,500
Wood Wall Panel - stage café	\$75.00	SF	350	\$26,250	350	\$26,250
Ceramic Tile Bathroom - 8'h	\$34.00	SF	7,000	\$238,000	10,000	\$340,000
Porcelain Tile - corridor 5'	\$35.00	SF	11,000	\$385,000	13,500	\$472,500
Porcelain Tile - servery café	\$35.00	SF	500	\$17,500	500	\$17,500
Tectum - gym	\$23.00	SF	1,500	\$34,500	1,500	\$34,500
Acoustical Wall panel	\$36.00	SF	2,500	\$90,000	2,500	\$90,000
Misc. Finish	\$50,000.00	LS	1	\$50,000	1	\$50,000
Interior Painting	\$2.10	GSF	121,000	\$254,100	136,000	\$285,600
				-----		-----
				\$1,260,125		\$1,481,125
C3020 FLOOR FINISHES						
Floor Finish	\$12.00	SF	121,000	\$1,452,000	136,000	\$1,632,000
				-----		-----
				\$1,452,000		\$1,632,000
C3030 CEILING FINISHES						
Ceiling Finish	\$11.00	GSF	121,000	\$1,331,000	136,000	\$1,496,000
				-----		-----
				\$1,331,000		\$1,496,000
TOTAL C30 - INTERIOR FINISHES				\$4,043,125		\$4,609,125

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
D. SERVICES						
D10 - CONVEYING						
D1010 ELEVATORS & LIFTS						
<u>140001 ELEVATORS*</u>						
Traction 3,500 lbs Passenger Elev	\$100,000.00	STOP	2	\$200,000	2	\$200,000
Elevator Metals	\$10,000.00	LS	1	\$10,000	1	\$10,000
				-----		-----
				\$210,000		\$210,000
TOTAL D10 - CONVEYING				\$210,000		\$210,000
D20 - PLUMBING						
D2010 PLUMBING						
Plumbing	\$28.75	GSF	121,000	\$3,478,750	136,000	\$3,910,000
				-----		-----
				\$3,478,750		\$3,910,000
TOTAL D20 - PLUMBING				\$3,478,750		\$3,910,000
D30 - HVAC						
D3010 HVAC						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Air to Water HP w/ Condensing Boiler & DOAS	\$92.00	GSF	121,000	\$11,132,000	136,000	\$12,512,000
				----- \$11,132,000		----- \$12,512,000
TOTAL D30 - HVAC				\$11,132,000		\$12,512,000
D40 - FIRE PROTECTION						
D4010 SPRINKLERS						
<u>210001 FIRE SUPPRESSION*</u>						
Sprinkler system - wet *EXCLUDES FIRE PUMP	\$8.00	GSF	121,000	\$968,000	136,000	\$1,088,000
				----- \$968,000		----- \$1,088,000
TOTAL D40 - FIRE PROTECTION				\$968,000		\$1,088,000
D50 - ELECTRICAL						
D5010 ELECTRICAL SERVICE & DISTRIBUTION						
<u>260001 ELECTRICAL*</u>						
4,000 Service Panel and Feeders (480 V	\$8.00	GSF	121,000	\$968,000	136,000	\$1,088,000
Digital metering	\$35,000.00	LS	1	\$35,000	1	\$35,000
PV Rough in	\$32,000.00	LS	1	\$32,000	1	\$32,000
500 kw Diesel Generator	\$310,000.00	LS	1	\$310,000		

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
700 kw Diesel Generator	\$525,000.00	LS			1	\$525,000
Temp Power and Light	\$1.00	GSF	121,000	\$121,000	136,000	\$136,000
				-----		-----
				\$1,466,000		\$1,816,000
D5020 LIGHTING & BRANCH WIRING						
<u>260001 ELECTRICAL*</u>						
Lighting	\$10.50	GSF	121,000	\$1,270,500	136,000	\$1,428,000
Lighting Control (inc device oc)	\$3.15	GSF	121,000	\$381,150	136,000	\$428,400
				-----		-----
				\$1,651,650		\$1,856,400
D5030 COMMUNICATION & SECURITY						
<u>260001 ELECTRICAL*</u>						
CCTV	\$3.00	GSF	121,000	\$363,000	136,000	\$408,000
Access control	\$1.00	GSF	121,000	\$121,000	136,000	\$136,000
Video entry system	\$27,500.00	LS	1	\$27,500	1	\$27,500
Wifi nodes and Equipment	\$0.25	SF	121,000	\$30,250	136,000	\$34,000
Telephone System	\$65,000.00	LS	1	\$65,000	1	\$65,000
Network switches	\$250,000.00	LS	1	\$250,000	1	\$250,000
Digital Signage	\$4,000.00	EA	4	\$16,000	4	\$16,000
Tele/data cabling, racks and switches	\$6.00	GSF	121,000	\$726,000	136,000	\$816,000
Classroom AV rough-in only	\$1,500.00	EA	37	\$55,500	44	\$66,000
Speech Reinforcement	\$3,300.00	EA	37	\$122,100	44	\$145,200
				-----		-----
				\$1,776,350		\$1,963,700
D5090 OTHER ELECTRICAL SYSTEMS						
<u>260001 ELECTRICAL*</u>						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Rath 2way call	\$22,000.00	EA	1	\$22,000	1	\$22,000
Fire Alarm	\$4.80	GSF	121,000	\$580,800	136,000	\$652,800
Mass Notification Devices	\$0.75	GSF	121,000	\$90,750	136,000	\$102,000
Vape Detection	\$3.50	GSF	121,000	\$423,500	136,000	\$476,000
Clocks and PA	\$0.76	GSF	121,000	\$91,476	136,000	\$102,816
Gym/Café AV System	\$1.20	GSF	121,000	\$145,200	136,000	\$163,200
Lighting Protection	\$1.30	GSF	121,000	\$157,300	136,000	\$176,800
Kitchen/Mechanical Wiring	\$0.78	GSF	121,000	\$94,380	136,000	\$106,080
Bi-Direction Antenna	\$2.50	GSF	121,000	\$302,500	136,000	\$340,000
Cell Phone Amplification	\$0.80	GSF	121,000	\$96,800	136,000	\$108,800
Test Permit and Misc.	\$0.85	GSF	121,000	\$102,850	136,000	\$115,600
	\$5.00	GSF	121,000	\$605,000	136,000	\$680,000
By others: Telephone system Classroom projectors PV Panels						
				----- \$2,712,556		----- \$3,046,096
TOTAL D50 - ELECTRICAL			\$62.86	\$7,606,556	\$63.84	\$8,682,196
<u>E. EQUIPMENT & FURNISHINGS</u>						
E10 - EQUIPMENT						
E1010 COMMERCIAL EQUIPMENT						
<u>114000 FOOD SERVICE EQUIPMENT</u>						
Kitchen equipment - new	\$800,000.00	LS	1	\$800,000	1	\$800,000
				----- \$800,000		----- \$800,000

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
<u>E1090 OTHER EQUIPMENT</u>						
<u>113100 APPLIANCES</u>						
Staff kitchen refrigerator	\$1,000.00	EA	2	\$2,000	2	\$2,000
Staff kitchen microwave	\$500.00	EA	2	\$1,000	2	\$1,000
Medical office refrigerator w/ice	\$1,000.00	EA	1	\$1,000	1	\$1,000
<u>116600 ATHLETIC & SPORTS EQUIPMENT</u>						
Basketball backstops - electric	\$10,250.00	EA	6	\$61,500	6	\$61,500
Wall padding - 6'	\$15.00	SF	500	\$7,500	500	\$7,500
Motorized gym divider curtain	\$19.00	SF	1,800	\$34,200	1,800	\$34,200
Volley ball court equip.	\$700.00	EA	1	\$700	1	\$700
Scoreboard and shot clock	\$24,000.00	EA	1	\$24,000	1	\$24,000
Bleachers	\$125.00	SEAT	550	\$68,750	700	\$87,500
<u>116143 STAGE DRAPERY</u>						
Stage curtain and rigging	\$35,000.00	LS	1	\$35,000	1	\$35,000
<u>115213 PROJECTION SCREENS</u>						
Projection screen - stage	\$10,000.00	EA	1	\$10,000	1	\$10,000
<u>119000 MISC. EQUIPMENT</u>						
Science Room Equipment	\$2,500.00	RMS	3	\$7,500	3	\$7,500
Metal storage shelving		NIC				
Book security equipment		NIC				
Kiln	\$4,000.00	EA	1	\$4,000	1	\$4,000
				-----		-----
				\$257,150		\$275,900
TOTAL E10 - EQUIPMENT				\$1,057,150		\$1,075,900

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
E20 - FURNISHINGS						
E 2010 FIXED FURNISHINGS						
<u>129000 MISC. FURNISHINGS</u>						
Meco shade - manual	\$9.50	SF	10,896	\$103,512	10,988	\$104,386
Elec Op Shades - 20%	1	LS	20,702	\$20,702	20,877	\$20,877
<u>123553 CLASSROOM CASEWORK</u>						
Casework	\$13.00	GSF	121,000	\$1,573,000	136,000	\$1,768,000
				-----		-----
				\$1,697,214		\$1,893,263
E2020 MOVABLE FURNISHINGS						
				-----		-----
				\$0		\$0
TOTAL E20 - FURNISHINGS				\$1,697,214		\$1,893,263
F20 - SELECTIVE BUILDING DEMOLITION						
F2010 BUILDING ELEMENTS DEMOLITION						
Demolish existing building	SEE SUMMARY PAGE			-----		-----
				\$0		\$0
F2020 HAZARDOUS COMPONENTS ABATEMENT						
Hazardous Waste Allowance	SEE SUMMARY PAGE			-----		-----

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
				\$0		\$0
TOTAL F20 - SELECTIVE BUILDING DEMOLITION				\$0		\$0
<u>G. BUILDING SITEWORK</u>						
G10 - SITE PREPARATION						
G1010 SITE CLEARING						
<u>311000 SITE PREPARATION & CLEARING</u>						
Construction fence	14.00	LF	4,100	\$57,400	4,100	\$57,400
Construction entrance pad(1,000 sf/loc)	11.00	SF	2,000	\$22,000	2,000	\$22,000
Construction gate	1,500.00	EA	2	\$3,000	2	\$3,000
Erosion control	8.50	LF	4,100	\$34,850	4,100	\$34,850
Inlet Protection	110.00	EA	25	\$2,750	25	\$2,750
Erosion Control Maintenance	7,500.00	LS	1	\$7,500	1	\$7,500
General site prep(exclude wooded area)	0.12	SF	779,000	\$93,480	779,000	\$93,480
*Noted Developed 24.22 Acre						
				-----		-----
				\$220,980		\$220,980
G1020 SITE DEMOLITION & RELOCATIONS						
New Entry Drive, Emerg Access & HS Conn Rd:						
Sawcut street	10.50	LF	155	\$1,628	155	\$1,628
Sawcut bit sidewalk	20.00	LF	20	\$400	20	\$400
W Boylston St Improvements:						
Remove vehicular guardrail	NIC					
Remove Bit Town Sidewalk	NIC					
Remove Street Bit curb	NIC					
Site Removals:						
Bit Pavement - basketball court	1.00	SF	23,100	\$23,100	23,100	\$23,100

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Bit Pavement -parking /circulation	1.10	SF	141,725	\$155,898	141,725	\$155,898
Conc. Pavement - site walk	2.00	SF	13,064	\$26,128	13,064	\$26,128
Salvage granite curbing	24.00	LF	1,500	\$36,000	1,500	\$36,000
Drainage structures & line	50,000.00	LS	1	\$50,000	1	\$50,000
Parking & traffic signage	1,500.00	LS	1	\$1,500	1	\$1,500
Chain Link Fence Prop Line	16.00	LF	2,300	\$36,800	2,300	\$36,800
Retaining Wall		N/A				
Loading dock /slab	2.00	SF	500	\$1,000	500	\$1,000
BLDG sanitary line & structures	10,000.00	LS	1	\$10,000	1	\$10,000
BLDG water lines	10,000.00	LS	1	\$10,000	1	\$10,000
Hydrants	750.00	LS	1	\$750	1	\$750
Transformer & pad	5,000.00	LS	1	\$5,000	1	\$5,000
Generator & pad	5,000.00	LS	1	\$5,000	1	\$5,000
Utility pole	By Others					
Duct bank	65.00	LF	550	\$35,750	550	\$35,750
Site light pole & base	500.00	EA	25	\$12,500	25	\$12,500
Flag pole & base	500.00	EA	1	\$500	1	\$500
Bollards @ equip.	210.00	EA	15	\$3,150	15	\$3,150
Misc. Utility removal	25,000.00	LS	1	\$25,000	1	\$25,000
Baseball/softball backstop & equip	3,500.00	LOC	3	\$10,500	3	\$10,500
Basketball hoop	500.00	EA	6	\$3,000	6	\$3,000
Basketball court fencing	15.00	LF	640	\$9,600	640	\$9,600
Misc. Site Demolition(nic bldg)	0.10	SF	779,000	\$77,900	779,000	\$77,900
Int Court yard demolition	5.00	GSF	1,650	\$8,250	1,650	\$8,250
Temporary Measures:						
Temp Sediment basin	10,000.00	LS	1	\$10,000	1	\$10,000
Temporary Parking and Access	50,000.00	LS	1	\$50,000	1	\$50,000
Snow removal	35,000.00	LS	1	\$35,000	1	\$35,000
Pedestrian and Traffic Control	75,000.00	LS	1	\$75,000	1	\$75,000
				-----		-----
				\$719,353		\$719,353
G1030 SITE EARTHWORK						
310000 EARTHWORK						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Strip top soil & sub bases - 12"	10.00	CY	18,519	\$185,190	18,519	\$185,190
Load and Haul Top Soil	12.00	CY	8,853	\$106,236	8,853	\$106,236
Soil disposal	22.00	TONS	14,165	\$311,626	14,165	\$311,626
General Site Grading:						
Site Grading	2.30	SY	86,556	\$199,078	86,556	\$199,078
Site Cut - allow	12.50	CY	15,000	\$187,500	15,000	\$187,500
Truck and haul spoil - 50%	15.00	CY	5,000	\$75,000	5,000	\$75,000
Dispose of spoil - 50%	22.00	TONS	8,000	\$176,000	8,000	\$176,000
*Utilities & improvements include excavation & backfill						
*Paving base is w/ G20						

				\$1,240,629	\$1,240,629	
TOTAL G10 - SITE PREPARATION			\$2,180,962		\$2,180,962	
G20 - SITE IMPROVEMENTS						
G2010 ROADWAYS						
<u>321000 PAVING AND CURBING</u>						
Site:						
HD Bituminous- Drive 24'W	\$5.00	SF	87,500	\$437,500	87,500	\$437,500
STD Bituminous-Parking & site drive	\$4.55	SF	87,500	\$398,125	87,500	\$398,125
14" Gravel base @ HD vehicular pave.	\$48.00	CY	3,759	\$180,432	3,759	\$180,432
12" Gravel base @ STD vehicular pave.	\$50.00	CY	3,240	\$162,000	3,240	\$162,000
Reinstall salvaged granite curb	\$35.00	LF	1,500	\$52,500	1,500	\$52,500
New granite curb	\$55.00	LF	7,500	\$412,500	7,500	\$412,500
Parking/traffic signage	\$0.10	SF	175,000	\$17,500	175,000	\$17,500
Parking line painting & markings	\$0.15	SF	175,000	\$26,250	175,000	\$26,250
Geotextile fabric		NIC				
Porous Pavement		NIC				
Concrete Vehicular Pavement		NIC				

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
W Boylston Street Improvements: Patch @ Utility	W / Utility					
New Granite Curbing		NIC				
Steel guard rail modifications		NIC				
Pedestrian Crosswalk and curb cuts	\$2,500.00	LOC	2	\$5,000	2	\$5,000
*PEDESTRIAN AND SCHOOL WARNING LIGHTS		NIC				
				-----		-----
				\$1,691,807		\$1,691,807
G2030 PEDESTRIAN PAVING						
<u>321000 PAVING AND CURBING</u>						
Entry Plaza:						
4" Concrete Walk(50%)	\$11.00	SF	600	\$6,600	600	\$6,600
Unit paver sys(50%)	\$36.00	SF	600	\$21,600	600	\$21,600
8" Gravel base @ plaza	\$55.00	CY	30	\$1,650	30	\$1,650
Playground 8-10Yr -Allow:						
Pour-in place rubber surface	\$25.00	SF	2,000	\$50,000	2,000	\$50,000
8" Gravel base @ play surf	\$55.00	CY	50	\$2,750	50	\$2,750
Under drain system	\$0.75	SF	2,000	\$1,500	2,000	\$1,500
Filter Fabric	\$1.05	SF	2,000	\$2,100	2,000	\$2,100
Perim. curb	\$48.00	LF	240	\$11,520	240	\$11,520
Outdoor Class/ Maker Space -Allow:						
4" Concrete Walk(50%)	\$11.00	SF	1,750	\$19,250	1,750	\$19,250
Unit paver sys(50%)	\$36.00	SF	1,750	\$63,000	1,750	\$63,000
8" Gravel base @ outdoor class	\$55.00	CY	87	\$4,785	87	\$4,785
New Basketball Court(110' x 70'/EA):						
STD Bituminous	\$4.55	SF	15,400	\$70,070	15,400	\$70,070
BB Court -Asphalt Color Play Surface	\$6.50	SF	15,400	\$100,100	15,400	\$100,100
12" Gravel base @ BB court pave.	\$48.00	CY	570	\$27,360	570	\$27,360
Site New 4" Concrete Walk:						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
4" Concrete Walk 5'W typ	\$11.00	SF	19,800	\$217,800	19,800	\$217,800
4" Concrete Walk 5'W field access	\$11.00	SF	2,700	\$29,700	2,700	\$29,700
8" Gravel base @conc walk	\$55.00	CY	558	\$30,690	558	\$30,690
ADA paver	\$775.00	EA	10	\$7,750	10	\$7,750
Allow:						
Restore BB Court		NIC				
Colored concrete		N/A				
Exposed agg. walks		N/A				
Porous walk		N/A				
Bit walk		N/A				
Stone dust walk		N/A				
Repair exist walk		NIC				
W Boylston sidewalk replacement		NIC				
				-----		-----
				\$668,225		\$668,225
 G2040 SITE DEVELOPMENT						
<u>323000 SITE IMPROVEMENTS</u>						
Entry Plaza -Allow:						
Paving sys	W/G2030					
Planter	\$4,000.00	EA	3	\$12,000	3	\$12,000
Bench	\$3,500.00	EA	6	\$21,000	6	\$21,000
Drop Off Area Bollards	\$2,750.00	EA	10	\$27,500	10	\$27,500
Multi-purpose Field -Allow:						
Surface	W/G2050					
Field equipment	\$25,000.00	LS	1	\$25,000	1	\$25,000
Players bench	\$2,500.00	EA	2	\$5,000	2	\$5,000
Spectator seating -bleach w/ conc base	\$25,000.00	EA	2	\$50,000	2	\$50,000
Sports lighting		NIC				
Score board		NIC				
Chain link fence & gates		NIC				
Ball safety netting	\$285.00	LF	350	\$99,750	350	\$99,750

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Playground 8-10Yr -Allow:						
Paving sys	W/G2030					
Play equip	\$350,000.00	EA	1	\$350,000	1	\$350,000
Bench	\$3,500.00	EA	2	\$7,000	2	\$7,000
Ornamental Perimeter fence	\$165.00	LF	240	\$39,600	240	\$39,600
SGL gate	\$6,000.00	EA	2	\$12,000	2	\$12,000
Premium -fence screen @ loading	\$20,000.00	LS	1	\$20,000	1	\$20,000
Outdoor Class/ Maker Space -Allow:						
Paving sys	W/G2030					
Fixed seat wall	\$575.00	LF	90	\$51,750	90	\$51,750
Planter	\$4,000.00	EA	3	\$12,000	3	\$12,000
Water service	\$15,000.00	LOC	1	\$15,000	1	\$15,000
Elec power	\$10,000.00	LOC	1	\$10,000	1	\$10,000
Misc spec.	\$10.00	GSF	3,500	\$35,000	3,500	\$35,000
Basketball Court(110' x 70'/EA)-Allow:						
Basketball hoop	4,000.00	EA	4	\$16,000	4	\$16,000
Chain link fence - 8'	125.00	LF	500	\$62,500	500	\$62,500
Chain link gate -sgl	3,500.00	LF	2	\$7,000	2	\$7,000
Players bench	2,500.00	EA	4	\$10,000	4	\$10,000
Allow New Loading Dock:						
Wall Footing	\$475.00	CY	5	\$2,138	5	\$2,138
12" Found Wall	\$1,200.00	CY	18	\$21,600	18	\$21,600
Platform slab on grade	\$15.00	SF	600	\$9,000	600	\$9,000
CIP Stair w /rails	\$7,500.00	LOC	1	\$7,500	1	\$7,500
CIP Ramp w /rails		NIC				
*Excludes masonry veneer						
Mod Block Retaining Wall Complete- Allow:						
Parking Area East	\$450.00	LF	250	\$112,500	250	\$112,500
Parking Area North	\$450.00	LF	315	\$141,750	315	\$141,750
Dumpster Enclosure:						
Slab on grade	\$22.00	SF	288	\$6,336	288	\$6,336
12" Gravel base @ conc pad	\$48.00	CY	11	\$528	11	\$528
Louvered fence 8'H	\$175.00	LF	52	\$9,100	52	\$9,100

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
DBL Gate (10' Wx 8'H)	\$8,000.00	EA	2	\$16,000	2	\$16,000
Bollards	\$1,500.00	LOC	4	\$6,000	4	\$6,000
Site Improvements:						
Bicycle loop	\$850.00	EA	15	\$12,750	15	\$12,750
Trash Receptacle	\$4,500.00	EA	5	\$22,500	5	\$22,500
4' CL Fence @ East Prop Line	\$74.00	LF	1,000	\$74,000	1,000	\$74,000
4' CL Fence @ South Prop Line	\$74.00	LF	1,300	\$96,200	1,300	\$96,200
Baseball/Softball Field-Allow			N/A		N/A	
Mech Yard-Allow:						
Decorative Gravel surface	\$6.75	SF	200	\$1,350	200	\$1,350
Conc pads	W / Utility					
Bollards	\$1,500.00	LOC	8	\$12,000	8	\$12,000
Screen fence screen		NIC				
Allow:						
Site Stair - complete w/ rails		N/A				
Site Ramp - complete w/ rails		N/A				
Site sign	\$20,000.00	EA	1	\$20,000	1	
Flag Pole - 40'	\$11,000.00	EA	1	\$11,000	1	\$11,000
Traffic gate @ Parent Circulation	NIC					
Traffic gate @ Emerg Access Drive	\$25,000.00	EA	1	\$25,000	1	\$25,000
Misc. site improvements	\$100,000.00	LS	1	\$100,000	1	\$100,000
				-----		-----
				\$1,595,352		\$1,575,352
G2050 LANDSCAPING						
<u>329000 PLANTING</u>						
Parking Island(20'x10'):						
18" Planting Bed - import	\$88.00	CY	74	\$6,512	74	\$6,512
2" Mulch	\$62.00	CY	13	\$806	13	\$806
Multi-purpose & Ball Field -Allow:						

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
12" Loam - ammended	\$48.00	CY	2,400	\$115,200	2,400	\$115,200
Hydroseed	\$0.39	SF	64,800	\$25,272	64,800	\$25,272
Irrigation System	\$1.75	SF	64,800	\$113,400	64,800	\$113,400
Field Underdrain	\$0.80	SF	64,800	\$51,840	64,800	\$51,840
Infield	W / G2040					
Landscape Buffer and Rain garden @ Roadway:						
Rain garden plantings	\$10.00	SF	9,000	\$90,000	9,000	\$90,000
18" Planting Bed/Soils - import	\$90.00	CY	500	\$45,000	500	\$45,000
General Planting Allowance	\$200,000.00	LS	1	\$200,000	1	\$200,000
General Lawn:						
6" Loam Lawn - ammend	\$48.00	CY	7,266	\$348,768	7,266	\$348,768
Hydroseed - lawn	\$0.39	SF	392,383	\$153,029	392,383	\$153,029
Irrigation System:						
Plant bed	N/A					
Lawn	N/A					
				-----		-----
				\$1,149,827		\$1,149,827
TOTAL G20 - SITE IMPROVEMENTS				\$5,105,211		\$5,085,211
G30 - SITE MECHANICAL UTILITIES						
G3010 WATER SUPPLY						
330000 UTILITIES						
Allow:						
W Boylston Street Connection	\$25,000.00	LOC	1	\$25,000	1	\$25,000
Temp St pavement cut & patch	\$3,000.00	LOC	1	\$3,000	1	\$3,000
8" Main	\$124.00	LF	750	\$93,000	750	\$93,000
6" Fire Service	\$97.00	LF	10	\$970	10	\$970
4" Domestic	\$84.00	LF	10	\$840	10	\$840
8" Gate valve main	\$3,600.00	EA	6	\$21,600	6	\$21,600
6" Gate valve fire	\$3,200.00	EA	1	\$3,200	1	\$3,200

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
4" Gate valve dom	\$3,000.00	EA	1	\$3,000	1	\$3,000
Fire Hydrant	\$4,500.00	EA	2	\$9,000	2	\$9,000
6" Hydrant Service	\$97.00	LF	50	\$4,850	50	\$4,850
6" Gate valve hydrant	\$2,600.00	EA	2	\$5,200	2	\$5,200
Test, sanitize, thrust block , misc.	\$10,000.00	LS	1	\$10,000	1	\$10,000
Temporary water service	\$25,000.00	LS	1	\$25,000	1	\$25,000
				-----		-----
				\$204,660		\$204,660
G3020 SANITARY SEWER						
330000 UTILITIES						
Allow:						
W Boylston Street Connection	\$25,000.00	LOC	1	\$25,000	1	\$25,000
Temp St pavement cut & patch	\$3,000.00	LOC	1	\$3,000	1	\$3,000
Sanitary Main	\$105.00	LF	750	\$78,750	750	\$78,750
Site manhole	\$5,000.00	EA	4	\$20,000	4	\$20,000
Ext. Grease Trap	\$35,000.00	EA	1	\$35,000	1	\$35,000
Int. Grease interceptor		W / plumbing				
Temp Sewer Line	\$25,000.00	LS	1	\$25,000	1	\$25,000
				-----		-----
				\$186,750		\$186,750
G3030 STORM SEWER						
330000 UTILITIES						
Drainage system @:						
Blg Footprint	\$6.00	SF	84,000	\$504,000	84,000	\$504,000
Site Paved Area	\$6.00	SF	208,767	\$1,252,602	208,767	\$1,252,602
				-----		-----
				\$1,756,602		\$1,756,602

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
G3060 FUEL DISTRIBUTION						
Allow:						
W Boylston Street Connection	\$12,000.00	LOC	1	\$12,000	1	\$12,000
Temp St pavement cut & patch	\$3,500.00	LOC	1	\$3,500	1	\$3,500
Trench exc & bf	\$45.00	LF	750	\$33,750	750	\$33,750
Gas service	By Utility					
				-----		-----
				\$49,250		\$49,250
TOTAL G30 - SITE MECHANICAL UTILITIES				\$2,197,262		\$2,197,262
G40 - SITE ELECTRICAL UTILITIES						
G4010 ELECTRICAL DISTRIBUTION						
<u>330000 UTILITIES</u>						
Duct banks:						
Pole dressing	\$3,500.00	LS	2	\$7,000	2	\$7,000
Primary duct bank	\$146.00	LF	500	\$73,000	500	\$73,000
Secondary duct bank and conductor	\$250.00	LF	150	\$37,500	150	\$37,500
Tele/data duct bank	\$146.00	LF	900	\$131,400	900	\$131,400
Future EV Station feed	\$74.00	LF	1,500	\$111,000	1,500	\$111,000
Transformer pad and grounding	\$10,000.00	EA	1	\$10,000	1	\$10,000
Generator pad and grounding	\$10,000.00	EA	1	\$10,000	1	\$10,000
Demolition and disconnect	\$20,000.00	LS	1	\$20,000	1	\$20,000
Temp Electrical	\$25,000.00	LS	1	\$25,000	1	\$25,000
*Electrical poles and primary by others						
				-----		-----
				\$424,900		\$424,900

DESCRIPTION	UNIT COST	UNIT	NEW CONST - 550 STUDENTS		NEW CONST - 700 STUDENTS	
			QUANTITY	TOTAL	QUANTITY	TOTAL
G4020 SITE LIGHTING						
<u>260001 ELECTRICAL*</u>						
Lighting Fixtures:						
Parking Fixtures	\$4,000.00	EA	30	\$120,000	30	\$120,000
Pedestrian Fixture	\$3,500.00	EA	20	\$70,000	20	\$70,000
Flagpole light	\$1,150.00	EA	2	\$2,300	2	\$2,300
1" c Light feed	\$14.00	LF	7,500	\$105,000	7,500	\$105,000
Specialty Lighting	\$25,000.00	LS	1	\$25,000	1	\$25,000
*Specialty Lighting Also W/Site Impr.						
*Excludes traffic lights						
*Excludes sports field lighting						
<u>330000 UTILITIES</u>						
New Site Lighting:						
Light pole feeder trench	\$14.50	LF	7,500	\$108,750	7,500	\$108,750
Light pole base	\$950.00	EA	50	\$47,500	50	\$47,500
				-----		-----
				\$478,550		\$478,550
TOTAL G40 - SITE ELECTRICAL UTILITIES				\$903,450	\$903,450	

PROJECT: Clinton Middle School
 LOCATION: Clinton, MA
 CLIENT: Lamoureux Pagano Associates Architects
 DATE: 20-Jun-23

No.: 22025 **SUMMARY**

A. SUBSTRUCTURE

A10 - FOUNDATIONS

A1010 STANDARD FOUNDATIONS
 A1020 SPECIAL FOUNDATIONS
 A1030 SLAB ON GRADE

A20 - BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION
 A2020 BASEMENT WALLS

B. SHELL

B10 - SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION
 B1020 ROOF CONSTRUCTION

B20 - EXTERIOR ENCLOSURE

B2010 EXTERIOR WALLS
 B2020 EXTERIOR WINDOWS
 B2030 EXTERIOR DOORS

B30 - ROOFING

B3010 ROOF COVERINGS
 B3020 ROOF OPENINGS

C. INTERIORS

C10 - INTERIOR CONSTRUCTION

C1010 PARTITIONS
 C1020 INTERIOR DOORS
 C1030 FITTINGS

C20 - STAIRS

C2010 STAIR CONSTRUCTION
 C2020 STAIR FINISHES

C30 - INTERIOR FINISHES

C3010 WALL FINISHES
 C3020 FLOOR FINISHES
 C3030 CEILING FINISHES

	AR 1 550 ADDITION ESTIMATE TOTAL	AR 1 750 ADDITION ESTIMATE TOTAL	AR 2 550 ADDITION ESTIMATE TOTAL	AR 2 750 ADDITION ESTIMATE TOTAL
A1010 STANDARD FOUNDATIONS	\$606,460	\$886,181	\$1,383,590	\$1,383,590
A1020 SPECIAL FOUNDATIONS	\$0	\$0	\$0	\$0
A1030 SLAB ON GRADE	\$186,102	\$335,157	\$532,332	\$532,332
A2010 BASEMENT EXCAVATION	\$0	\$0	\$0	\$0
A2020 BASEMENT WALLS	\$0	\$0	\$0	\$0
B1010 FLOOR CONSTRUCTION	\$0	\$0	\$769,897	\$1,615,147
B1020 ROOF CONSTRUCTION	\$752,400	\$879,050	\$1,823,172	\$1,823,172
B2010 EXTERIOR WALLS	\$980,839	\$1,063,108	\$2,489,035	\$3,141,073
B2020 EXTERIOR WINDOWS	\$324,201	\$351,728	\$860,859	\$1,098,341
B2030 EXTERIOR DOORS	\$42,000	\$56,250	\$76,500	\$76,500
B3010 ROOF COVERINGS	\$535,772	\$934,296	\$1,280,701	\$1,280,701
B3020 ROOF OPENINGS	\$0	\$0	\$0	\$0
C1010 PARTITIONS	\$543,500	\$962,675	\$1,970,700	\$2,528,050
C1020 INTERIOR DOORS	\$120,950	\$195,700	\$380,950	\$478,450
C1030 FITTINGS	\$123,295	\$305,910	\$579,210	\$764,435
C2010 STAIR CONSTRUCTION	\$0	\$0	\$48,300	\$96,600
C2020 STAIR FINISHES	\$0	\$0	\$8,676	\$17,352
C3010 WALL FINISHES	\$154,850	\$356,150	\$596,900	\$739,550
C3020 FLOOR FINISHES	\$168,000	\$306,000	\$648,000	\$828,000
C3030 CEILING FINISHES	\$154,000	\$280,500	\$594,000	\$759,000

Clinton Middle School Addition/Renovation - PSR

D. SERVICES

D10 - CONVEYING

D1010 ELEVATORS & LIFTS

AR 1 550 ADDITION ESTIMATE TOTAL	AR 1 750 ADDITION ESTIMATE TOTAL	AR 2 550 ADDITION ESTIMATE TOTAL	AR 2 750 ADDITION ESTIMATE TOTAL
\$0	\$0	\$0	\$0

D20 - PLUMBING

D2010 PLUMBING

\$252,000	\$726,750	\$1,539,000	\$1,966,500
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D30 - HVAC

D3010 HVAC

\$1,288,000	\$2,346,000	\$4,968,000	\$6,348,000
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D40 - FIRE PROTECTION

D4010 SPRINKLERS

\$112,000	\$204,000	\$432,000	\$552,000
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D50 - ELECTRICAL

D5010 ELECTRICAL SERVICE & DISTRIBUTION

\$126,000	\$229,500	\$486,000	\$621,000
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D5020 LIGHTING & BRANCH WIRING

\$191,100	\$348,075	\$737,100	\$941,850
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D5030 COMMUNICATION & SECURITY

\$240,000	\$401,075	\$774,800	\$966,950
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D5090 OTHER ELECTRICAL SYSTEMS

\$311,304	\$567,018	\$1,200,744	\$1,534,284
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E. EQUIPMENT & FURNISHINGS

E10 - EQUIPMENT

E1010 COMMERCIAL EQUIPMENT

\$0	\$0	\$0	\$0
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E1090 OTHER EQUIPMENT

\$2,500	\$10,000	\$14,000	\$14,000
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E20 - FURNISHINGS

E 2010 FIXED FURNISHINGS

\$61,357	\$351,963	\$754,280	\$963,952
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E2020 MOVABLE FURNISHINGS

\$0	\$0	\$0	\$0
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F. SPECIAL CONSTRUCTION & DEMOLITION

F10 - SPECIAL CONSTRUCTION

F1010 SPECIAL STRUCTURES

\$0	\$0	\$0	\$0
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F1020 INTEGRATED CONSTRUCTION

\$0	\$0	\$0	\$0
-----	-----	-----	-----

F1030 SPECIAL CONSTRUCTION SYSTEMS

\$0	\$0	\$0	\$0
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F1040 SPECIAL FACILITIES

\$0	\$0	\$0	\$0
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F1050 SPECIAL CONTROLS & INSTRUMENTATION

\$0	\$0	\$0	\$0
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F20 - SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

\$22,500	\$22,500	\$30,000	\$37,500
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F2020 HAZARDOUS COMPONENTS ABATEMENT

\$0	\$0	\$0	\$0
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Clinton Middle School Addition/Renovation - PSR

G. BUILDING SITEWORK

G10 - SITE PREPARATION

	AR 1 550 ADDITION ESTIMATE TOTAL	AR 1 750 ADDITION ESTIMATE TOTAL	AR 2 550 ADDITION ESTIMATE TOTAL	AR 2 750 ADDITION ESTIMATE TOTAL
G1010 SITE CLEARING	\$197,718	\$197,718	\$214,020	\$214,020
G1020 SITE DEMOLITION & RELOCATIONS	\$579,548	\$579,548	\$712,291	\$712,291
G1030 SITE EARTHWORK	\$1,098,412	\$1,689,460	\$1,786,552	\$1,786,552
G1040 HAZARDOUS WASTE REMEDIATION	\$0	\$0	\$0	\$0
G20 - SITE IMPROVEMENTS				
G2010 ROADWAYS	\$890,445	\$890,445	\$1,250,960	\$1,250,960
G2020 PARKING LOTS	\$0	\$0	\$0	\$0
G2030 PEDESTRIAN PAVING	\$896,046	\$896,046	\$721,388	\$721,388
G2040 SITE DEVELOPMENT	\$1,589,483	\$1,619,483	\$2,291,983	\$2,291,983
G2050 LANDSCAPING	\$1,378,719	\$1,364,010	\$1,297,941	\$1,297,941
G30 - SITE MECHANICAL UTILITIES				
G3010 WATER SUPPLY	\$204,660	\$204,660	\$204,660	\$204,660
G3020 SANITARY SEWER	\$186,750	\$186,750	\$186,750	\$186,750
G3030 STORM SEWER	\$1,091,388	\$1,160,388	\$1,726,512	\$1,723,512
G3040 HEATING DISTRIBUTION	\$0	\$0	\$0	\$0
G3050 COOLING DISTRIBUTION	\$0	\$0	\$0	\$0
G3060 FUEL DISTRIBUTION	\$49,250	\$49,250	\$49,250	\$49,250
G3090 OTHER SITE MECHANICAL UTILITIES	\$0	\$0	\$0	\$0
G40 - SITE ELECTRICAL UTILITIES				
G4010 ELECTRICAL DISTRIBUTION	\$424,900	\$424,900	\$424,900	\$424,900
G4020 SITE LIGHTING	\$478,550	\$478,550	\$478,550	\$478,550

TOTAL DIRECT COST

	\$16,364,997	\$21,860,792	\$36,324,502	\$42,451,085
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DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
A. SUBSTRUCTURE										
A10 - FOUNDATIONS										
A1010 STANDARD FOUNDATIONS										
<u>033000 CAST IN PLACE CONCRETE</u>										
Foundations :										
Wall Footing 1' x 3':	\$600.00	CY	45	\$27,000	47	\$28,200	89	\$53,400	89	\$53,400
Frost wall - 4' x 16"	\$1,300.00	CY	119	\$154,700	128	\$166,400	221	\$287,300	221	\$287,300
Perm Column Footing 22" x 7'-0"sq	\$625.00	CY	93	\$58,125	113	\$70,625	156	\$97,500	156	\$97,500
Int Column Footing 24" x 9'-6"sq.	\$625.00	CY	87	\$54,375	188	\$117,500	268	\$167,500	268	\$167,500
Grade Beam	\$700.00	CY	10	\$7,000	15	\$10,500	30	\$21,000	30	\$21,000
Pilasters	\$1,200.00	CY	15	\$18,000	25	\$30,000	35	\$42,000	35	\$42,000
Anchor bolt and grout	\$245.00	EA	40	\$9,800	60	\$14,700	84	\$20,580	84	\$20,580
Tie inot existing foundation	\$5,000.00	LOC	3	\$15,000	4	\$20,000	4	\$20,000	4	\$20,000
<u>072100 INSULATION</u>										
2" Rigid ext. found. insul w/prot.bd	\$4.05	SF	2,400	\$9,720	2,564	\$10,384	4,464	\$18,079	4,464	\$18,079
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>										
Foundation dampproofing	\$2.30	SF	2,400	\$5,520	2,564	\$5,897	4,464	\$10,267	4,464	\$10,267
<u>310000 EARTHWORK</u>										
Ground Improvement Allowance	8.00	FTP	14,000	\$112,000	25,500	\$204,000	40,469	\$323,752	40,469	\$323,752
Perimeter Found Drain	\$44.00	LF	630	\$27,720	650	\$28,600	1,120	\$49,280	1,120	\$49,280
Under slab Drain	\$1.25	SF	14,000	\$17,500	25,500	\$31,875	40,469	\$50,586	40,469	\$50,586
Foundation Earthwork:										
Foundation excavation / backfill	\$5.00	SF	14,000	\$70,000	25,500	\$127,500	40,469	\$202,345	40,469	\$202,345
Dewatering	\$20,000.00	LS	1	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
				-----			-----			-----
				\$606,460			\$886,181			\$1,383,590
A1030 SLAB ON GRADE										
<u>310000 EARTHWORK</u>										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
12" Gravel base	\$48.00	CY	519	\$24,912	945	\$45,360	1,499	\$71,952	1,499	\$71,952
<u>033000 CAST IN PLACE CONCRETE</u>										
5" Slab on Grade: 3500 psi, NW, (incl. placement)	\$305.00	CY	216	\$65,880	394	\$120,170	624	\$190,320	624	\$190,320
Welded wire fabric	\$2.60	SF	14,000	\$36,400	25,500	\$66,300	40,469	\$105,219	40,469	\$105,219
Control Joint	\$3.50	LF	940	\$3,290	1,700	\$5,950	2,698	\$9,443	2,698	\$9,443
Trowel Finish	\$2.50	SF	14,000	\$35,000	25,500	\$63,750	40,469	\$101,173	40,469	\$101,173
<u>072100 INSULATION</u>										
4" Rigid Slab Insul. - 2' perm.	\$4.35	SF	1,200	\$5,220	1,282	\$5,577	2,232	\$9,709	2,232	\$9,709
<u>072616 BELOW GRADE VAPOR RETARDER</u>										
Stegro vapor barrier	\$1.10	SF	14,000	\$15,400	25,500	\$28,050	40,469	\$44,516	40,469	\$44,516
				-----		-----		-----		-----
				\$186,102		\$335,157		\$532,332		\$532,332
TOTAL A10 FOUNDATIONS				\$792,562	\$1,221,338		\$1,915,922		\$1,915,922	
B. SHELL										
B10 - SUPERSTRUCTURE										
B1010 FLOOR CONSTRUCTION										
<u>051200 STRUCTURAL STEEL</u>										
New Construction: Floor frame (14 lbs/sf)	\$5,450.00	TONS					94.717	\$516,208	199.717	\$1,088,458
Shear stud	\$5.50	EA					1,350	\$7,425	1,350	\$7,425
<u>033000 CAST IN PLACE CONCRETE</u>										
5 1/2" NW Deck fill	\$9.40	SF					13,531	\$127,191	28,531	\$268,191
<u>053100 STEEL DECKING</u>										
2" x 18 Ga. comp deck	\$5.90	SF					13,531	\$79,833	28,531	\$168,333

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
<u>072100 INSULATION</u>										
Spray on fireproofing - structure	\$2.90	SF					13,531	\$39,240	28,531	\$82,740
Intumescent - allow	\$30,000.00	LS								
				----- \$0		----- \$0		----- \$769,897		----- \$1,615,147
B1020 ROOF CONSTRUCTION										
<u>033000 CAST IN PLACE CONCRETE</u>										
6" NW Deck fill - Mech Equip.	\$9.00	SF	2,500	\$22,500	4,000	\$36,000	4,000	\$36,000	4,000	\$36,000
<u>051200 STRUCTURAL STEEL</u>										
New Construction:										
Roof frame (14 lbs/sf)	\$5,450.00	TONS	98.00	\$534,100	98.00	\$534,100	244.22	\$1,331,015	244.22	\$1,331,015
Roof screen frame (varies lf @ 110 lbs/	\$5,600.00	TONS	5.50	\$30,800	8.25	\$46,200	11.00	\$61,600	11.00	\$61,600
Galv. RTU dunnage	\$5,600.00	TONS	2	\$11,200	2	\$11,200	3	\$16,800	3	\$16,800
Frame Entry Canopies (varies sf @ 20	\$5,200.00	TONS	6	\$31,200	6	\$31,200	14	\$72,800	14	\$72,800
<u>053100 STEEL DECKING</u>										
1 1/2" x 18 Ga roof deck - typ.	\$5.60	SF	14,000	\$78,400	25,500	\$142,800	34,889	\$195,378	34,889	\$195,378
3" x 18 Ga acoust. deck - gym/aux. gym	\$12.00	SF								
1 1/2" x 20 Ga canopy roof deck	\$6.00	SF	600	\$3,600	600	\$3,600	1,400	\$8,400	1,400	\$8,400
<u>072100 INSULATION</u>										
Spray on fireproofing - structure	\$2.90	SF	14,000	\$40,600	25,500	\$73,950	34,889	\$101,178	34,889	\$101,178
Intumescent - allow	\$75,000.00	LS								
				----- \$752,400		----- \$879,050		----- \$1,823,172		----- \$1,823,172
TOTAL B10 SUPERSTRUCTURE				\$752,400		\$879,050		\$2,593,069		\$3,438,319
B20 - EXTERIOR ENCLOSURE										
B2010 EXTERIOR WALLS										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
<u>040001 MASONRY*</u>										
Masonry Veneer:										
Brick Veneer - 40%	\$43.00	SF	3,396	\$146,028	3,591	\$154,413	9,172	\$394,396	11,747	\$505,121
Canopy col. -complete	\$4,800.00	EA	4	\$19,200	4	\$19,200	4	\$19,200	4	\$19,200
Stainless steel masonry flashing	\$29.00	LF	635	\$18,415	700	\$20,300	1,600	\$46,400	2,200	\$63,800
Architectural Precast:										
Precast Window Sill	\$68.00	LF	113	\$7,698	120	\$8,133	306	\$20,781	392	\$26,629
CMU Exterior Wall:										
8" CMU Elev.	\$38.00	SF								
<u>054000 COLD FORMED METAL FRAMING</u>										
8" x 18 Ga. stud @ typical wall	\$15.00	SF	6,793	\$101,895	7,182	\$107,730	18,344	\$275,160	23,494	\$352,410
1/2" Dens glass sheathing-ext. wall	\$4.50	SF	6,793	\$30,569	7,182	\$32,319	18,344	\$82,548	23,494	\$105,723
3" Soffit/eave framing	\$25.00	LF	607	\$15,175	641	\$16,025	1,116	\$27,900	1,116	\$27,900
6" Overhang soffit frame	\$9.50	SF								
3" Canopy ceiling framing	\$7.00	SF	600	\$4,200	600	\$4,200	1,400	\$9,800	1,400	\$9,800
1/2" Dens glass sheathing -soffit	\$4.50	SF								
1/2" Dens glass sheathing -canopy	\$4.50	SF	600	\$2,700	600	\$2,700	1,400	\$6,300	1,400	\$6,300
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Misc. Ext Metals	\$0.50	SF	3,396	\$1,698	3,591	\$1,796	9,172	\$4,586	11,747	\$5,874
<u>071326 AIR & VAPOR BARRIERS</u>										
Air & vapor barrier - wall	\$9.50	SF	6,793	\$64,534	7,182	\$68,229	18,344	\$174,268	23,494	\$223,193
Air & vapor barrier - soffit	\$9.50	SF								
<u>072100 INSULATION</u>										
Exterior Wall:										
Spray foam at perm openings	\$6.00	LF	1,415	\$8,490	1,496	\$8,976	3,822	\$22,932	4,895	\$29,370
3" Mineral wool Insul.	\$4.12	SF	6,793	\$27,987	7,182	\$29,590	18,344	\$75,577	23,494	\$96,795
2" Spray foam	\$4.65	SF	6,793	\$31,587	7,182	\$33,396	18,344	\$85,300	23,494	\$109,247
Bldg Soffit:										
3" Rigid Insul.	\$3.90	SF								
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>										
Exterior Sealants	\$0.42	SF	6,793	\$2,853	7,182	\$3,016	18,344	\$7,704	23,494	\$9,867

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
<u>074213 PERFORMED CLADDING</u>										
Wall Panel:										
Architectural Metal panel - 40%	\$95.00	SF	3,396	\$322,620	3,591	\$341,145	9,172	\$871,340	11,747	\$1,115,965
Alum. 16 ga Panel :										
Canopy ceiling	\$45.00	SF	600	\$27,000	600	\$27,000	1,400	\$63,000	1,400	\$63,000
Overhang soffit	\$45.00	SF								
Roof Eave Cladding	\$75.00	LF	607	\$45,525	641	\$48,075	1,116	\$83,700	1,116	\$83,700
Roof Screen:										
10' H Metal Panel Equipment Screen	\$65.00	SF	1,000	\$65,000	1,500	\$97,500	2,000	\$130,000	2,000	\$130,000
<u>092116 GYPSUM WALLBOARD</u>										
1 Lyr 5/8" gyp @ ext. wall	\$4.15	SF	6,793	\$28,191	7,182	\$29,805	18,344	\$76,128	23,494	\$97,500
<u>090007 PAINTING*</u>										
Exterior painting	\$0.22	SF	6,793	\$1,494	7,182	\$1,580	18,344	\$4,036	234,994	\$51,699
<u>101400 IDENTIFYING DEVICES (EXT. BLD MTD SIGNAGE)</u>										
24" Alum bldg mtd letter - allow	\$420.00	EA	19	\$7,980	19	\$7,980	19	\$7,980	19	\$7,980
				-----		-----		-----		-----
				\$980,839		\$1,063,108		\$2,489,035		\$3,141,073
B2020 EXTERIOR WINDOWS										
<u>061000 ROUGH CARPENTRY</u>										
P.T. - perim blocking	\$14.00	LF	1,415	\$19,810	1,496	\$20,944	3,822	\$53,508	4,895	\$68,530
<u>071326 AIR & VAPOR BARRIERS</u>										
Flex flashing - perim	\$10.00	LF	1,415	\$14,150	1,496	\$14,960	3,822	\$38,220	4,895	\$48,950
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>										
Window Caulking	\$12.75	LF	1,415	\$18,041	1,496	\$19,074	3,822	\$48,731	4,895	\$62,411
<u>080001 METAL WINDOWS*</u>										
DBL Glazing Exterior										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Alum Window - 20%	\$150.00	SF	1,698	\$254,700	1,795	\$269,250	4,586	\$687,900	5,873	\$880,950
Alum. Curtainwall - premium	\$45.00	SF								
Security glazing - premium	\$35.00	SF	500	\$17,500	500	\$17,500	500	\$17,500	500	\$17,500
Sun Shading: Typical Classroom Window		LS			10,000	\$10,000	15,000	\$15,000	20,000	\$20,000
				----- \$324,201		----- \$351,728		----- \$860,859		----- \$1,098,341
B2030 EXTERIOR DOORS										
<u>080001 METAL WINDOWS*</u>										
7' Alum. Doors (Incl. Hardware):										
Main Entry - dbl	\$12,000.00	EA	2	\$24,000	2	\$24,000	2	\$24,000	2	\$24,000
Main Entry - sgl	\$6,000.00	EA	1	\$6,000	3	\$18,000	6	\$36,000	6	\$36,000
Auto opener - allow	\$9,000.00	PR	1	\$9,000	1	\$9,000	1	\$9,000	1	\$9,000
*Storefront at entries W /B 2020										
Security Glazing Premium	\$750.00	LVS	4	\$3,000	7	\$5,250	10	\$7,500	10	\$7,500
				----- \$42,000		----- \$56,250		----- \$76,500		----- \$76,500
TOTAL B20 - EXTERIOR ENCLOSURE				\$1,347,040		\$1,471,086		\$3,426,394		\$4,315,914
B30 - ROOFING										
B3010 ROOF COVERINGS										
<u>061000 ROUGH CARPENTRY</u>										
Roof Blocking - main bldg	\$1.45	SF	14,000	\$20,300	25,500	\$36,975	34,889	\$50,589	34,889	\$50,589
Roof Blocking - canopy	\$1.20	SF	600	\$720	600	\$720	1,400	\$1,680	1,400	\$1,680
<u>070002 ROOFING AND FLASHING*</u>										
PVC roof - canopy	\$26.00	SF	600	\$15,600	600	\$15,600	1,400	\$36,400	1,400	\$36,400
PVC roof w/ 8" rigid insul	\$30.00	SF	14,000	\$420,000	25,500	\$765,000	34,889	\$1,046,670	34,889	\$1,046,670
Roof walkway pad (2'x2')	\$6.15	SF	2,000	\$12,300	3,500	\$21,525	4,000	\$24,600	4,000	\$24,600
Alum. Trim :										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Perimeter wall Coping	\$36.00	LF	607	\$21,852	641	\$23,076	1,131	\$40,716	1,131	\$40,716
Base Flashing	\$34.00	LF	500	\$17,000	600	\$20,400	302	\$10,268	302	\$10,268
Misc. flashing	\$2.00	SF	14,000	\$28,000	25,500	\$51,000	34,889	\$69,778	34,889	\$69,778
				-----		-----		-----		-----
				\$535,772		\$934,296		\$1,280,701		\$1,280,701
B3020 ROOF OPENINGS										
<u>077200 ROOF ACCESSORIES</u>										
Roof hatch	\$4,250.00	EA								
*Mechanical equip screen is included with B1020 & B2010				-----		-----		-----		-----
				\$0		\$0		\$0		\$0
TOTAL B30 ROOFING				\$535,772	\$934,296	\$1,280,701	\$1,280,701			
C. INTERIORS										
C10 - INTERIOR CONSTRUCTION										
C1010 PARTITIONS										
<u>040001 MASONRY*</u>										
Repair Opneing at New Add. Connectio	\$10,000.00	EA	3	\$30,000	3	\$30,000	4	\$40,000	5	\$50,000
8" CMU - Mech Receiving	\$36.75	SF								
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
CMU angle brace frame - 4' 0C	\$125.00	EA		\$0						
Loose lintels	\$0.65	SF		\$0						
<u>061000 ROUGH CARPENTRY</u>										
Interior blocking	\$1.00	GSF	14,000	\$14,000	25,500	\$25,500	54,000	\$54,000	69,000	\$69,000
Misc. rough carpentry	\$1.00	GSF	14,000	\$14,000	25,500	\$25,500	54,000	\$54,000	69,000	\$69,000
Clean Saftey and Laborer	\$4.00	GSF	14,000	\$56,000	25,500	\$102,000	54,000	\$216,000	69,000	\$276,000
<u>072100 INSULATION</u>										
Firestopping	\$0.85	GSF	14,000	\$11,900	25,500	\$21,675	54,000	\$45,900	69,000	\$58,650

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
<u>081113 HOLLOW METALWORK</u>										
Interior H.M Windows, Sidelites and Transoms (INC. GLAZING):										
Door sidelight (2' x 7')	\$1,200.00	EA	4	\$4,800	16	\$19,200	30	\$36,000	38	\$45,600
Rated Stair window	\$390.00	SF								
Misc. window/sidelight & transom	\$90.00	SF	200	\$18,000	500	\$45,000	1,000	\$90,000	1,500	\$135,000
<u>083323 SPECIAL DOORS</u>										
Access panels	\$0.25	GSF	14,000	\$3,500	25,500	\$6,375	54,000	\$13,500	69,000	\$17,250
<u>080001 METAL WINDOWS*</u>										
Interior Aluminum Storefront:										
Vestibule and Entries	\$88.00	SF	350	\$30,800	350	\$30,800	350	\$30,800	350	\$30,800
General Building Area	\$0.50	GSF	14,000	\$7,000	25,500	\$12,750	54,000	\$27,000	69,000	\$34,500
<u>092116 GYPSUM WALLBOARD</u>										
Drywall Partitions:										
GWB assemblies	\$25.25	GSF	14,000	\$353,500	25,500	\$643,875	54,000	\$1,363,500	69,000	\$1,742,250
Operable Partition:										
Stage - 10'		n/a								
				-----		-----		-----		-----
				\$543,500		\$962,675		\$1,970,700		\$2,528,050
C1020 INTERIOR DOORS										
<u>081113 HOLLOW METALWORK</u>										
<u>081416 WOOD AND PLASTIC DOORS</u>										
<u>087100 DOOR HARDWARE</u>										
Interior Door frame and Hardware	\$6.50	GSF	14,000	\$91,000	25,500	\$165,750	54,000	\$351,000	69,000	\$448,500
<u>080001 METAL WINDOWS*</u>										
Aluminum (Frame, Door, Glass, Glazing and Hdw):										
Vest - dbl	\$12,000.00	PR	2	\$24,000	2	\$24,000	2	\$24,000	2	\$24,000
Main office -sgl	\$2,975.00	EA	2	\$5,950	2	\$5,950	2	\$5,950	2	\$5,950
				-----		-----		-----		-----
				\$120,950		\$195,700		\$380,950		\$478,450

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
C1030 FITTINGS										
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Misc. metals	\$2.00	GSF	14,000	\$28,000	25,500	\$51,000	54,000	\$108,000	69,000	\$138,000
<u>062000 FINISH CARPENTRY</u>										
Utility & closet shelving	\$5,000.00	LS			1	\$5,000	1	\$5,000	1	\$5,000
Typ. window sill/apron (nic cw-gym)	\$65.00	LF	283	\$18,395	299	\$19,435	764	\$49,660	979	\$63,635
Stage Proscenium and Trim	\$35,000.00	LS								
Misc. wood trim	\$1.00	GSF	14,000	\$14,000	25,500	\$25,500	54,000	\$54,000	69,000	\$69,000
Media Center Built-in	\$30,000.00	LS								
Raised Stage Platform and steps	\$55.00	SF								
Custom Casework:										
Admin casework	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Circulation desk	\$15,000.00	LS								
<u>102113 COMPARTMENTS & CUBICLES</u>										
Solid Plastic Toilet Partitions:										
Std. partition	\$1,385.00	EA								
HC partition	\$1,590.00	EA								
<u>102813 TOILET & BATH ACCESSORIES</u>										
Sgl User Toilet Accessories	\$750.00	EA	2	\$1,500	6	\$4,500	8	\$6,000	10	\$7,500
*Excludes classroom accessories										
<u>101100 MARKERBOARDS & TACKBOARDS</u>										
Marker board tackboard	\$1.30	GSF	14,000	\$18,200	25,500	\$33,150	54,000	\$70,200	69,000	\$89,700
Glass Display Case	\$1,000.00	LF	5	\$5,000	5	\$5,000	10	\$10,000	10	\$10,000
<u>109000 MISCELLANEOUS SPECIALTIES</u>										
Kitchen staff locker(12"wx15" D x 6'h)	\$350.00	EA								
Custodian staff(12"wx15" D x 6'h)	\$350.00	EA								
Student Lockers	\$450.00	EA			200	\$90,000	400	\$180,000	600	\$270,000
PE Locker	\$375.00	EA								
Wall & corner guards - allow	\$5,000.00	LS			1	\$5,000	1	\$5,000	1	\$5,000

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Fire extinguisher and cab - allow	\$550.00	EA	2	\$1,100	5	\$2,750	15	\$8,250	25	\$13,750
Cubicle curtain track w/ curtain - health	\$1,500.00	EA	2	\$3,000	2	\$3,000	2	\$3,000	2	\$3,000
Misc. specialties	\$0.25	GSF	14,000	\$3,500	25,500	\$6,375	54,000	\$13,500	69,000	\$17,250
101400 IDENTIFYING DEVICES										
Building directory - allow	\$5,000.00	EA								
Dedication plaque	\$3,500.00	EA								
Interior Signage	\$0.40	GSF	14,000	\$5,600	25,500	\$10,200	54,000	\$21,600	69,000	\$27,600
Environmental graphics	\$20,000.00	LS			1	\$20,000	1	\$20,000	1	\$20,000
				-----		-----		-----		-----
				\$123,295		\$305,910		\$579,210		\$764,435
TOTAL C10 - INTERIOR CONSTRUCTION				\$787,745		\$1,464,285		\$2,930,860		\$3,770,935
C20 - STAIRS										
C2010 STAIR CONSTRUCTION										
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Metal Pan Stair w/Rails: Egress corridor stair	\$45,000.00	FLT					1	\$45,000	2	\$90,000
<u>033000 CAST IN PLACE CONCRETE</u>										
Conc stair pan fill - full ft	\$3,300.00	FLTS					1	\$3,300	2	\$6,600
				-----		-----		-----		-----
				\$0		\$0		\$48,300		\$96,600
C2020 STAIR FINISHES										
<u>090005 RESILIENT FLOORING*</u>										
Rubber treads and risers	\$22.00	LF					108	\$2,376	216	\$4,752
Rubber landing tile	\$25.00	SF					96	\$2,400	192	\$4,800
<u>090007 PAINTING*</u>										
Paint stair & rails - full ft	\$3,900.00	FLTS					1	\$3,900	2	\$7,800

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
				\$0		\$0		\$8,676		\$17,352
TOTAL C20 - STAIRS				\$0		\$0		\$56,976		\$113,952
C30 - INTERIOR FINISHES										
C3010 WALL FINISHES										
Wood Wall Panel - First Flr Lobby	\$75.00	SF	500	\$37,500	500	\$37,500	500	\$37,500	500	\$37,500
Wood Wall Panel - media cntr	\$75.00	SF								
Wood Wall Panel - stage café	\$75.00	SF								
Ceramic Tile Bathroom - 8'h	\$34.00	SF	300	\$10,200	900	\$30,600	2,000	\$68,000	2,400	\$81,600
Porcelain Tile - corridor 5'	\$35.00	SF	1,250	\$43,750	4,700	\$164,500	8,440	\$295,400	10,610	\$371,350
Porcelain Tile - servery café	\$35.00	SF								
Tectum - gym	\$23.00	SF								
Acoustical Wall panel	\$36.00	SF	250	\$9,000	1,250	\$45,000	1,600	\$57,600	2,200	\$79,200
Misc. Finish	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Interior Painting	\$2.10	GSF	14,000	\$29,400	25,500	\$53,550	54,000	\$113,400	69,000	\$144,900
				\$154,850		\$356,150		\$596,900		\$739,550
C3020 FLOOR FINISHES										
Floor Finish	\$12.00	SF	14,000	\$168,000	25,500	\$306,000	54,000	\$648,000	69,000	\$828,000
				\$168,000		\$306,000		\$648,000		\$828,000
C3030 CEILING FINISHES										
Ceiling Finish	\$11.00	GSF	14,000	\$154,000	25,500	\$280,500	54,000	\$594,000	69,000	\$759,000
				\$154,000		\$280,500		\$594,000		\$759,000
TOTAL C30 - INTERIOR FINISHES				\$476,850		\$942,650		\$1,838,900		\$2,326,550
D. SERVICES										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
D10 - CONVEYING										
D1010 ELEVATORS & LIFTS										
<u>140001 ELEVATORS*</u>										
Traction 3,500 lbs Passenger Elev	\$85,000.00	STOP								
Elevator Metals	\$10,000.00	LS								
				-----		-----		-----		-----
				\$0		\$0		\$0		\$0
TOTAL D10 - CONVEYING				\$0		\$0		\$0		\$0
D20 - PLUMBING										
D2010 PLUMBING										
Plumbing - (2 sgl user toilets)	\$18.00	GSF	14,000	\$252,000						
Plumbing - (6 sgl user toilets & classroc	\$28.50	GSF			25,500	\$726,750	54,000	\$1,539,000	69,000	\$1,966,500
				-----		-----		-----		-----
				\$252,000		\$726,750		\$1,539,000		\$1,966,500
TOTAL D20 - PLUMBING				\$252,000		\$726,750		\$1,539,000		\$1,966,500
D30 - HVAC										
D3010 HVAC										
Air to Water HP w/ Condensing Boiler & DOAS	\$92.00	GSF	14,000	\$1,288,000	25,500	\$2,346,000	54,000	\$4,968,000	69,000	\$6,348,000
				-----		-----		-----		-----
				\$1,288,000		\$2,346,000		\$4,968,000		\$6,348,000
TOTAL D30 - HVAC				\$1,288,000		\$2,346,000		\$4,968,000		\$6,348,000

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
D40 - FIRE PROTECTION										
D4010 SPRINKLERS										
<u>210001 FIRE SUPPRESSION*</u>										
Sprinkler system - wet *EXCLUDES FIRE PUMP	\$8.00	GSF	14,000	\$112,000	25,500	\$204,000	54,000	\$432,000	69,000	\$552,000
				----- \$112,000		----- \$204,000		----- \$432,000		----- \$552,000
TOTAL D40 - FIRE PROTECTION				\$112,000		\$204,000		\$432,000		\$552,000
D50 - ELECTRICAL										
D5010 ELECTRICAL SERVICE & DISTRIBUTION										
<u>260001 ELECTRICAL*</u>										
4,000 Service Panel and Feeders (480 V	\$8.00	GSF	14,000	\$112,000	25,500	\$204,000	54,000	\$432,000	69,000	\$552,000
Digital metering	\$35,000.00	LS								
PV Rough in	\$32,000.00	LS								
500 kw Diesel Generator	\$310,000.00	LS								
700 kw Diesel Generator	\$525,000.00	LS								
Temp Power and Light	\$1.00	GSF	14,000	\$14,000	25,500	\$25,500	54,000	\$54,000	69,000	\$69,000
				----- \$126,000		----- \$229,500		----- \$486,000		----- \$621,000
D5020 LIGHTING & BRANCH WIRING										
<u>260001 ELECTRICAL*</u>										
Lighting	\$10.50	GSF	14,000	\$147,000	25,500	\$267,750	54,000	\$567,000	69,000	\$724,500
Lighting Control (inc device oc)	\$3.15	GSF	14,000	\$44,100	25,500	\$80,325	54,000	\$170,100	69,000	\$217,350
				----- \$191,100		----- \$348,075		----- \$737,100		----- \$941,850

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
D5030 COMMUNICATION & SECURITY										
<u>260001 ELECTRICAL*</u>										
CCTV	\$3.00	GSF	14,000	\$42,000	25,500	\$76,500	54,000	\$162,000	69,000	\$207,000
Access control	\$1.00	GSF	14,000	\$14,000	25,500	\$25,500	54,000	\$54,000	69,000	\$69,000
Video entry system	\$27,500.00	LS	1	\$27,500	1	\$27,500	1	\$27,500	1	\$27,500
Wifi nodes and Equipment	\$0.25	SF	14,000	\$3,500	25,500	\$6,375	54,000	\$13,500	69,000	\$17,250
Telephone System	\$65,000.00	LS	1	\$65,000	1	\$65,000	1	\$65,000	1	\$65,000
Network switches		W/ RENO								
Digital Signage	\$4,000.00	EA	1	\$4,000	1	\$4,000	1	\$4,000	1	\$4,000
Tele/data cabling, racks and switches	\$6.00	GSF	14,000	\$84,000	25,500	\$153,000	54,000	\$324,000	69,000	\$414,000
Classroom AV rough-in only	\$1,500.00	EA			9	\$13,500	26	\$39,000	34	\$51,000
Speech Reinforcement	\$3,300.00	EA			9	\$29,700	26	\$85,800	34	\$112,200
				-----		-----		-----		-----
				\$240,000		\$401,075		\$774,800		\$966,950
D5090 OTHER ELECTRICAL SYSTEMS										
<u>260001 ELECTRICAL*</u>										
Fire Alarm	\$4.80	GSF	14,000	\$67,200	25,500	\$122,400	54,000	\$259,200	69,000	\$331,200
Mass Notification	\$0.75	GSF	14,000	\$10,500	25,500	\$19,125	54,000	\$40,500	69,000	\$51,750
Devices	\$3.50	GSF	14,000	\$49,000	25,500	\$89,250	54,000	\$189,000	69,000	\$241,500
Vape Detection	\$0.76	GSF	14,000	\$10,584	25,500	\$19,278	54,000	\$40,824	69,000	\$52,164
Clocks and PA	\$1.20	GSF	14,000	\$16,800	25,500	\$30,600	54,000	\$64,800	69,000	\$82,800
Gym/Café AV System	\$1.30	GSF	14,000	\$18,200	25,500	\$33,150	54,000	\$70,200	69,000	\$89,700
Lighting Protection	\$0.78	GSF	14,000	\$10,920	25,500	\$19,890	54,000	\$42,120	69,000	\$53,820
Kitchen/Mechanical Wiring	\$2.50	GSF	14,000	\$35,000	25,500	\$63,750	54,000	\$135,000	69,000	\$172,500
Bi-Direction Antenna	\$0.80	GSF	14,000	\$11,200	25,500	\$20,400	54,000	\$43,200	69,000	\$55,200
Cell Phone Amplification	\$0.85	GSF	14,000	\$11,900	25,500	\$21,675	54,000	\$45,900	69,000	\$58,650
Test Permit and Misc.	\$5.00	GSF	14,000	\$70,000	25,500	\$127,500	54,000	\$270,000	69,000	\$345,000
By others:										
Telephone system										
Classroom projectors										
PV Panels										
				-----		-----		-----		-----
				\$311,304		\$567,018		\$1,200,744		\$1,534,284
TOTAL D50 - ELECTRICAL				\$868,404	\$1,545,668	\$3,198,644	\$4,064,084			
E. EQUIPMENT & FURNISHINGS										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
E10 - EQUIPMENT										
E1010 COMMERCIAL EQUIPMENT										
<u>114000 FOOD SERVICE EQUIPMENT</u>										
		see renovation		-----		-----		-----		-----
				\$0		\$0		\$0		\$0
E1090 OTHER EQUIPMENT										
<u>113100 APPLIANCES</u>										
Staff kitchen refrigerator	\$1,000.00	EA	1	\$1,000	1	\$1,000	1	\$1,000	1	\$1,000
Staff kitchen microwave	\$500.00	EA	1	\$500	1	\$500	1	\$500	1	\$500
Medical office refrigerator w/ice	\$1,000.00	EA	1	\$1,000	1	\$1,000	1	\$1,000	1	\$1,000
<u>116600 ATHLETIC & SPORTS EQUIPMENT</u>										
Basketball backstops - electric	\$10,250.00	EA								
Wall padding - 6'	\$15.00	SF								
Motorized gym divider curtain	\$19.00	SF								
Volley ball court equip.	\$700.00	EA								
Scoreboard and shot clock	\$24,000.00	EA								
Bleachers	\$125.00	SEAT								
<u>116143 STAGE DRAPERY</u>										
Stage curtain and rigging	\$35,000.00	LS								
<u>115213 PROJECTION SCREENS</u>										
Projection screen - stage	\$10,000.00	EA								
<u>119000 MISC. EQUIPMENT</u>										
Science Room Equipment	\$2,500.00	RMS			3	\$7,500	3	\$7,500	3	\$7,500
Metal storage shelving		NIC								
Book security equipment		NIC								
Kiln	\$4,000.00	EA					1	\$4,000	1	\$4,000
				-----		-----		-----		-----
				\$2,500		\$10,000		\$14,000		\$14,000

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
TOTAL E10 - EQUIPMENT				\$2,500		\$10,000		\$14,000		\$14,000
E20 - FURNISHINGS										
E 2010 FIXED FURNISHINGS										
<u>129000 MISC. FURNISHINGS</u>										
Meco shade - manual	\$9.50	SF	1,698	\$16,131	1,795	\$17,053	4,586	\$43,567	5,873	\$55,794
Elec Op Shades - 20%	1	LS	3,226	\$3,226	3,411	\$3,411	8,713	\$8,713	11,159	\$11,159
<u>123553 CLASSROOM CASEWORK</u>										
Casework - admin	\$3.00	GSF	14,000	\$42,000						
Casework - classrooms	\$13.00	GSF			25,500	\$331,500	54,000	\$702,000	69,000	\$897,000
				-----		-----		-----		-----
				\$61,357		\$351,963		\$754,280		\$963,952
E2020 MOVABLE FURNISHINGS							NIC			
				-----		-----		-----		-----
				\$0		\$0		\$0		\$0
TOTAL E20 - FURNISHINGS				\$61,357		\$351,963		\$754,280		\$963,952
F20 - SELECTIVE BUILDING DEMOLITION										
F2010 BUILDING ELEMENTS DEMOLITION										
Cut In Addition Openings	\$7,500.00	EA	3	\$22,500	3	\$22,500	4	\$30,000	5	\$37,500
				-----		-----		-----		-----
				\$22,500		\$22,500		\$30,000		\$37,500
F2020 HAZARDOUS COMPONENTS ABATEMENT										
Hazardous Waste Allowance	SEE SUMMARY PAGE									
				-----		-----		-----		-----
				\$0		\$0		\$0		\$0
TOTAL F20 - SELECTIVE BUILDING DEMOLITION				\$22,500		\$22,500		\$30,000		\$37,500

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
G. BUILDING SITEWORK										
G10 - SITE PREPARATION										
G1010 SITE CLEARING										
<u>311000 SITE PREPARATION & CLEARING</u>										
Construction fence	14.00	LF	4,100	\$57,400	4,100	\$57,400	4,100	\$57,400	4,100	\$57,400
Construction entrance pad(1,000 sf/loc)	11.00	SF	2,000	\$22,000	2,000	\$22,000	2,000	\$22,000	2,000	\$22,000
Construction gate	1,500.00	EA	2	\$3,000	2	\$3,000	2	\$3,000	2	\$3,000
Erosion control	8.50	LF	4,100	\$34,850	4,100	\$34,850	4,100	\$34,850	4,100	\$34,850
Inlet Protection	110.00	EA	25	\$2,750	25	\$2,750	25	\$2,750	25	\$2,750
Erosion Control Maintenance	7,500.00	LS	1	\$7,500	1	\$7,500	1	\$7,500	1	\$7,500
General site prep(exclude wooded area)	0.12	SF	585,146	\$70,218	585,146	\$70,218	721,000	\$86,520	721,000	\$86,520
*Noted Developed 24.22 Acre										
				----- \$197,718		----- \$197,718		----- \$214,020		----- \$214,020
G1020 SITE DEMOLITION & RELOCATIONS										
New Entry Drive, Emerg Access & HS Conn Rd:										
Sawcut street	10.50	LF	130	\$1,365	130	\$1,365	130	\$1,365	130	\$1,365
Sawcut bit sidewalk	20.00	LF	20	\$400	20	\$400	20	\$400	20	\$400
W Boylston St Improvements:										
Remove vehicular guardrail		NIC								
Remove Bit Town Sidewalk		NIC								
Remove Street Bit curb		NIC								
Site Removals:										
Bit Pavement - basketball court	1.00	SF	23,100	\$23,100	23,100	\$23,100	23,100	\$23,100	23,100	\$23,100
Bit Pavement -parking /circulation	1.10	SF	33,400	\$36,740	33,400	\$36,740	141,725	\$155,898	141,725	\$155,898
Conc. Pavement - site walk	2.00	SF	13,064	\$26,128	13,064	\$26,128	13,064	\$26,128	13,064	\$26,128
Salvage granite curbing	24.00	LF	1,500	\$36,000	1,500	\$36,000	1,500	\$36,000	1,500	\$36,000
Drainage structures & line	50,000.00	LS	1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000
Parking & traffic signage	1,500.00	LS	1	\$1,500	1	\$1,500	1	\$1,500	1	\$1,500
Chain Link Fence Prop Line	16.00	LF	2,300	\$36,800	2,300	\$36,800	2,300	\$36,800	2,300	\$36,800
Retaining Wall		N/A								
BLDG sanitary line & structures	10,000.00	LS	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
BLDG water lines	10,000.00	LS	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
Hydrants	750.00	LS	1	\$750	1	\$750	1	\$750	1	\$750

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Transformer & pad	5,000.00	LS	1	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Generator & pad	5,000.00	LS	1	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Utility pole	By Others									
Duct bank	65.00	LF	550	\$35,750	550	\$35,750	550	\$35,750	550	\$35,750
Site light pole & base	500.00	EA	25	\$12,500	25	\$12,500	25	\$12,500	25	\$12,500
Flag pole & base	500.00	EA	1	\$500	1	\$500	1	\$500	1	\$500
Bollards @ equip.	210.00	EA	15	\$3,150	15	\$3,150	15	\$3,150	15	\$3,150
Misc. Utility removal	25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Baseball/softball backstop & equip	3,500.00	LOC	3	\$10,500	3	\$10,500	3	\$10,500	3	\$10,500
Basketball hoop	500.00	EA	6	\$3,000	6	\$3,000	6	\$3,000	6	\$3,000
Basketball court fencing	15.00	LF	640	\$9,600	640	\$9,600	640	\$9,600	640	\$9,600
Misc. Site Demolition(nic bldg)	0.10	SF	585,146	\$58,515	585,146	\$58,515	721,000	\$72,100	721,000	\$72,100
Int Court yard demolition	5.00	GSF	1,650	\$8,250	1,650	\$8,250	1,650	\$8,250	1,650	\$8,250
Temporary Measures:										
Temp Sediment basin	10,000.00	LS	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
Temporary Parking and Access	50,000.00	LS	1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000
Snow removal	35,000.00	LS	1	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
Pedestrian and Traffic Control	75,000.00	LS	1	\$75,000	1	\$75,000	1	\$75,000	1	\$75,000
				-----		-----		-----		-----
				\$579,548		\$579,548		\$712,291		\$712,291
G1030 SITE EARTHWORK										
<u>310000 EARTHWORK</u>										
Strip top soil & sub bases - 12"	10.00	CY	18,519	\$185,190	28,852	\$288,520	28,852	\$288,520	28,852	\$288,520
Load and Haul Top Soil	12.00	CY	7,684	\$92,208	18,017	\$216,204	18,544	\$222,528	18,544	\$222,528
Soil disposal	22.00	TONS	12,294	\$270,477	28,827	\$634,198	29,670	\$652,749	29,670	\$652,749
General Site Grading:										
Site Grading	2.30	SY	65,016	\$149,537	65,016	\$149,537	80,111	\$184,256	80,111	\$184,256
Site Cut - allow	12.50	CY	12,000	\$150,000	12,000	\$150,000	15,000	\$187,500	15,000	\$187,500
Truck and haul spoil - 50%	15.00	CY	5,000	\$75,000	5,000	\$75,000	5,000	\$75,000	5,000	\$75,000
Dispose of spoil - 50%	22.00	TONS	8,000	\$176,000	8,000	\$176,000	8,000	\$176,000	8,000	\$176,000
*Utilities & improvements include excavation & backfill										
*Paving base is w/ G20										
				-----		-----		-----		-----
				\$1,098,412		\$1,689,460		\$1,786,552		\$1,786,552
TOTAL G10 - SITE PREPARATION				\$1,875,677	\$2,466,725	\$2,712,863	\$2,712,863			

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
G20 - SITE IMPROVEMENTS										
G2010 ROADWAYS										
<u>321000 PAVING AND CURBING</u>										
Site Resurface Pavement:										
Sawcut bit pavement	\$4.50	LF	120	\$540	120	\$540				
Mill and dispose top layer	\$1.00	SF	108,850	\$108,850	108,850	\$108,850				
2" Top Coat	\$3.00	SF	108,850	\$326,550	108,850	\$326,550				
Reset existing Structures	\$5,000.00	LS	1	\$5,000	1	\$5,000				
Reinstall salvaged granite curb	\$35.00	LF	1,500	\$52,500	1,500	\$52,500				
New granite curb	\$55.00	LF	500	\$27,500	500	\$27,500				
Site New Pavement:										
HD Bituminous- Drive 24'W	\$5.00	SF	27,258	\$136,290	27,258	\$136,290	66,000	\$330,000	66,000	\$330,000
STD Bituminous-Parking & site drive	\$4.55	SF					65,350	\$297,343	65,350	\$297,343
14" Gravel base @ HD vehicular pave.	\$48.00	CY	1,181	\$56,688	1,181	\$56,688	2,860	\$137,280	2,860	\$137,280
12" Gravel base @ STD vehicular pave.	\$50.00	CY					2,420	\$121,000	2,420	\$121,000
Reinstall salvaged granite curb	\$35.00	LF					1,500	\$52,500	1,500	\$52,500
New granite curb	\$55.00	LF	2,500	\$137,500	2,500	\$137,500	5,000	\$275,000	5,000	\$275,000
Parking/traffic signage	\$0.10	SF	136,108	\$13,611	136,108	\$13,611	131,350	\$13,135	131,350	\$13,135
Parking line painting & markings	\$0.15	SF	136,108	\$20,416	136,108	\$20,416	131,350	\$19,703	131,350	\$19,703
Geotextile fabric		NIC								
Porous Pavement		NIC								
Concrete Vehicular Pavement		NIC								
W Boylston Street Improvements:										
Patch @ Utility	W / Utility									
New Granite Curbing		NIC								
Steel guard rail modifications		NIC								
Pedestrian Crosswalk and curb cuts	\$2,500.00	LOC	2	\$5,000	2	\$5,000	2	\$5,000	2	\$5,000
*PEDESTRIAN AND SCHOOL WARNING LIGHTS										
		NIC								
				-----		-----		-----		-----
				\$890,445		\$890,445		\$1,250,960		\$1,250,960
G2030 PEDESTRIAN PAVING										
<u>321000 PAVING AND CURBING</u>										
Entry Plaza:										
4" Concrete Walk(50%)	\$11.00	SF	125	\$1,375	125	\$1,375	375	\$4,125	375	\$4,125
Unit paver sys(50%)	\$36.00	SF	125	\$4,500	125	\$4,500	375	\$13,500	375	\$13,500

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
8" Gravel base @ plaza	\$55.00	CY	7	\$358	7	\$358	19	\$1,045	19	\$1,045
Playground 8-10Yr -Allow:										
Pour-in place rubber surface	\$25.00	SF	5,000	\$125,000	5,000	\$125,000	5,000	\$125,000	5,000	\$125,000
8" Gravel base @ play surf	\$55.00	CY	124	\$6,820	124	\$6,820	124	\$6,820	124	\$6,820
Under drain system	\$0.75	SF	5,000	\$3,750	5,000	\$3,750	5,000	\$3,750	5,000	\$3,750
Filter Fabric	\$1.05	SF	5,000	\$5,250	5,000	\$5,250	5,000	\$5,250	5,000	\$5,250
Perim. curb	\$48.00	LF	356	\$17,088	356	\$17,088	356	\$17,088	356	\$17,088
Outdoor Class/ Maker Space -Allow:										
4" Concrete Walk(50%)	\$11.00	SF	1,000	\$11,000	1,000	\$11,000	500	\$5,500	500	\$5,500
Unit paver sys(50%)	\$36.00	SF	1,000	\$36,000	1,000	\$36,000	500	\$18,000	500	\$18,000
8" Gravel base @ outdoor class	\$55.00	CY	50	\$2,750	50	\$2,750	25	\$1,375	25	\$1,375
New Basketball Court(110' x 70'/EA):										
STD Bituminous	\$4.55	SF	30,800	\$140,140	30,800	\$140,140	23,100	\$105,105	23,100	\$105,105
BB Court -Asphalt Color Play Surface	\$6.50	SF	30,800	\$200,200	30,800	\$200,200	23,100	\$150,150	23,100	\$150,150
12" Gravel base @ BB court pave.	\$48.00	CY	1,140	\$54,720	1,140	\$54,720	856	\$41,088	856	\$41,088
Site New 4" Concrete Walk:										
4" Concrete Walk 5'W typ	\$11.00	SF	15,760	\$173,360	15,760	\$173,360	14,200	\$156,200	14,200	\$156,200
4" Concrete Walk 5'W field access	\$11.00	SF	6,830	\$75,130	6,830	\$75,130	3,252	\$35,772	3,252	\$35,772
8" Gravel base @conc walk	\$55.00	CY	561	\$30,855	561	\$30,855	434	\$23,870	434	\$23,870
ADA paver	\$775.00	EA	10	\$7,750	10	\$7,750	10	\$7,750	10	\$7,750
Allow:										
Restore BB Court		NIC								
Colored concrete		N/A								
Exposed agg. walks		N/A								
Porous walk		N/A								
Bit walk		N/A								
Stone dust walk		N/A								
Repair exist walk		NIC								
W Boylston sidewalk replacement		NIC								
				-----		-----		-----		-----
				\$896,046		\$896,046		\$721,388		\$721,388
G2040 SITE DEVELOPMENT										
<u>323000 SITE IMPROVEMENTS</u>										
Entry Plaza -Allow:										
Paving sys	W/G2030									
Planter	\$4,000.00	EA	1	\$4,000	1	\$4,000	2	\$8,000	2	\$8,000

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Bench	\$3,500.00	EA	2	\$7,000	2	\$7,000	4	\$14,000	4	\$14,000
Drop Off Area Bollards	\$2,750.00	EA	4	\$11,000	4	\$11,000	4	\$11,000	4	\$11,000
Multi-purpose Field -Allow: Surface	W/G2050									
Field equipment	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Players bench	\$2,500.00	EA	2	\$5,000	2	\$5,000	2	\$5,000	2	\$5,000
Spectator seating -bleach w/ conc base	\$25,000.00	EA	2	\$50,000	2	\$50,000	2	\$50,000	2	\$50,000
Sports lighting	NIC									
Score board	NIC									
Chain link fence & gates	NIC									
Ball safety netting	\$285.00	LF	350	\$99,750	350	\$99,750	350	\$99,750	350	\$99,750
Playground 8-10Yr -Allow: Paving sys	W/G2030									
Play equip	\$350,000.00	EA	1	\$350,000	1	\$350,000	1	\$350,000	1	\$350,000
Bench	\$3,500.00	EA	4	\$14,000	4	\$14,000	4	\$14,000	4	\$14,000
Ornamental Perimeter fence	\$165.00	LF	356	\$58,740	356	\$58,740	356	\$58,740	356	\$58,740
SGL gate	\$6,000.00	EA	2	\$12,000	2	\$12,000	2	\$12,000	2	\$12,000
Premium -fence screen @ loading	\$20,000.00	LS	1	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
Outdoor Class/ Maker Space -Allow: Paving sys	W/G2030									
Fixed seat wall	\$575.00	LF	60	\$34,500	60	\$34,500	30	\$17,250	30	\$17,250
Planter	\$4,000.00	EA	2	\$8,000	2	\$8,000	1	\$4,000	1	\$4,000
Water service	\$15,000.00	LOC	1	\$15,000	1	\$15,000	1	\$15,000	1	\$15,000
Elec power	\$10,000.00	LOC	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
Misc spec.	\$10.00	GSF	2,000	\$20,000	2,000	\$20,000	1,000	\$10,000	1,000	\$10,000
Basketball Court(110' x 70'/EA)-Allow: Basketball hoop	4,000.00	EA	8	\$32,000	8	\$32,000	6	\$24,000	6	\$24,000
Chain link fence - 8'	125.00	LF	780	\$97,500	780	\$97,500	640	\$80,000	640	\$80,000
Chain link gate -sgl	3,500.00	LF	4	\$14,000	4	\$14,000	3	\$10,500	3	\$10,500
Players bench	2,500.00	EA	8	\$20,000	8	\$20,000	6	\$15,000	6	\$15,000
New Loading Dock Allow Reno Loading Dock -Allow	\$30,000.00	LS	1	\$30,000	1	\$30,000	1	\$30,000	1	\$30,000
Mod Block Retaining Wall Complete- Allow: Parking Area East	\$450.00	LF	250	\$112,500	250	\$112,500	250	\$112,500	250	\$112,500
Parking Area North	\$450.00	LF					315	\$141,750	315	\$141,750
Dumpster Enclosure: Slab on grade	\$22.00	SF	288	\$6,336	288	\$6,336	288	\$6,336	288	\$6,336
12" Gravel base @ conc pad	\$48.00	CY	11	\$528	11	\$528	11	\$528	11	\$528
Louvered fence 8'H	\$175.00	LF	52	\$9,100	52	\$9,100	52	\$9,100	52	\$9,100

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
DBL Gate (10' Wx 8'H)	\$8,000.00	EA	2	\$16,000	2	\$16,000	2	\$16,000	2	\$16,000
Bollards	\$1,500.00	LOC	4	\$6,000	4	\$6,000	4	\$6,000	4	\$6,000
Site Improvements:										
Bicycle loop	\$850.00	EA	15	\$12,750	15	\$12,750	15	\$12,750	15	\$12,750
Trash Receptacle	\$4,500.00	EA	5	\$22,500	5	\$22,500	5	\$22,500	5	\$22,500
4' CL Fence @ East Prop Line	\$74.00	LF	1,000	\$74,000	1,000	\$74,000	1,000	\$74,000	1,000	\$74,000
4' CL Fence @ South Prop Line	\$74.00	LF	1,300	\$96,200	1,300	\$96,200	1,300	\$96,200	1,300	\$96,200
Baseball/Softball Field-Allow:										
Skinned Infield Mix-Complete	\$4.75	SF	12,860	\$61,085	12,860	\$61,085	12,860	\$61,085	12,860	\$61,085
8" Gravel	\$48.00	CY	318	\$15,264	318	\$15,264	318	\$15,264	318	\$15,264
Geo tech fabric	\$1.00	SF	12,860	\$12,860	12,860	\$12,860	12,860	\$12,860	12,860	\$12,860
Backstop	\$32,000.00	LOC	1	\$32,000	1	\$32,000	1	\$32,000	1	\$32,000
6'H Chain Link Fence Players Bench En	\$85.00	LF	172	\$14,620	172	\$14,620	172	\$14,620	172	\$14,620
SGL Chain Link Gate @ 6'H Bench En	\$3,500.00	EA	4	\$14,000	4	\$14,000	4	\$14,000	4	\$14,000
15' Alum Player Bench	\$4,000.00	EA	2	\$8,000	2	\$8,000	2	\$8,000	2	\$8,000
Conc Pad @ Alum Player Bench	\$25.00	SF	336	\$8,400	336	\$8,400	336	\$8,400	336	\$8,400
Foul pole	\$7,750.00	EA	2	\$15,500	2	\$15,500	2	\$15,500	2	\$15,500
Chain link outfield		NIC								
*Outfield Lawn & drainage	W /G2050									
Mech Yard-Allow:										
Decorative Gravel surface	\$6.75	SF	200	\$1,350	200	\$1,350	200	\$1,350	200	\$1,350
Conc pads	W / Utility									
Bollards	\$1,500.00	LOC	8	\$12,000	8	\$12,000	8	\$12,000	8	\$12,000
Screen fence screen		NIC								
Allow:										
Int. courtyard improvements	\$50.00	GSF					11,700	\$585,000	11,700	\$585,000
Site Stair - complete w/ rails		N/A								
Site Ramp - complete w/ rails		N/A								
Site sign	\$20,000.00	EA	1	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
Flag Pole - 40'	\$11,000.00	EA	1	\$11,000	1	\$11,000	1	\$11,000	1	\$11,000
Traffic gate @ Parent Circulation		NIC								
Misc. site improvements	\$100,000.00	LS	1	\$100,000	\$1	\$100,000	1	\$100,000	1	\$100,000
				-----		-----		-----		-----
				\$1,589,483		\$1,619,483		\$2,291,983		\$2,291,983
G2050 LANDSCAPING										
<u>329000 PLANTING</u>										
Parking Island(20'x10'):										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
18" Planting Bed - import	\$88.00	CY	22	\$1,936	22	\$1,936	44	\$3,872	44	\$3,872
2" Mulch	\$62.00	CY	3	\$186	3	\$186	6	\$372	6	\$372
Multi-purpose & Ball Field -Allow:										
12" Loam - ammended	\$48.00	CY	5,029	\$241,392	5,029	\$241,392	3,670	\$176,160	3,670	\$176,160
Hydroseed	\$0.39	SF	135,794	\$52,960	135,794	\$52,960	99,100	\$38,649	99,100	\$38,649
Irrigation System	\$1.75	SF	135,794	\$237,640	135,794	\$237,640	111,950	\$195,913	111,950	\$195,913
Field Underdrain	\$0.80	SF	135,794	\$108,635	135,794	\$108,635	111,950	\$89,560	111,950	\$89,560
Infield	W / G2040									
Landscape Buffer and Rain garden @ Roadway:										
Rain garden plantings	\$10.00	SF	9,000	\$90,000	9,000	\$90,000	9,000	\$90,000	9,000	\$90,000
18" Planting Bed/Soils - import	\$90.00	CY	500	\$45,000	500	\$45,000	500	\$45,000	500	\$45,000
General Planting Allowance	\$200,000.00	LS	1	\$200,000	1	\$200,000	1	\$200,000	1	\$200,000
General Lawn:										
6" Loam Lawn - ammend	\$48.00	CY	5,806	\$278,688	5,593	\$268,464	6,638	\$318,624	6,638	\$318,624
Hydroseed - lawn	\$0.39	SF	313,544	\$122,282	302,044	\$117,797	358,439	\$139,791	358,439	\$139,791
Irrigation System:										
Plant bed	N/A									
Lawn	N/A									
				-----		-----		-----		-----
				\$1,378,719		\$1,364,010		\$1,297,941		\$1,297,941
TOTAL G20 - SITE IMPROVEMENTS				\$4,754,692		\$4,769,983		\$5,562,272		\$5,562,272
G30 - SITE MECHANICAL UTILITIES										
G3010 WATER SUPPLY										
330000 UTILITIES										
Allow:										
W Boylston Street Connection	\$25,000.00	LOC	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Temp St pavement cut & patch	\$3,000.00	LOC	1	\$3,000	1	\$3,000	1	\$3,000	1	\$3,000
8" Main	\$124.00	LF	750	\$93,000	750	\$93,000	750	\$93,000	750	\$93,000
6" Fire Service	\$97.00	LF	10	\$970	10	\$970	10	\$970	10	\$970
4" Domestic	\$84.00	LF	10	\$840	10	\$840	10	\$840	10	\$840
8" Gate valve main	\$3,600.00	EA	6	\$21,600	6	\$21,600	6	\$21,600	6	\$21,600
6" Gate valve fire	\$3,200.00	EA	1	\$3,200	1	\$3,200	1	\$3,200	1	\$3,200
4" Gate valve dom	\$3,000.00	EA	1	\$3,000	1	\$3,000	1	\$3,000	1	\$3,000
Fire Hydrant	\$4,500.00	EA	2	\$9,000	2	\$9,000	2	\$9,000	2	\$9,000

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
6" Hydrant Service	\$97.00	LF	50	\$4,850	50	\$4,850	50	\$4,850	50	\$4,850
6" Gate valve hydrant	\$2,600.00	EA	2	\$5,200	2	\$5,200	2	\$5,200	2	\$5,200
Test, sanitize, thrust block , misc.	\$10,000.00	LS	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
Temporary water service	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
				-----		-----		-----		-----
				\$204,660		\$204,660		\$204,660		\$204,660
G3020 SANITARY SEWER										
330000 UTILITIES										
Allow:										
W Boylston Street Connection	\$25,000.00	LOC	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Temp St pavement cut & patch	\$3,000.00	LOC	1	\$3,000	1	\$3,000	1	\$3,000	1	\$3,000
Sanitary Main	\$105.00	LF	750	\$78,750	750	\$78,750	750	\$78,750	750	\$78,750
Site manhole	\$5,000.00	EA	4	\$20,000	4	\$20,000	4	\$20,000	4	\$20,000
Ext. Grease Trap	\$35,000.00	EA	1	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
Int. Grease interceptor		W / plumbing								
Temp Sewer Line	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
				-----		-----		-----		-----
				\$186,750		\$186,750		\$186,750		\$186,750
G3030 STORM SEWER										
330000 UTILITIES										
Drainage System @:										
Blg Footprint	\$6.00	SF	99,000	\$594,000	110,500	\$663,000	98,500	\$591,000	98,000	\$588,000
Site New Paved Area	\$6.00	SF	82,898	\$497,388	82,898	\$497,388	173,652	\$1,041,912	173,652	\$1,041,912
Site Resurfaced Paved Area	N/A									
Int. courtyard improvements	\$8.00	GSF					11,700	\$93,600	11,700	\$93,600
				-----		-----		-----		-----
				\$1,091,388		\$1,160,388		\$1,726,512		\$1,723,512
G3060 FUEL DISTRIBUTION										
Allow:										
W Boylston Street Connection	\$12,000.00	LOC	1	\$12,000	1	\$12,000	1	\$12,000	1	\$12,000

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Temp St pavement cut & patch	\$3,500.00	LOC	1	\$3,500	1	\$3,500	1	\$3,500	1	\$3,500
Trench exc & bf	\$45.00	LF	750	\$33,750	750	\$33,750	750	\$33,750	750	\$33,750
Gas service	By Utility									
				-----		-----		-----		-----
				\$49,250		\$49,250		\$49,250		\$49,250
TOTAL G30 - SITE MECHANICAL UTILITIES				\$1,532,048		\$1,601,048		\$2,167,172		\$2,164,172
G40 - SITE ELECTRICAL UTILITIES										
G4010 ELECTRICAL DISTRIBUTION										
<u>330000 UTILITIES</u>										
Duct banks:										
Pole dressing	\$3,500.00	LS	2	\$7,000	2	\$7,000	2	\$7,000	2	\$7,000
Primary duct bank	\$146.00	LF	500	\$73,000	500	\$73,000	500	\$73,000	500	\$73,000
Secondary duct bank and conductor	\$250.00	LF	150	\$37,500	150	\$37,500	150	\$37,500	150	\$37,500
Tele/data duct bank	\$146.00	LF	900	\$131,400	900	\$131,400	900	\$131,400	900	\$131,400
Future EV Station feed	\$74.00	LF	1,500	\$111,000	1,500	\$111,000	1,500	\$111,000	1,500	\$111,000
Transformer pad and grounding	\$10,000.00	EA	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
Generator pad and grounding	\$10,000.00	EA	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
Demolition and disconnect	\$20,000.00	LS	1	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
Temp Electrical	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
*Electrical poles and primary by others										
				-----		-----		-----		-----
				\$424,900		\$424,900		\$424,900		\$424,900
G4020 SITE LIGHTING										
<u>260001 ELECTRICAL*</u>										
Lighting Fixtures:										
Parking Fixtures	\$4,000.00	EA	30	\$120,000	30	\$120,000	30	\$120,000	30	\$120,000
Pedestrian Fixture	\$3,500.00	EA	20	\$70,000	20	\$70,000	20	\$70,000	20	\$70,000
Flagpole light	\$1,150.00	EA	2	\$2,300	2	\$2,300	2	\$2,300	2	\$2,300
1" c Light feed	\$14.00	LF	7,500	\$105,000	7,500	\$105,000	7,500	\$105,000	7,500	\$105,000
Specialty Lighting	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
*Specialty Lighting Also W/Site Impr.										

DESCRIPTION	UNIT COST	UNIT	AR 1 ADD - 550		AR 1 ADD - 750		AR 2 - 550		AR 2 - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
*Excludes traffic lights										
*Excludes sports field lighting										
330000 UTILITIES										
New Site Lighting:										
Light pole feeder trench	\$14.50	LF	7,500	\$108,750	7,500	\$108,750	7,500	\$108,750	7,500	\$108,750
Light pole base	\$950.00	EA	50	\$47,500	50	\$47,500	50	\$47,500	50	\$47,500
*Excludes sports field lighting										
				-----		-----		-----		-----
				\$478,550		\$478,550		\$478,550		\$478,550
TOTAL G40 - SITE ELECTRICAL UTILITIES				\$903,450	\$903,450	\$903,450	\$903,450	\$903,450	\$903,450	\$903,450

PROJECT: Clinton Middle School
 LOCATION: Clinton, MA
 CLIENT: Lamoureux Pagano Associates Architects
 DATE: 20-Jun-23

No.: 22025 **SUMMARY**

A. SUBSTRUCTURE

A10 - FOUNDATIONS

A1010 STANDARD FOUNDATIONS \$21,750
 A1020 SPECIAL FOUNDATIONS \$0
 A1030 SLAB ON GRADE \$161,878

A20 - BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION \$0
 A2020 BASEMENT WALLS \$0

B. SHELL

B10 - SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION \$476,400
 B1020 ROOF CONSTRUCTION \$173,200

B20 - EXTERIOR ENCLOSURE

B2010 EXTERIOR WALLS \$4,112,618
 B2020 EXTERIOR WINDOWS \$1,449,288
 B2030 EXTERIOR DOORS \$84,000

B30 - ROOFING

B3010 ROOF COVERINGS \$3,225,188
 B3020 ROOF OPENINGS \$100,000

C. INTERIORS

C10 - INTERIOR CONSTRUCTION

C1010 PARTITIONS \$3,050,000
 C1020 INTERIOR DOORS \$900,000
 C1030 FITTINGS \$1,002,855

C20 - STAIRS

C2010 STAIR CONSTRUCTION \$60,000
 C2020 STAIR FINISHES \$30,000

C30 - INTERIOR FINISHES

C3010 WALL FINISHES \$1,260,000
 C3020 FLOOR FINISHES \$1,440,000
 C3030 CEILING FINISHES \$1,320,000

	AR 1 500 RENOVATION ESTIMATE TOTAL	AR 1 750 RENOVATION ESTIMATE TOTAL	AR 2 500 RENOVATION ESTIMATE TOTAL	AR 2 750 RENOVATION ESTIMATE TOTAL
A1010 STANDARD FOUNDATIONS	\$21,750	\$21,750	\$392,810	\$392,810
A1020 SPECIAL FOUNDATIONS	\$0	\$0	\$0	\$0
A1030 SLAB ON GRADE	\$161,878	\$161,878	\$281,536	\$281,536
A2010 BASEMENT EXCAVATION	\$0	\$0	\$0	\$0
A2020 BASEMENT WALLS	\$0	\$0	\$0	\$0
B1010 FLOOR CONSTRUCTION	\$476,400	\$476,400	\$944,700	\$944,700
B1020 ROOF CONSTRUCTION	\$173,200	\$173,200	\$357,800	\$327,800
B2010 EXTERIOR WALLS	\$4,112,618	\$3,891,524	\$4,990,154	\$4,853,185
B2020 EXTERIOR WINDOWS	\$1,449,288	\$1,369,519	\$1,576,044	\$1,495,383
B2030 EXTERIOR DOORS	\$84,000	\$84,000	\$84,000	\$84,000
B3010 ROOF COVERINGS	\$3,225,188	\$3,225,188	\$2,215,154	\$2,215,154
B3020 ROOF OPENINGS	\$100,000	\$100,000	\$0	\$0
C1010 PARTITIONS	\$3,050,000	\$3,050,000	\$2,223,350	\$2,223,350
C1020 INTERIOR DOORS	\$900,000	\$900,000	\$685,500	\$685,500
C1030 FITTINGS	\$1,002,855	\$1,015,295	\$826,340	\$823,740
C2010 STAIR CONSTRUCTION	\$60,000	\$60,000	\$60,000	\$60,000
C2020 STAIR FINISHES	\$30,000	\$30,000	\$30,000	\$30,000
C3010 WALL FINISHES	\$1,260,000	\$1,260,000	\$913,500	\$913,500
C3020 FLOOR FINISHES	\$1,440,000	\$1,440,000	\$1,044,000	\$1,044,000
C3030 CEILING FINISHES	\$1,320,000	\$1,320,000	\$957,000	\$957,000

Clinton Middle School Addition/Renovation - PSR

D. SERVICES

D10 - CONVEYING

D1010 ELEVATORS & LIFTS

D20 - PLUMBING

D2010 PLUMBING

D30 - HVAC

D3010 HVAC

D40 - FIRE PROTECTION

D4010 SPRINKLERS

D50 - ELECTRICAL

D5010 ELECTRICAL SERVICE & DISTRIBUTION

D5020 LIGHTING & BRANCH WIRING

D5030 COMMUNICATION & SECURITY

D5090 OTHER ELECTRICAL SYSTEMS

E. EQUIPMENT & FURNISHINGS

E10 - EQUIPMENT

E1010 COMMERCIAL EQUIPMENT

E1090 OTHER EQUIPMENT

E20 - FURNISHINGS

E 2010 FIXED FURNISHINGS

E2020 MOVABLE FURNISHINGS

F. SPECIAL CONSTRUCTION & DEMOLITION

F10 - SPECIAL CONSTRUCTION

F1010 SPECIAL STRUCTURES

F1020 INTEGRATED CONSTRUCTION

F1030 SPECIAL CONSTRUCTION SYSTEMS

F1040 SPECIAL FACILITIES

F1050 SPECIAL CONTROLS & INSTRUMENTATION

F20 - SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

F2020 HAZARDOUS COMPONENTS ABATEMENT

	AR 1 500 RENOVATION ESTIMATE TOTAL	AR 1 750 RENOVATION ESTIMATE TOTAL	AR 2 500 RENOVATION ESTIMATE TOTAL	AR 2 750 RENOVATION ESTIMATE TOTAL
D1010 ELEVATORS & LIFTS	\$260,000	\$260,000	\$260,000	\$260,000
D2010 PLUMBING	\$3,240,000	\$3,240,000	\$2,349,000	\$2,349,000
D3010 HVAC	\$11,040,000	\$11,040,000	\$8,004,000	\$8,004,000
D4010 SPRINKLERS	\$960,000	\$960,000	\$696,000	\$696,000
D5010 ELECTRICAL SERVICE & DISTRIBUTION	\$1,457,000	\$1,672,000	\$1,160,000	\$1,375,000
D5020 LIGHTING & BRANCH WIRING	\$1,638,000	\$1,638,000	\$1,187,550	\$1,187,550
D5030 COMMUNICATION & SECURITY	\$1,697,900	\$1,697,900	\$1,244,450	\$1,244,450
D5090 OTHER ELECTRICAL SYSTEMS	\$2,379,600	\$2,379,600	\$1,725,210	\$1,725,210
E1010 COMMERCIAL EQUIPMENT	\$640,000	\$640,000	\$640,000	\$640,000
E1090 OTHER EQUIPMENT	\$242,650	\$242,650	\$242,650	\$242,650
E 2010 FIXED FURNISHINGS	\$1,636,517	\$1,632,299	\$1,217,287	\$1,214,665
E2020 MOVABLE FURNISHINGS	\$0	\$0	\$0	\$0
F1010 SPECIAL STRUCTURES	\$0	\$0	\$0	\$0
F1020 INTEGRATED CONSTRUCTION	\$0	\$0	\$0	\$0
F1030 SPECIAL CONSTRUCTION SYSTEMS	\$0	\$0	\$0	\$0
F1040 SPECIAL FACILITIES	\$0	\$0	\$0	\$0
F1050 SPECIAL CONTROLS & INSTRUMENTATION	\$0	\$0	\$0	\$0
F2010 BUILDING ELEMENTS DEMOLITION	\$1,800,000	\$1,800,000	\$1,592,500	\$1,592,500
F2020 HAZARDOUS COMPONENTS ABATEMENT	\$0	\$0	\$0	\$0

Clinton Middle School Addition/Renovation - PSR

G. BUILDING SITEWORK

G10 - SITE PREPARATION

G1010 SITE CLEARING

G1020 SITE DEMOLITION & RELOCATIONS

G1030 SITE EARTHWORK

G1040 HAZARDOUS WASTE REMEDIATION

G20 - SITE IMPROVEMENTS

G2010 ROADWAYS

G2020 PARKING LOTS

G2030 PEDESTRIAN PAVING

G2040 SITE DEVELOPMENT

G2050 LANDSCAPING

G30 - SITE MECHANICAL UTILITIES

G3010 WATER SUPPLY

G3020 SANITARY SEWER

G3030 STORM SEWER

G3040 HEATING DISTRIBUTION

G3050 COOLING DISTRIBUTION

G3060 FUEL DISTRIBUTION

G3090 OTHER SITE MECHANICAL UTILITIES

G40 - SITE ELECTRICAL UTILITIES

G4010 ELECTRICAL DISTRIBUTION

G4020 SITE LIGHTING

TOTAL DIRECT COST

	AR 1 500 RENOVATION ESTIMATE TOTAL	AR 1 750 RENOVATION ESTIMATE TOTAL	AR 2 500 RENOVATION ESTIMATE TOTAL	AR 2 750 RENOVATION ESTIMATE TOTAL
G1010 SITE CLEARING	\$0	\$0	\$0	\$0
G1020 SITE DEMOLITION & RELOCATIONS	\$0	\$0	\$0	\$0
G1030 SITE EARTHWORK	\$0	\$0	\$0	\$0
G1040 HAZARDOUS WASTE REMEDIATION	\$0	\$0	\$0	\$0
G2010 ROADWAYS	\$0	\$0	\$0	\$0
G2020 PARKING LOTS	\$0	\$0	\$0	\$0
G2030 PEDESTRIAN PAVING	\$0	\$0	\$0	\$0
G2040 SITE DEVELOPMENT	\$0	\$0	\$0	\$0
G2050 LANDSCAPING	\$0	\$0	\$0	\$0
G3010 WATER SUPPLY	\$0	\$0	\$0	\$0
G3020 SANITARY SEWER	\$0	\$0	\$0	\$0
G3030 STORM SEWER	\$0	\$0	\$0	\$0
G3040 HEATING DISTRIBUTION	\$0	\$0	\$0	\$0
G3050 COOLING DISTRIBUTION	\$0	\$0	\$0	\$0
G3060 FUEL DISTRIBUTION	\$0	\$0	\$0	\$0
G3090 OTHER SITE MECHANICAL UTILITIES	\$0	\$0	\$0	\$0
G4010 ELECTRICAL DISTRIBUTION	\$0	\$0	\$0	\$0
G4020 SITE LIGHTING	\$0	\$0	\$0	\$0
TOTAL DIRECT COST	\$45,858,844	\$45,781,202	\$37,900,534	\$37,862,682

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
A. SUBSTRUCTURE										
A10 - FOUNDATIONS										
A1010 STANDARD FOUNDATIONS										
<u>033000 CAST IN PLACE CONCRETE</u>										
Courtyard Foundations :										
Wall Footing 1' x 3':	\$850.00	CY					50	\$42,500	50	\$42,500
Frost wall - 4' x 16"	\$1,800.00	CY					90	\$162,000	90	\$162,000
Column and Piers	\$2,000.00	CY					20	\$40,000	20	\$40,000
Anchor bolt and grout	\$245.00	EA					18	\$4,410	18	\$4,410
Misc. Foundation work	\$25,000.00	LS					1	\$25,000	1	\$25,000
New CMU Footing:										
Footing 1' x 3'	\$95.00	LF	150	\$14,250	150	\$14,250	500	\$47,500	500	\$47,500
<u>310000 EARTHWORK</u>										
Foundation Earthwork:										
Excavate at new footing	\$50.00	LF	150	\$7,500	150	\$7,500	500	\$25,000	500	\$25,000
Excavate at new courtyard found.	\$100.00	LF					464	\$46,400	464	\$46,400
				-----		-----		-----		-----
				\$21,750		\$21,750		\$392,810		\$392,810
A1030 SLAB ON GRADE										
<u>310000 EARTHWORK</u>										
12" Gravel base	\$85.00	CY	191	\$16,213	191	\$16,213	221	\$18,776	221	\$18,776
<u>033000 CAST IN PLACE CONCRETE</u>										
Slab Patching										
Patch at CMU Footing	\$100.00	LF	150	\$15,000	150	\$15,000	500	\$50,000	500	\$50,000
Patch at Courtyard perimeter	\$175.00	LF					464	\$81,200	464	\$81,200
Patch at plumbing	\$25.00	SF	5,000	\$125,000	5,000	\$125,000	5,000	\$125,000	5,000	\$125,000
<u>072616 BELOW GRADE VAPOR RETARDER</u>										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Stegro vapor barrier	\$1.10	SF	5,150	\$5,665	5,150	\$5,665	5,964	\$6,560	5,964	\$6,560
				-----		-----		-----		-----
				\$161,878		\$161,878		\$281,536		\$281,536
TOTAL A10 FOUNDATIONS				\$183,628		\$183,628		\$674,346		\$674,346
B. SHELL										
B10 - SUPERSTRUCTURE										
B1010 FLOOR CONSTRUCTION										
<u>051200 STRUCTURAL STEEL</u>										
Seismic Clip - Ex CMU	\$2.50	GSF	120,000	\$300,000	120,000	\$300,000	87,000	\$217,500	87,000	\$217,500
Reinforce/Repair Framing at courtyard	\$300.00	LF					464	\$139,200	464	\$139,200
<u>040001 MASONRY*</u>										
8" CMU Shear Wall	\$42.00	SF	4,200	\$176,400	4,200	\$176,400	14,000	\$588,000	14,000	\$588,000
				-----		-----		-----		-----
				\$476,400		\$476,400		\$944,700		\$944,700
B1020 ROOF CONSTRUCTION										
Reinforce/Repair Framing at courtyard	\$300.00	LF					464	\$139,200	464	\$139,200
Galv. RTU dunnage	\$5,600.00	TONS	4	\$22,400	4	\$22,400	4	\$22,400	4	\$22,400
Reinforce Roof Structure	\$10,000.00	TONS	12	\$120,000	12	\$120,000	15	\$150,000	12	\$120,000
Roof screen frame (varies lf @ 110 lbs/	\$5,600.00	TONS	5.50	\$30,800	5.50	\$30,800	8.25	\$46,200	8.25	\$46,200
*Verify fireproofing scope				-----		-----		-----		-----
				\$173,200		\$173,200		\$357,800		\$327,800
TOTAL B10 SUPERSTRUCTURE				\$649,600		\$649,600		\$1,302,500		\$1,272,500
B20 - EXTERIOR ENCLOSURE										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
B2010 EXTERIOR WALLS										
<u>040001 MASONRY*</u>										
Masonry Veneer:										
Brick Veneer - 40%	\$48.00	SF					5,082	\$243,936	5,082	\$243,936
Stainless steel masonry flashing	\$29.00	LF					650	\$18,850	650	\$18,850
Architectural Precast: Precast Window Sill	\$68.00	LF					170	\$11,533	170	\$11,533
Masonry Restoration General Masonry Repair	\$5.00	SF	33,560	\$167,800	31,712	\$158,560	25,138	\$125,690	23,987	\$119,935
Create Access into Courtyard	\$200,000.00	LS					1	\$200,000	1	\$200,000
Infill Exterior wall at Triangular pods (\$125.00	SF					2,744	\$343,000	2,744	\$343,000
<u>054000 COLD FORMED METAL FRAMING</u>										
8" x 18 Ga. stud @ typical wall	\$18.00	SF					12,706	\$228,708	12,706	\$228,708
1/2" Dens glass sheathing-ext. wall	\$4.75	SF					12,706	\$60,354	12,706	\$60,354
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Misc. Ext Metals	\$0.50	SF					12,706	\$6,353	12,706	\$6,353
<u>071326 AIR & VAPOR BARRIERS</u>										
Air & vapor barrier - wall	\$9.50	SF					12,706	\$120,707	12,706	\$120,707
Air & vapor barrier - renovation	\$9.50	SF	33,560	\$318,820	31,712	\$301,264	25,138	\$238,811	23,987	\$227,877
<u>072100 INSULATION</u>										
Exterior Wall:										
Spray foam at perm openings	\$6.00	LF					2,118	\$12,708	2,118	\$12,708
3" Mineral wool Insul. - courtyard	\$4.12	SF					12,706	\$52,349	12,706	\$52,349
2" Spray foam - courtyard	\$4.65	SF					12,706	\$59,083	12,706	\$59,083
2" Mineral wool Insul. - exisitng	\$4.50	SF	33,560	\$151,020	31,712	\$142,704	25,138	\$113,121	23,987	\$107,942
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>										
Exterior Sealants	\$0.42	SF	33,560	\$14,095	31,712	\$13,319	12,706	\$5,337	12,706	\$5,337
<u>074213 PERFORMED CLADDING</u>										
Wall Panel:										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Architectural Metal panel - 40%	\$95.00	SF					5,082	\$482,790	5,082	\$482,790
Metal Panel at Existing Façade	\$100.00	SF	33,560	\$3,356,000	31,712	\$3,171,200	25,138	\$2,513,800	23,987	\$2,398,700
Roof Screen:										
10' H Metal Panel Equipment Screen	\$65.00	SF	1,500	\$97,500	1,500	\$97,500	1,500	\$97,500	1,500	\$97,500
<u>092116 GYPSUM WALLBOARD</u>										
1 Lyr 5/8" gyp @ ext. wall	\$4.15	SF					12,706	\$52,730	12,706	\$52,730
<u>090007 PAINTING*</u>										
Exterior painting	\$0.22	SF	33,560	\$7,383	31,712	\$6,977	12,706	\$2,795	12,706	\$2,795
				-----		-----		-----		-----
				\$4,112,618		\$3,891,524		\$4,990,154		\$4,853,185
B2020 EXTERIOR WINDOWS										
<u>061000 ROUGH CARPENTRY</u>										
P.T. - perim blocking	\$14.00	LF	5,593	\$78,302	5,285	\$73,990	7,148	\$100,072	6,116	\$85,624
<u>071326 AIR & VAPOR BARRIERS</u>										
Flex flashing - perim	\$10.00	LF	5,593	\$55,930	5,285	\$52,850	7,148	\$71,480	6,116	\$61,160
<u>071000 DAMPPROOF., WATERPROOF. & CAULKING*</u>										
Window Caulking	\$12.75	LF	5,593	\$71,311	5,285	\$67,384	7,148	\$91,137	6,116	\$77,979
<u>080001 METAL WINDOWS*</u>										
DBL Glazing Exterior										
Alum Window - 20%	\$150.00	SF					2,541	\$381,150	2,541	\$381,150
Replace Existing Windows	\$185.00	SF	6,712	\$1,241,720	6,342	\$1,173,270	5,028	\$930,180	4,797	\$887,445
<u>109000 MISCELLANEOUS SPECIALTIES</u>										
Alum louvers - allow	\$135.00	SF	15	\$2,025	15	\$2,025	15	\$2,025	15	\$2,025
				-----		-----		-----		-----
				\$1,449,288		\$1,369,519		\$1,576,044		\$1,495,383

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
B2030 EXTERIOR DOORS										
<u>080001 METAL WINDOWS*</u>										
7' Alum. Doors (Incl. Hardware): Café Entries - dbl	\$12,000.00	EA	7	\$84,000	7	\$84,000	7	\$84,000	7	\$84,000
				----- \$84,000		----- \$84,000		----- \$84,000		----- \$84,000
TOTAL B20 - EXTERIOR ENCLOSURE				\$5,645,906		\$5,345,042		\$6,650,198		\$6,432,568
B30 - ROOFING										
B3010 ROOF COVERINGS										
<u>061000 ROUGH CARPENTRY</u>										
Roof Blocking - main bldg	\$1.45	SF	85,440	\$123,888	85,440	\$123,888	58,044	\$84,164	58,044	\$84,164
<u>070002 ROOFING AND FLASHING*</u>										
Remove Existing Roofing	\$2.50	SF	85,440	\$213,600	85,440	\$213,600	58,044	\$145,110	58,044	\$145,110
PVC roof w/ 8" rigid insul	\$32.00	SF	85,440	\$2,734,080	85,440	\$2,734,080	58,044	\$1,857,408	58,044	\$1,857,408
Roof walkway pad (2'x2')	\$6.15	SF	4,000	\$24,600	4,000	\$24,600	3,000	\$18,450	3,000	\$18,450
Alum. Trim :										
Perimeter wall Coping	\$36.00	LF	1,500	\$54,000	1,500	\$54,000	1,400	\$50,400	1,400	\$50,400
Base Flashing	\$34.00	LF	950	\$32,300	950	\$32,300	900	\$30,600	900	\$30,600
Misc. flashing	\$0.50	SF	85,440	\$42,720	85,440	\$42,720	58,044	\$29,022	58,044	\$29,022
				----- \$3,225,188		----- \$3,225,188		----- \$2,215,154		----- \$2,215,154
B3020 ROOF OPENINGS										
<u>077200 ROOF ACCESSORIES</u>										
Skylights	\$50,000.00	EA	2	\$100,000	2	\$100,000				
				----- \$100,000		----- \$100,000		----- \$0		----- \$0

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
TOTAL B30 ROOFING				\$3,325,188		\$3,325,188		\$2,215,154		\$2,215,154
C. INTERIORS										
C10 - INTERIOR CONSTRUCTION										
C1010 PARTITIONS										
<u>040001 MASONRY*</u>										
8" CMU Shear wall		w/ structural								
Misc. Int Cmu Partition	\$2.25	GSF	120,000	\$270,000	120,000	\$270,000	87,000	\$195,750	87,000	\$195,750
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Mscnry Misc. Metal	\$0.20	GSF	120,000	\$24,000	120,000	\$24,000	87,000	\$17,400	87,000	\$17,400
<u>061000 ROUGH CARPENTRY</u>										
Interior blocking	\$1.00	GSF	120,000	\$120,000	120,000	\$120,000	87,000	\$87,000	87,000	\$87,000
Misc. rough carpentry	\$1.00	GSF	120,000	\$120,000	120,000	\$120,000	87,000	\$87,000	87,000	\$87,000
Clean Saftey and Laborer	\$4.00	GSF	120,000	\$480,000	120,000	\$480,000	87,000	\$348,000	87,000	\$348,000
<u>072100 INSULATION</u>										
Firestopping	\$0.85	GSF	120,000	\$102,000	120,000	\$102,000	87,000	\$73,950	87,000	\$73,950
<u>081113 HOLLOW METALWORK</u>										
Interior H.M Windows, Sidelites and Transoms (INC. GLAZING):										
Misc. window/sidelight & transom	\$1.00	GSF	120,000	\$120,000	120,000	\$120,000	87,000	\$87,000	87,000	\$87,000
<u>083323 SPECIAL DOORS</u>										
Access panels	\$0.25	GSF	120,000	\$30,000	120,000	\$30,000	87,000	\$21,750	87,000	\$21,750
<u>080001 METAL WINDOWS*</u>										
Interior Aluminum Storefront:										
Vestibule and Entries	\$88.00	SF	500	\$44,000	500	\$44,000	500	\$44,000	500	\$44,000
General Building Area	\$0.50	GSF	120,000	\$60,000	120,000	\$60,000	87,000	\$43,500	87,000	\$43,500
<u>092116 GYPSUM WALLBOARD</u>										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Drywall Partitions: GWB assemblies - 50% Replacment	\$14.00	GSF	120,000	\$1,680,000	120,000	\$1,680,000	87,000	\$1,218,000	87,000	\$1,218,000
Operable Partition: Stage - 10'		n/a								
				----- \$3,050,000		----- \$3,050,000		----- \$2,223,350		----- \$2,223,350
C1020 INTERIOR DOORS										
<u>081113 HOLLOW METALWORK</u>										
<u>081416 WOOD AND PLASTIC DOORS</u>										
<u>087100 DOOR HARDWARE</u>										
Interior Door frame and Hardware	\$6.50	GSF	120,000	\$780,000	120,000	\$780,000	87,000	\$565,500	87,000	\$565,500
<u>080001 METAL WINDOWS*</u>										
Aluminum (Frame, Door, Glass, Glazing and Hdw): Vest - dbl	\$11,500.00	PR	7	\$80,500	7	\$80,500	7	\$80,500	7	\$80,500
<u>083323 SPECIAL DOORS</u>										
Dish drop window	\$5,000.00	EA	1	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Kitchen OH grille	\$4,500.00	EA	1	\$4,500	1	\$4,500	1	\$4,500	1	\$4,500
Security Gate and Grill	\$30,000.00	LS	1	\$30,000	1	\$30,000	1	\$30,000	1	\$30,000
				----- \$900,000		----- \$900,000		----- \$685,500		----- \$685,500
C1030 FITTINGS										
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Misc. metals	\$2.00	GSF	120,000	\$240,000	120,000	\$240,000	87,000	\$174,000	87,000	\$174,000
<u>062000 FINISH CARPENTRY</u>										
Utility & closet shelving	\$5,000.00	LS	1	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Typ. window sill/apron (nic cw-gym)	\$65.00	LF	1,119	\$72,735	1,057	\$68,705	1,264	\$82,160	1,224	\$79,560
Stage Proscenium and Trim	\$35,000.00	LS	1	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
Misc. wood trim	\$1.00	GSF	120,000	\$120,000	120,000	\$120,000	87,000	\$87,000	87,000	\$87,000
Media Center Built-in	\$30,000.00	LS	1	\$30,000	1	\$30,000	1	\$30,000	1	\$30,000

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Raised Stage Platform and steps	\$55.00	SF	1,200	\$66,000	1,200	\$66,000	1,200	\$66,000	1,200	\$66,000
Custom Casework: Circulation desk	\$15,000.00	LS	1	\$15,000	1	\$15,000	1	\$15,000	1	\$15,000
<u>102113 COMPARTMENTS & CUBICLES</u>										
Solid Plastic Toilet Partitions:										
Std. partition	\$1,385.00	EA	10	\$13,850	10	\$13,850	8	\$11,080	8	\$11,080
HC partition	\$1,590.00	EA	6	\$9,540	6	\$9,540	4	\$6,360	4	\$6,360
<u>102813 TOILET & BATH ACCESSORIES</u>										
Building Toilet Accessories *Excludes classroom accessories	\$0.92	GSF	120,000	\$110,400	120,000	\$110,400	87,000	\$80,040	87,000	\$80,040
<u>101100 MARKERBOARDS & TACKBOARDS</u>										
Marker board tackboard	\$1.30	GSF	120,000	\$156,000	120,000	\$156,000	87,000	\$113,100	87,000	\$113,100
Glass Display Case	\$1,000.00	LF	15	\$15,000	15	\$15,000	15	\$15,000	15	\$15,000
<u>109000 MISCELLANEOUS SPECIALTIES</u>										
Kitchen staff locker(12"wx15" D x 6'h)	\$350.00	EA	5	\$1,750	5	\$1,750	5	\$1,750	5	\$1,750
Custodian staff(12"wx15" D x 6'h)	\$350.00	EA	3	\$1,050	3	\$1,050	3	\$1,050	3	\$1,050
Wall & corner guards - allow	\$5,000.00	LS	1	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Fire extinguisher and cab - allow	\$550.00	EA	30	\$30	30	\$16,500	25	\$13,750	25	\$13,750
Misc. specialties	\$0.25	GSF	120,000	\$30,000	120,000	\$30,000	87,000	\$21,750	87,000	\$21,750
<u>101400 IDENTIFYING DEVICES</u>										
Building directory - allow	\$5,000.00	EA	1	\$5,000	1	\$5,000	1	\$5,000	1	\$5,000
Dedication plaque	\$3,500.00	EA	1	\$3,500	1	\$3,500	1	\$3,500	1	\$3,500
Interior Signage	\$0.40	GSF	120,000	\$48,000	120,000	\$48,000	87,000	\$34,800	87,000	\$34,800
Environmental graphics	\$20,000.00	LS	1	\$20,000	1	\$20,000	1	\$20,000	1	\$20,000
			-----		-----		-----		-----	
			\$1,002,855		\$1,015,295		\$826,340		\$823,740	
TOTAL C10 - INTERIOR CONSTRUCTION			\$4,952,855		\$4,965,295		\$3,735,190		\$3,732,590	
C20 - STAIRS										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
C2010 STAIR CONSTRUCTION										
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Metal Pan Stair w/Rails: Stair railing upgrade	\$15,000.00	FLT	4	\$60,000	4	\$60,000	4	\$60,000	4	\$60,000
				----- \$60,000		----- \$60,000		----- \$60,000		----- \$60,000
C2020 STAIR FINISHES										
<u>090005 RESILIENT FLOORING*</u>										
Rubber treads and risers	\$4,000.00	FLTS	4	\$16,000	4	\$16,000	4	\$16,000	4	\$16,000
<u>090007 PAINTING*</u>										
Paint stair & rails - full flt	\$3,500.00	FLTS	4	\$14,000	4	\$14,000	4	\$14,000	4	\$14,000
				----- \$30,000		----- \$30,000		----- \$30,000		----- \$30,000
TOTAL C20 - STAIRS				\$90,000		\$90,000		\$90,000		\$90,000
C30 - INTERIOR FINISHES										
C3010 WALL FINISHES										
Interior Wall Finish	\$10.50	GSF	120,000	\$1,260,000	120,000	\$1,260,000	87,000	\$913,500	87,000	\$913,500
				----- \$1,260,000		----- \$1,260,000		----- \$913,500		----- \$913,500
C3020 FLOOR FINISHES										
Floor Finish	\$12.00	GSF	120,000	\$1,440,000	120,000	\$1,440,000	87,000	\$1,044,000	87,000	\$1,044,000
				----- \$1,440,000		----- \$1,440,000		----- \$1,044,000		----- \$1,044,000

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
C3030 CEILING FINISHES										
Ceiling Finish	\$11.00	GSF	120,000	\$1,320,000	120,000	\$1,320,000	87,000	\$957,000	87,000	\$957,000
				-----		-----		-----		-----
				\$1,320,000		\$1,320,000		\$957,000		\$957,000
TOTAL C30 - INTERIOR FINISHES				\$4,020,000	\$4,020,000	\$2,914,500	\$2,914,500			
D. SERVICES										
D10 - CONVEYING										
D1010 ELEVATORS & LIFTS										
<u>140001 ELEVATORS*</u>										
Replace Existing Elevator	\$250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000
Elevator Metals	\$10,000.00	LS	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
				-----		-----		-----		-----
				\$260,000		\$260,000		\$260,000		\$260,000
TOTAL D10 - CONVEYING				\$260,000	\$260,000	\$260,000	\$260,000			
D20 - PLUMBING										
D2010 PLUMBING										
Plumbing	\$27.00	GSF	120,000	\$3,240,000	120,000	\$3,240,000	87,000	\$2,349,000	87,000	\$2,349,000
				-----		-----		-----		-----
				\$3,240,000		\$3,240,000		\$2,349,000		\$2,349,000
TOTAL D20 - PLUMBING				\$3,240,000	\$3,240,000	\$2,349,000	\$2,349,000			
D30 - HVAC										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
D3010 HVAC										
Air to Water HP w/ Condensing Boiler & DOAS	\$92.00	GSF	120,000	\$11,040,000	120,000	\$11,040,000	87,000	\$8,004,000	87,000	\$8,004,000
				-----		-----		-----		-----
				\$11,040,000		\$11,040,000		\$8,004,000		\$8,004,000
TOTAL D30 - HVAC				\$11,040,000		\$11,040,000		\$8,004,000		\$8,004,000
D40 - FIRE PROTECTION										
D4010 SPRINKLERS										
<u>210001 FIRE SUPPRESSION*</u>										
Sprinkler system - wet *EXCLUDES FIRE PUMP	\$8.00	GSF	120,000	\$960,000	120,000	\$960,000	87,000	\$696,000	87,000	\$696,000
				-----		-----		-----		-----
				\$960,000		\$960,000		\$696,000		\$696,000
TOTAL D40 - FIRE PROTECTION				\$960,000		\$960,000		\$696,000		\$696,000
D50 - ELECTRICAL										
D5010 ELECTRICAL SERVICE & DISTRIBUTION										
<u>260001 ELECTRICAL*</u>										
4,000 Service Panel and Feeders (480 V	\$8.00	GSF	120,000	\$960,000	120,000	\$960,000	87,000	\$696,000	87,000	\$696,000
Digital metering	\$35,000.00	LS	1	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
PV Rough in	\$32,000.00	LS	1	\$32,000	1	\$32,000	1	\$32,000	1	\$32,000
500 kw Diesel Generator	\$310,000.00	LS	1	\$310,000			1	\$310,000		
700 kw Diesel Generator	\$525,000.00	LS			1	\$525,000			1	\$525,000
Temp Power and Light	\$1.00	GSF	120,000	\$120,000	120,000	\$120,000	87,000	\$87,000	87,000	\$87,000
				-----		-----		-----		-----
				\$1,457,000		\$1,672,000		\$1,160,000		\$1,375,000

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
D5020 LIGHTING & BRANCH WIRING										
<u>260001 ELECTRICAL*</u>										
Lighting	\$10.50	GSF	120,000	\$1,260,000	120,000	\$1,260,000	87,000	\$913,500	87,000	\$913,500
Lighting Control (inc device oc)	\$3.15	GSF	120,000	\$378,000	120,000	\$378,000	87,000	\$274,050	87,000	\$274,050
				-----		-----		-----		-----
				\$1,638,000		\$1,638,000		\$1,187,550		\$1,187,550
D5030 COMMUNICATION & SECURITY										
<u>260001 ELECTRICAL*</u>										
CCTV	\$3.00	GSF	120,000	\$360,000	120,000	\$360,000	87,000	\$261,000	87,000	\$261,000
Access control	\$1.00	GSF	120,000	\$120,000	120,000	\$120,000	87,000	\$87,000	87,000	\$87,000
Video entry system	\$27,500.00	LS	1	\$27,500	1	\$27,500	1	\$27,500	1	\$27,500
Network switches	\$250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000
Wifi nodes and Equipment	\$0.25	SF	120,000	\$30,000	120,000	\$30,000	87,000	\$21,750	87,000	\$21,750
Digital Signage	\$4,000.00	EA	2	\$8,000	2	\$8,000	2	\$8,000	2	\$8,000
Tele/data cabling, racks and switches	\$6.00	GSF	120,000	\$720,000	120,000	\$720,000	87,000	\$522,000	87,000	\$522,000
Classroom AV rough-in only	\$1,500.00	EA	38	\$57,000	38	\$57,000	14	\$21,000	14	\$21,000
Speech Reinforcement	\$3,300.00	EA	38	\$125,400	38	\$125,400	14	\$46,200	14	\$46,200
				-----		-----		-----		-----
				\$1,697,900		\$1,697,900		\$1,244,450		\$1,244,450
D5090 OTHER ELECTRICAL SYSTEMS										
<u>260001 ELECTRICAL*</u>										
Fire Alarm	\$4.80	GSF	120,000	\$576,000	120,000	\$576,000	87,000	\$417,600	87,000	\$417,600
Mass Notification	\$0.75	GSF	120,000	\$90,000	120,000	\$90,000	87,000	\$65,250	87,000	\$65,250
Devices	\$3.25	GSF	120,000	\$390,000	120,000	\$390,000	87,000	\$282,750	87,000	\$282,750
Clocks and PA	\$1.20	GSF	120,000	\$144,000	120,000	\$144,000	87,000	\$104,400	87,000	\$104,400
Gym/Café Sound System	\$0.75	GSF	120,000	\$90,000	120,000	\$90,000	87,000	\$65,250	87,000	\$65,250
Lighting Protection	\$0.78	GSF	120,000	\$93,600	120,000	\$93,600	87,000	\$67,860	87,000	\$67,860
Kitchen/Mechanical Wiring	\$2.50	GSF	120,000	\$300,000	120,000	\$300,000	87,000	\$217,500	87,000	\$217,500
Bi-Direction Antenna	\$0.80	GSF	120,000	\$96,000	120,000	\$96,000	87,000	\$69,600	87,000	\$69,600
Test Permit and Misc.	\$5.00	GSF	120,000	\$600,000	120,000	\$600,000	87,000	\$435,000	87,000	\$435,000
By others:										
Telephone system										
Classroom projectors										
PV Panels										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
				-----		-----		-----		-----
				\$2,379,600		\$2,379,600		\$1,725,210		\$1,725,210
TOTAL D50 - ELECTRICAL			\$59.77	\$7,172,500	\$61.56	\$7,387,500	\$61.12	\$5,317,210	\$63.59	\$5,532,210
E. EQUIPMENT & FURNISHINGS										
E10 - EQUIPMENT										
E1010 COMMERCIAL EQUIPMENT										
<u>114000 FOOD SERVICE EQUIPMENT</u>										
Kitchen equipment - Reno	\$640,000.00	LS	1	\$640,000	1	\$640,000	1	\$640,000	1	\$640,000
				-----		-----		-----		-----
				\$640,000		\$640,000		\$640,000		\$640,000
E1090 OTHER EQUIPMENT										
<u>116600 ATHLETIC & SPORTS EQUIPMENT</u>										
Basketball backstops - electric	\$10,250.00	EA	6	\$61,500	6	\$61,500	6	\$61,500	6	\$61,500
Wall padding - 6'	\$15.00	SF	500	\$7,500	500	\$7,500	500	\$7,500	500	\$7,500
Motorized gym divider curtain	\$19.00	SF	1,800	\$34,200	1,800	\$34,200	1,800	\$34,200	1,800	\$34,200
Volley ball court equip.	\$700.00	EA	1	\$700	1	\$700	1	\$700	1	\$700
Scoreboard and shot clock	\$24,000.00	EA	1	\$24,000	1	\$24,000	1	\$24,000	1	\$24,000
Bleachers	\$125.00	SEAT	550	\$68,750	550	\$68,750	550	\$68,750	550	\$68,750
<u>116143 STAGE DRAPERY</u>										
Stage curtain and rigging	\$32,000.00	LS	1	\$32,000	1	\$32,000	1	\$32,000	1	\$32,000
<u>115213 PROJECTION SCREENS</u>										
Projection screen - stage	\$10,000.00	EA	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
<u>119000 MISC. EQUIPMENT</u>										
Metal storage shelving		NIC								
Book security equipment		NIC								
Kiln	\$4,000.00	EA	1	\$4,000	1	\$4,000	1	\$4,000	1	\$4,000

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
				-----		-----		-----		-----
				\$242,650		\$242,650		\$242,650		\$242,650
TOTAL E10 - EQUIPMENT				\$882,650		\$882,650		\$882,650		\$882,650
E20 - FURNISHINGS										
E 2010 FIXED FURNISHINGS										
<u>129000 MISC. FURNISHINGS</u>										
Meco shade - manual	\$9.50	SF	6,712	\$63,764	6,342	\$60,249	7,569	\$71,906	7,339	\$69,721
Elec Op Shades - 20%	1	LS	12,753	\$12,753	12,050	\$12,050	14,381	\$14,381	13,944	\$13,944
<u>123553 CLASSROOM CASEWORK</u>										
Casework	\$13.00	GSF	120,000	\$1,560,000	120,000	\$1,560,000	87,000	\$1,131,000	87,000	\$1,131,000
				-----		-----		-----		-----
				\$1,636,517		\$1,632,299		\$1,217,287		\$1,214,665
E2020 MOVABLE FURNISHINGS							NIC			
				-----		-----		-----		-----
				\$0		\$0		\$0		\$0
TOTAL E20 - FURNISHINGS				\$1,636,517		\$1,632,299		\$1,217,287		\$1,214,665
F20 - SELECTIVE BUILDING DEMOLITION										
F2010 BUILDING ELEMENTS DEMOLITION										
Demolish existing building										
Interior Demolition	\$15.00	GSF	120,000	\$1,800,000	120,000	\$1,800,000	87,000	\$1,305,000	87,000	\$1,305,000
Cut In Courtyard	\$25.00	SF					\$11,500	\$287,500	\$11,500	\$287,500
				-----		-----		-----		-----
				\$1,800,000		\$1,800,000		\$1,592,500		\$1,592,500
F2020 HAZARDOUS COMPONENTS ABATEMENT										

DESCRIPTION	UNIT COST	UNIT	AR 1 RENO - 500		AR 1 RENO - 750		AR 2 RENO - 500		AR 2 RENO - 750	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Hazardous Waste Allowance	SEE SUMMARY PAGE			----- \$0		----- \$0		----- \$0		----- \$0
TOTAL F20 - SELECTIVE BUILDING DEMOLITION				\$1,800,000		\$1,800,000		\$1,592,500		\$1,592,500

Clinton Middle School Addition/Renovation - PSR

DESCRIPTION	UNIT COST	UNIT	RENOVATION	
			QUANTITY	TOTAL
BASE REPAIR EXISTING SCHOOL				
Sismic Upgrade	\$4.00	GSF	130,000	\$520,000
ADA Interior Doors:				
Replace Int Partition and Doors	\$55	GSF	130,000	\$7,150,000
Replace all Finishes	\$50	GSF	130,000	\$6,500,000
New Sprinkler System	\$8	GSF	130,000	\$1,040,000
New Kitchen Equipment	\$800,000	LS	1	\$800,000
Replace Plumbing	\$24	GSF	130,000	\$3,120,000
HVAC Replacement	\$80	GSF	130,000	\$10,400,000
Replace Entire Electrical System	\$55	GSF	130,000	\$7,150,000
ROOFING:				
Replace Roofing and Flashing	\$33	SF	69,500	\$2,293,500
EXTERIOR WALL				
Cut and Point Brick - 40%	\$15.00	SF	52,500	\$787,500
Window System - 30%	\$165.00	SF	15,750	\$2,598,750
Misc. Exterior Work	\$5.00	SF	65,000	\$325,000

				\$42,684,750
			130,000	\$328.34



PM&C LLC
20 Downer Avenue, Suite 5
Hingham, MA 02043
(T) 781-740-8007
(F) 781-740-1012

PSR Submission Estimate

Clinton Middle School
Clinton, MA

Prepared for:

Dore & Whittier

May 31, 2023



Clinton Middle School

31-May-23

Clinton, MA

PSR Submission Estimate

INTRODUCTION

NOTE: The costs for the various PSR Options indicated above are intended to be an analysis of the relative costs between options and NOT a prediction of the actual final cost of any individual option. Major variables such as geotechnical, site grading, structural system and final MEP systems have yet to be designed and costs will vary significantly from the benchmark cost estimating included as part of this PDP cost analysis. The costs outlined in this report should not be represented as the FINAL construction budget.

This PSR Design Submission cost estimate was produced from narratives and outline drawings received May 16th, 2023 prepared by Dore & Whittier and their design team.

This estimate includes all direct construction costs, construction managers overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under 149a of the Massachusetts General Laws to pre-qualified construction managers, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

- All professional fees and insurance
- Building Permit costs
- Removal of contaminated soils
- Rock excavation
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)



Clinton Middle School
Clinton, MA

31-May-23

PSR Submission Estimate

OPTION	Gross Floor Area	\$/sf	Estimated Construction Cost
CODE UPGRADE/ BASE REPAIR OPTION	130,000	\$690.62	\$89,780,914
OPTION AR-1 ADDITION + RENOVATION - 550 STUDENTS	134,000	\$795.73	\$106,628,056
OPTION AR-1 ADDITION/ RENOVATION - 700 STUDENTS	145,500	\$784.55	\$114,152,139
OPTION AR-1.5 ADDITION + RENOVATION - 550 STUDENTS	143,500	\$783.10	\$112,374,460
OPTION AR-1.5 ADDITION + RENOVATION - 700 STUDENTS	150,000	\$761.89	\$114,283,017
OPTION AR-2 ADDITION + RENOVATION - 550 STUDENTS	141,000	\$829.39	\$116,943,812
OPTION AR-2 ADDITION + RENOVATION - 700 STUDENTS	156,000	\$801.42	\$125,021,820
OPTION NC-1 NEW CONSTRUCTION - 550 STUDENTS	119,500	\$868.46	\$103,781,500
OPTION NC-1 NEW CONSTRUCTION - 700 STUDENTS	136,000	\$827.27	\$112,508,214



Clinton Middle School
Clinton, MA

31-May-23

PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
Code Upgrade/ Base Repair Option				
SELECTIVE REPAIR	Dec-25	130,000	\$351.91	\$45,748,300
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITework				\$5,373,304
SUB-TOTAL		130,000	\$406.71	\$52,872,854
DESIGN AND PRICING CONTINGENCY	12.0%			\$6,344,742
ESCALATION	12.08%			\$6,387,041
SUB-TOTAL				\$65,604,637
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		48	MTHS	\$7,680,000
GENERAL REQUIREMENTS	4.0%			\$2,624,185
PHASING PREMIUM INCLUDING 2ND SHIFT IN SUMMER MTHS	4.5%			\$2,952,209
BONDS	0.9%			\$590,442
GENERAL LIABILITY INSURANCE	1.1%			\$721,651
PERMIT				WAIVED
SUB-TOTAL				\$80,173,124
CM FEE	2.5%			\$2,004,328
GMP Contingency	2.0%			\$1,603,462
ALLOWANCE FOR MODULAR SWING SPACE AND ASSOCIATED SITework				\$6,000,000
TOTAL OF ALL CONSTRUCTION		130,000	\$690.62	\$89,780,914



PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION AR-1				
ADDITION/ RENOVATION - 550 STUDENTS				
NEW ADDITION	Dec-25	14,000	\$507.28	\$7,101,966
RENOVATION		120,000	\$398.83	\$47,859,360
PARTIAL DEMOLITION		10,000	\$10.00	\$100,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITWORK				\$9,485,497
SUB-TOTAL		134,000	\$494.76	\$66,298,073
DESIGN AND PRICING CONTINGENCY	12.0%			\$7,955,769
ESCALATION	12.08%			\$8,008,807
SUB-TOTAL				\$82,262,649
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		42	MTHS	\$160,000
GENERAL REQUIREMENTS	3.0%			\$2,467,879
PHASING PREMIUM INCLUDING 2ND SHIFT IN SUMMER MTHS	2.5%			\$2,286,263
BONDS	0.9%			\$740,364
GENERAL LIABILITY INSURANCE	1.1%			\$904,889
PERMIT				WAIVED
SUB-TOTAL				\$95,382,044
CM FEE	2.5%			\$2,384,551
GMP Contingency	3.0%			\$2,861,461
ALLOWANCE FOR MODULAR SWING SPACE AND ASSOCIATED SITWORK				\$6,000,000
TOTAL OF ALL CONSTRUCTION		134,000	\$795.73	\$106,628,056



PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION AR-1				
ADDITION/ RENOVATION - 700 STUDENTS				
NEW ADDITION	Dec-25	25,500	\$496.35	\$12,656,800
RENOVATION		120,000	\$395.81	\$47,497,559
PARTIAL DEMOLITION		10,000	\$10.00	\$100,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITWORK				\$9,635,497
SUB-TOTAL		145,500	\$492.38	\$71,641,106
DESIGN AND PRICING CONTINGENCY	12.0%			\$8,596,933
ESCALATION	12.08%			\$8,654,246
SUB-TOTAL				\$88,892,285
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		42	MTHS	\$160,000
GENERAL REQUIREMENTS	3.0%			\$2,666,769
PHASING PREMIUM INCLUDING 2ND SHIFT IN SUMMER MTHS	2.5%			\$2,456,976
BONDS	0.9%			\$800,031
GENERAL LIABILITY INSURANCE	1.1%			\$977,815
PERMIT				WAIVED
SUB-TOTAL				\$102,513,876
CM FEE	2.5%			\$2,562,847
GMP Contingency	3.0%			\$3,075,416
ALLOWANCE FOR MODULAR SWING SPACE AND ASSOCIATED SITWORK				\$6,000,000
TOTAL OF ALL CONSTRUCTION		145,500	\$784.55	\$114,152,139



PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION AR-1.5				
ADDITION + RENOVATION - 550 STUDENTS				
NEW ADDITION	Dec-25	44,500	\$464.03	\$20,649,135
RENOVATION		99,000	\$428.72	\$42,443,598
PARTIAL DEMOLITION		31,000	\$10.00	\$310,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITWORK				\$9,485,497
SUB-TOTAL		143,500	\$520.14	\$74,639,480
DESIGN AND PRICING CONTINGENCY	12.0%			\$8,956,738
ESCALATION	12.08%			\$9,016,449
SUB-TOTAL				\$92,612,667
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		42	MTHS	\$160,000
GENERAL REQUIREMENTS	3.0%			\$2,778,380
PHASING PREMIUM INCLUDING 2ND SHIFT IN SUMMER MTHS	2.5%			\$2,552,776
BONDS	0.9%			\$833,514
GENERAL LIABILITY INSURANCE	1.1%			\$1,018,739
PERMIT				WAIVED
SUB-TOTAL				\$106,516,076
CM FEE	2.5%			\$2,662,902
GMP Contingency	3.0%			\$3,195,482
TEMPORARY CLASSROOMS				NR
TOTAL OF ALL CONSTRUCTION		143,500	\$783.10	\$112,374,460



PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION AR-1.5				
ADDITION + RENOVATION - 700 STUDENTS				
NEW ADDITION	Dec-25	38,000	\$455.62	\$17,313,432
RENOVATION		112,000	\$420.67	\$47,114,614
PARTIAL DEMOLITION		18,000	\$10.00	\$180,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITWORK				\$9,635,497
SUB-TOTAL		150,000	\$506.63	\$75,994,793
DESIGN AND PRICING CONTINGENCY	12.0%			\$9,119,375
ESCALATION	12.08%			\$9,180,171
SUB-TOTAL				\$94,294,339
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		42	MTHS	\$160,000
GENERAL REQUIREMENTS	3.0%			\$2,828,830
PHASING PREMIUM INCLUDING 2ND SHIFT IN SUMMER MTHS	2.5%			\$2,596,079
BONDS	0.9%			\$848,649
GENERAL LIABILITY INSURANCE	1.1%			\$1,037,238
PERMIT				WAIVED
SUB-TOTAL				\$108,325,135
CM FEE	2.5%			\$2,708,128
GMP Contingency	3.0%			\$3,249,754
TEMPORARY CLASSROOMS				NR
TOTAL OF ALL CONSTRUCTION		150,000	\$761.89	\$114,283,017



PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION AR-2				
ADDITION + RENOVATION - 550 STUDENTS				
NEW ADDITION	Dec-25	54,000	\$482.39	\$26,048,992
RENOVATION		87,000	\$448.42	\$39,012,152
PARTIAL DEMOLITION		43,000	\$10.00	\$430,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITWORK				\$10,641,894
SUB-TOTAL		141,000	\$552.37	\$77,884,288
DESIGN AND PRICING CONTINGENCY	12.0%			\$9,346,115
ESCALATION	12.08%			\$9,408,422
SUB-TOTAL				\$96,638,825
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		42	MTHS	\$160,000
GENERAL REQUIREMENTS	3.0%			\$6,720,000
PHASING PREMIUM INCLUDING 2ND SHIFT IN SUMMER MTHS	2.5%			\$2,899,165
BONDS	0.9%			\$2,656,450
GENERAL LIABILITY INSURANCE	1.1%			\$869,749
PERMIT				\$1,063,027
SUB-TOTAL				WAIVED
SUB-TOTAL				\$110,847,216
CM FEE	2.5%			\$2,771,180
GMP Contingency	3.0%			\$3,325,416
TEMPORARY CLASSROOMS				NR
TOTAL OF ALL CONSTRUCTION		141,000	\$829.39	\$116,943,812



PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION AR-2				
ADDITION + RENOVATION - 700 STUDENTS				
NEW ADDITION	Dec-25	69,000	\$463.78	\$32,001,049
RENOVATION		87,000	\$444.21	\$38,646,485
PARTIAL DEMOLITION		43,000	\$10.00	\$430,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITWORK				\$10,791,894
SUB-TOTAL		156,000	\$536.03	\$83,620,678
DESIGN AND PRICING CONTINGENCY	12.0%			\$10,034,481
ESCALATION	12.08%			\$10,101,378
SUB-TOTAL				\$103,756,537
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		42	MTHS	\$160,000
GENERAL REQUIREMENTS	3.0%			\$3,112,696
PHASING PREMIUM INCLUDING 2ND SHIFT IN SUMMER MTHS	2.5%			\$2,839,731
BONDS	0.9%			\$933,809
GENERAL LIABILITY INSURANCE	1.1%			\$1,141,322
PERMIT				WAIVED
SUB-TOTAL				\$118,504,095
CM FEE	2.5%			\$2,962,602
GMP Contingency	3.0%			\$3,555,123
TEMPORARY CLASSROOMS				NR
TOTAL OF ALL CONSTRUCTION		156,000	\$801.42	\$125,021,820



Clinton Middle School
Clinton, MA

31-May-23

PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION NC-1				
NEW CONSTRUCTION - 550 STUDENTS				
NEW BUILDING	Dec-25	119,500	\$495.15	\$59,170,756
DEMOLITION		130,000	\$8.00	\$1,040,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITework				\$9,858,854
SUB-TOTAL		119,500	\$601.01	\$71,820,860
DESIGN AND PRICING CONTINGENCY	12.0%			\$8,618,503
ESCALATION	12.08%			\$8,675,960
SUB-TOTAL				\$89,115,323
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		30	MTHS	\$160,000
GENERAL REQUIREMENTS	3.0%			\$2,673,460
BONDS	0.9%			\$802,038
GENERAL LIABILITY INSURANCE	1.1%			\$980,269
PERMIT				WAIVED
SUB-TOTAL				\$98,371,090
CM FEE	2.5%			\$2,459,277
GMP Contingency	3.0%			\$2,951,133
TEMPORARY CLASSROOMS				NR
TOTAL OF ALL CONSTRUCTION		119,500	\$868.46	\$103,781,500



Clinton Middle School
Clinton, MA

31-May-23

PSR Submission Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION NC-1				
NEW CONSTRUCTION - 700 STUDENTS				
NEW BUILDING	Dec-25	136,000	\$480.26	\$65,314,699
DEMOLITION		130,000	\$8.00	\$1,040,000
HAZARDOUS MATERIAL ABATEMENT				\$1,751,250
SITWORK				\$10,063,939
SUB-TOTAL		136,000	\$574.78	\$78,169,888
DESIGN AND PRICING CONTINGENCY	12.0%			\$9,380,387
ESCALATION	12.08%			\$9,442,922
SUB-TOTAL				\$96,993,197
NON TRADES SUB BONDS				Included In Rates
GENERAL CONDITIONS		30	MTHS	\$4,800,000
GENERAL REQUIREMENTS	3.0%			\$2,909,796
BONDS	0.9%			\$872,939
GENERAL LIABILITY INSURANCE	1.1%			\$1,066,925
PERMIT				WAIVED
SUB-TOTAL				\$106,642,857
CM FEE	2.5%			\$2,666,071
GMP Contingency	3.0%			\$3,199,286
TEMPORARY CLASSROOMS				NR
TOTAL OF ALL CONSTRUCTION		136,000	\$827.27	\$112,508,214

PSR Submission Estimate		GSF	130,000	134,000	145,500	143,500	150,000	141,000	156,000	119,500	136,000
CONSTRUCTION COST SUMMARY											
BUILDING SYSTEM		SUB-TOTAL	SUB-TOTAL	SUB-TOTAL	SUB-TOTAL	SUB-TOTAL	SUB-TOTAL	SUB-TOTAL	SUB-TOTAL	SUB-TOTAL	SUB-TOTAL
		Code Upgrade/ Base Repair Option	OPTION AR-1	OPTION AR-1	OPTION AR-1.5	OPTION AR-1.5	OPTION AR-2	OPTION AR-2	OPTION NC-1	OPTION NC-1	
		REPAIR	ADDITION/ RENOVIATION - 550 STUDENTS	ADDITION/ RENOVIATION - 700 STUDENTS	ADDITION + RENOVIATION - 550 STUDENTS	ADDITION + RENOVIATION - 700 STUDENTS	ADDITION + RENOVIATION - 550 STUDENTS	ADDITION + RENOVIATION - 700 STUDENTS	NEW CONSTRUCTION - 550 STUDENTS	NEW CONSTRUCTION - 700 STUDENTS	
ALL OPTIONS											
A10	FOUNDATIONS										
A1010	Standard Foundations		\$774,520	\$1,147,492	\$1,542,968	\$1,227,943	\$2,307,179	\$2,328,493	\$2,511,788	\$2,506,445	
A1020	Special Foundations										
A1030	Lowest Floor Construction	\$77,805	\$581,032	\$886,742	\$1,073,788	\$900,020	\$1,288,476	\$1,275,204	\$2,258,368	\$2,297,573	
B10	SUPERSTRUCTURE										
B1010	Upper Floor Construction		\$1,605,000	\$1,605,000	\$2,081,320	\$2,185,320	\$2,374,583	\$3,026,315	\$2,227,355	\$3,114,000	
B1020	Roof Construction	\$380,000	\$1,417,750	\$1,953,313	\$2,092,438	\$1,824,250	\$2,343,038	\$2,236,400	\$4,244,988	\$4,315,800	
B20	EXTERIOR CLOSURE										
B2010	Exterior Walls	\$4,660,144	\$3,182,576	\$3,330,215	\$4,320,578	\$4,275,355	\$5,605,413	\$6,029,797	\$5,577,092	\$5,599,236	
B2020	Windows	\$1,354,338	\$997,456	\$1,053,231	\$1,416,289	\$1,383,444	\$1,787,055	\$1,999,994	\$1,954,997	\$1,961,568	
B2030	Exterior Doors	\$260,000	\$261,000	\$278,250	\$215,250	\$225,000	\$211,500	\$234,000	\$179,250	\$204,000	
B30	ROOFING										
B3010	Roof Coverings	\$3,325,000	\$3,476,800	\$3,774,000	\$3,427,500	\$3,459,000	\$3,572,400	\$3,450,400	\$2,851,400	\$2,901,450	
B3020	Roof Openings	\$30,000	\$370,000	\$370,000	\$430,000	\$430,000	\$30,000	\$30,000			
C10	INTERIOR CONSTRUCTION										
C1010	Partitions	\$2,390,000	\$3,998,000	\$4,423,500	\$5,507,500	\$5,774,000	\$5,391,000	\$5,946,000	\$4,421,500	\$5,032,000	
C1020	Interior Doors	\$390,000	\$938,000	\$1,018,500	\$1,004,500	\$1,050,000	\$987,000	\$1,092,000	\$836,500	\$952,000	
C1030	Specialties/Millwork	\$1,173,500	\$1,676,850	\$1,822,200	\$1,799,900	\$1,880,500	\$1,818,900	\$2,004,900	\$1,493,300	\$1,792,400	
C20	STAIRCASES										
C2010	Stair Construction	\$80,000	\$200,000	\$200,000	\$245,000	\$245,000	\$245,000	\$290,000	\$155,000	\$200,000	
C2020	Stair Finishes	\$20,000	\$20,000	\$20,000	\$25,000	\$25,000	\$25,000	\$30,000	\$15,000	\$20,000	
C30	INTERIOR FINISHES										
C3010	Wall Finishes	\$1,045,800	\$1,003,000	\$1,157,150	\$1,083,350	\$1,112,600	\$848,900	\$991,920	\$1,377,554	\$1,630,304	
C3020	Floor Finishes	\$1,105,350	\$1,154,442	\$1,300,280	\$1,200,940	\$1,244,340	\$1,037,275	\$1,186,050	\$1,330,705	\$1,468,645	
C3030	Ceiling Finishes	\$923,100	\$1,277,630	\$1,396,370	\$1,378,625	\$1,336,900	\$1,358,300	\$1,506,350	\$1,331,310	\$1,490,535	
D10	CONVEYING SYSTEMS										
D1010	Elevator	\$125,000	\$230,000	\$230,000	\$230,000	\$230,000	\$230,000	\$230,000	\$183,000	\$183,000	
D20	PLUMBING										
D20	Plumbing	\$2,561,000	\$3,702,000	\$4,012,500	\$3,943,800	\$4,128,400	\$3,867,900	\$4,272,900	\$3,226,500	\$3,672,000	
D30	HVAC										
D30	HVAC	\$12,252,500	\$12,612,000	\$13,681,500	\$13,469,250	\$14,090,000	\$13,221,750	\$14,616,750	\$11,113,500	\$12,648,000	
D40	FIRE PROTECTION										
D40	Fire Protection	\$1,189,500	\$1,217,000	\$1,314,750	\$1,284,100	\$1,347,800	\$1,255,050	\$1,382,550	\$1,015,750	\$1,156,000	
D50	ELECTRICAL										
D5010	Complete System	\$8,780,000	\$9,418,000	\$10,188,500	\$1,284,100	\$10,474,000	\$9,821,000	\$10,826,000	\$8,206,500	\$9,312,000	
E10	EQUIPMENT										
E10	Equipment	\$989,375	\$1,116,275	\$1,127,775	\$1,136,275	\$1,136,275	\$1,139,775	\$1,154,775	\$1,133,295	\$1,133,295	
E20	FURNISHINGS										
E2010	Fixed Furnishings	\$1,115,000	\$1,667,808	\$1,801,944	\$1,792,664	\$1,874,528	\$1,772,104	\$1,964,000	\$1,526,104	\$1,724,448	
E2020	Movable Furnishings										
F20	HAZMAT REMOVALS										
F2010	Building Elements Demolition	\$1,520,888	\$2,064,187	\$2,061,147	\$2,379,198	\$2,568,371	\$2,522,546	\$2,542,736			
TOTAL DIRECT COST (Trade Costs)		\$45,748,300	\$54,961,326	\$60,154,359	\$54,364,333	\$64,428,046	\$65,061,144	\$70,647,534	\$59,170,756	\$65,314,699	



PSR Submission Estimate

GFA 130,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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Code Upgrade/ Base Repair Option

GROSS FLOOR AREA CALCULATION

First Floor 95,000
Second Floor 35,000

TOTAL GROSS FLOOR AREA (GFA)	130,000 sf
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A1010 STANDARD FOUNDATIONS

No work required per Engineer's report

A1020 SPECIAL FOUNDATIONS

No work required per Engineer's report

SUBTOTAL

-

A1030 LOWEST FLOOR CONSTRUCTION

033000 CONCRETE

Remove and replace slab on grade as necessary to accommodate new fixtures and fittings/ ADA upgrades to ramps etc.

5,187 sf 15.00 77,805

312000 EARTHWORK

SUBTOTAL

77,805

TOTAL - FOUNDATIONS	\$77,805
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

No Work in this section

SUBTOTAL

-

A2020 BASEMENT WALLS

No Work in this section

SUBTOTAL

-

TOTAL - BASEMENT CONSTRUCTION	
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B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

No work required per Engineer's report

SUBTOTAL

-

B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Allowance for supplemental support framing at new rooftop mechanical equipment - allowance

95,000 sf 4.00 380,000

SUBTOTAL

380,000

TOTAL - SUPERSTRUCTURE	\$380,000
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B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

34,984 sf Total Exterior Closure

040001 MASONRY



PSR Submission Estimate

GFA 130,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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Code Upgrade/ Base Repair Option

53	Selectively repoint masonry at exterior walls as required					NR		
54	Provide engineered concrete repairs at broken exterior header/ sill elements					NR		
55	Allowance to infill openings with masonry including backup at removed unit ventilator louvers	24	loc	1,500.00	36,000			
56								
57	055000 MISCELLANOUS METALS							
58	Prepare and repaint steel lintels, plates and other exterior metal items	34,984	sf	1.00	34,984			
59								
60	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
61	Liquid applied vapor barrier @ etr masonry walls	34,984	sf	8.50	297,364			
62	Air barrier/flashing at openings	3,087	lf	8.50	26,240			
63	Rake out existing masonry control joints; provide new backer rod and joint sealant - allow	34,984	sf	1.50	52,476			
64								
65	072100 THERMAL INSULATION							
66								
67	074213 WALL PANELS							
68	2" Insulated metal panel, Kingsan or similar	34,984	sf	35.00	1,224,440			
69	Metal panel rainscreen on girt system; Alucobond or similar	34,984	sf	85.00	2,973,640			
70								
71	092900 GYPSUM BOARD ASSEMBLIES							
72								
73	101400 SIGNAGE							
74	New signage	1	ls	15,000.00	15,000			
75	SUBTOTAL						4,660,144	
76								
77	B2020 WINDOWS	6,174	sf					
78								
79	092900 GYPSUM BOARD ASSEMBLIES							
80	Wood blocking at openings	3,087	lf	14.00	43,218			
81								
82	079200 JOINT SEALANTS							
83	Backer rod & double sealant	3,087	lf	10.00	30,870			
84								
85	080001 METAL WINDOWS							
86	Replace all existing windows, storefront and curtainwall, double glazed - 15%	6,174	sf	150.00	926,100			
87	Replace Greenhouse glazing - assume walls & roof	1,574	sf	225.00	354,150			
88								
89	089100 LOUVERS							
90	Louvers					N/A		
91	SUBTOTAL						1,354,338	
92								
93	B2030 EXTERIOR DOORS							
94	Exterior door replacement allowance	130,000	gsf	2.00	260,000			
95								
96	SUBTOTAL						260,000	
97								
98	TOTAL - EXTERIOR CLOSURE							\$6,274,482

B30 ROOFING

103	B3010 ROOF COVERINGS						
104							
105	Replace w/ new adhered PVC roofing includes edge coping, blocking, flashings and roof accessories etc. (assumes removal of existing included w/ haz mat)	95,000	sf	35.00	3,325,000		
106	SUBTOTAL						3,325,000
107							
108	B3020 ROOF OPENINGS						
109	Allowance to replace roof hatches, ladders etc.	1	ls	30,000.00	30,000		
110	SUBTOTAL						30,000
111							



PSR Submission Estimate

GFA 130,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Code Upgrade/ Base Repair Option

111	TOTAL - ROOFING						\$3,355,000
112							
113	C10 INTERIOR CONSTRUCTION						
114	C1010 PARTITIONS						
115	Modify interior CMU/GWB walls, glazed partitions + BL's, operable walls etc. to accommodate code upgrades	130,000	gsf	15.00	1,950,000		
115	Seismic clips at the top of interior masonry walls - allow @ 32" oc	2,200	ea	200.00	440,000		
116	SUBTOTAL					2,390,000	
117	C1020 INTERIOR DOORS						
118	Allowance for new doors at ADA upgrades door locations. Replace hardware at all ETR doors. Prep and paint all ETR doors. Replace wire glass w/ tempered or laminated safety glass at door and frames.	130,000	gsf	3.00	390,000		
118	SUBTOTAL					390,000	
119	C1030 SPECIALTIES / MILLWORK						
120	055000 MISCELLANEOUS METALS						
121	Miscellaneous metals complete including ceiling grid supports	130,000	gsf	2.50	325,000		
122	064100 FINISH CARPENTRY						
122	Modify existing millwork as required to meet dimensional requirements	130,000	gsf	1.50	195,000		
123	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
124	Miscellaneous sealants throughout building	130,000	gsf	1.00	130,000		
125	101100 VISUAL DISPLAY SURFACES						
125	Marker boards/TB complete	130,000	gsf	1.60	208,000		
126	101400 SIGNAGE						
127	New interior signage	130,000	gsf	0.80	104,000		
128	102110 TOILET COMPARTMENTS + ACCESSORIES						
128	New toilet partitions/bathroom accessories	130,000	gsf	1.00	130,000		
129	104400 FIRE PROTECTION SPECIALTIES						
130	Fire extinguisher cabinets	1	ls	15,000.00	15,000		
131	AED cabinets	1	ls	1,500.00	1,500		
132	105113 LOCKERS						
134	Repair existing corridor and locker room lockers throughout	130,000	gsf	0.50	65,000		
135	SUBTOTAL					1,173,500	
137	TOTAL - INTERIOR CONSTRUCTION						\$3,953,500
138							
139	C20 STAIRCASES						
140	C2010 STAIR CONSTRUCTION						
144	Modify stair guardrails and handrails to meet ADA requirements	4	flt	15,000.00	60,000		
145	Modify ramp guardrails and handrails to meet ADA requirements - allowance	1	ls	20,000.00	20,000		
146	SUBTOTAL					80,000	
148	C2020 STAIR FINISHES						
149	New finishes at ETR stairs	4	flt	5,000.00	20,000		
150	SUBTOTAL					20,000	
152	TOTAL - STAIRCASES						\$100,000



PSR Submission Estimate

GFA 130,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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Code Upgrade/ Base Repair Option

155	C30 INTERIOR FINISHES						
156							
157	C3010 WALL FINISHES						
158	Prep and paint all etr and new interior walls	130,000	gsf	3.00	390,000		
159	New tile in bathrooms and shower rooms	12,800	sf	36.00	460,800		
160	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	130,000	sf	1.50	195,000		
161							
162	SUBTOTAL					1,045,800	
163							
164	C3020 FLOOR FINISHES						
165	Allowance for leveler at new floor finishes	118,600	sf	3.00	355,800		
166	Replace finishes throughout with VCT flooring and resilient base	100,800	sf	5.00	504,000		
167	Premium for carpet in Admin spaces, Media center etc. including resilient base	8,500	sf	1.50	12,750		
168							
169	Premium for tile in bathrooms	5,800	sf	35.00	203,000		
170	Gymnasium flooring	9,000	sf		assume ETR		
171	Quarry tile in kitchen & support spaces	2,400	sf		assume ETR		
172	Concrete sealer in Mech/ Elec/ Boiler spaces	3,500	sf		assume ETR		
173	Allowance to clean etr floors	14,900	sf	2.00	29,800		
174	SUBTOTAL					1,105,350	
175							
176	C3030 CEILING FINISHES						
177	ACT ceiling replacement throughout	114,200	sf	7.00	799,400		
178	Premium for healthzone or similar ACT in kitchen and bathrooms	8,200	sf	2.00	16,400		
179	Gymnasium, Cafetorium and Platform - paint exposed deck	15,800	sf	3.50	55,300		
180	Allowance for prep and paint etr gwb ceilings and soffits	130,000	gsf	0.40	52,000		
181	SUBTOTAL					923,100	
182							
183							
184	TOTAL - INTERIOR FINISHES						\$3,074,250
185							
186	D10 CONVEYING SYSTEMS						
187							
188							
189	D1010 ELEVATOR						
190							
191	142000 ELEVATOR						
192	Existing to remain elevator - new controls, call stations, signals, 2-way emergency communications and finishes	1	ea	75,000.00	75,000		
193	New platform lift from Cafeteria to Stage level	1	ea	50,000.00	50,000		
194	SUBTOTAL					125,000	
195							
196	TOTAL - CONVEYING SYSTEMS						\$125,000
197							
198	D20 PLUMBING						
199							
200							
201	D20 PLUMBING, GENERALLY						
202	Plumbing system complete; replace each system, fixtures & all equipment including domestic water, AG sanitary W&V and AG storm. Reuse underground sanitary and storm piping. Reuse acid waste & natural gas piping.	130,000	gsf	19.00	2,470,000		
203	Demolition; cut & cap, make safe, removal by others	130,000	gsf	0.70	91,000		
204	SUBTOTAL					2,561,000	
205							
206	TOTAL - PLUMBING						\$2,561,000
207							
208	D30 HVAC						
209							
210							
211	D30 HVAC, GENERALLY						



PSR Submission Estimate

GFA 130,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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Code Upgrade/ Base Repair Option

212	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	130,000	gsf	93.00	12,090,000		
213	Demolition; cut & cap existing HVAC; removal by others	130,000	gsf	1.25	162,500		
214	SUBTOTAL					12,252,500	

TOTAL - HVAC							\$12,252,500
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D40 FIRE PROTECTION

220	D40 FIRE PROTECTION, GENERALLY						
221	Fire protection complete system	130,000	gsf	8.50	1,105,000		
222	Demolition	130,000	gsf	0.65	84,500		
223	SUBTOTAL					1,189,500	

TOTAL - FIRE PROTECTION							\$1,189,500
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D50 ELECTRICAL

230	Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA etc.	130,000	gsf	59.00	7,670,000		
231	AV sound system and projection at Gym/Café	1	ls	200,000.00	200,000		
232	Network switches	130,000	sf	1.50	195,000		
233	Wi-Fi equipment	130,000	sf	1.00	130,000		
234	Video Surveillance system	130,000	sf	2.00	260,000		
235	Access Control system	130,000	sf	1.00	130,000		
236	VOIP telephone system	130,000	sf	1.50	195,000		
237	SUBTOTAL					8,780,000	

TOTAL - ELECTRICAL							\$8,780,000
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E10 EQUIPMENT

244	E10 EQUIPMENT, GENERALLY						
274	114000 FOODSERVICE EQUIPMENT						
275	Kitchen equipment - allowance for replacement of wood work surfaces and shelving to stainless steel. Replace exhaust ventilators and interior grease traps w/ stainless steel. Replace two hoods. New serving line equipment. Tray & pot washing area upgrades	1	ls	640,000.00	640,000		
276	116200 THEATRE EQUIPMENT						
278	New curtain and rigging allowance in Cafetorium	1	ls	30,000.00	30,000		
279	New portable risers in Band room	1	ls	24,375.00	24,375		
281	116600 ATHLETIC EQUIPMENT						
282	Replace operable partitions in Gymnasium	2	ea	35,000.00	70,000		
283	Allowance to repair basketball backstops (8#), volleyball standards, scoreboard etc.	1	ls	30,000.00	30,000		
284	New telescopic bleachers - seating capacity 650	1	ls	130,000.00	130,000		
285	119000 MISCELLANEOUS EQUIPMENT						
287	Allowance to replace projection screens, residential appliances science room equipment, kiln etc.	130,000	gsf	0.50	65,000		
288	SUBTOTAL					989,375	

TOTAL - EQUIPMENT							\$989,375
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PSR Submission Estimate

GFA 130,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Code Upgrade/ Base Repair Option

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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window treatment replacements - allowance 1 ls 75,000.00 75,000

123000 CASEWORK

Provide new casework where broken or exceeded lifespan - allowance 130,000 gsf 8.00 1,040,000

SUBTOTAL 1,115,000

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL NIC

TOTAL - FURNISHINGS \$1,115,000

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

SUBTOTAL -

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

Demo and remove existing floor slab 5,187 sf 8.00 41,496

Remove exterior windows and storefront 6,174 sf 8.00 49,392

Demo and remove interior floor finishes, ceilings and wall finishes etc. 130,000 gsf 4.00 520,000

Misc. selective interior demolition as req'd, partitions, specialties, furnishings, door hardware etc. - allowance 130,000 gsf 3.00 390,000

Selective interior MEP demolition including removal of cut & capped MEP equipment & fixtures 130,000 gsf 4.00 520,000

SUBTOTAL 1,520,888

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION \$1,520,888

TRADE SUBTOTAL \$45,748,300



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework: BASE REPAIR/CODE UPGRADES OPTION

1	G	SITework	860,000	sf		-	
2							
3							
4	G10	PHASING					
5		6' high site construction fence	4,500	lf	18.00	81,000	
6		Site construction entrance and removal/restoration	2	loc	12,000.00	24,000	
7		Temporary parking area - phase 1	1	ls	60,000.00	60,000	
8		Contractor laydown area - phase 1	1	ls	10,000.00	10,000	
9		Temporary utilities allowance	1	ls	50,000.00	50,000	
10		Temporary signage	1	ls	10,000.00	10,000	
11		Mobilizations	2	ea	35,000.00	70,000	
12		Street sweeping allowance	1	ls	10,000.00	10,000	
13		Traffic control measures for milling - allowance	1	ls	25,000.00	25,000	
14		Snow removal allowance	1	ls	25,000.00	25,000	
15		SUBTOTAL					365,000
16	G10	SITE PREPARATION & DEMOLITION					
17	311000	GENERAL CONDITIONS					
18		Layout/As-builts/Survey	1	ls	15,000.00	15,000	
19	311000	SITE DEMOLITION AND RELOCATIONS					
20		Demolish existing pavement	60,000	sf	1.25	75,000	
21		Demolish existing basketball courts	1	ls	5,000.00	5,000	
22		Allowance for misc. demo	1	ls	50,000.00	50,000	
23	311000	VEGETATION & TOPSOIL MANAGEMENT					
24		Tree clearing allowance				ETR	
25		Strip + stockpile topsoil				ETR	
26	312000	EROSION & SEDIMENT CONTROL					
27		Silt Fence; installation and removal	4,500	lf	12.00	54,000	
28		Silt Sacks; installation and removal	10	ea	250.00	2,500	
29		Erosion Control monitoring & maintenance	1	ls	15,000.00	15,000	
30		SUBTOTAL					216,500
31							
32	312000	SITE EARTHWORK					
33		<u>Site cut to design subgrade</u>					
34		Cut + fills - assume 1 ft and balanced site	7,407	cy	10.00	74,070	
35		Fill - imported granular fill				Assumed Not Required	
36	312000	SOIL DISPOSAL					
37		Load excess soils for disposal				Assumed Not Required	
38		Less than RCS-1 site disposal 1.8x				Assumed Not Required	
39							
40							
41	312000	ROCK REMOVAL - allowances				assume no rock	
42							
43	312000	ESTABLISHING GRADE					
44		Sub grade establishment	200,000	sf	0.15	30,000	
45		Fine grading throughout the site	200,000	sf	0.35	70,000	
46							
47	312000	HAZARDOUS MATERIALS					
48		UST removal allowance				Already removed	
49		SUBTOTAL					174,070
50							
51	G20	SITE IMPROVEMENTS					
52	320000	ROADWAYS AND PARKING LOTS					
53		<u>Asphalt Paving; roadways/parking lots</u>	143,965	sf			
54		gravel base; 12" thick	5,332	cy	60.00	319,920	
55		asphalt top; 1.5" thick	1,376	tns	225.00	309,600	
56		asphalt binder; 2.5" thick	2,290	tns	190.00	435,100	
57	320000	CURBING					
58		Vertical granite curb	4,825	lf	52.00	250,900	
59		ADA Curb cuts - allowance	1	ls	15,000.00	15,000	
60	320000	ROAD MARKINGS AND SIGNS					
61		Parking spot	172	ea	85.00	14,620	
62		Parking spot ADA	4	ea	250.00	1,000	



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework: BASE REPAIR/CODE UPGRADES OPTION							
67	Sign allowance	1	ls	20,000.00	20,000		
68	Pavement markings allowance	1	ls	20,000.00	20,000		
69	Crosswalk hatching	2	loc	2,500.00	5,000		
70	SUBTOTAL					1,391,140	
71							
72	320000 PEDESTRIAN PAVING						
73	<u>Concrete sidewalks</u>	10,000	sf				
74	gravel base; 6" thick	185	cy	60.00	11,100		
75	Broom finish concrete paving; 4" thick pavement	10,000	sf	12.00	120,000		
76	<u>Basketball Court</u>	25,000	sf				
77	gravel base; 6" thick	463	cy	60.00	ETR		
78	asphalt top; 1" thick	159	tns	225.00	ETR		
79	asphalt binder; 2" thick	319	tns	190.00	ETR		
80	Allowance for color play surfacing	1	ls	25,000.00	ETR		
81	Basketball hoops	2	ea	5,000.00	ETR		
82	<u>Concrete Plaza</u>	250	sf				
83	gravel base; 6" thick	5	cy	60.00	300		
84	Broom finish concrete paving; 4" thick - colored pavement	250	sf	15.00	3,750		
85	<u>Unit pavers</u>	250	sf				
86	crushed stone; 8" thick	6	cy	55.00	330		
87	Unit Pavers	250	sf	32.00	8,000		
88	Geotextiles	250	sf	0.55	138		
89	<u>Outdoor Plaza</u>	1,000	sf				
90	gravel base; 6" thick	19	cy	60.00	1,140		
91	Broom finish concrete paving; 4" thick - colored pavement	1,000	sf	15.00	15,000		
92	<u>Unit pavers</u>	1,000	sf				
93	crushed stone; 8" thick	25	cy	55.00	1,375		
94	Unit Pavers	1,000	sf	32.00	32,000		
95	Geotextiles	1,000	sf	0.55	550		
96	SUBTOTAL					193,683	
97							
98	320000 SITE IMPROVEMENTS						
99	320000 SITE FURNISHINGS						
100	Bollards - utility	15	ea	1,200.00	18,000		
101	Bollards - stainless steel	15	ea	2,500.00	37,500		
102	Trash receptacles	5	ea	3,141.60	15,708		
103	Flagpole - 40' Ht.	1	ea	9,000.00	9,000		
104	Flagpole foundation	1	ea	3,200.00	3,200		
105	Benches	12	ea	3,500.00	42,000		
106	Benches - concrete	4	ea	4,000.00	16,000		
107	Bike racks	15	ea	850.00	12,750		
108	School sign	1	ls	25,000.00	25,000		
109	Landscape curbing allowance	1	ls	50,000.00	50,000		
110	Dumpster enclosure allowance	1	ls	10,000.00	10,000		
111	320000 GRASS FIELD	140,000	sf				
112	Grass field/softball field with drainage	140,000	sf	8.00	ETR		
113	<u>Softball Infields</u>	6,570	sf				
114	Infield mix	132	tn	225.00	29,700		
115	Sand gravel fill; 12" thick	243	cy	50.00	12,150		
116	320000 PLAY AREAS						
117	<u>Playground - pour-in-place safety surfacing</u>	5,000	sf				
118	asphalt binder; 2" thick	64	tns	190.00	ETR		
119	crushed stone; 5" thick	77	cy	55.00	ETR		
120	Pour-in-place safety surface	5,000	sf	28.00	ETR		
121	Allowance for play equipment	1	ls	400,000.00	ETR		
122	320000 ATHLETIC EQUIPMENT						



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework: BASE REPAIR/CODE UPGRADES OPTION							
123	<u>Softball</u>						
124	Softball mound	1	loc	3,500.00	ETR		
125	Softball bases	1	set	2,500.00	ETR		
126	Softball batters boxes	1	loc	3,500.00	ETR		
127	Softball foul poles	2	ea	4,800.00	ETR		
128	Softball backstop	1	ea	55,000.00	ETR		
129	Softball dugouts - players benches	4	ea	4,000.00	ETR		
130	Softball dugouts	2	ea	25,000.00	ETR		
131	320000 <u>FENCING</u>						
132	4' Ht - Chain link fence at playground	380	lf	65.00	24,700		
133	8' Ht - Chain link fence at perimeter	1,800	lf	85.00	153,000		
134	12' Ht - Chain link fence				deleted		
135	SUBTOTAL						458,708
136							
137	329900 <u>SITE WALLS/Ramps/Stairs</u>						
138	Allowance for retaining walls	650	lf	325.00	ETR		
139	Allowance for new ramps	1	ls	100,000.00	100,000		
140	SUBTOTAL						100,000
141							
142	<u>Landscaping</u>						
143	329900 <u>LAWN AND SEED</u>						
144	Screen topsoil	0	cy	7.50	ETR		
145	Export tailings from screening process - assume clean rock	0	cy	8.50	ETR		
146	Amend/Place	0	cy	20.00	ETR		
147	Soil and mulch at planting areas; 8" thick	1	ls	30,000.00	ETR		
148	Lawn seed mix	50,000	sf	0.35	17,500		
149	Irrigation at play fields	140,000	sf	2.00	ETR		
150	329900 <u>PLANTS</u>	<u>Allowance</u>					
151	Trees, Shrubs etc.	1	ls	100,000.00	100,000		
152	SUBTOTAL						117,500
153							
154	G30 CIVIL MECHANICAL UTILITIES						
155	210000 <u>FIRE PROTECTION</u>						
156	Allowance for new water supply for fire protection	1,750	lf	100.00	175,000		
157	Street connections	2	ea	15,000.00	30,000		
158	Fire hydrant	2	ea	6,500.00	13,000		
159	331000 <u>WATER UTILITIES</u>						
160	Allowance for new water supply for domestic service	150	lf	80.00	12,000		
161	SUBTOTAL						230,000
162							
163	333000 <u>SANITARY SEWER</u>						
164	Allowance for new sewer service and grease trap	1	ls	125,000.00	125,000		
165	SUBTOTAL						125,000
166							
167	334000 <u>STORM DRAINAGE</u>						
168	Allowance for stormwater infiltration system	42,000	cf	12.00	504,000		
169	Allowance for structures/piping/rain gardens etc.	143,965	sf	7.00	1,007,755		
170	SUBTOTAL						1,511,755
171							
172	220001 <u>NATURAL GAS</u>						
173	No work in this section						
174	SUBTOTAL						-
175							
176	G40 ELECTRICAL UTILITIES						
177	<u>Power</u>						
178	Power riser	1	ea	2,500.00	2,500		
179	Primary service duct bank	350	lf	80.00	28,000		
180	Pad mount transformer pad (TX by Utility Co)	1	ea	3,000.00	3,000		
181	3000A Secondary service duct bank	50	lf	1,500.00	75,000		



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITWORK: BASE REPAIR/CODE UPGRADES OPTION							
182	Generator						
183	Generator duct bank	70	lf	500.00	35,000		
184	Electric Vehicle Stations						
185	2-4" for future EV system	1	ls	15,000.00	15,000		
186	Security						
187	Site camera system, allow	1	ls	50,000.00	50,000		
188	Telecommunications						
189	Communication riser	1	ea	2,500.00	2,500		
190	Telcom duct bank 4-4" (empty)	350	lf	180.00	63,000		
191	<u>Site lighting</u>						
192	Site lighting allowance	143,965	sf	1.50	215,948		
193	Add Signals - flashing yellow lights				Assumed NR		
194	SUBTOTAL					489,948	
195							
TOTAL - SITE DEVELOPMENT							\$5,373,304



PSR Submission Estimate

GFA 14,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 14,000

TOTAL GROSS FLOOR AREA (GFA)						14,000	sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	36	CY	\$853	/cy		
Foundation Walls	83	CY	\$1,268	/cy		
Spread Footings	75	CY	\$806	/cy		
Grade beams	16	CY	\$1,275	/cy		
Piers	11	CY	\$1,870	/cy		

Total Foundation Concrete 221 CY

Strip footing, typical; 2'-4" x 12"

Formwork	800	sf	16.00		12,800	
Re-bar	4,000	lbs.	2.00		8,000	
Concrete material	36	cy	155.00		5,580	
Placing concrete	36	cy	120.00		4,320	

Foundation wall; 16" thick

Formwork	3,200	sf	20.00		64,000	
Re-bar	7,200	lbs.	2.00		14,400	
Concrete material	83	cy	155.00		12,865	
Placing concrete	83	cy	120.00		9,960	
Form shelf	400	lf	10.00		4,000	

Exterior spread footings, typical; 7'-0" x 7'-0" x 22"

Formwork	666	sf	18.00		11,988	
Re-bar	6,175	lbs.	2.00		12,350	
Concrete material	45	cy	155.00		6,975	
Placing concrete	45	cy	120.00		5,400	
Set anchor bolts grout plates	13	ea	150.00		1,950	

Interior spread footings, typical; 9'-6" x 9'-6" x 26"

Formwork	329	sf	18.00		5,922	
Re-bar	3,500	lbs.	2.00		7,000	
Concrete material	30	cy	155.00		4,650	
Placing concrete	30	cy	120.00		3,600	
Set anchor bolts grout plates	4	ea	150.00		600	

Grade beams at braced frames, allow

Formwork	400	sf	15.00		6,000	
Re-bar	5,000	lbs.	2.00		10,000	
Concrete material	16	cy	155.00		2,480	
Placing concrete	16	cy	120.00		1,920	

Piers/Pilasters

Formwork	571	sf	20.00		11,420	
Re-bar	3,060	lbs.	2.00		6,120	
Concrete material	11	cy	155.00		1,705	
Placing concrete	11	cy	120.00		1,320	

Miscellaneous

Elevator pit NR

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Trowelled-on bituminous mastic dam proofing at foundation walls	1,600	sf	4.00		6,400	
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072100 THERMAL INSULATION

2" Insulation at foundation walls	1,600	sf	3.00		4,800	
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312000 EARTHWORK

Strip footings/Fdn wall

Excavation	267	cy	10.00		2,670	
Remove off-site	267	cy	32.00		8,544	



PSR Submission Estimate

GFA

14,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

56	Backfill with imported material	231	cy	48.00	11,088		
57	<u>Spread footings/Grade beams</u>						
58	Excavation	273	cy	10.00	2,730		
59	Remove off-site	273	cy	32.00	8,736		
60	Backfill with imported material	182	cy	48.00	8,736		
61	<u>Building</u>						
62	Cut; assumed 2 feet	1,037	cy	15.00	15,555		
63	Fill - granular fill pad; allow 2 feet	1,037	cy	48.00	49,776		
64	<u>Miscellaneous</u>						
65	Gravel fill beneath footings, 12"	79	cy	40.00	3,160		
66	Perimeter drain	400	lf	30.00	12,000		
67	Temporary dewatering for foundation work	1	ls	20,000.00	20,000		
68	SUBTOTAL					391,520	

A1020 SPECIAL FOUNDATIONS

71	Allowance for rammed aggregate piers				Assumed NR		
72	SUBTOTAL					-	

A1030 LOWEST FLOOR CONSTRUCTION

75	<i>033000 CONCRETE</i>						
76	<u>Slab on grade</u>	14,000	sf				
77	Vapor barrier at slab on grade	14,000	sf	1.25	17,500		
78	WWF reinforcement	16,100	sf	1.80	28,980		
79	Concrete - 6" thick	272	cy	155.00	42,160		
80	Barrier One Admixture	272	cy		Assumed Not Required		
81	Placing concrete	272	cy	90.00	24,480		
82	Finishing and curing concrete	14,000	sf	3.00	42,000		
83	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	2,000.00	2,000		
84	<u>Miscellaneous</u>						
85	Equipment pads	1	ls	5,000.00	5,000		
86	Radon system	14,000	sf	3.00	42,000		
87							
88	<i>072100 THERMAL INSULATION</i>						
89	Slab insulation, 2" thick; 2' @ perimeter only	1,600	sf	2.50	4,000		
90							
91	<i>312000 EARTHWORK</i>						
92	Improve soils/ground improvement allowance	14,000	sf	8.00	112,000		
93	<u>Building</u>						
94	Gravel base, 12"	519	cy	48.00	24,912		
95	Compact existing sub-grade	14,000	sf	1.00	14,000		
96	Under slab E&B for plumbing	14,000	sf	1.50	21,000		
97	SUBTOTAL					380,032	

TOTAL - FOUNDATIONS

\$771,552

A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

105	No Work in this section						
106	SUBTOTAL					-	

A2020 BASEMENT WALLS

109	No Work in this section						
110	SUBTOTAL					-	

TOTAL - BASEMENT CONSTRUCTION

B10 SUPERSTRUCTURE



PSR Submission Estimate

GFA

14,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

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B1010 FLOOR CONSTRUCTION

SUBTOTAL

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B1020 ROOF CONSTRUCTION

033000	CONCRETE						
	Concrete fill to metal roof deck	1,500	sf	10.00	15,000		
051200	STRUCTURAL STEEL FRAMING						
	Steel floor framing, columns and lateral bracing;						
	Floor framing 14.5 lbs/sf at typical roof	102	tns	5,500.00	561,000		
	Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns		
	Shear studs	3,500	ea	3.50	12,250		
	1-1/2" metal floor deck at typical roof	14,000	sf	6.00	84,000		
	HSS support framing at roof screen @ 110 lbs/lf	10	tns	5,800.00	58,000		
	Steel framing at canopies @ 20 lbs/sf						NR
078100	FIREPROOFING/FIRESTOPPING						
	Fireproofing to roof deck and structure						NR
	SUBTOTAL					730,250	

TOTAL - SUPERSTRUCTURE						\$730,250
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B20 EXTERIOR CLOSURE

6,132 sf

B2010 EXTERIOR WALLS

6,132 sf Total Exterior Closure

040001	MASONRY						
	Brick veneer; 40%	2,453	sf	44.00	107,932		
	Precast trim	2,453	sf	2.00	4,906		
	Staging/Lifts to exterior wall						Included
055000	MISCELLANEOUS METALS						
	Miscellaneous metals to exterior; lintels, angles etc.	2,453	sf	1.00	2,453		
	Relieving angles				assume included in lbs/sf tns		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	4,906	sf	8.80	43,173		
	Air barrier/flashing at windows	409	lf	6.25	2,556		
	Air barrier @ overhangs/soffits				8.50		
	Miscellaneous sealants to closure	4,906	sf	0.50	2,453		
072100	THERMAL INSULATION						
	3" Rigid insulation	4,906	sf	4.00	19,624		
	Spray insulation; 2" typical	4,906	sf	3.00	14,718		
	3" Rigid insulation @ overhangs/soffits				4.00		
	Insulation at window openings	409	lf	6.00	2,454		
074213	WALL PANELS						
	Alucobond metal panels: 40%	2,453	sf	90.00	220,770		
	Prefinished aluminum panels at roof overhang soffits				90.00		
	Pre-finished metal fascia, assume 12" wide	400	lf	90.00	36,000		
	Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750		
092900	GYPSUM BOARD ASSEMBLIES						
	Framing at soffits				18.00		
	8" metal stud backup, typical	4,906	sf	14.00	68,684		
	Gypsum Sheathing	4,906	sf	3.50	17,171		



PSR Submission Estimate

GFA 14,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

177	Drywall lining to interior face of stud backup	4,906	sf	4.00	19,624			
178								
179	101400 SIGNAGE							
180	Signage	1	ls	10,000.00	10,000			
181	SUBTOTAL					686,268		
182								
183	B2020 WINDOWS; 20% glazed	1,226	sf					
184								
185	092900 GYPSUM BOARD ASSEMBLIES							
186	Wood blocking at openings	409	lf	14.00	5,726			
187								
188	079200 JOINT SEALANTS							
189	Backer rod & double sealant	409	lf	10.00	4,090			
190								
191	080001 METAL WINDOWS							
192	Aluminum windows/CW/Storefront; double glazed	1,226	sf	145.00	177,770			
193	Sun control at south facing classrooms - allow	200	lf	250.00	50,000			
194	Premium for 3M security film @ first floor	320	sf	40.00	12,800			
195	Premium for triple glazing				Excluded			
196								
197	089100 LOUVERS							
198	Louvers - allowance	100	sf	85.00	8,500			
199	SUBTOTAL					258,886		
200								
201	B2030 EXTERIOR DOORS							
202								
203	Exterior door allowance	14,000	gsf	1.50	21,000			
204	SUBTOTAL					21,000		
205								
206	TOTAL - EXTERIOR CLOSURE						\$966,154	

B30 ROOFING

211	B3010 ROOF COVERINGS							
212								
213	PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	14,000	sf	32.00	448,000			
214	Pre-finished metal coping	400	lf	50.00	20,000			
215	Canopy roof system				NR			
216	Allowance for roof hatches, ladders, walkway pads etc.	1	ls	10,000.00	10,000			
217	SUBTOTAL					478,000		
218								
219	B3020 ROOF OPENINGS							
220	No items in this section							
221	SUBTOTAL					-		
222								
223	TOTAL - ROOFING						\$478,000	

C10 INTERIOR CONSTRUCTION

228	C1010 PARTITIONS						
229							
230	Interior partitions; gwb/ metal stud partitions including premium for CMU in Stairs, Gym and kitchen and allowance for glazed partitions throughout. Abuse resistant board at select areas.	14,000	sf	37.00	518,000		
231	SUBTOTAL					518,000	
232							
233	C1020 INTERIOR DOORS						
234							
235	Interior doors; complete	14,000	gsf	7.00	98,000		
236	SUBTOTAL					98,000	
237							
238	C1030 SPECIALTIES / MILLWORK						
239							
240	055000 MISCELLANEOUS METALS						



PSR Submission Estimate

GFA 14,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

241	Miscellaneous metals complete including ceiling grid supports	14,000	gsf	2.50	35,000			
242								
243	064100 FINISH CARPENTRY							
244	Millwork allowance	14,000	gsf	4.00	56,000			
245								
246	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
247	Miscellaneous sealants throughout building	14,000	gsf	1.00	14,000			
248								
249	101100 VISUAL DISPLAY SURFACES							
250	Marker boards/TB/ Flagpoles complete	14,000	gsf	1.60	22,400			
251	Interactive White Board projectors					FF&E		
252								
253	101400 SIGNAGE							
254	Signage; complete package	14,000	gsf	0.80	11,200			
255								
256	102110 TOILET COMPARTMENTS + ACCESSORIES							
257	Toilet partitions/bathroom accessories	14,000	gsf	1.00	14,000			
258								
259	104400 FIRE PROTECTION SPECIALTIES							
260	Fire extinguisher cabinets	1	ls	3,000.00	3,000			
261	AED cabinets	1	ls	750.00	750			
262								
263	105113 LOCKERS							
264	Student lockers/ cubbies, kitchen lockers etc.	14,000	gsf	1.50	21,000			
265	SUBTOTAL					177,350		
266								
267	TOTAL - INTERIOR CONSTRUCTION						\$793,350	

C20 STAIRCASES

272	C2010 STAIR CONSTRUCTION							
273	SUBTOTAL					-		
274								
275	C2020 STAIR FINISHES							
276	SUBTOTAL					-		
277								
278	TOTAL - STAIRCASES							

C30 INTERIOR FINISHES

283	C3010 WALL FINISHES							
284	Paint to walls	14,000	gsf	2.50	35,000			
285	CT to toilet walls	800	sf	32.00	25,600			
286	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	14,000	gsf	2.00	28,000			
287	SUBTOTAL					88,600		
288								
289								
290	C3020 FLOOR FINISHES							
291	VCT flooring	13,420	sf	6.00	80,520			
292	Ceramic tile in toilets	330	sf	40.00	13,200			
293	Entry mats - walk-off mats	250	sf	20.00	5,000			
294	Allowances for bases throughout	1	ls	9,872.00	9,872			
295	SUBTOTAL					108,592		
296								
297								
298	C3030 CEILING FINISHES							
299	Armstrong ACT Ultima, typical, 2x2	11,670	sf	7.00	81,690			
300	Armstrong ACT Health Zone ceilings in toilets, 2x2	330	sf	9.00	2,970			
301	Armstrong wood acoustic panels Woodworks - allowance	2,000	sf	55.00	110,000			
302	Miscellaneous soffits/GWB	14,000	gsf	3.00	42,000			
303	SUBTOTAL					236,660		
304								
305								
306	TOTAL - INTERIOR FINISHES						\$433,852	



PSR Submission Estimate

GFA 14,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

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D10 CONVEYING SYSTEMS

D1010 ELEVATOR						W/ RENOVATION	
SUBTOTAL							-
TOTAL - CONVEYING SYSTEMS							

D20 PLUMBING

D20 PLUMBING, GENERALLY							
ADDITION: Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm & natural gas piping.	14,000	gsf		27.00	378,000		
SUBTOTAL							378,000
TOTAL - PLUMBING							\$378,000

D30 HVAC

D30 HVAC, GENERALLY							
HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	14,000	gsf		93.00	1,302,000		
SUBTOTAL							1,302,000
TOTAL - HVAC							\$1,302,000

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY							
Fire protection complete system	14,000	gsf		8.50	119,000		
SUBTOTAL							119,000
TOTAL - FIRE PROTECTION							\$119,000

D50 ELECTRICAL

D50 ELECTRICAL							
Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems and master clock/PA	14,000	gsf		60.00	840,000		
AV sound system and projection at Gym/Café	1	ls		200,000.00	See Reno		
Network switches	14,000	sf		1.50	21,000		
Wi-Fi equipment	14,000	sf		1.00	14,000		
Video Surveillance system	14,000	sf		2.00	28,000		
Access Control system	14,000	sf		1.00	14,000		
VOIP telephone system	14,000	sf		1.50	21,000		
SUBTOTAL							938,000
TOTAL - ELECTRICAL							\$938,000

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY							
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PSR Submission Estimate

GFA 14,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

362	119000	MISCELLANEOUS EQUIPMENT					
363		Allowance for miscellaneous equipment	14,000	gsf	1.00	14,000	
364		SUBTOTAL				14,000	
365							
366							
367		TOTAL - EQUIPMENT					\$14,000

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

372	122100	WINDOW TREATMENT					
373		Shades; allowance	1,226	sf	8.00	9,808	
374		SUBTOTAL				177,808	
375							
376	123000	CASEWORK					
377		Wood casework w/ solid surface counters throughout	14,000	gsf	12.00	168,000	
378		SUBTOTAL				177,808	
379							
380							

E2020 MOVABLE FURNISHINGS

381		All movable furnishings to be provided and installed by owner					
382		SUBTOTAL				NIC	
383							
384							
385		TOTAL - FURNISHINGS					\$177,808

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

389		SUBTOTAL				-	
390							
391							
392							
393		TOTAL - SPECIAL CONSTRUCTION					

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

398		SUBTOTAL				-	
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F2020 HAZARDOUS COMPONENTS ABATEMENT

400		See main summary for HazMat allowance				See Summary	
401		SUBTOTAL					

TOTAL - SELECTIVE BUILDING DEMOLITION

TRADE SUBTOTAL \$7,101,966



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 550 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 85,000
Second Floor 35,000

TOTAL GROSS FLOOR AREA (GFA)						120,000 sf
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1	A1010 STANDARD FOUNDATIONS						
2	Shear wall footings @ connection to new additions and for new layout configurations generally to resist current seismic loads - allow	250	lf	500.00	125,000		
3	Foundation system to support infilled courtyards and media center open to above areas (4300SF)	4,300	sf	60.00	258,000		
4	SUBTOTAL					383,000	
5	A1020 SPECIAL FOUNDATIONS						
6	No work required per Engineer's report						
7	SUBTOTAL					-	
8	A1030 LOWEST FLOOR CONSTRUCTION						
9	<i>033000 CONCRETE</i>						
10	New slab on grade at courtyard infills	1,700	sf	30.00	51,000		
11	Remove and replace slab on grade as necessary to accommodate new fixtures and fittings/ ADA upgrades to ramps/ space reconfigurations/ shear walls etc.	10,000	sf	15.00	150,000		
12	SUBTOTAL					201,000	

TOTAL - FOUNDATIONS						\$584,000
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A20 BASEMENT CONSTRUCTION

22	A2010 BASEMENT EXCAVATION						
23	No Work in this section						
24	SUBTOTAL					-	
25	A2020 BASEMENT WALLS						
26	No Work in this section						
27	SUBTOTAL					-	

TOTAL - BASEMENT CONSTRUCTION						
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B10 SUPERSTRUCTURE

35	B1010 FLOOR CONSTRUCTION						
36	<i>051200 STRUCTURAL STEEL FRAMING</i>						
37	Allowance for reframing at courtyard and media center open to above	4,300	sf	150.00	645,000		
38	Allowance for structural modifications including redesigning lateral force-resisting to resist current seismic loads	120,000	gsf	8.00	960,000		
39	SUBTOTAL					1,605,000	
40	B1020 ROOF CONSTRUCTION						
41	<i>051200 STRUCTURAL STEEL FRAMING</i>						
42	Allowance for steel framing at new skylights	21	tns	12,500.00	262,500		



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 550 STUDENTS

45	Allowance for supplemental support framing at new rooftop mechanical equipment - allowance	85,000	sf	5.00	425,000			
46	SUBTOTAL					687,500		
TOTAL - SUPERSTRUCTURE							\$2,292,500	

B20 EXTERIOR CLOSURE

52	B2010 EXTERIOR WALLS	25,832	sf	Total Exterior Closure				
55	040001 MASONRY							
56	Selectively repoint masonry at exterior walls as required						NR	
57	Provide engineered concrete repairs at broken exterior header/ sill elements						NR	
58	Allowance to infill openings with masonry including backup at removed unit ventilator louvers	24	loc	1,500.00	36,000			
59	Exterior metal, fiber cement or thin brick wall panel rainscreen on furring at ETR masonry wall	25,832	sf	80.00	2,066,560			
61	055000 MISCELLANOUS METALS							
62	Prepare and repaint steel lintels, plates and other exterior metal items	25,832	sf	1.00	25,832			
64	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
65	Liquid applied vapor barrier @ etr masonry walls	25,832	sf	7.50	193,740			
66	Air barrier/flashing at openings	2,280	lf	7.50	17,100			
67	Rake out existing masonry control joints; provide new backer rod and joint sealant - allow	25,832	sf	1.50	38,748			
69	072100 THERMAL INSULATION							
70	3" Rigid insulation	25,832	sf	4.00	103,328			
72	074213 WALL PANELS							
74	092900 GYPSUM BOARD ASSEMBLIES							
76	101400 SIGNAGE							
77	New signage	1	ls	15,000.00	15,000			
78	SUBTOTAL					2,496,308		
80	B2020 WINDOWS	4,559	sf					
82	092900 GYPSUM BOARD ASSEMBLIES							
83	Wood blocking at openings	2,280	lf	14.00	31,920			
85	079200 JOINT SEALANTS							
86	Backer rod & double sealant	2,280	lf	10.00	22,800			
88	080001 METAL WINDOWS							
89	Replace all existing windows, storefront and curtainwall, double glazed - 15% Greenhouse glazing	4,559	sf	150.00	683,850			
							demolished in this option	
92	089100 LOUVERS							
93	Louvers						N/A	
94	SUBTOTAL					738,570		
96	B2030 EXTERIOR DOORS							
97	Exterior door replacement allowance	120,000	gsf	2.00	240,000			
99	SUBTOTAL					240,000		
TOTAL - EXTERIOR CLOSURE							\$3,474,878	



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 550 STUDENTS

B30 ROOFING

B3010 ROOF COVERINGS

Replace w/ new adhered PVC roofing includes edge coping, blocking, flashings and roof accessories etc. (assumes removal of existing included w/ haz mat)	83,300	sf	36.00	2,998,800		
SUBTOTAL						2,998,800

B3020 ROOF OPENINGS

Skylight infills at courtyards	1,700	sf	200.00	340,000		
Allowance to replace roof hatches, ladders etc.	1	ls	30,000.00	30,000		
SUBTOTAL						370,000

TOTAL - ROOFING						\$3,368,800
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Modify interior CMU/GWB walls, glazed partitions + BL's, operable walls etc. to accommodate code upgrades and reconfigured spaces - kitchen and gymnasium layouts to remain. Allowance to open up existing exterior walls at infilled courtyards.	120,000	gsf	25.00	3,000,000		
Seismic clips at the top of interior masonry walls - allow @ 32" oc	120,000	gsf	4.00	480,000		
SUBTOTAL						3,480,000

C1020 INTERIOR DOORS

New doors and hardware throughout	120,000	gsf	7.00	840,000		
SUBTOTAL						840,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS							
Miscellaneous metals complete including ceiling grid supports	120,000	gsf	2.50	300,000			
064100 FINISH CARPENTRY							
New millwork throughout	120,000	gsf	4.00	480,000			
070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
Miscellaneous sealants throughout building	120,000	gsf	1.00	120,000			
101100 VISUAL DISPLAY SURFACES							
Marker boards/TB complete	120,000	gsf	1.60	192,000			
101400 SIGNAGE							
New interior signage	120,000	gsf	0.80	96,000			
102110 TOILET COMPARTMENTS + ACCESSORIES							
New toilet partitions/bathroom accessories	120,000	gsf	1.00	120,000			
104400 FIRE PROTECTION SPECIALTIES							
Fire extinguisher cabinets	1	ls	10,000.00	10,000			
AED cabinets	1	ls	1,500.00	1,500			
105113 LOCKERS							
New corridor and locker room lockers throughout	120,000	gsf	1.50	180,000			
SUBTOTAL						1,499,500	

TOTAL - INTERIOR CONSTRUCTION						\$5,819,500
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
OPTION AR-1: RENOVATION 550 STUDENTS							
157	New stairs; complete	4	flt	45,000.00	180,000		
158	New ramp guardrails and handrails to meet ADA requirements - allowance	1	ls	20,000.00	20,000		
159	SUBTOTAL					200,000	
161	C2020 STAIR FINISHES						
162	New finishes at stairs	4	flt	5,000.00	20,000		
163	SUBTOTAL					20,000	
TOTAL - STAIRCASES							\$220,000
C30 INTERIOR FINISHES							
C3010 WALL FINISHES							
172	Prep and paint all etr and new interior walls	120,000	gsf	3.00	360,000		
173	New tile in bathrooms and shower rooms	10,400	sf	36.00	374,400		
174	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	120,000	sf	1.50	180,000		
175	SUBTOTAL					914,400	
C3020 FLOOR FINISHES							
178	Allowance for leveler at new floor finishes	108,600	sf	3.00	325,800		
179	Replace finishes throughout with VCT flooring and resilient base	94,765	sf	5.00	473,825		
181	Premium for carpet in Admin spaces, Media center etc. including resilient base	5,000	sf	1.50	7,500		
182	Premium for tile in bathrooms	5,735	sf	35.00	200,725		
183	Gymnasium flooring	9,000	sf		assume ETR		
184	Quarry tile in kitchen & support spaces	2,400	sf		assume ETR		
185	Concrete sealer in Mech/ Elec/ Boiler spaces	2,600	sf		assume ETR		
186	Entry mats - walk-off mats	500	sf	20.00	10,000		
187	Allowance to clean etr floors	14,000	sf	2.00	28,000		
188	SUBTOTAL					1,045,850	
C3030 CEILING FINISHES							
192	ACT ceiling replacement throughout	104,200	sf	7.00	729,400		
193	Premium for healthzone or similar ACT in kitchen and bathrooms	8,135	sf	2.00	16,270		
194	Gymnasium, Cafetorium and Platform - paint exposed deck	15,800	sf	3.50	55,300		
195	Allowance for prep and paint etr gwb ceilings and soffits	120,000	gsf	2.00	240,000		
196	SUBTOTAL					1,040,970	
TOTAL - INTERIOR FINISHES							\$3,001,220
D10 CONVEYING SYSTEMS							
D1010 ELEVATOR							
142000	ELEVATOR						
206	New 2-stop elevator	1	ea	180,000.00	180,000		
207	New platform lift from Cafeteria to Stage level	1	ea	50,000.00	50,000		
208	SUBTOTAL					230,000	
TOTAL - CONVEYING SYSTEMS							\$230,000
D20 PLUMBING							
D20 PLUMBING, GENERALLY							
216	RENOVATION: Plumbing system complete; replace each system, fixtures & all equipment including domestic water, AG sanitary W&V and AG storm	120,000	gsf	27.00	3,240,000		
217	Demolition; cut & cap, make safe, removal by others	120,000	gsf	0.70	84,000		



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 550 STUDENTS

218 SUBTOTAL 3,324,000

219 **TOTAL - PLUMBING \$3,324,000**

221 **D30 HVAC**

222 **D30 HVAC, GENERALLY**

223 HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.

224 **120,000** gsf 93.00 11,160,000

225 Demolition; cut & cap existing HVAC; removal by others **120,000** gsf 1.25 150,000

226 SUBTOTAL 11,310,000

227 **TOTAL - HVAC \$11,310,000**

228 **D40 FIRE PROTECTION**

229 **D40 FIRE PROTECTION, GENERALLY**

230 Fire protection complete system **120,000** gsf 8.50 1,020,000

231 Demolition **120,000** gsf 0.65 78,000

232 SUBTOTAL 1,098,000

233 **TOTAL - FIRE PROTECTION \$1,098,000**

234 **D50 ELECTRICAL**

235 Electrical system incl demo, normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA and modular electrical requirements etc. **120,000** gsf 62.00 7,440,000

236 AV sound system and projection at Gym/Café **1** ls 200,000.00 200,000

237 Network switches **120,000** sf 1.50 180,000

238 Wi-Fi equipment **120,000** sf 1.00 120,000

239 Video Surveillance system **120,000** sf 2.00 240,000

240 Access Control system **120,000** sf 1.00 120,000

241 VOIP telephone system **120,000** sf 1.50 180,000

242 SUBTOTAL 8,480,000

243 **TOTAL - ELECTRICAL \$8,480,000**

244 **E10 EQUIPMENT**

245 **E10 EQUIPMENT, GENERALLY**

246 **114000 FOODSERVICE EQUIPMENT**

247 Kitchen equipment - allowance for replacement of wood work surfaces and shelving to stainless steel. Replace exhaust ventilators and interior grease traps w/ stainless steel. Replace two hoods. New serving line equipment. Tray & pot washing area upgrades **1** ls 640,000.00 640,000

248 **116200 THEATRE EQUIPMENT**

249 New curtain and rigging allowance in Cafetorium **1** ls 30,000.00 30,000

250 New portable risers in Band room **1** ls 24,375.00 24,375

251 **116600 ATHLETIC EQUIPMENT**

252 Gym safety wall pads **2,145** sf 20.00 42,900

253 Replace operable partitions in Gymnasium **2** ea 35,000.00 70,000

254 Replace basketball backstops **8** ea 10,000.00 80,000



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST	
OPTION AR-1: RENOVATION 550 STUDENTS								
292	Volley ball standards and inserts	1	ls	5,000.00	5,000			
293	Score board - allow	1	ea	20,000.00	20,000			
294	New telescopic bleachers - seating capacity 650	1	ls	130,000.00	130,000			
295								
296	119000 MISCELLANEOUS EQUIPMENT							
297	Allowance to replace projection screens, residential appliances science room equipment, kiln etc.	120,000	gsf	0.50	60,000			
298	SUBTOTAL					1,102,275		
299								
300	TOTAL - EQUIPMENT							\$1,102,275
301								
302								
303	E20 FURNISHINGS							
304								
305	E2010 FIXED FURNISHINGS							
306								
307	122100 WINDOW TREATMENT							
308	Window treatment replacements - allowance	1	ls	50,000.00	50,000			
309								
310	123000 CASEWORK							
311	New casework throughout	120,000	gsf	12.00	1,440,000			
312	SUBTOTAL					1,490,000		
313								
314	E2020 MOVABLE FURNISHINGS							
315	All movable furnishings to be provided and installed by owner							
316	SUBTOTAL					NIC		
317								
318	TOTAL - FURNISHINGS							\$1,490,000
319								
320								
321	F10 SPECIAL CONSTRUCTION							
322								
323	F10 SPECIAL CONSTRUCTION							
324	SUBTOTAL					-		
325								
326	TOTAL - SPECIAL CONSTRUCTION							
327								
328								
329	F20 SELECTIVE BUILDING DEMOLITION							
330								
331	F2010 BUILDING ELEMENTS DEMOLITION							
332	Demo and remove existing floor slab	10,000	sf	8.00	80,000			
333	Demo and remove existing courtyard finishes	1,700	sf	8.00	13,600			
334	Demo and remove upper floor for new Media center open to above, including shoring	2,590	sf	30.00	77,700			
335	Remove exterior windows and storefront	4,559	sf	8.00	36,472			
336	Demo and remove exterior wall at connection to new additions, shore as necessary	3,167	sf	15.00	47,505			
337	Demo and remove interior floor finishes, ceilings and wall finishes etc.	120,000	gsf	4.00	480,000			
338	Misc. selective interior demolition as req'd, partitions, specialties, furnishings, door hardware etc. - allowance	120,000	gsf	7.00	840,000			
339	Selective interior MEP demolition including removal of cut & capped MEP equipment & fixtures	120,000	gsf	4.00	480,000			
340	Demolish existing greenhouse	594	gsf	15.00	8,910			
341	SUBTOTAL					2,064,187		
342								
343	F2020 HAZARDOUS COMPONENTS ABATEMENT							
344	See main summary for HazMat allowance					See Summary		
345	SUBTOTAL							
346								
347	TOTAL - SELECTIVE BUILDING DEMOLITION							\$2,064,187
TRADE SUBTOTAL								\$47,859,360



PSR Submission Estimate

GFA 25,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 25,500

TOTAL GROSS FLOOR AREA (GFA)						25,500	sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	59	CY	\$848 /cy	
Foundation Walls	134	CY	\$1,274 /cy	
Spread Footings	229	CY	\$765 /cy	
Grade beams	31	CY	\$1,307 /cy	
Piers	26	CY	\$1,942 /cy	
Total Foundation Concrete	479	CY		

Strip footing, typical; 2'-4" x 12"

Formwork	1,300	sf	16.00	20,800
Re-bar	6,500	lbs.	2.00	13,000
Concrete material	59	cy	155.00	9,145
Placing concrete	59	cy	120.00	7,080

Foundation wall; 16" thick

Formwork	5,200	sf	20.00	104,000
Re-bar	11,700	lbs.	2.00	23,400
Concrete material	134	cy	155.00	20,770
Placing concrete	134	cy	120.00	16,080
Form shelf	650	lf	10.00	6,500

Exterior spread footings, typical; 7'-0" x 7'-0" x 22"

Formwork	1,127	sf	18.00	20,286
Re-bar	10,450	lbs.	2.00	20,900
Concrete material	77	cy	155.00	11,935
Placing concrete	77	cy	120.00	9,240
Set anchor bolts grout plates	22	ea	150.00	3,300

Interior spread footings, typical; 9'-6" x 9'-6" x 26"

Formwork	1,647	sf	18.00	29,646
Re-bar	17,500	lbs.	2.00	35,000
Concrete material	152	cy	155.00	23,560
Placing concrete	152	cy	120.00	18,240
Set anchor bolts grout plates	20	ea	150.00	3,000

Grade beams at braced frames, allow

Formwork	800	sf	15.00	12,000
Re-bar	10,000	lbs.	2.00	20,000
Concrete material	31	cy	155.00	4,805
Placing concrete	31	cy	120.00	3,720

Piers/Pilasters

Formwork	1,411	sf	20.00	28,220
Re-bar	7,560	lbs	2.00	15,120
Concrete material	26	cy	155.00	4,030
Placing concrete	26	cy	120.00	3,120

Miscellaneous

Elevator pit				NR
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Trowelled-on bituminous mastic dam proofing at foundation walls	2,600	sf	4.00	10,400
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072100 THERMAL INSULATION

2" Insulation at foundation walls	2,600	sf	3.00	7,800
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312000 EARTHWORK

Strip footings/Fdn wall

Excavation	433	cy	10.00	4,330
Remove off-site	433	cy	32.00	13,856



PSR Submission Estimate

GFA 25,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

56	Backfill with imported material	374	cy	48.00	17,952		
57	<u>Spread footings/Grade beams</u>						
58	Excavation	779	cy	10.00	7,790		
59	Remove off-site	779	cy	32.00	24,928		
60	Backfill with imported material	519	cy	48.00	24,912		
61	<u>Building</u>						
62	Cut; assumed 2 feet	1,889	cy	15.00	28,335		
63	Fill - granular fill pad; allow 2 feet	1,889	cy	48.00	90,672		
64	<u>Miscellaneous</u>						
65	Gravel fill beneath footings, 12"	178	cy	40.00	7,120		
66	Perimeter drain	650	lf	30.00	19,500		
67	Temporary dewatering for foundation work	1	ls	20,000.00	20,000		
68	SUBTOTAL					764,492	

A1020 SPECIAL FOUNDATIONS

71	Allowance for rammed aggregate piers				Assumed NR		
72	SUBTOTAL					-	

A1030 LOWEST FLOOR CONSTRUCTION

75	<i>033000 CONCRETE</i>						
76	<u>Slab on grade</u>	25,500	sf				
77	Vapor barrier at slab on grade	25,500	sf	1.25	31,875		
78	WWF reinforcement	29,325	sf	1.80	52,785		
79	Concrete - 6" thick	496	cy	155.00	76,880		
80	Barrier One Admixture	496	cy		Assumed Not Required		
81	Placing concrete	496	cy	90.00	44,640		
82	Finishing and curing concrete	25,500	sf	3.00	76,500		
83	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	2,000.00	2,000		
84	<u>Miscellaneous</u>						
85	Equipment pads	1	ls	5,000.00	5,000		
86	Radon system	25,500	sf	3.00	76,500		
87							
88	<i>072100 THERMAL INSULATION</i>						
89	Slab insulation, 2" thick; 2' @ perimeter only	2,600	sf	2.50	6,500		
90							
91	<i>312000 EARTHWORK</i>						
92	Improve soils/ground improvement allowance	25,500	sf	8.00	204,000		
93	<u>Building</u>						
94	Gravel base, 12"	944	cy	48.00	45,312		
95	Compact existing sub-grade	25,500	sf	1.00	25,500		
96	Under slab E&B for plumbing	25,500	sf	1.50	38,250		
97	SUBTOTAL					685,742	

TOTAL - FOUNDATIONS	\$1,450,234
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

105	No Work in this section						
106	SUBTOTAL					-	

A2020 BASEMENT WALLS

109	No Work in this section						
110	SUBTOTAL					-	

TOTAL - BASEMENT CONSTRUCTION	
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B10 SUPERSTRUCTURE



CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

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B1010 FLOOR CONSTRUCTION

SUBTOTAL

B1020 ROOF CONSTRUCTION

033000	CONCRETE	Allowance at mechanical equipment/low roof					
	Concrete fill to metal roof deck	1,500	sf	10.00	15,000		
051200	STRUCTURAL STEEL FRAMING						
	Steel floor framing, columns and lateral bracing;						
	Floor framing 14.5 lbs/sf at typical roof	185	tns	5,500.00	1,017,500		
	Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns		
	Shear studs	6,375	ea	3.50	22,313		
	1-1/2" metal floor deck at typical roof	25,500	sf	6.00	153,000		
	HSS support framing at roof screen @ 110 lbs/lf	10	tns	5,800.00	58,000		
	Steel framing at canopies @ 20 lbs/sf		tns	5,800.00			
078100	FIREPROOFING/FIRESTOPPING						
	Fireproofing to roof deck and structure					NR	
	SUBTOTAL						1,265,813

TOTAL - SUPERSTRUCTURE							\$1,265,813
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B20 EXTERIOR CLOSURE

9,965 sf

B2010 EXTERIOR WALLS

9,965 sf Total Exterior Closure

040001	MASONRY						
	Brick veneer; 40%	3,986	sf	44.00	175,384		
	Precast trim	3,986	sf	2.00	7,972		
	Staging/Lifts to exterior wall					Included	
055000	MISCELLANEOUS METALS						
	Miscellaneous metals to exterior; lintels, angles etc.	3,986	sf	1.00	3,986		
	Relieving angles				assume included in lbs/sf tns		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	7,972	sf	8.80	70,154		
	Air barrier/flashing at windows	664	lf	6.25	4,150		
	Air barrier @ overhangs/soffits		sf	8.50			
	Miscellaneous sealants to closure	7,972	sf	0.50	3,986		
072100	THERMAL INSULATION						
	3" Rigid insulation	7,972	sf	4.00	31,888		
	Spray insulation; 2" typical	7,972	sf	3.00	23,916		
	3" Rigid insulation @ overhangs/soffits		sf	4.00			
	Insulation at window openings	664	lf	6.00	3,984		
074213	WALL PANELS						
	Alucobond metal panels: 40%	3,986	sf	90.00	358,740		
	Prefinished aluminum panels at roof overhang soffits		sf	90.00			
	Pre-finished metal fascia, assume 12" wide	650	lf	90.00	58,500		
	Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750		
092900	GYPSUM BOARD ASSEMBLIES						
	Framing at soffits		sf	18.00			
	8" metal stud backup, typical	7,972	sf	14.00	111,608		
	Gypsum Sheathing	7,972	sf	3.50	27,902		



PSR Submission Estimate

GFA 25,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

177	Drywall lining to interior face of stud backup	7,972	sf	4.00	31,888			
178								
179	101400 SIGNAGE							
180	Signage	1	ls	10,000.00	10,000			
181	SUBTOTAL					1,037,808		
182								
183	B2020 WINDOWS; 20% glazed	1,993	sf					
184								
185	092900 GYPSUM BOARD ASSEMBLIES							
186	Wood blocking at openings	664	lf	14.00	9,296			
187								
188	079200 JOINT SEALANTS							
189	Backer rod & double sealant	664	lf	10.00	6,640			
190								
191	080001 METAL WINDOWS							
192	Aluminum windows/CW/Storefront; double glazed	1,993	sf	145.00	288,985			
193	Sun control at south facing classrooms - allow	200	lf	250.00	50,000			
194	Premium for 3M security film @ first floor	320	sf	40.00	12,800			
195	Premium for triple glazing				Excluded			
196								
197	089100 LOUVERS							
198	Louvers - allowance	100	sf	85.00	8,500			
199	SUBTOTAL					376,221		
200								
201	B2030 EXTERIOR DOORS							
202								
203	Exterior door allowance	25,500	gsf	1.50	38,250			
204	SUBTOTAL					38,250		
205								
206	TOTAL - EXTERIOR CLOSURE						\$1,452,279	

B30 ROOFING

210	B3010 ROOF COVERINGS							
211								
212	PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	25,500	sf	32.00	816,000			
213								
214	Pre-finished metal coping	650	lf	50.00	32,500			
215	Canopy roof system		sf	32.00				
216	Allowance for roof hatches, ladders, walkway pads etc.	1	ls	10,000.00	10,000			
217	SUBTOTAL					858,500		
218								
219	B3020 ROOF OPENINGS							
220	No items in this section							
221	SUBTOTAL					-		
222								
223	TOTAL - ROOFING						\$858,500	

C10 INTERIOR CONSTRUCTION

227	C1010 PARTITIONS						
228							
229	Interior partitions; gwb/ metal stud partitions including premium for CMU in Stairs, Gym and kitchen and allowance for glazed partitions throughout. Abuse resistant board at select areas.	25,500	sf	37.00	943,500		
230							
231	SUBTOTAL					943,500	
232							
233	C1020 INTERIOR DOORS						
234							
235	Interior doors; complete	25,500	gsf	7.00	178,500		
236	SUBTOTAL					178,500	
237							
238	C1030 SPECIALTIES / MILLWORK						
239							
240	055000 MISCELLANEOUS METALS						



PSR Submission Estimate

GFA 25,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

241	Miscellaneous metals complete including ceiling grid supports	25,500	gsf	2.50	63,750			
242								
243	064100 FINISH CARPENTRY							
244	Millwork allowance	25,500	gsf	4.00	102,000			
245								
246	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
247	Miscellaneous sealants throughout building	25,500	gsf	1.00	25,500			
248								
249	101100 VISUAL DISPLAY SURFACES							
250	Marker boards/TB/ Flagpoles complete	25,500	gsf	1.60	40,800			
251	Interactive White Board projectors					FF&E		
252								
253	101400 SIGNAGE							
254	Signage; complete package	25,500	gsf	0.80	20,400			
255								
256	102110 TOILET COMPARTMENTS + ACCESSORIES							
257	Toilet partitions/bathroom accessories	25,500	gsf	1.00	25,500			
258								
259	104400 FIRE PROTECTION SPECIALTIES							
260	Fire extinguisher cabinets	1	ls	5,000.00	5,000			
261	AED cabinets	1	ls	1,500.00	1,500			
262								
263	105113 LOCKERS							
264	Student lockers/ cubbies, kitchen lockers etc.	25,500	gsf	1.50	38,250			
265	SUBTOTAL					322,700		
266								
267	TOTAL - INTERIOR CONSTRUCTION						\$1,444,700	

C20 STAIRCASES

272	C2010 STAIR CONSTRUCTION							
273	SUBTOTAL					-		
274								
275	C2020 STAIR FINISHES							
276	SUBTOTAL					-		
277								
278	TOTAL - STAIRCASES							

C30 INTERIOR FINISHES

283	C3010 WALL FINISHES							
284	Paint to walls	25,500	gsf	2.50	63,750			
285								
286	CT to toilet walls	4,000	sf	32.00	128,000			
287	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	25,500	gsf	2.00	51,000			
288	SUBTOTAL					242,750		
289								
290	C3020 FLOOR FINISHES							
291	VCT/ Carpet flooring	23,050	sf	6.00	138,300			
292								
293	Ceramic tile in toilets	2,200	sf	40.00	88,000			
294	Entry mats - walk-off mats	250	sf	20.00	5,000			
295	Allowances for bases throughout	1	ls	23,130.00	23,130			
296	SUBTOTAL					254,430		
297								
298	C3030 CEILING FINISHES							
299	Armstrong ACT Ultima, typical, 2x2	21,300	sf	7.00	149,100			
300								
301	Armstrong ACT Health Zone ceilings in toilets, 2x2	2,200	sf	9.00	19,800			
302	Armstrong wood acoustic panels Woodworks - allowance	2,000	sf	55.00	110,000			
303	Miscellaneous soffits/GWB	25,500	gsf	3.00	76,500			
304	SUBTOTAL					355,400		
305								
306	TOTAL - INTERIOR FINISHES						\$852,580	



PSR Submission Estimate

GFA 25,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

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D10 CONVEYING SYSTEMS

D1010 ELEVATOR W/ RENOVATION
SUBTOTAL

TOTAL - CONVEYING SYSTEMS

D20 PLUMBING

D20 PLUMBING, GENERALLY
ADDITION: Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm & natural gas piping.
SUBTOTAL

TOTAL - PLUMBING \$688,500

D30 HVAC

D30 HVAC, GENERALLY
HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.
SUBTOTAL

TOTAL - HVAC \$2,371,500

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY
Fire protection complete system
SUBTOTAL

TOTAL - FIRE PROTECTION \$216,750

D50 ELECTRICAL

D50 ELECTRICAL
Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems and master clock/PA
AV sound system and projection at Gym/Café
Network switches
Wi-Fi equipment
Video Surveillance system
Access Control system
VOIP telephone system
SUBTOTAL

TOTAL - ELECTRICAL \$1,708,500

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY



PSR Submission Estimate

GFA 25,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: ADDITION 700 STUDENTS

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119000	MISCELLANEOUS EQUIPMENT							
	Allowance for miscellaneous equipment	25,500	gsf	1.00	25,500			
	SUBTOTAL					25,500		
TOTAL - EQUIPMENT								\$25,500

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100	WINDOW TREATMENT						
	Shades; allowance	1,993	sf	8.00	15,944		
123000	CASEWORK						
	Wood casework w/ solid surface counters throughout	25,500	gsf	12.00	306,000		
	SUBTOTAL					321,944	

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner
SUBTOTAL NIC

TOTAL - FURNISHINGS \$321,944

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION
SUBTOTAL -

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION
SUBTOTAL -

F2020 HAZARDOUS COMPONENTS ABATEMENT
See main summary for HazMat allowance See Summary
SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION

TRADE SUBTOTAL \$12,656,800



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 700 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 85,000
Second Floor 35,000

TOTAL GROSS FLOOR AREA (GFA)					120,000	sf
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1	A1010 STANDARD FOUNDATIONS						
2	Shear wall footings @ connection to new additions and for new layout configurations generally to resist current seismic loads - allow	250	lf	500.00	125,000		
3	Foundation system to support infilled courtyards and media center open to above areas (4300SF)	4,300	sf	60.00	258,000		
4	SUBTOTAL					383,000	
5	A1020 SPECIAL FOUNDATIONS						
6	No work required per Engineer's report						
7	SUBTOTAL					-	
8							
9							
10	A1030 LOWEST FLOOR CONSTRUCTION						
11							
12	<i>033000 CONCRETE</i>						
13	New slab on grade at courtyard infills	1,700	sf	30.00	51,000		
14	Remove and replace slab on grade as necessary to accommodate new fixtures and fittings/ ADA upgrades to ramps/ space reconfigurations/ shear walls etc.	10,000	sf	15.00	150,000		
15	SUBTOTAL					201,000	
16							
17	TOTAL - FOUNDATIONS						\$584,000

A20 BASEMENT CONSTRUCTION

20	A2010 BASEMENT EXCAVATION						
21	No Work in this section						
22	SUBTOTAL					-	
23							
24	A2020 BASEMENT WALLS						
25	No Work in this section						
26	SUBTOTAL					-	
27							
28							
29							
30	TOTAL - BASEMENT CONSTRUCTION						

B10 SUPERSTRUCTURE

32	B1010 FLOOR CONSTRUCTION						
33							
34	<i>051200 STRUCTURAL STEEL FRAMING</i>						
35	Allowance for reframing at courtyard and media center open to above	4,300	sf	150.00	645,000		
36							
37	Allowance for structural modifications including redesigning lateral force-resisting to resist current seismic loads	120,000	gsf	8.00	960,000		
38	SUBTOTAL					1,605,000	
39							
40	B1020 ROOF CONSTRUCTION						
41							
42	<i>051200 STRUCTURAL STEEL FRAMING</i>						
43	Allowance for steel framing at new skylights	21	tns	12,500.00	262,500		
44							
45							



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 700 STUDENTS

45	Allowance for supplemental support framing at new rooftop mechanical equipment - allowance	85,000	sf	5.00	425,000		
46	SUBTOTAL					687,500	
TOTAL - SUPERSTRUCTURE							\$2,292,500

B20 EXTERIOR CLOSURE

52	B2010 EXTERIOR WALLS	23,678	sf		Total Exterior Closure		
53	040001 MASONRY						
56	Selectively repoint masonry at exterior walls as required						NR
57	Provide engineered concrete repairs at broken exterior header/ sill elements						NR
58	Allowance to infill openings with masonry including backup at removed unit ventilator louvers	24	loc	1,500.00		36,000	
59	Exterior metal, fiber cement or thin brick wall panel rainscreen on furring at ETR masonry wall	23,678	sf	80.00		1,894,240	
60	055000 MISCELLANOUS METALS						
62	Prepare and repaint steel lintels, plates and other exterior metal items	23,678	sf	1.00		23,678	
63	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
65	Liquid applied vapor barrier @ etr masonry walls	23,678	sf	7.50		177,585	
66	Air barrier/flashing at openings	2,090	lf	7.50		15,675	
67	Rake out existing masonry control joints; provide new backer rod and joint sealant - allow	23,678	sf	1.50		35,517	
68	072100 THERMAL INSULATION						
70	3" Rigid insulation	23,678	sf	4.00		94,712	
72	074213 WALL PANELS						
73	092900 GYPSUM BOARD ASSEMBLIES						
75	101400 SIGNAGE						
77	New signage	1	ls	15,000.00		15,000	
78	SUBTOTAL						2,292,407
79	B2020 WINDOWS	4,179	sf				
80	092900 GYPSUM BOARD ASSEMBLIES						
83	Wood blocking at openings	2,090	lf	14.00		29,260	
84	079200 JOINT SEALANTS						
86	Backer rod & double sealant	2,090	lf	10.00		20,900	
87	080001 METAL WINDOWS						
89	Replace all existing windows, storefront and curtainwall, double glazed - 15%	4,179	sf	150.00		626,850	
90	Greenhouse glazing						demolished in this option
91	089100 LOUVERS						
93	Louvers						N/A
94	SUBTOTAL						677,010
95	B2030 EXTERIOR DOORS						
97	Exterior door replacement allowance	120,000	gsf	2.00		240,000	
99	SUBTOTAL						240,000
TOTAL - EXTERIOR CLOSURE							\$3,209,417



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 700 STUDENTS

B30 ROOFING

B3010 ROOF COVERINGS

Replace w/ new adhered PVC roofing includes edge coping, blocking, flashings and roof accessories etc. (assumes removal of existing included w/ haz mat) **83,300** sf 35.00 2,915,500

SUBTOTAL 2,915,500

B3020 ROOF OPENINGS

Skylight infills at courtyards **1,700** sf 200.00 340,000

Allowance to replace roof hatches, ladders etc. **1** ls 30,000.00 30,000

SUBTOTAL 370,000

TOTAL - ROOFING						\$3,285,500
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Modify interior CMU/GWB walls, glazed partitions + BL's, operable walls etc. to accommodate code upgrades and reconfigured spaces - kitchen and gymnasium layouts to remain. Allowance to open up existing exterior walls at infilled courtyards. **120,000** gsf 25.00 3,000,000

Seismic clips at the top of interior masonry walls - allow @ 32" oc **120,000** gsf 4.00 480,000

SUBTOTAL 3,480,000

C1020 INTERIOR DOORS

New doors and hardware throughout **120,000** gsf 7.00 840,000

SUBTOTAL 840,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals complete including ceiling grid supports **120,000** gsf 2.50 300,000

064100 FINISH CARPENTRY

New millwork throughout **120,000** gsf 4.00 480,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building **120,000** gsf 1.00 120,000

101100 VISUAL DISPLAY SURFACES

Marker boards/TB complete **120,000** gsf 1.60 192,000

101400 SIGNAGE

New interior signage **120,000** gsf 0.80 96,000

102110 TOILET COMPARTMENTS + ACCESSORIES

New toilet partitions/bathroom accessories **120,000** gsf 1.00 120,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets **1** ls 10,000.00 10,000

AED cabinets **1** ls 1,500.00 1,500

105113 LOCKERS

New corridor and locker room lockers throughout **120,000** gsf 1.50 180,000

SUBTOTAL 1,499,500

TOTAL - INTERIOR CONSTRUCTION						\$5,819,500
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 700 STUDENTS

156								
157	New stairs; complete	4	flt	45,000.00	180,000			
158	New ramp guardrails and handrails to meet ADA requirements - allowance	1	ls	20,000.00	20,000			
159	SUBTOTAL					200,000		
160								
161	C2020 STAIR FINISHES							
162	New finishes at stairs	4	flt	5,000.00	20,000			
163	SUBTOTAL					20,000		
164								
165	TOTAL - STAIRCASES							\$220,000

C30 INTERIOR FINISHES

166								
167								
168								
169								
170	C3010 WALL FINISHES							
171								
172	Prep and paint all etr and new interior walls	120,000	gsf	3.00	360,000			
173	New tile in bathrooms and shower rooms	10,400	sf	36.00	374,400			
174	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	120,000	sf	1.50	180,000			
175	SUBTOTAL					914,400		
176								
177	C3020 FLOOR FINISHES							
178								
179	Allowance for leveler at new floor finishes	108,600	sf	3.00	325,800			
180	Replace finishes throughout with VCT flooring and resilient base	94,765	sf	5.00	473,825			
181	Premium for carpet in Admin spaces, Media center etc. including resilient base	5,000	sf	1.50	7,500			
182	Premium for tile in bathrooms	5,735	sf	35.00	200,725			
183	Gymnasium flooring	9,000	sf		assume ETR			
184	Quarry tile in kitchen & support spaces	2,400	sf		assume ETR			
185	Concrete sealer in Mech/ Elec/ Boiler spaces	2,600	sf		assume ETR			
186	Entry mats - walk-off mats	500	sf	20.00	10,000			
187	Allowance to clean etr floors	14,000	sf	2.00	28,000			
188	SUBTOTAL					1,045,850		
189								
190	C3030 CEILING FINISHES							
191								
192	ACT ceiling replacement throughout	104,200	sf	7.00	729,400			
193	Premium for healthzone or similar ACT in kitchen and bathrooms	8,135	sf	2.00	16,270			
194	Gymnasium, Cafetorium and Platform - paint exposed deck	15,800	sf	3.50	55,300			
195	Allowance for prep and paint etr gwb ceilings and soffits	120,000	gsf	2.00	240,000			
196	SUBTOTAL					1,040,970		
197								
198	TOTAL - INTERIOR FINISHES							\$3,001,220

D10 CONVEYING SYSTEMS

199								
200								
201								
202								
203	D1010 ELEVATOR							
204								
205	142000 ELEVATOR							
206	New 2-stop elevator	1	ea	180,000.00	180,000			
207	New platform lift from Cafeteria to Stage level	1	ea	50,000.00	50,000			
208	SUBTOTAL					230,000		
209								
210	TOTAL - CONVEYING SYSTEMS							\$230,000

D20 PLUMBING

211							
212							
213							
214							
215	D20 PLUMBING, GENERALLY						
216	RENOVATION: Plumbing system complete; replace each system, fixtures & all equipment including domestic water, AG sanitary W&V and AG storm	120,000	gsf	27.00	3,240,000		



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
OPTION AR-1: RENOVATION 700 STUDENTS								
217	Demolition; cut & cap, make safe, removal by others	120,000	gsf	0.70	84,000			
218	SUBTOTAL					3,324,000		
TOTAL - PLUMBING							\$3,324,000	
D30 HVAC								
D30 HVAC, GENERALLY								
226	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	120,000	gsf	93.00	11,160,000			
227	Demolition; cut & cap existing HVAC; removal by others	120,000	gsf	1.25	150,000			
228	SUBTOTAL					11,310,000		
TOTAL - HVAC							\$11,310,000	
D40 FIRE PROTECTION								
D40 FIRE PROTECTION, GENERALLY								
235	Fire protection complete system	120,000	gsf	8.50	1,020,000			
236	Demolition	120,000	gsf	0.65	78,000			
237	SUBTOTAL					1,098,000		
TOTAL - FIRE PROTECTION							\$1,098,000	
D50 ELECTRICAL								
244	Electrical system incl demo, normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA and modular electrical requirements etc.	120,000	gsf	62.00	7,440,000			
245	AV sound system and projection at Gym/Café	1	ls	200,000.00	200,000			
246	Network switches	120,000	sf	1.50	180,000			
247	Wi-Fi equipment	120,000	sf	1.00	120,000			
248	Video Surveillance system	120,000	sf	2.00	240,000			
249	Access Control system	120,000	sf	1.00	120,000			
250	VOIP telephone system	120,000	sf	1.50	180,000			
251	SUBTOTAL					8,480,000		
TOTAL - ELECTRICAL							\$8,480,000	
E10 EQUIPMENT								
E10 EQUIPMENT, GENERALLY								
281	114000 FOODSERVICE EQUIPMENT							
282	Kitchen equipment - allowance for replacement of wood work surfaces and shelving to stainless steel. Replace exhaust ventilators and interior grease traps w/ stainless steel. Replace two hoods. New serving line equipment. Tray & pot washing area upgrades	1	ls	640,000.00	640,000			
284	116200 THEATRE EQUIPMENT							
285	New curtain and rigging allowance in Cafetorium	1	ls	30,000.00	30,000			
286	New portable risers in Band room	1	ls	24,375.00	24,375			
288	116600 ATHLETIC EQUIPMENT							
289	Gym safety wall pads	2,145	sf	20.00	42,900			



PSR Submission Estimate

GFA 120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 700 STUDENTS

290	Replace operable partitions in Gymnasium	2	ea	35,000.00	70,000			
291	Replace basketball backstops	8	ea	10,000.00	80,000			
292	Volley ball standards and inserts	1	ls	5,000.00	5,000			
293	Score board - allow	1	ea	20,000.00	20,000			
294	New telescopic bleachers - seating capacity 650	1	ls	130,000.00	130,000			
295								
296	119000 MISCELLANEOUS EQUIPMENT							
297	Allowance to replace projection screens, residential appliances science room equipment, kiln etc.	120,000	gsf	0.50	60,000			
298	SUBTOTAL					1,102,275		
299								
300	TOTAL - EQUIPMENT							\$1,102,275

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

305								
306								
307	122100 WINDOW TREATMENT							
308	Window treatment replacements - allowance	1	ls	40,000.00	40,000			
309								
310	123000 CASEWORK							
311	New casework throughout	120,000	gsf	12.00	1,440,000			
312	SUBTOTAL					1,480,000		
313								
314	E2020 MOVABLE FURNISHINGS							
315	All movable furnishings to be provided and installed by owner							
316	SUBTOTAL					NIC		
317								
318	TOTAL - FURNISHINGS							\$1,480,000

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION
SUBTOTAL

-

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

331	Demo and remove existing floor slab	10,000	sf	8.00	80,000		
332							
333	Demo and remove existing courtyard finishes	1,700	sf	8.00	13,600		
334	Demo and remove upper floor for new Media center open to above, including shoring	2,590	sf	30.00	77,700		
335	Remove exterior windows and storefront	4,179	sf	8.00	33,432		
336	Demo and remove exterior wall at connection to new additions, shore as necessary	3,167	sf	15.00	47,505		
337	Demo and remove interior floor finishes, ceilings and wall finishes etc.	120,000	gsf	4.00	480,000		
338	Misc. selective interior demolition as req'd, partitions, specialties, furnishings, door hardware etc. - allowance	120,000	gsf	7.00	840,000		
339	Selective interior MEP demolition including removal of cut & capped MEP equipment & fixtures	120,000	gsf	4.00	480,000		
340	Demolish existing greenhouse	594	gsf	15.00	8,910		
341	SUBTOTAL					2,061,147	
342							



Clinton Middle School
Clinton, MA

30-May-23

PSR Submission Estimate

GFA

120,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1: RENOVATION 700 STUDENTS

343
344
345
346
347

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION							\$2,061,147
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TRADE SUBTOTAL

\$47,497,559



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITWORK: OPTION AR1

1	G	SITWORK	860,000	sf		-	
2							
3	G10	PHASING					
4		6' high site construction fence	4,500	lf	18.00	81,000	
5		Site construction entrance and removal/restoration	2	loc	12,000.00	24,000	
6		Temporary parking area - phase 1	1	ls	60,000.00	60,000	
7		Contractor laydown area - phase 1	1	ls	10,000.00	10,000	
8		Temporary utilities allowance	1	ls	50,000.00	50,000	
9		Temporary signage	1	ls	10,000.00	10,000	
10		Mobilizations	2	ea	35,000.00	70,000	
11		Street sweeping allowance	1	ls	10,000.00	10,000	
12		Traffic control measures for milling - allowance	1	ls	25,000.00	25,000	
13		Snow removal allowance	1	ls	25,000.00	25,000	
14		SUBTOTAL					365,000
15							
16	G10	SITE PREPARATION & DEMOLITION					
17	311000	GENERAL CONDITIONS					
18		Layout/As-builts/Survey	1	ls	15,000.00	15,000	
19	311000	SITE DEMOLITION AND RELOCATIONS					
20		Demolish existing pavement	60,000	sf	1.25	75,000	
21		Demolish existing basketball courts	1	ls	5,000.00	5,000	
22		Allowance for misc. demo	1	ls	50,000.00	50,000	
23	311000	UTILITY DEMOLITION					
24		Demolish existing utility allowance	1	ls	75,000.00	75,000	
25		Cut/cap allowance	1	ls	30,000.00	30,000	
26		Protection of utilities during construction allowance	1	ls	25,000.00	25,000	
27	311000	ROADWAY WORK - allowance					
28		Sawcut	320	lf	8.25	2,640	
29		Remove pavement	800	sf	3.50	2,800	
30		Temp pavement patching	800	sf	8.00	6,400	
31		Steel plates	1	ls	2,500.00	2,500	
32		Police details	7	dy	850.00	5,950	
33		Permanent pavement patch	800	sf	10.00	8,000	
34		Restore areas of utility connections	820	sf	10.00	8,200	
35	311000	VEGETATION & TOPSOIL MANAGEMENT					
36		Tree clearing allowance	1	ls	25,000.00	ETR	
37		Street sweeping allowance during hauling	1	ls	10,000.00	10,000	
38	312000	EROSION & SEDIMENT CONTROL					
39		Silt Fence; installation and removal	4,500	lf	12.00	54,000	
40		Silt Sacks; installation and removal	10	ea	250.00	2,500	
41		Erosion Control monitoring & maintenance	1	ls	15,000.00	15,000	
42		SUBTOTAL					392,990
43							
44	312000	SITE EARTHWORK					
45		Strip + stockpile topsoil	12,778	cy	11.50	146,947	
46		Load + remove topsoil; allowance	4,000	cy	45.00	180,000	
47		Site cut to design subgrade					
48		Cut + fills - assume 2 ft and balanced site	37,037	cy	15.00	555,555	
49		Fill - imported granular fill				Assumed Not Required	
50	312000	SOIL DISPOSAL					
51		Load excess soils for disposal				Assumed Not Required	
52		Less than RCS-1 site disposal 1.8x				Assumed Not Required	
53							
54							
55	312000	ROCK REMOVAL - allowances				assume no rock	
56							
57	312000	ESTABLISHING GRADE					
58		Sub grade establishment	345,000	sf	0.15	51,750	
59		Fine grading throughout the site	345,000	sf	0.35	120,750	
60							
61	312000	HAZARDOUS MATERIALS					
62		UST removal allowance				Already removed	
63		SUBTOTAL					1,055,002



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework: OPTION AR1

64							
65	G20	SITE IMPROVEMENTS					
70	320000	ROADWAYS AND PARKING LOTS					
71		<u>Asphalt Paving; roadways/parking lots</u>	35,965	sf			
72		gravel base; 12" thick	1,332	cy	60.00	79,920	
73		asphalt top; 1.5" thick	344	tns	225.00	77,400	
74		asphalt binder; 2.5" thick	572	tns	190.00	108,680	
75		<u>Asphalt Paving; mill existing roadways/parking lots</u>	108,000	sf			
76		gravel base; 12" thick	4,000	cy	60.00	NR	
77		asphalt top; 1.5" thick	1,033	tns	225.00	232,425	
78		Mill + scarify	108,000	sf	1.50	162,000	
75	320000	CURBING					
76		Vertical granite curb	4,825	lf	52.00	250,900	
77		ADA Curb cuts - allowance	1	ls	15,000.00	15,000	
78	320000	ROAD MARKINGS AND SIGNS					
79		Parking spot	172	ea	85.00	14,620	
80		Parking spot ADA	4	ea	250.00	1,000	
81		Sign allowance	1	ls	20,000.00	20,000	
82		Pavement markings allowance	1	ls	20,000.00	20,000	
83		Crosswalk hatching	2	loc	2,500.00	5,000	
84		SUBTOTAL					986,945
85							
86	320000	PEDESTRIAN PAVING					
87		<u>Concrete sidewalks</u>	19,000	sf			
88		gravel base; 6" thick	352	cy	60.00	21,120	
89		Broom finish concrete paving; 4" thick pavement	19,000	sf	12.00	228,000	
90		<u>Basketball Court</u>	25,000	sf			
91		gravel base; 6" thick	463	cy	60.00	27,780	
92		asphalt top; 1" thick	159	tns	225.00	35,775	
93		asphalt binder; 2" thick	319	tns	190.00	60,610	
94		Allowance for color play surfacing	1	ls	25,000.00	25,000	
95		Basketball hoops	2	ea	5,000.00	10,000	
96		<u>Concrete Plaza</u>	250	sf			
97		gravel base; 6" thick	5	cy	60.00	300	
98		Broom finish concrete paving; 4" thick - colored pavement	250	sf	15.00	3,750	
99		<u>Unit pavers</u>	250	sf			
100		crushed stone; 8" thick	6	cy	55.00	330	
101		Unit Pavers	250	sf	32.00	8,000	
102		Geotextiles	250	sf	0.55	138	
103		<u>Outdoor Plaza</u>	1,000	sf			
104		gravel base; 6" thick	19	cy	60.00	1,140	
105		Broom finish concrete paving; 4" thick - colored pavement	1,000	sf	15.00	15,000	
106		<u>Unit pavers</u>	1,000	sf			
107		crushed stone; 8" thick	25	cy	55.00	1,375	
108		Unit Pavers	1,000	sf	32.00	32,000	
109		Geotextiles	1,000	sf	0.55	550	
110		SUBTOTAL					470,868
111							
112	320000	SITE IMPROVEMENTS					
113	320000	SITE FURNISHINGS					
114		Bollards - utility	15	ea	1,200.00	18,000	
115		Bollards - stainless steel	15	ea	2,500.00	37,500	
116		Trash receptacles	5	ea	3,141.60	15,708	
117		Flagpole - 40' Ht.	1	ea	9,000.00	9,000	
118		Flagpole foundation	1	ea	3,200.00	3,200	
119		Benches	12	ea	3,500.00	42,000	



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework: OPTION AR1							
120	Benches - concrete	4	ea	4,000.00	16,000		
121	Bike racks	15	ea	850.00	12,750		
122	School sign	1	ls	25,000.00	25,000		
123	Landscape curbing allowance	1	ls	50,000.00	50,000		
124	Dumpster enclosure allowance	1	ls	10,000.00	10,000		
125	320000 GRASS FIELD	140,000	sf				
126	Grass field/softball field with drainage	140,000	sf	8.00	1,120,000		
127	<u>Softball Infields</u>	6,570	sf				
128	Infield mix	132	tn	225.00	29,700		
129	Sand gravel fill; 12" thick	243	cy	50.00	12,150		
127	320000 PLAY AREAS						
128	<u>Playground - pour-in-place safety surfacing</u>	5,000	sf				
129	asphalt binder; 2" thick	64	tns	190.00	12,160		
130	crushed stone; 5" thick	77	cy	55.00	4,235		
131	Pour-in-place safety surface	5,000	sf	28.00	140,000		
132	Allowance for play equipment	1	ls	350,000.00	350,000		
133	320000 ATHLETIC EQUIPMENT						
134	<u>Softball</u>						
135	Softball mound	1	loc	3,500.00	3,500		
136	Softball bases	1	set	2,500.00	2,500		
137	Softball batters boxes	1	loc	3,500.00	3,500		
138	Softball foul poles	2	ea	4,800.00	9,600		
139	Softball backstop	1	ea	55,000.00	55,000		
140	Softball dugouts - players benches	4	ea	4,000.00	16,000		
141	Softball dugouts	2	ea	25,000.00	50,000		
133	320000 FENCING						
134	4' Ht - Chain link fence at playground	380	lf	65.00	24,700		
135	8' Ht - Chain link fence at perimeter	1,800	lf	85.00	153,000		
136	12' Ht - Chain link fence				deleted		
137	SUBTOTAL					2,225,203	
138							
139	329900 SITE WALLS/Ramps/Stairs						
140	Allowance for retaining walls	650	lf	325.00	211,250		
141	Allowance for seating walls, steps etc.	1	ls	250,000.00	250,000		
142	SUBTOTAL					461,250	
143							
144	<u>Landscaping</u>						
145	329900 LAWN AND SEED						
146	Screen topsoil	12,778	cy	15.00	191,670		
147	Export tailings from screening process - assume clean rock	3,833	cy	8.50	32,581		
148	Amend/Place	8,945	cy	26.00	232,570		
149	Soil and mulch at planting areas; 8" thick	1	ls	30,000.00	30,000		
150	Rain gardens; planting	9,000	sf	10.00	90,000		
150	Lawn seed mix	345,000	sf	0.35	120,750		
151	Irrigation at play fields	140,000	sf	2.00	280,000		
152	329900 PLANTS	Allowance					
153	Trees, Shrubs etc.	1	ls	200,000.00	200,000		
154	SUBTOTAL					1,177,571	
155							
156	G30 CIVIL MECHANICAL UTILITIES						
157	210000 FIRE PROTECTION						
158	Allowance for new water supply for fire protection	1,750	lf	100.00	175,000		
159	Street connections	2	ea	15,000.00	30,000		
160	Fire hydrant	2	ea	6,500.00	13,000		
161	331000 WATER UTILITIES						
162	Allowance for new water supply for domestic service	150	lf	80.00	12,000		
163	SUBTOTAL					230,000	



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework: OPTION AR1

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333000	SANITARY SEWER Allowance for new sewer service and grease trap	1	ls	125,000.00	125,000		
	SUBTOTAL					125,000	
334000	STORM DRAINAGE Allowance for stormwater infiltration system	42,000	cf	12.00	504,000		
	Allowance for structures/piping/rain gardens etc.	143,965	sf	7.00	1,007,755		
	SUBTOTAL						1,511,755
220001	NATURAL GAS No work in this section						
	SUBTOTAL						-
G40	ELECTRICAL UTILITIES						
	<u>Power</u>						
	Power riser	1	ea	2,500.00	2,500		
	Primary service duct bank	350	lf	80.00	28,000		
	Pad mount transformer pad (TX by Utility Co)	1	ea	3,000.00	3,000		
	3000A Secondary service duct bank	50	lf	1,500.00	75,000		
	Generator						
	Generator duct bank	70	lf	500.00	35,000		
	Electric Vehicle Stations						
	2-4" for future EV system	1	ls	15,000.00	15,000		
	Security						
	Site camera system, allow	1	ls	50,000.00	50,000		
	Telecommunications						
	Communication riser	1	ea	2,500.00	2,500		
	Telecom duct bank 4-4" (empty)	350	lf	180.00	63,000		
	<u>Site lighting</u>						
	Site lighting allowance	143,965	sf	2.50	359,913		
	Add Signals - flashing yellow lights				Assumed NR		
	SUBTOTAL						633,913

TOTAL - SITE DEVELOPMENT	\$9,635,497
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	28,500
Second Floor	16,000

TOTAL GROSS FLOOR AREA (GFA)					44,500 sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	68	CY	\$849 /cy	
Foundation Walls	155	CY	\$1,272 /cy	
Spread Footings	178	CY	\$787 /cy	
Grade beams	23	CY	\$1,318 /cy	
Piers	23	CY	\$1,935 /cy	

Total Foundation Concrete 447 CY

Strip footing, typical; 2'-4" x 12"

Formwork	1,500	sf	16.00	24,000
Re-bar	7,500	lbs.	2.00	15,000
Concrete material	68	cy	155.00	10,540
Placing concrete	68	cy	120.00	8,160

Foundation wall; 16" thick

Formwork	6,000	sf	20.00	120,000
Re-bar	13,500	lbs.	2.00	27,000
Concrete material	155	cy	155.00	24,025
Placing concrete	155	cy	120.00	18,600
Form shelf	750	lf	10.00	7,500

Exterior spread footings, typical; 7'-0" x 7'-0" x 22"

Formwork	1,281	sf	18.00	23,058
Re-bar	11,875	lbs.	2.00	23,750
Concrete material	87	cy	155.00	13,485
Placing concrete	87	cy	120.00	10,440
Set anchor bolts grout plates	25	ea	150.00	3,750

Interior spread footings, typical; 9'-6" x 9'-6" x 26"

Formwork	988	sf	18.00	17,784
Re-bar	10,500	lbs.	2.00	21,000
Concrete material	91	cy	155.00	14,105
Placing concrete	91	cy	120.00	10,920
Set anchor bolts grout plates	12	ea	150.00	1,800

Grade beams at braced frames, allow

Formwork	600	sf	15.00	9,000
Re-bar	7,500	lbs.	2.00	15,000
Concrete material	23	cy	155.00	3,565
Placing concrete	23	cy	120.00	2,760

Piers/Pilasters

Formwork	1,243	sf	20.00	24,860
Re-bar	6,660	lbs.	2.00	13,320
Concrete material	23	cy	155.00	3,565
Placing concrete	23	cy	120.00	2,760

Miscellaneous

Elevator pit				NR
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Trowelled-on bituminous mastic dam proofing at foundation walls	3,000	sf	4.00	12,000
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072100 THERMAL INSULATION

2" Insulation at foundation walls	3,000	sf	3.00	9,000
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312000 EARTHWORK

<u>Strip footings/Fdn wall</u>				
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PSR Submission Estimate

GFA 44,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

54	Excavation	500	cy	10.00	5,000		
55	Remove off-site	500	cy	32.00	16,000		
56	Backfill with imported material	432	cy	48.00	20,736		
57	<u>Spread footings/Grade beams</u>						
58	Excavation	605	cy	10.00	6,050		
59	Remove off-site	605	cy	32.00	19,360		
60	Backfill with imported material	404	cy	48.00	19,392		
61	<u>Building</u>						
62	Cut; assumed 2 feet	2,111	cy	15.00	31,665		
63	Fill - granular fill pad; allow 2 feet	2,111	cy	48.00	101,328		
64	<u>Miscellaneous</u>						
65	Gravel fill beneath footings, 12"	161	cy	40.00	6,440		
66	Perimeter drain	750	lf	30.00	22,500		
67	Temporary dewatering for foundation work	1	ls	20,000.00	20,000		
68	SUBTOTAL					759,218	

A1020 SPECIAL FOUNDATIONS

71	Allowance for rammed aggregate piers				Assumed NR		
72	SUBTOTAL					-	

A1030 LOWEST FLOOR CONSTRUCTION

76	<i>033000 CONCRETE</i>						
77	<u>Slab on grade</u>						
78	Vapor barrier at slab on grade	28,500	sf				
79	WWF reinforcement	28,500	sf	1.25	35,625		
80	Concrete - 6" thick	32,775	sf	1.80	58,995		
81	Concrete - 6" thick	554	cy	155.00	85,870		
82	Barrier One Admixture	554	cy		Assumed Not Required		
83	Placing concrete	554	cy	90.00	49,860		
84	Finishing and curing concrete	28,500	sf	3.00	85,500		
85	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	5,000.00	5,000		
86	<u>Miscellaneous</u>						
87	Equipment pads	1	ls	10,000.00	10,000		
88	Radon system	28,500	sf	3.00	85,500		
89	<i>072100 THERMAL INSULATION</i>						
90	Slab insulation, 2" thick; 2' @ perimeter only	3,000	sf	2.50	7,500		
92	<i>312000 EARTHWORK</i>						
93	Improve soils/ground improvement allowance	28,500	sf	8.00	228,000		
94	<u>Building</u>						
95	Gravel base, 12"	1,056	cy	48.00	50,688		
96	Compact existing sub-grade	28,500	sf	1.00	28,500		
97	Under slab E&B for plumbing	28,500	sf	1.50	42,750		
98	SUBTOTAL					773,788	

TOTAL - FOUNDATIONS	\$1,533,006
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

105	No Work in this section						
106	SUBTOTAL					-	

A2020 BASEMENT WALLS

109	No Work in this section						
110	SUBTOTAL					-	

TOTAL - BASEMENT CONSTRUCTION	
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PSR Submission Estimate

GFA 44,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

14.5 lbs/sf
323 tns excluding roof screens and canopies
\$6,652 \$/Ton

033000 CONCRETE

WWF reinforcement	18,400	sf	1.80	33,120
Concrete fill to metal deck; 3-1/2" normal weight, total thickness 5 1/2"	285	cy	160.00	45,600
Place and finish concrete	16,000	sf	3.50	56,000
Rebar to decks	4,800	lbs	2.00	9,600

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf	116	tns	5,500.00	638,000
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	4,000	ea	3.50	14,000
2" metal floor deck	16,000	sf	6.50	104,000
Allowance for expansion joint	1	ls	10,000.00	10,000

078100 FIREPROOFING/FIRESTOPPING

Fire proofing to columns and beams	16,000	sf	2.75	44,000
Intumescent allowance	1	ls	35,000.00	35,000

SUBTOTAL 989,320

B1020 ROOF CONSTRUCTION

033000 CONCRETE

Allowance at mechanical equipment/low roof

Concrete fill to metal roof deck	5,000	sf	10.00	50,000
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051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf at typical roof	207	tns	5,500.00	1,138,500
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	7,125	ea	3.50	24,938
1-1/2" metal floor deck at typical roof	28,500	sf	6.00	171,000
HSS support framing at roof screen @ 110 lbs/lf	10	tns	5,800.00	58,000
Steel framing at canopies @ 20 lbs/sf		tns	5,800.00	

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to roof deck and structure				NR
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SUBTOTAL 1,442,438

TOTAL - SUPERSTRUCTURE						\$2,431,758
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B20 EXTERIOR CLOSURE

19,163 sf

B2010 EXTERIOR WALLS

19,163 sf Total Exterior Closure

040001 MASONRY

Brick veneer; 40%	7,665	sf	44.00	337,260
Precast trim	7,665	sf	2.00	15,330
Staging/Lifts to exterior wall				Included

055000 MISCELLANEOUS METALS

Miscellaneous metals to exterior; lintels, angles etc.	7,665	sf	1.00	7,665
Relieving angles				assume included in lbs/sf tns



PSR Submission Estimate

GFA 44,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

175	070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
176		Air barrier	15,330	sf	8.80	134,904		
177		Air barrier/flashing at windows	1,278	lf	6.25	7,988		
178		Air barrier @ overhangs/soffits		sf	8.50			
179		Miscellaneous sealants to closure	15,330	sf	0.50	7,665		
180								
181	072100	THERMAL INSULATION						
182		3" Rigid insulation	15,330	sf	4.00	61,320		
183		Spray insulation; 2" typical	15,330	sf	3.00	45,990		
184		3" Rigid insulation @ overhangs/soffits		sf	4.00			
185		Insulation at window openings	1,278	lf	6.00	7,668		
186								
187	074213	WALL PANELS						
188		Alucobond metal panels: 40%	7,665	sf	90.00	689,850		
189		Prefinished aluminum panels at roof overhang soffits		sf	90.00			
190		Pre-finished metal fascia, assume 12" wide	750	lf	90.00	67,500		
191		Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750		
192								
193	092900	GYPSUM BOARD ASSEMBLIES						
194		Framing at soffits		sf	18.00			
195		8" metal stud backup, typical	15,330	sf	14.00	214,620		
196		Gypsum Sheathing	15,330	sf	3.50	53,655		
197		Drywall lining to interior face of stud backup	15,330	sf	4.00	61,320		
198								
199	101400	SIGNAGE						
200		Signage	1	ls	10,000.00	10,000		
201		SUBTOTAL					1,836,485	
202								
203		B2020 WINDOWS; 20% glazed	3,833	sf				
204								
205	092900	GYPSUM BOARD ASSEMBLIES						
206		Wood blocking at openings	1,278	lf	14.00	17,892		
207								
208	079200	JOINT SEALANTS						
209		Backer rod & double sealant	1,278	lf	10.00	12,780		
210								
211	080001	METAL WINDOWS						
212		Aluminum windows/CW/Storefront; double glazed	3,833	sf	145.00	555,785		
213		Sun control at south facing classrooms - allow	250	lf	250.00	62,500		
214		Premium for 3M security film @ first floor	600	sf	40.00	24,000		
215		Premium for triple glazing				Excluded		
216								
217	089100	LOUVERS						
218		Louvers - allowance	100	sf	85.00	8,500		
219		SUBTOTAL					681,457	
220								
221		B2030 EXTERIOR DOORS						
222		Exterior door allowance	44,500	gsf	1.50	66,750		
223		SUBTOTAL					66,750	
224								
225								
226		TOTAL - EXTERIOR CLOSURE					\$2,584,692	
227								
228								
229		B30 ROOFING						
230								
231		B3010 ROOF COVERINGS						
232								
233		PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	28,500	sf	32.00	912,000		
234		Pre-finished metal coping	750	lf	50.00	37,500		
235		Canopy roof system		sf	32.00			
236		Allowance for roof hatches, ladders, walkway pads etc.	1	ls	30,000.00	30,000		



PSR Submission Estimate

GFA 44,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

237 SUBTOTAL 979,500

B3020 ROOF OPENINGS

No items in this section

241 SUBTOTAL -

TOTAL - ROOFING

\$979,500

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

249 Interior partitions; gwb/ metal stud partitions including premium for
250 CMU in Stairs, Gym and kitchen and allowance for glazed partitions
throughout. Abuse resistant board at select areas. **44,500** sf 37.00 1,646,500

251 SUBTOTAL 1,646,500

C1020 INTERIOR DOORS

254 Interior doors; complete **44,500** gsf 7.00 311,500

256 SUBTOTAL 311,500

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

261 Miscellaneous metals complete including ceiling grid supports **44,500** gsf 2.50 111,250

064100 FINISH CARPENTRY

264 Millwork allowance **44,500** gsf 4.00 178,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

267 Miscellaneous sealants throughout building **44,500** gsf 1.00 44,500

101100 VISUAL DISPLAY SURFACES

270 Marker boards/TB/ Flagpoles complete **44,500** gsf 1.60 71,200

271 Interactive White Board projectors FF&E

101400 SIGNAGE

274 Signage; complete package **44,500** gsf 0.80 35,600

102110 TOILET COMPARTMENTS + ACCESSORIES

277 Toilet partitions/bathroom accessories **44,500** gsf 1.00 44,500

104400 FIRE PROTECTION SPECIALTIES

280 Fire extinguisher cabinets **1** ls 10,000.00 10,000

281 AED cabinets **1** ls 1,500.00 1,500

105113 LOCKERS

284 Student lockers/ cubbies, kitchen lockers etc. **44,500** gsf 1.50 66,750

285 SUBTOTAL 563,300

TOTAL - INTERIOR CONSTRUCTION

\$2,521,300

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

294 New stairs; complete **1** flt 45,000.00 45,000

295 SUBTOTAL 45,000

C2020 STAIR FINISHES

299 Finishes complete **1** flt 5,000.00 5,000

300 SUBTOTAL 5,000

TOTAL - STAIRCASES

\$50,000



PSR Submission Estimate

GFA 44,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

304	C30 INTERIOR FINISHES						
305	C3010 WALL FINISHES						
306							
307	Paint to walls	44,500	gsf	2.50	111,250		
308	CT to toilet walls	4,000	sf	32.00	128,000		
309	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	44,500	gsf	2.00	89,000		
310	SUBTOTAL					328,250	
311							
312							
313							
314	C3020 FLOOR FINISHES						
315	VCT/ Carpet flooring	39,650	sf	6.00	237,900		
316	Ceramic tile in toilets	2,350	sf	40.00	94,000		
317	Sealed concrete in BOH	2,000	sf	2.50	5,000		
318	Entry mats - walk-off mats	500	sf	20.00	10,000		
319	Allowances for bases throughout	1	ls	34,690.00	34,690		
320	SUBTOTAL					381,590	
321							
322							
323	C3030 CEILING FINISHES						
324	Armstrong ACT Ultima, typical, 2x2	37,925	sf	7.00	265,475		
325	Armstrong ACT Health Zone ceilings in toilets, 2x2	2,350	sf	9.00	21,150		
326	Armstrong wood acoustic panels Woodworks - allowance	2,000	sf	55.00	110,000		
327	Miscellaneous soffits/GWB	44,500	gsf	3.00	133,500		
328	SUBTOTAL					530,125	
329							
330							
331	TOTAL - INTERIOR FINISHES						\$1,239,965
332							
333							
334	D10 CONVEYING SYSTEMS						
335							
336	D1010 ELEVATOR					W/ RENOVATION	
337	SUBTOTAL					-	
338							
339	TOTAL - CONVEYING SYSTEMS						
340							
341							
342	D20 PLUMBING						
343							
344	D20 PLUMBING, GENERALLY						
345	ADDITION: Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm & natural gas piping.	44,500	gsf	27.00	1,201,500		
346	SUBTOTAL					1,201,500	
347							
348	TOTAL - PLUMBING						\$1,201,500
349							
350							
351	D30 HVAC						
352							
353	D30 HVAC, GENERALLY						
354	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	44,500	gsf	93.00	4,138,500		
355	SUBTOTAL					4,138,500	
356							
357	TOTAL - HVAC						\$4,138,500
358							
359							
360	D40 FIRE PROTECTION						
361							
362	D40 FIRE PROTECTION, GENERALLY						



PSR Submission Estimate

GFA 44,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

363	Fire protection complete system	44,500	gsf	8.50	378,250		
364	SUBTOTAL					378,250	
TOTAL - FIRE PROTECTION							\$378,250

D50 ELECTRICAL

D50 ELECTRICAL

372	Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems and master clock/PA	44,500	gsf	60.00	2,670,000		
373	AV sound system and projection at Gym/Café	1	ls	200,000.00	See Reno		
374	Network switches	44,500	sf	1.50	66,750		
375	Wi-Fi equipment	44,500	sf	1.00	44,500		
376	Video Surveillance system	44,500	sf	2.00	89,000		
377	Access Control system	44,500	sf	1.00	44,500		
378	VOIP telephone system	44,500	sf	1.50	66,750		
379	SUBTOTAL					2,981,500	
TOTAL - ELECTRICAL							\$2,981,500

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

119000 MISCELLANEOUS EQUIPMENT

389	Allowance for miscellaneous equipment	44,500	gsf	1.00	44,500		
390	SUBTOTAL					44,500	
TOTAL - EQUIPMENT							\$44,500

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

400	Shades; allowance	3,833	sf	8.00	30,664		
402	123000 CASEWORK						
403	Wood casework w/ solid surface counters throughout	44,500	gsf	12.00	534,000		
404	SUBTOTAL					564,664	

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

408	SUBTOTAL						NIC
TOTAL - FURNISHINGS							\$564,664

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

416	SUBTOTAL						-
TOTAL - SPECIAL CONSTRUCTION							

F20 SELECTIVE BUILDING DEMOLITION



Clinton Middle School
Clinton, MA

31-May-23

PSR Submission Estimate

GFA

44,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

423
424
425
426
427
428
429
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F2010 BUILDING ELEMENTS DEMOLITION
SUBTOTAL

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F2020 HAZARDOUS COMPONENTS ABATEMENT
See main summary for HazMat allowance
SUBTOTAL

See Summary

TOTAL - SELECTIVE BUILDING DEMOLITION							
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TRADE SUBTOTAL

\$20,649,135



PSR Submission Estimate

GFA 99,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 70,000
Second Floor 29,000

TOTAL GROSS FLOOR AREA (GFA)						99,000	sf
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A1010 STANDARD FOUNDATIONS

Shear wall footings to resist current seismic loads - allow	250	lf	500.00	125,000
New foundations to cap existing building and to allow for new additions to be built separate from the existing building	360	lf	500.00	180,000
Foundation system to support reconfigured media center	190	lf	1,000.00	190,000
New concrete strip footing at replacement CMU walls - 30% allowance	1,650	lf	175.00	288,750

SUBTOTAL 783,750

A1020 SPECIAL FOUNDATIONS

No work required per Engineer's report				
SUBTOTAL				-

A1030 LOWEST FLOOR CONSTRUCTION

033000 CONCRETE

Remove and replace slab on grade as necessary to accommodate new fixtures and fittings/ ADA upgrades to ramps/ space reconfigurations/ shear walls etc.	20,000	sf	15.00	300,000
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SUBTOTAL 300,000

TOTAL - FOUNDATIONS						\$1,083,750
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

No Work in this section				
SUBTOTAL				-

A2020 BASEMENT WALLS

No Work in this section				
SUBTOTAL				-

TOTAL - BASEMENT CONSTRUCTION						
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B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Allowance for reframing at media center open to above	2,000	sf	150.00	300,000
Allowance for structural modifications including redesigning lateral force-resisting to resist current seismic loads	99,000	gsf	8.00	792,000

SUBTOTAL 1,092,000

B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Allowance for reframing to accommodate enlarged media center including infilling roof framing back to existing column lines	2,000	sf	150.00	300,000
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PSR Submission Estimate

GFA 99,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

342	Allowance for supplemental support framing at new rooftop mechanical equipment - allowance (assume majority of new equipment can be placed on Addition)	70,000	sf	5.00	350,000		
343	SUBTOTAL					650,000	
TOTAL - SUPERSTRUCTURE							\$1,742,000

B20 EXTERIOR CLOSURE

349	B2010 EXTERIOR WALLS	25,703	sf	Total Exterior Closure			
350	<i>040001 MASONRY</i>						
353	Selectively repoint masonry at exterior walls as required						NR
354	Provide engineered concrete repairs at broken exterior header/ sill elements						NR
355	Allowance to infill openings with masonry including backup at removed unit ventilator louvers	24	loc	1,500.00	36,000		
356	Exterior metal, fiber cement or thin brick wall panel rainscreen on furring at ETR masonry wall	25,703	sf	80.00	2,056,240		
357	<i>055000 MISCELLANOUS METALS</i>						
359	Prepare and repaint steel lintels, plates and other exterior metal items	25,703	sf	1.00	25,703		
360	<i>070001 WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
362	Liquid applied vapor barrier @ etr masonry walls	25,703	sf	7.50	192,773		
363	Air barrier/flashing at openings	2,268	lf	7.50	17,010		
364	Rake out existing masonry control joints; provide new backer rod and joint sealant - allow	25,703	sf	1.50	38,555		
365	<i>072100 THERMAL INSULATION</i>						
367	3" Rigid insulation	25,703	sf	4.00	102,812		
368	<i>074213 WALL PANELS</i>						
370	<i>092900 GYPSUM BOARD ASSEMBLIES</i>						
372	<i>101400 SIGNAGE</i>						
374	New signage	1	ls	15,000.00	15,000		
375	SUBTOTAL						2,484,093
376	B2020 WINDOWS	4,536	sf				
377	<i>092900 GYPSUM BOARD ASSEMBLIES</i>						
380	Wood blocking at openings	2,268	lf	14.00	31,752		
381	<i>079200 JOINT SEALANTS</i>						
383	Backer rod & double sealant	2,268	lf	10.00	22,680		
384	<i>080001 METAL WINDOWS</i>						
386	Replace all existing windows, storefront and curtainwall, double glazed - 15%	4,536	sf	150.00	680,400		
387	Greenhouse glazing						demolished in this option
388	<i>089100 LOUVERS</i>						
390	Louvers						N/A
391	SUBTOTAL						734,832
392	B2030 EXTERIOR DOORS						
393	Exterior door replacement allowance	99,000	gsf	1.50	148,500		
395	SUBTOTAL						148,500
TOTAL - EXTERIOR CLOSURE							\$3,367,425



PSR Submission Estimate

GFA 99,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

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B30 ROOFING

B3010 ROOF COVERINGS

Replace w/ new adhered PVC roofing includes edge coping, blocking, flashings and roof accessories etc. (assumes removal of existing included w/ haz mat) **68,000** sf 36.00 2,448,000

SUBTOTAL 2,448,000

B3020 ROOF OPENINGS

Skylight infills at Media center **2,000** sf 200.00 400,000

Allowance to replace roof hatches, ladders etc. **1** ls 30,000.00 30,000

SUBTOTAL 430,000

TOTAL - ROOFING \$2,878,000

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Modify interior CMU/GWB walls, glazed partitions + BL's, operable walls etc. to accommodate code upgrades and reconfigured spaces - kitchen and gymnasium layouts to remain. **99,000** gsf 35.00 3,465,000

Seismic clips at the top of interior masonry walls - allow @ 32" oc **99,000** gsf 4.00 396,000
SUBTOTAL 3,861,000

C1020 INTERIOR DOORS

New doors and hardware throughout **99,000** gsf 7.00 693,000
SUBTOTAL 693,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals complete including ceiling grid supports **99,000** gsf 2.50 247,500

064100 FINISH CARPENTRY

New millwork throughout **99,000** gsf 4.00 396,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building **99,000** gsf 1.00 99,000

101100 VISUAL DISPLAY SURFACES

Marker boards/TB complete **99,000** gsf 1.60 158,400

101400 SIGNAGE

New interior signage **99,000** gsf 0.80 79,200

102110 TOILET COMPARTMENTS + ACCESSORIES

New toilet partitions/bathroom accessories **99,000** gsf 1.00 99,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets **1** ls 7,500.00 7,500

AED cabinets **1** ls 1,500.00 1,500

105113 LOCKERS

New corridor and locker room lockers throughout **99,000** gsf 1.50 148,500

SUBTOTAL 1,236,600

TOTAL - INTERIOR CONSTRUCTION \$5,790,600

C20 STAIRCASES

C2010 STAIR CONSTRUCTION



PSR Submission Estimate

GFA 99,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

462								
463	New stairs; complete	4	flt	45,000.00	180,000			
464	New ramp guardrails and handrails to meet ADA requirements - allowance	1	ls	20,000.00	20,000			
465	SUBTOTAL					200,000		
466								
467	C2020 STAIR FINISHES							
468	New finishes at stairs	4	flt	5,000.00	20,000			
469	SUBTOTAL					20,000		
470								
471	TOTAL - STAIRCASES							\$220,000

C30 INTERIOR FINISHES

474								
475								
476	C3010 WALL FINISHES							
477	Prep and paint all etr and new interior walls	99,000	gsf	3.00	297,000			
478	New tile in bathrooms and shower rooms	8,600	sf	36.00	309,600			
479	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	99,000	sf	1.50	148,500			
480								
481	SUBTOTAL					755,100		
482								
483	C3020 FLOOR FINISHES							
484	Allowance for leveler at new floor finishes	87,600	sf	3.00	262,800			
485	Replace finishes throughout with VCT flooring and resilient base	74,850	sf	5.00	374,250			
486	Premium for carpet in Media center etc. including resilient base	5,000	sf	1.50	7,500			
487	Premium for tile in bathrooms	4,000	sf	35.00	140,000			
488	Gymnasium flooring	9,000	sf		assume ETR			
489	Quarry tile in kitchen & support spaces	2,400	sf		assume ETR			
490	Concrete sealer in Mech/ Elec/ Boiler spaces	3,500	sf		assume ETR			
491	Entry mats - walk-off mats	250	sf	20.00	5,000			
492	Allowance to clean etr floors	14,900	sf	2.00	29,800			
493	SUBTOTAL					819,350		
494								
495	C3030 CEILING FINISHES							
496	ACT ceiling replacement throughout	83,200	sf	7.00	582,400			
497	Premium for healthzone or similar ACT in kitchen and bathrooms	6,400	sf	2.00	12,800			
498	Gymnasium, Cafetorium and Platform - paint exposed deck	15,800	sf	3.50	55,300			
499	Allowance for prep and paint etr gwb ceilings and soffits	99,000	gsf	2.00	198,000			
500	SUBTOTAL					848,500		
501								
502	TOTAL - INTERIOR FINISHES							\$2,422,950

D10 CONVEYING SYSTEMS

504								
505								
506	D1010 ELEVATOR							
507								
508	D1010 ELEVATOR							
509	142000 ELEVATOR							
510	New 2-stop elevator	1	ea	180,000.00	180,000			
511	New platform lift from Cafeteria to Stage level	1	ea	50,000.00	50,000			
512	SUBTOTAL					230,000		
513								
514	TOTAL - CONVEYING SYSTEMS							\$230,000

D20 PLUMBING

516							
517							
518	D20 PLUMBING, GENERALLY						
519	RENOVATION: Plumbing system complete; replace each system, fixtures & all equipment including domestic water, AG sanitary W&V and AG storm	99,000	gsf	27.00	2,673,000		
520	Demolition; cut & cap, make safe, removal by others	99,000	gsf	0.70	69,300		
521							
522							



PSR Submission Estimate

GFA 99,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

523	SUBTOTAL					2,742,300	
524	TOTAL - PLUMBING						\$2,742,300

D30 HVAC

528	D30 HVAC, GENERALLY						
529	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	99,000	gsf	93.00	9,207,000		
530	Demolition; cut & cap existing HVAC; removal by others	99,000	gsf	1.25	123,750		
531	SUBTOTAL					9,330,750	
532	TOTAL - HVAC						\$9,330,750

D40 FIRE PROTECTION

537	D40 FIRE PROTECTION, GENERALLY						
538	Fire protection complete system	99,000	gsf	8.50	841,500		
539	Demolition	99,000	gsf	0.65	64,350		
540	SUBTOTAL					905,850	
541	TOTAL - FIRE PROTECTION						\$905,850

D50 ELECTRICAL

542	Electrical system incl demo, normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems and master clock/PA	99,000	gsf	62.00	6,138,000		
543	AV sound system and projection at Gym/Café	1	ls	200,000.00	200,000		
544	Network switches	99,000	sf	1.50	148,500		
545	Wi-Fi equipment	99,000	sf	1.00	99,000		
546	Video Surveillance system	99,000	sf	2.00	198,000		
547	Access Control system	99,000	sf	1.00	99,000		
548	VOIP telephone system	99,000	sf	1.50	148,500		
549	SUBTOTAL					7,031,000	
550	TOTAL - ELECTRICAL						\$7,031,000

E10 EQUIPMENT

551	E10 EQUIPMENT, GENERALLY						
552	114000 FOODSERVICE EQUIPMENT						
553	Kitchen equipment - allowance for replacement of wood work surfaces and shelving to stainless steel. Replace exhaust ventilators and interior grease traps w/ stainless steel. Replace two hoods. New serving line equipment. Tray & pot washing area upgrades	1	ls	640,000.00	640,000		
554	116200 THEATRE EQUIPMENT						
555	New curtain and rigging allowance in Cafetorium	1	ls	30,000.00	30,000		
556	New portable risers in Band room	1	ls	24,375.00	24,375		
557	116600 ATHLETIC EQUIPMENT						
558	Gym safety wall pads	2,145	sf	20.00	42,900		
559	Replace operable partitions in Gymnasium	2	ea	35,000.00	70,000		



PSR Submission Estimate

GFA 99,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

292	Replace basketball backstops	8	ea	10,000.00	80,000		
293	Volley ball standards and inserts	1	ls	5,000.00	5,000		
294	Score board - allow	1	ea	20,000.00	20,000		
295	New telescopic bleachers - seating capacity 650	1	ls	130,000.00	130,000		
296							
297	119000 MISCELLANEOUS EQUIPMENT						
298	Allowance to replace projection screens, residential appliances science room equipment, kiln etc.	99,000	gsf	0.50	49,500		
299	SUBTOTAL					1,091,775	

TOTAL - EQUIPMENT							\$1,091,775
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

307							
308	122100 WINDOW TREATMENT						
309	Window treatment replacements - allowance	1	ls	40,000.00	40,000		
310							
311	123000 CASEWORK						
312	New casework throughout	99,000	gsf	12.00	1,188,000		
313	SUBTOTAL					1,228,000	

E2020 MOVABLE FURNISHINGS

316	All movable furnishings to be provided and installed by owner						
317	SUBTOTAL					NIC	

TOTAL - FURNISHINGS							\$1,228,000
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

325	SUBTOTAL					-	
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TOTAL - SPECIAL CONSTRUCTION							
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F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

332							
333	Demo and remove existing floor slab	20,000	sf	8.00	160,000		
334	Demo and remove existing courtyard finishes	1,700	sf	8.00	13,600		
335	Allowance for heavy equipment access into Courtyard - selective demolition of floor and roof framing between two column lines to create an equipment corridor	1	ls	250,000.00	250,000		
336	Demo and remove upper floor for new Media center open to above, including shoring	2,000	sf	30.00	60,000		
337	Remove exterior windows and storefront	4,536	sf	8.00	36,288		
338	Demo and remove exterior wall at connection to new additions, shore	4,560	sf	15.00	68,400		
339	Demo and remove interior floor finishes, ceilings and wall finishes etc.	99,000	gsf	4.00	396,000		
340	Misc. selective interior demolition as req'd, partitions, specialties, furnishings, door hardware etc. - allowance	99,000	gsf	10.00	990,000		
341	Selective interior MEP demolition including removal of cut & capped MEP equipment & fixtures	99,000	gsf	4.00	396,000		
342	Demolish existing greenhouse	594	gsf	15.00	8,910		
343	SUBTOTAL					2,379,198	



Clinton Middle School
Clinton, MA

30-May-23

PSR Submission Estimate

GFA 99,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

345
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F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION							\$2,379,198
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TRADE SUBTOTAL

\$42,443,598



CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	22,000
Second Floor	16,000

TOTAL GROSS FLOOR AREA (GFA)	38,000 sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	45	CY	\$853	/cy
Foundation Walls	103	CY	\$1,275	/cy
Spread Footings	150	CY	\$775	/cy
Grade beams	23	CY	\$1,318	/cy
Piers	18	CY	\$1,937	/cy

Total Foundation Concrete 339 CY

Strip footing, typical: 2'-4" x 12"

Formwork	1,000	sf	16.00	16,000
Re-bar	5,000	lbs.	2.00	10,000
Concrete material	45	cy	155.00	6,975
Placing concrete	45	cy	120.00	5,400

Foundation wall; 16" thick

Formwork	4,000	sf	20.00	80,000
Re-bar	9,000	lbs.	2.00	18,000
Concrete material	103	cy	155.00	15,965
Placing concrete	103	cy	120.00	12,360
Form shelf	500	lf	10.00	5,000

Exterior spread footings, typical: 7'-0" x 7'-0" x 22"

Formwork	871	sf	18.00	15,678
Re-bar	8,075	lbs.	2.00	16,150
Concrete material	59	cy	155.00	9,145
Placing concrete	59	cy	120.00	7,080
Set anchor bolts grout plates	17	ea	150.00	2,550

Interior spread footings, typical: 9'-6" x 9'-6" x 26"

Formwork	988	sf	18.00	17,784
Re-bar	10,500	lbs.	2.00	21,000
Concrete material	91	cy	155.00	14,105
Placing concrete	91	cy	120.00	10,920
Set anchor bolts grout plates	12	ea	150.00	1,800

Grade beams at braced frames, allow

Formwork	600	sf	15.00	9,000
Re-bar	7,500	lbs.	2.00	15,000
Concrete material	23	cy	155.00	3,565
Placing concrete	23	cy	120.00	2,760

Piers/Pilasters

Formwork	974	sf	20.00	19,480
Re-bar	5,220	lbs.	2.00	10,440
Concrete material	18	cy	155.00	2,790
Placing concrete	18	cy	120.00	2,160

Miscellaneous

Elevator pit NR

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Trowelled-on bituminous mastic dam proofing at foundation walls	2,000	sf	4.00	8,000
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072100 THERMAL INSULATION

2" Insulation at foundation walls	2,000	sf	3.00	6,000
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312000 EARTHWORK

Strip footings/Fdn wall



PSR Submission Estimate

GFA 38,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

54	Excavation	333	cy	10.00	3,330		
55	Remove off-site	333	cy	32.00	10,656		
56	Backfill with imported material	288	cy	48.00	13,824		
57	<u>Spread footings/Grade beams</u>						
58	Excavation	521	cy	10.00	5,210		
59	Remove off-site	521	cy	32.00	16,672		
60	Backfill with imported material	348	cy	48.00	16,704		
61	<u>Building</u>						
62	Cut; assumed 2 feet	1,630	cy	15.00	24,450		
63	Fill - granular fill pad; allow 2 feet	1,630	cy	48.00	78,240		
64	<u>Miscellaneous</u>						
65	Gravel fill beneath footings, 12"	125	cy	40.00	5,000		
66	Perimeter drain	500	lf	30.00	15,000		
67	Temporary dewatering for foundation work	1	ls	20,000.00	20,000		
68	SUBTOTAL					574,193	

A1020 SPECIAL FOUNDATIONS

71	Allowance for rammed aggregate piers				Assumed NR		
72	SUBTOTAL					-	

A1030 LOWEST FLOOR CONSTRUCTION

76	<i>033000 CONCRETE</i>						
77	<u>Slab on grade</u>						
78	Vapor barrier at slab on grade	22,000	sf				
79	WWF reinforcement	25,300	sf	1.25	27,500		
80	Concrete - 6" thick	428	cy	155.00	66,340		
81	Barrier One Admixture	428	cy		Assumed Not Required		
82	Placing concrete	428	cy	90.00	38,520		
83	Finishing and curing concrete	22,000	sf	3.00	66,000		
84	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	5,000.00	5,000		
85	<u>Miscellaneous</u>						
86	Equipment pads	1	ls	10,000.00	10,000		
87	Radon system	22,000	sf	3.00	66,000		
88	<i>072100 THERMAL INSULATION</i>						
89	<u>Slab insulation, 2" thick; 2' @ perimeter only</u>						
90		2,000	sf	2.50	5,000		
92	<i>312000 EARTHWORK</i>						
92	Improve soils/ground improvement allowance	22,000	sf	8.00	176,000		
93	<u>Building</u>						
94	Gravel base, 12"	815	cy	48.00	39,120		
95	Compact existing sub-grade	22,000	sf	1.00	22,000		
96	Under slab E&B for plumbing	22,000	sf	1.50	33,000		
97	SUBTOTAL					600,020	

TOTAL - FOUNDATIONS						\$1,174,213
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

105	No Work in this section						
106	SUBTOTAL					-	

A2020 BASEMENT WALLS

109	No Work in this section						
110	SUBTOTAL					-	

TOTAL - BASEMENT CONSTRUCTION						
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

14.5 lbs/sf
276 tns excluding roof screens and canopies
\$6,686 \$/Ton

033000 CONCRETE

WWF reinforcement	18,400	sf	1.80	33,120
Concrete fill to metal deck; 3-1/2" normal weight, total thickness 5 1/2"	285	cy	160.00	45,600
Place and finish concrete	16,000	sf	3.50	56,000
Rebar to decks	4,800	lbs	2.00	9,600

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf	116	tns	5,500.00	638,000
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	4,000	ea	3.50	14,000
2" metal floor deck	16,000	sf	6.50	104,000
Allowance for expansion joint	1	ls	10,000.00	10,000

078100 FIREPROOFING/FIRESTOPPING

Fire proofing to columns and beams	16,000	sf	2.75	44,000
Intumescent allowance	1	ls	35,000.00	35,000

SUBTOTAL 989,320

B1020 ROOF CONSTRUCTION

033000 CONCRETE

Allowance at mechanical equipment/low roof

Concrete fill to metal roof deck	5,000	sf	10.00	50,000
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051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf at typical roof	160	tns	5,500.00	880,000
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	5,500	ea	3.50	19,250
1-1/2" metal floor deck at typical roof	22,000	sf	6.00	132,000
HSS support framing at roof screen @ 110 lbs/lf	10	tns	5,800.00	58,000
Steel framing at canopies @ 20 lbs/sf		tns	5,800.00	

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to roof deck and structure				NR
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SUBTOTAL 1,139,250

TOTAL - SUPERSTRUCTURE						\$2,128,570
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B20 EXTERIOR CLOSURE

15,330 sf

B2010 EXTERIOR WALLS

15,330 sf Total Exterior Closure

040001 MASONRY

Brick veneer; 40%	6,132	sf	44.00	269,808
Precast trim	6,132	sf	2.00	12,264
Staging/Lifts to exterior wall				Included

055000 MISCELLANEOUS METALS

Miscellaneous metals to exterior; lintels, angles etc.	6,132	sf	1.00	6,132
Relieving angles				assume included in lbs/sf tns



PSR Submission Estimate

GFA 38,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

175	070001	WATERPROOFING, DAMPPROOFING AND CAULKING					
176		Air barrier	12,264	sf	8.80	107,923	
177		Air barrier/flashing at windows	1,022	lf	6.25	6,388	
178		Air barrier @ overhangs/soffits		sf	8.50		
179		Miscellaneous sealants to closure	12,264	sf	0.50	6,132	
180							
181	072100	THERMAL INSULATION					
182		3" Rigid insulation	12,264	sf	4.00	49,056	
183		Spray insulation; 2" typical	12,264	sf	3.00	36,792	
184		3" Rigid insulation @ overhangs/soffits		sf	4.00		
185		Insulation at window openings	1,022	lf	6.00	6,132	
186							
187	074213	WALL PANELS					
188		Alucobond metal panels: 40%	6,132	sf	90.00	551,880	
189		Prefinished aluminum panels at roof overhang soffits		sf	90.00		
190		Pre-finished metal fascia, assume 12" wide	500	lf	90.00	45,000	
191		Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750	
192							
193	092900	GYPSUM BOARD ASSEMBLIES					
194		Framing at soffits		sf	18.00		
195		8" metal stud backup, typical	12,264	sf	14.00	171,696	
196		Gypsum Sheathing	12,264	sf	3.50	42,924	
197		Drywall lining to interior face of stud backup	12,264	sf	4.00	49,056	
198							
199	101400	SIGNAGE					
200		Signage	1	ls	10,000.00	10,000	
201		SUBTOTAL					1,484,933
202							
203	B2020	WINDOWS; 20% glazed	3,066	sf			
204							
205	092900	GYPSUM BOARD ASSEMBLIES					
206		Wood blocking at openings	1,022	lf	14.00	14,308	
207							
208	079200	JOINT SEALANTS					
209		Backer rod & double sealant	1,022	lf	10.00	10,220	
210							
211	080001	METAL WINDOWS					
212		Aluminum windows/CW/Storefront; double glazed	3,066	sf	145.00	444,570	
213		Sun control at south facing classrooms - allow	250	lf	250.00	62,500	
214		Premium for 3M security film @ first floor	400	sf	40.00	16,000	
215		Premium for triple glazing				Excluded	
216							
217	089100	LOUVERS					
218		Louvers - allowance	100	sf	85.00	8,500	
219		SUBTOTAL					556,098
220							
221	B2030	EXTERIOR DOORS					
222		Exterior door allowance	38,000	gsf	1.50	57,000	
223		SUBTOTAL					57,000
224							
225							
226		TOTAL - EXTERIOR CLOSURE					\$2,098,031
227							
228							
229	B30	ROOFING					
230							
231	B3010	ROOF COVERINGS					
232		PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	22,000	sf	32.00	704,000	
233		Pre-finished metal coping	500	lf	50.00	25,000	
234		Canopy roof system		sf	32.00		
235		Allowance for roof hatches, ladders, walkway pads etc.	1	ls	30,000.00	30,000	
236							



PSR Submission Estimate

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

237 SUBTOTAL 759,000

B3020 ROOF OPENINGS

No items in this section

241 SUBTOTAL -

TOTAL - ROOFING

\$759,000

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

249 Interior partitions; gwb/ metal stud partitions including premium for **38,000** sf 37.00 1,406,000
250 CMU in Stairs, Gym and kitchen and allowance for glazed partitions throughout. Abuse resistant board at select areas.

251 SUBTOTAL 1,406,000

C1020 INTERIOR DOORS

254 Interior doors; complete **38,000** gsf 7.00 266,000

256 SUBTOTAL 266,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

261 Miscellaneous metals complete including ceiling grid supports **38,000** gsf 2.50 95,000

064100 FINISH CARPENTRY

264 Millwork allowance **38,000** gsf 4.00 152,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

267 Miscellaneous sealants throughout building **38,000** gsf 1.00 38,000

101100 VISUAL DISPLAY SURFACES

270 Marker boards/TB/ Flagpoles complete **38,000** gsf 1.60 60,800

271 Interactive White Board projectors FF&E

101400 SIGNAGE

274 Signage; complete package **38,000** gsf 0.80 30,400

102110 TOILET COMPARTMENTS + ACCESSORIES

277 Toilet partitions/bathroom accessories **38,000** gsf 1.00 38,000

104400 FIRE PROTECTION SPECIALTIES

280 Fire extinguisher cabinets **1** ls 10,000.00 10,000

281 AED cabinets **1** ls 1,500.00 1,500

105113 LOCKERS

284 Student lockers/ cubbies, kitchen lockers etc. **38,000** gsf 1.50 57,000

285 SUBTOTAL 482,700

TOTAL - INTERIOR CONSTRUCTION

\$2,154,700

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

294 New stairs; complete **1** flt 45,000.00 45,000

295 SUBTOTAL 45,000

C2020 STAIR FINISHES

299 Finishes complete **1** flt 5,000.00 5,000

300 SUBTOTAL 5,000

TOTAL - STAIRCASES

\$50,000



PSR Submission Estimate

GFA 38,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

304	C30 INTERIOR FINISHES						
305	C3010 WALL FINISHES						
306							
307	Paint to walls	38,000	gsf	2.50	95,000		
308	CT to toilet walls	4,000	sf	32.00	128,000		
309	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	38,000	gsf	2.00	76,000		
310	SUBTOTAL					299,000	
311							
312							
313							
314	C3020 FLOOR FINISHES						
315	VCT/ Carpet flooring	33,650	sf	6.00	201,900		
316	Ceramic tile in toilets	2,350	sf	40.00	94,000		
317	Sealed concrete in BOH	2,000	sf	2.50	5,000		
318	Entry mats - walk-off mats		sf	20.00			
319	Allowances for bases throughout	1	ls	30,090.00	30,090		
320	SUBTOTAL					330,990	
321							
322							
323	C3030 CEILING FINISHES						
324	Armstrong ACT Ultima, typical, 2x2	33,750	sf	7.00	236,250		
325	Armstrong ACT Health Zone ceilings in toilets, 2x2	2,350	sf	9.00	21,150		
326	Armstrong wood acoustic panels Woodworks - allowance		sf	55.00			
327	Miscellaneous soffits/GWB	38,000	gsf	3.00	114,000		
328	SUBTOTAL					371,400	
329							
330							
331	TOTAL - INTERIOR FINISHES						\$1,001,390
332							
333							
334	D10 CONVEYING SYSTEMS						
335							
336	D1010 ELEVATOR					W/ RENOVATION	
337	SUBTOTAL					-	
338							
339	TOTAL - CONVEYING SYSTEMS						
340							
341							
342	D20 PLUMBING						
343							
344	D20 PLUMBING, GENERALLY						
345	ADDITION: Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm & natural gas piping.	38,000	gsf	27.00	1,026,000		
346	SUBTOTAL					1,026,000	
347							
348	TOTAL - PLUMBING						\$1,026,000
349							
350							
351	D30 HVAC						
352							
353	D30 HVAC, GENERALLY						
354	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	38,000	gsf	93.00	3,534,000		
355	SUBTOTAL					3,534,000	
356							
357	TOTAL - HVAC						\$3,534,000
358							
359							
360	D40 FIRE PROTECTION						
361							
362	D40 FIRE PROTECTION, GENERALLY						
363	Fire protection complete system	38,000	gsf	8.50	323,000		



PSR Submission Estimate

GFA 38,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

364	SUBTOTAL						323,000	
365	TOTAL - FIRE PROTECTION							\$323,000

D50 ELECTRICAL

371	D50 ELECTRICAL							
372	Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems and master clock/PA	38,000	gsf	60.00	2,280,000			
373	AV sound system and projection at Gym/Café	1	ls	200,000.00	See Reno			
374	Network switches	38,000	sf	1.50	57,000			
375	Wi-Fi equipment	38,000	sf	1.00	38,000			
376	Video Surveillance system	38,000	sf	2.00	76,000			
377	Access Control system	38,000	sf	1.00	38,000			
378	VOIP telephone system	38,000	sf	1.50	57,000			
379	SUBTOTAL					2,546,000		
380	TOTAL - ELECTRICAL							\$2,546,000

E10 EQUIPMENT

385	E10 EQUIPMENT, GENERALLY							
387	119000 MISCELLANEOUS EQUIPMENT							
388	Allowance for miscellaneous equipment	38,000	gsf	1.00	38,000			
389	SUBTOTAL					38,000		
390	TOTAL - EQUIPMENT							\$38,000

E20 FURNISHINGS

397	E2010 FIXED FURNISHINGS							
398	122100 WINDOW TREATMENT							
399	Shades; allowance	3,066	sf	8.00	24,528			
400	123000 CASEWORK							
401	Wood casework w/ solid surface counters throughout	38,000	gsf	12.00	456,000			
402	SUBTOTAL					480,528		
403	E2020 MOVABLE FURNISHINGS							
404	All movable furnishings to be provided and installed by owner							
405	SUBTOTAL						NIC	
406	TOTAL - FURNISHINGS							\$480,528

F10 SPECIAL CONSTRUCTION

414	F10 SPECIAL CONSTRUCTION							
415	SUBTOTAL							
416	TOTAL - SPECIAL CONSTRUCTION							



PSR Submission Estimate

GFA

38,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: ADDITION 550 STUDENTS

421
422
423
424
425
426
427
428
429
430

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION
SUBTOTAL

-

F2020 HAZARDOUS COMPONENTS ABATEMENT
See main summary for HazMat allowance
SUBTOTAL

See Summary

TOTAL - SELECTIVE BUILDING DEMOLITION

TRADE SUBTOTAL

\$17,313,432



PSR Submission Estimate

GFA 112,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 77,000
Second Floor 35,000

TOTAL GROSS FLOOR AREA (GFA)					112,000	sf
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A1010 STANDARD FOUNDATIONS

2	Shear wall footings to resist current seismic loads - allow	250	lf	500.00	125,000	
3	New foundations to cap existing building and to allow for new additions to be built separate from the existing building	100	lf	500.00	50,000	
4	Foundation system to support reconfigured media center	190	lf	1,000.00	190,000	
5	New concrete strip footing at replacement CMU walls - 30% allowance	1,650	lf	175.00	288,750	
6	SUBTOTAL					653,750

A1020 SPECIAL FOUNDATIONS

9	No work required per Engineer's report					
10	SUBTOTAL					-

A1030 LOWEST FLOOR CONSTRUCTION

14	033000 CONCRETE					
15	Remove and replace slab on grade as necessary to accommodate new fixtures and fittings/ ADA upgrades to ramps/ space reconfigurations/ shear walls etc.	20,000	sf	15.00	300,000	
16	SUBTOTAL					300,000

TOTAL - FOUNDATIONS					\$953,750
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

22	No Work in this section					
23	SUBTOTAL					-

A2020 BASEMENT WALLS

26	No Work in this section					
27	SUBTOTAL					-

TOTAL - BASEMENT CONSTRUCTION					
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B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

36	051200 STRUCTURAL STEEL FRAMING					
37	Allowance for reframing at media center open to above	2,000	sf	150.00	300,000	
38	Allowance for structural modifications including redesigning lateral force-resisting to resist current seismic loads	112,000	gsf	8.00	896,000	
337	SUBTOTAL					1,196,000

B1020 ROOF CONSTRUCTION

341	051200 STRUCTURAL STEEL FRAMING					
342	Allowance for reframing to accommodate enlarged media center including infilling roof framing back to existing column lines	2,000	sf	150.00	300,000	



PSR Submission Estimate

GFA 112,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

342	Allowance for supplemental support framing at new rooftop mechanical equipment - allowance (assume majority of new equipment can be placed on Addition)	77,000	sf	5.00	385,000		
343	SUBTOTAL					685,000	
TOTAL - SUPERSTRUCTURE							\$1,881,000

B20 EXTERIOR CLOSURE

349	B2010 EXTERIOR WALLS	28,939	sf	Total Exterior Closure			
350	040001 MASONRY						
353	Selectively repoint masonry at exterior walls as required						NR
354	Provide engineered concrete repairs at broken exterior header/ sill elements						NR
355	Allowance to infill openings with masonry including backup at removed unit ventilator louvers	24	loc	1,500.00	36,000		
356	Exterior metal, fiber cement or thin brick wall panel rainscreen on furring at ETR masonry wall	28,939	sf	80.00	2,315,120		
357	055000 MISCELLANOUS METALS						
359	Prepare and repaint steel lintels, plates and other exterior metal items	28,939	sf	1.00	28,939		
360	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
362	Liquid applied vapor barrier @ etr masonry walls	28,939	sf	7.50	217,043		
363	Air barrier/flashing at openings	2,554	lf	7.50	19,155		
364	Rake out existing masonry control joints; provide new backer rod and joint sealant - allow	28,939	sf	1.50	43,409		
365	072100 THERMAL INSULATION						
367	3" Rigid insulation	28,939	sf	4.00	115,756		
368	074213 WALL PANELS						
370	092900 GYPSUM BOARD ASSEMBLIES						
372	101400 SIGNAGE						
374	New signage	1	ls	15,000.00	15,000		
375	SUBTOTAL					2,790,422	
376	B2020 WINDOWS	5,107	sf				
377	092900 GYPSUM BOARD ASSEMBLIES						
380	Wood blocking at openings	2,554	lf	14.00	35,756		
381	079200 JOINT SEALANTS						
383	Backer rod & double sealant	2,554	lf	10.00	25,540		
384	080001 METAL WINDOWS						
386	Replace all existing windows, storefront and curtainwall, double glazed - 15%	5,107	sf	150.00	766,050		
387	Greenhouse glazing						demolished in this option
388	089100 LOUVERS						
390	Louvers						N/A
391	SUBTOTAL					827,346	
392	B2030 EXTERIOR DOORS						
393	Exterior door replacement allowance	112,000	gsf	1.50	168,000		
394	SUBTOTAL					168,000	
TOTAL - EXTERIOR CLOSURE							\$3,785,768



PSR Submission Estimate

GFA 112,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

B30 ROOFING

B3010 ROOF COVERINGS

Replace w/ new adhered PVC roofing includes edge coping, blocking, flashings and roof accessories etc. (assumes removal of existing included w/ haz mat)	75,000	sf	36.00	2,700,000	
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SUBTOTAL					2,700,000
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B3020 ROOF OPENINGS

Skylight infills at Media center	2,000	sf	200.00	400,000	
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Allowance to replace roof hatches, ladders etc.	1	ls	30,000.00	30,000	
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SUBTOTAL					430,000
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TOTAL - ROOFING	\$3,130,000
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Modify interior CMU/GWB walls, glazed partitions + BL's, operable walls etc. to accommodate code upgrades and reconfigured spaces - kitchen and gymnasium layouts to remain.	112,000	gsf	35.00	3,920,000	
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Seismic clips at the top of interior masonry walls - allow @ 32" oc	112,000	gsf	4.00	448,000	
SUBTOTAL					4,368,000

C1020 INTERIOR DOORS

New doors and hardware throughout	112,000	gsf	7.00	784,000	
SUBTOTAL					784,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals complete including ceiling grid supports	112,000	gsf	2.50	280,000	
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064100 FINISH CARPENTRY

New millwork throughout	112,000	gsf	4.00	448,000	
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building	112,000	gsf	1.00	112,000	
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101100 VISUAL DISPLAY SURFACES

Marker boards/TB complete	112,000	gsf	1.60	179,200	
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101400 SIGNAGE

New interior signage	112,000	gsf	0.80	89,600	
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102110 TOILET COMPARTMENTS + ACCESSORIES

New toilet partitions/bathroom accessories	112,000	gsf	1.00	112,000	
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104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets	1	ls	7,500.00	7,500	
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AED cabinets	1	ls	1,500.00	1,500	
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105113 LOCKERS

New corridor and locker room lockers throughout	112,000	gsf	1.50	168,000	
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SUBTOTAL					1,397,800
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TOTAL - INTERIOR CONSTRUCTION	\$6,549,800
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION



PSR Submission Estimate

GFA 112,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

462								
463	New stairs; complete	4	flt	45,000.00	180,000			
464	New ramp guardrails and handrails to meet ADA requirements - allowance	1	ls	20,000.00	20,000			
465	SUBTOTAL					200,000		
466								
467	C2020 STAIR FINISHES							
468	New finishes at stairs	4	flt	5,000.00	20,000			
469	SUBTOTAL					20,000		
470								
471	TOTAL - STAIRCASES							\$220,000

C30 INTERIOR FINISHES

474								
475								
476	C3010 WALL FINISHES							
477	Prep and paint all etr and new interior walls	112,000	gsf	3.00	336,000			
478	New tile in bathrooms and shower rooms	8,600	sf	36.00	309,600			
479	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	112,000	sf	1.50	168,000			
480								
481	SUBTOTAL					813,600		
482								
483	C3020 FLOOR FINISHES							
484	Allowance for leveler at new floor finishes	100,600	sf	3.00	301,800			
485	Replace finishes throughout with VCT flooring and resilient base	82,350	sf	5.00	411,750			
486	Premium for carpet in Admin, Media center etc. including resilient base	10,000	sf	1.50	15,000			
487								
488	Premium for tile in bathrooms	4,000	sf	35.00	140,000			
489	Gymnasium flooring	9,000	sf		assume ETR			
490	Quarry tile in kitchen & support spaces	2,400	sf		assume ETR			
491	Concrete sealer in Mech/ Elec/ Boiler spaces	3,500	sf		assume ETR			
492	Entry mats - walk-off mats	750	sf	20.00	15,000			
493	Allowance to clean etr floors	14,900	sf	2.00	29,800			
494	SUBTOTAL					913,350		
495								
496	C3030 CEILING FINISHES							
497	ACT ceiling replacement throughout	96,200	sf	7.00	673,400			
498	Premium for healthzone or similar ACT in kitchen and bathrooms	6,400	sf	2.00	12,800			
499	Gymnasium, Cafetorium and Platform - paint exposed deck	15,800	sf	3.50	55,300			
500	Allowance for prep and paint etr gwb ceilings and soffits	112,000	gsf	2.00	224,000			
501								
502	SUBTOTAL					965,500		
503								
504	TOTAL - INTERIOR FINISHES							\$2,692,450

D10 CONVEYING SYSTEMS

507								
508								
509	D1010 ELEVATOR							
510								
511	142000 ELEVATOR							
512	New 2-stop elevator	1	ea	180,000.00	180,000			
513	New platform lift from Cafeteria to Stage level	1	ea	50,000.00	50,000			
514	SUBTOTAL					230,000		
515								
516	TOTAL - CONVEYING SYSTEMS							\$230,000

D20 PLUMBING

517							
518							
519	D20 PLUMBING, GENERALLY						
520							
521	RENOVATION: Plumbing system complete; replace each system, fixtures & all equipment including domestic water, AG sanitary W&V and AG storm	112,000	gsf	27.00	3,024,000		
522							



PSR Submission Estimate

GFA 112,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

523	Demolition; cut & cap, make safe, removal by others	112,000	gsf	0.70	78,400			
524								
525	SUBTOTAL					3,102,400		
526	TOTAL - PLUMBING						\$3,102,400	

D30 HVAC

528								
529								
530								
531	D30 HVAC, GENERALLY							
532	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	112,000	gsf	93.00	10,416,000			
533	Demolition; cut & cap existing HVAC; removal by others	112,000	gsf	1.25	140,000			
534	SUBTOTAL					10,556,000		
535	TOTAL - HVAC						\$10,556,000	
536								

D40 FIRE PROTECTION

537								
538								
539								
540	D40 FIRE PROTECTION, GENERALLY							
541	Fire protection complete system	112,000	gsf	8.50	952,000			
542	Demolition	112,000	gsf	0.65	72,800			
259	SUBTOTAL					1,024,800		
260								
261	TOTAL - FIRE PROTECTION						\$1,024,800	
262								

D50 ELECTRICAL

263								
264								
265								
266	Electrical system incl demo, normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems and master clock/PA	112,000	gsf	62.00	6,944,000			
267	AV sound system and projection at Gym/Café	1	ls	200,000.00	200,000			
268	Network switches	112,000	sf	1.50	168,000			
269	Wi-Fi equipment	112,000	sf	1.00	112,000			
270	Video Surveillance system	112,000	sf	2.00	224,000			
271	Access Control system	112,000	sf	1.00	112,000			
272	VOIP telephone system	112,000	sf	1.50	168,000			
273	SUBTOTAL					7,928,000		
274								
275	TOTAL - ELECTRICAL						\$7,928,000	
276								

E10 EQUIPMENT

277							
278							
279							
280	E10 EQUIPMENT, GENERALLY						
281							
282	114000 FOODSERVICE EQUIPMENT						
283	Kitchen equipment - allowance for replacement of wood work surfaces and shelving to stainless steel. Replace exhaust ventilators and interior grease traps w/ stainless steel. Replace two hoods. New serving line equipment. Tray & pot washing area upgrades	1	ls	640,000.00	640,000		
284							
285	116200 THEATRE EQUIPMENT						
286	New curtain and rigging allowance in Cafetorium	1	ls	30,000.00	30,000		
287	New portable risers in Band room	1	ls	24,375.00	24,375		
288							
289	116600 ATHLETIC EQUIPMENT						
290	Gym safety wall pads	2,145	sf	20.00	42,900		
291	Replace operable partitions in Gymnasium	2	ea	35,000.00	70,000		



PSR Submission Estimate

GFA 112,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

292	Replace basketball backstops	8	ea	10,000.00	80,000		
293	Volley ball standards and inserts	1	ls	5,000.00	5,000		
294	Score board - allow	1	ea	20,000.00	20,000		
295	New telescopic bleachers - seating capacity 650	1	ls	130,000.00	130,000		
296							
297	119000 MISCELLANEOUS EQUIPMENT						
298	Allowance to replace projection screens, residential appliances science room equipment, kiln etc.	112,000	gsf	0.50	56,000		
299	SUBTOTAL					1,098,275	

TOTAL - EQUIPMENT							\$1,098,275
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

307							
308	122100 WINDOW TREATMENT						
309	Window treatment replacements - allowance	1	ls	50,000.00	50,000		
310							
311	123000 CASEWORK						
312	New casework throughout	112,000	gsf	12.00	1,344,000		
313	SUBTOTAL					1,394,000	

E2020 MOVABLE FURNISHINGS

316	All movable furnishings to be provided and installed by owner						
317	SUBTOTAL					NIC	

TOTAL - FURNISHINGS							\$1,394,000
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

325	SUBTOTAL					-	
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TOTAL - SPECIAL CONSTRUCTION							
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F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

332							
333	Demo and remove existing floor slab	20,000	sf	8.00	160,000		
334	Demo and remove existing courtyard finishes	1,700	sf	8.00	13,600		
335	Allowance for heavy equipment access into Courtyard - selective demolition of floor and roof framing between two column lines to create an equipment corridor	1	ls	250,000.00	250,000		
336	Demo and remove upper floor for new Media center open to above, including shoring	2,000	sf	30.00	60,000		
337	Remove exterior windows and storefront	5,107	sf	8.00	40,856		
338	Demo and remove exterior wall at connection to new additions, shore	1,267	sf	15.00	19,005		
339	Demo and remove interior floor finishes, ceilings and wall finishes etc.	112,000	gsf	4.00	448,000		
340	Misc. selective interior demolition as req'd, partitions, specialties, furnishings, door hardware etc. - allowance	112,000	gsf	10.00	1,120,000		
341	Selective interior MEP demolition including removal of cut & capped MEP equipment & fixtures	112,000	gsf	4.00	448,000		
342	Demolish existing greenhouse	594	gsf	15.00	8,910		
343	SUBTOTAL					2,568,371	



Clinton Middle School
Clinton, MA

30-May-23

PSR Submission Estimate

GFA

112,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-1.5: RENOVATION 550 STUDENTS

345
346
347
348
349

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION							\$2,568,371
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TRADE SUBTOTAL

\$47,114,614



PSR Submission Estimate

GFA 54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 550 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 36,500
Second Floor 17,500

TOTAL GROSS FLOOR AREA (GFA)						54,000 sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	101	CY	\$852	/cy
Foundation Walls	232	CY	\$1,269	/cy
Spread Footings	357	CY	\$769	/cy
Grade beams	39	CY	\$1,301	/cy
Piers	42	CY	\$1,921	/cy

Total Foundation Concrete 771 CY

Strip footing, typical: 2'-4" x 12"

Formwork	2,240	sf	16.00	35,840
Re-bar	11,200	lbs.	2.00	22,400
Concrete material	101	cy	155.00	15,655
Placing concrete	101	cy	120.00	12,120

Foundation wall: 16" thick

Formwork	8,960	sf	20.00	179,200
Re-bar	20,160	lbs.	2.00	40,320
Concrete material	232	cy	155.00	35,960
Placing concrete	232	cy	120.00	27,840
Form shelf	1,120	lf	10.00	11,200

Exterior spread footings, typical: 7'-0" x 7'-0" x 22"

Formwork	1,896	sf	18.00	34,128
Re-bar	17,575	lbs.	2.00	35,150
Concrete material	129	cy	155.00	19,995
Placing concrete	129	cy	120.00	15,480
Set anchor bolts grout plates	37	ea	150.00	5,550

Interior spread footings, typical: 9'-6" x 9'-6" x 26"

Formwork	2,470	sf	18.00	44,460
Re-bar	26,250	lbs.	2.00	52,500
Concrete material	228	cy	155.00	35,340
Placing concrete	228	cy	120.00	27,360
Set anchor bolts grout plates	30	ea	150.00	4,500

Grade beams at braced frames, allow

Formwork	1,000	sf	15.00	15,000
Re-bar	12,500	lbs.	2.00	25,000
Concrete material	39	cy	155.00	6,045
Placing concrete	39	cy	120.00	4,680

Piers/Pilasters

Formwork	2,251	sf	20.00	45,020
Re-bar	12,060	lbs.	2.00	24,120
Concrete material	42	cy	155.00	6,510
Placing concrete	42	cy	120.00	5,040

Miscellaneous

Elevator pit NR

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Trowelled-on bituminous mastic dam proofing at foundation walls	4,480	sf	4.00	17,920
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072100 THERMAL INSULATION

2" Insulation at foundation walls	4,480	sf	3.00	13,440
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312000 EARTHWORK

Strip footings/Fdn wall

Excavation	747	cy	10.00	7,470
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PSR Submission Estimate

GFA 54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 550 STUDENTS

55	Remove off-site	747	cy	32.00	23,904		
56	Backfill with imported material	646	cy	48.00	31,008		
57	<u>Spread footings/Grade beams</u>						
58	Excavation	1,189	cy	10.00	11,890		
59	Remove off-site	1,189	cy	32.00	38,048		
60	Backfill with imported material	793	cy	48.00	38,064		
61	<u>Building</u>						
62	Cut; assumed 2 feet	2,704	cy	15.00	40,560		
63	Fill - granular fill pad; allow 2 feet	2,704	cy	48.00	129,792		
64	<u>Miscellaneous</u>						
65	Gravel fill beneath footings, 12"	283	cy	40.00	11,320		
66	Perimeter drain	1,120	lf	30.00	33,600		
67	Temporary dewatering for foundation work	1	ls	20,000.00	20,000		
68	SUBTOTAL						1,203,429

A1020 SPECIAL FOUNDATIONS

71	Allowance for rammed aggregate piers				Assumed NR		
72	SUBTOTAL						-

A1030 LOWEST FLOOR CONSTRUCTION

76	033000 CONCRETE						
77	<u>Slab on grade</u>	36,500	sf				
78	Vapor barrier at slab on grade	36,500	sf	1.25	45,625		
79	WWF reinforcement	41,975	sf	1.80	75,555		
80	Concrete - 6" thick	710	cy	155.00	110,050		
81	Barrier One Admixture	710	cy		Assumed Not Required		
82	Placing concrete	710	cy	90.00	63,900		
83	Finishing and curing concrete	36,500	sf	3.00	109,500		
84	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	5,000.00	5,000		
85	<u>Miscellaneous</u>						
86	Equipment pads	1	ls	10,000.00	10,000		
87	Radon system	36,500	sf	3.00	109,500		
89	072100 THERMAL INSULATION						
90	Slab insulation, 2" thick; 2' @ perimeter only	4,480	sf	2.50	11,200		
92	312000 EARTHWORK						
92	Improve soils/ground improvement allowance	36,500	sf	8.00	292,000		
93	<u>Building</u>						
94	Gravel base, 12"	1,352	cy	48.00	64,896		
95	Compact existing sub-grade	36,500	sf	1.00	36,500		
96	Under slab E&B for plumbing	36,500	sf	1.50	54,750		
97	SUBTOTAL						988,476

TOTAL - FOUNDATIONS	\$2,191,905
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

105	No Work in this section						
106	SUBTOTAL						-

A2020 BASEMENT WALLS

109	No Work in this section						
110	SUBTOTAL						-

TOTAL - BASEMENT CONSTRUCTION	
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PSR Submission Estimate

GFA 54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 550 STUDENTS

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

14.5 lbs/sf
392 tns excluding roof screens and canopies
\$7,017 \$/Ton

033000 CONCRETE

WWF reinforcement	20,125	sf	1.80	36,225
Concrete fill to metal deck; 3-1/2" normal weight, total thickness 5 1/2"	312	cy	160.00	49,920
Place and finish concrete	17,500	sf	3.50	61,250
Rebar to decks	5,250	lbs	2.00	10,500

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf	127	tns	5,500.00	698,500
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	4,375	ea	3.50	15,313
2" metal floor deck	17,500	sf	6.50	113,750
Allowance for expansion joint	1	ls	10,000.00	10,000

078100 FIREPROOFING/FIRESTOPPING

Fire proofing to columns and beams	17,500	sf	2.75	48,125
Intumescent allowance	1	ls	35,000.00	35,000

SUBTOTAL 1,078,583

B1020 ROOF CONSTRUCTION

033000 CONCRETE

Allowance at mechanical equipment/low roof

Concrete fill to metal roof deck	5,000	sf	10.00	50,000
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051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf at typical roof	265	tns	5,500.00	1,457,500
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	9,125	ea	3.50	31,938
1-1/2" metal floor deck at typical roof	36,500	sf	6.00	219,000
HSS support framing at roof screen @ 110 lbs/lf	10	tns	5,800.00	58,000
Steel framing at canopies @ 20 lbs/sf	27	tns	5,800.00	156,600

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to roof deck and structure				NR
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SUBTOTAL 1,973,038

TOTAL - SUPERSTRUCTURE \$3,051,621

B20 EXTERIOR CLOSURE

25,065 sf

B2010 EXTERIOR WALLS

25,065 sf Total Exterior Closure

040001 MASONRY

Brick veneer; 40%	10,026	sf	44.00	441,144
Precast trim	10,026	sf	2.00	20,052
Staging/Lifts to exterior wall				Included

055000 MISCELLANEOUS METALS

Miscellaneous metals to exterior; lintels, angles etc.	10,026	sf	1.00	10,026
Relieving angles				assume included in lbs/sf tns

070001 WATERPROOFING, DAMPPROOFING AND CAULKING



PSR Submission Estimate

GFA 54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST	
OPTION AR-2: ADDITION 550 STUDENTS								
176	Air barrier	20,052	sf	8.80	176,458			
177	Air barrier/flashing at windows	1,671	lf	6.25	10,444			
178	Air barrier @ overhangs/soffits	2,700	sf	8.50	22,950			
179	Miscellaneous sealants to closure	20,052	sf	0.50	10,026			
180								
181	072100 THERMAL INSULATION							
182	3" Rigid insulation	20,052	sf	4.00	80,208			
183	Spray insulation; 2" typical	20,052	sf	3.00	60,156			
184	3" Rigid insulation @ overhangs/soffits	2,700	sf	4.00	10,800			
185	Insulation at window openings	1,671	lf	6.00	10,026			
186								
187	074213 WALL PANELS							
188	Alucobond metal panels: 40%	10,026	sf	90.00	902,340			
189	Prefinished aluminum panels at roof overhang soffits	2,700	sf	90.00	243,000			
190	Pre-finished metal fascia, assume 12" wide	1,120	lf	90.00	100,800			
191	Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750			
192								
193	092900 GYPSUM BOARD ASSEMBLIES							
194	Framing at soffits	2,700	sf	18.00	48,600			
195	8" metal stud backup, typical	20,052	sf	14.00	280,728			
196	Gypsum Sheathing	20,052	sf	3.50	70,182			
197	Drywall lining to interior face of stud backup	20,052	sf	4.00	80,208			
198								
199	101400 SIGNAGE							
200	Signage	1	ls	10,000.00	10,000			
201	SUBTOTAL					2,701,898		
202								
203	B2020 WINDOWS; 20% glazed	5,013	sf					
204								
205	092900 GYPSUM BOARD ASSEMBLIES							
206	Wood blocking at openings	1,671	lf	14.00	23,394			
207								
208	079200 JOINT SEALANTS							
209	Backer rod & double sealant	1,671	lf	10.00	16,710			
210								
211	080001 METAL WINDOWS							
212	Aluminum windows/CW/Storefront; double glazed	5,013	sf	145.00	726,885			
213	Sun control at south facing classrooms - allow	350	lf	250.00	87,500			
214	Premium for 3M security film @ first floor	900	sf	40.00	36,000			
215	Premium for triple glazing				Excluded			
216								
217	089100 LOUVERS							
218	Louvers - allowance	100	sf	85.00	8,500			
219	SUBTOTAL					898,989		
220								
221	B2030 EXTERIOR DOORS							
222	Exterior door allowance	54,000	gsf	1.50	81,000			
223								
224	SUBTOTAL					81,000		
225								
226	TOTAL - EXTERIOR CLOSURE						\$3,681,887	
227								
228								
229	B30 ROOFING							
230								
231	B3010 ROOF COVERINGS							
232	PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	36,500	sf	32.00	1,168,000			
233								
234	Pre-finished metal coping	1,120	lf	50.00	56,000			
235	Canopy roof system	2,700	sf	32.00	86,400			
236	Allowance for roof hatches, ladders, walkway pads etc.	1	ls	30,000.00	30,000			
237	SUBTOTAL					1,340,400		



PSR Submission Estimate

GFA 54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 550 STUDENTS

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B3020 ROOF OPENINGS
No items in this section
SUBTOTAL

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TOTAL - ROOFING							\$1,340,400
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Interior partitions; gwb/ metal stud partitions including premium for CMU in Stairs, Gym and kitchen and allowance for glazed partitions throughout. Abuse resistant board at select areas.

54,000 sf 37.00 1,998,000

SUBTOTAL 1,998,000

C1020 INTERIOR DOORS

Interior doors; complete

54,000 gsf 7.00 378,000

SUBTOTAL 378,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals complete including ceiling grid supports

54,000 gsf 2.50 135,000

064100 FINISH CARPENTRY

Millwork allowance

54,000 gsf 4.00 216,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building

54,000 gsf 1.00 54,000

101100 VISUAL DISPLAY SURFACES

Marker boards/TB/ Flagpoles complete

54,000 gsf 1.60 86,400

Interactive White Board projectors FF&E

101400 SIGNAGE

Signage; complete package

54,000 gsf 0.80 43,200

102110 TOILET COMPARTMENTS + ACCESSORIES

Toilet partitions/bathroom accessories

54,000 gsf 1.00 54,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets

1 ls 10,000.00 10,000

AED cabinets

1 ls 1,500.00 1,500

105113 LOCKERS

Student lockers/ cubbies, kitchen lockers etc.

54,000 gsf 1.50 81,000

SUBTOTAL 681,100

TOTAL - INTERIOR CONSTRUCTION							\$3,057,100
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs; complete

1 flt 45,000.00 45,000

SUBTOTAL 45,000

C2020 STAIR FINISHES

Finishes complete

1 flt 5,000.00 5,000

SUBTOTAL 5,000

TOTAL - STAIRCASES							\$50,000
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PSR Submission Estimate

GFA 54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 550 STUDENTS

305	C30 INTERIOR FINISHES						
306							
307	C3010 WALL FINISHES						
308	Paint to walls	54,000	gsf	2.50	135,000		
309	CT to toilet walls	4,000	sf	32.00	128,000		
310	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	54,000	gsf	2.00	108,000		
311	SUBTOTAL					371,000	
312							
313							
314	C3020 FLOOR FINISHES						
315	VCT/ Carpet flooring	48,350	sf	5.00	241,750		
316	Ceramic tile in toilets	2,350	sf	40.00	94,000		
317	Sealed concrete in BOH	3,000	sf	2.50	7,500		
318	Entry mats - walk-off mats	300	sf	20.00	6,000		
319	Allowances for bases throughout	1	ls	34,925.00	34,925		
320	SUBTOTAL					384,175	
321							
322							
323	C3030 CEILING FINISHES						
324	Armstrong ACT Ultima, typical, 2x2	46,950	sf	7.00	328,650		
325	Armstrong ACT Health Zone ceilings in toilets, 2x2	2,350	sf	9.00	21,150		
326	Armstrong wood acoustic panels Woodworks - allowance	2,000	sf	55.00	110,000		
327	Miscellaneous soffits/GWB	54,000	gsf	3.00	162,000		
328	SUBTOTAL					621,800	
329							
330							
331	TOTAL - INTERIOR FINISHES						\$1,376,975
332							
333							
334	D10 CONVEYING SYSTEMS						
335							
336	D1010 ELEVATOR					W/ RENOVATION	
337	SUBTOTAL					-	
338							
339	TOTAL - CONVEYING SYSTEMS						
340							
341							
342	D20 PLUMBING						
343							
344	D20 PLUMBING, GENERALLY						
345	ADDITION: Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm, acid W&V & natural gas piping.	54,000	gsf	27.00	1,458,000		
346	SUBTOTAL					1,458,000	
347							
348	TOTAL - PLUMBING						\$1,458,000
349							
350							
351	D30 HVAC						
352							
353	D30 HVAC, GENERALLY						
354	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	54,000	gsf	93.00	5,022,000		
355	SUBTOTAL					5,022,000	
356							
357	TOTAL - HVAC						\$5,022,000
358							
359							
360	D40 FIRE PROTECTION						
361							
362	D40 FIRE PROTECTION, GENERALLY						



PSR Submission Estimate

GFA 54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 550 STUDENTS

363	Fire protection complete system	54,000	gsf	8.50	459,000			
364	SUBTOTAL					459,000		
365	TOTAL - FIRE PROTECTION							\$459,000

D50 ELECTRICAL

371	D50 ELECTRICAL							
372	Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA etc.	54,000	gsf	60.00	3,240,000			
373	AV sound system and projection at Gym/Café	1	ls	200,000.00	See Reno			
374	Network switches	54,000	sf	1.50	81,000			
375	Wi-Fi equipment	54,000	sf	1.00	54,000			
376	Video Surveillance system	54,000	sf	2.00	108,000			
377	Access Control system	54,000	sf	1.00	54,000			
378	VOIP telephone system	54,000	sf	1.50	81,000			
379	SUBTOTAL					3,618,000		
380	TOTAL - ELECTRICAL							\$3,618,000

E10 EQUIPMENT

385	E10 EQUIPMENT, GENERALLY							
387	E10 EQUIPMENT, GENERALLY							
388	119000 MISCELLANEOUS EQUIPMENT							
389	Allowance for miscellaneous equipment	54,000	gsf	1.00	54,000			
390	SUBTOTAL					54,000		
391	TOTAL - EQUIPMENT							\$54,000

E20 FURNISHINGS

397	E2010 FIXED FURNISHINGS							
398	E2010 FIXED FURNISHINGS							
399	122100 WINDOW TREATMENT							
400	Shades; allowance	5,013	sf	8.00	40,104			
401								
402	123000 CASEWORK							
403	Wood casework w/ solid surface counters throughout	54,000	gsf	12.00	648,000			
404	SUBTOTAL					688,104		
405	E2020 MOVABLE FURNISHINGS							
406	E2020 MOVABLE FURNISHINGS							
407	All movable furnishings to be provided and installed by owner							
408	SUBTOTAL						NIC	
409	TOTAL - FURNISHINGS							\$688,104

F10 SPECIAL CONSTRUCTION

414	F10 SPECIAL CONSTRUCTION							
415	F10 SPECIAL CONSTRUCTION							
416	SUBTOTAL						-	
417	TOTAL - SPECIAL CONSTRUCTION							



PSR Submission Estimate

GFA

54,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 550 STUDENTS

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F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION
SUBTOTAL

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F2020 HAZARDOUS COMPONENTS ABATEMENT
See main summary for HazMat allowance
SUBTOTAL

See Summary

TOTAL - SELECTIVE BUILDING DEMOLITION

TRADE SUBTOTAL

\$26,048,992



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 550 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor 62,000
Second Floor 25,000

TOTAL GROSS FLOOR AREA (GFA)					87,000	sf
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1	A1010 STANDARD FOUNDATIONS						
2	Shear wall footings to resist current seismic loads - allow	250	lf	500.00	125,000		
3	New foundations to cap existing building and to allow for new additions to be built separate from the existing building	460	lf	500.00	230,000		
4	Foundation system to support new courtyard	460	lf	1,000.00	460,000		
5	New concrete strip footing at replacement CMU walls - 30% allowance	1,650	lf	175.00	288,750		
6	SUBTOTAL					1,103,750	
7	A1020 SPECIAL FOUNDATIONS						
9	No work required per Engineer's report						
10	SUBTOTAL					-	
11							
12	A1030 LOWEST FLOOR CONSTRUCTION						
13							
14	033000 CONCRETE						
14	Remove and replace slab on grade as necessary to accommodate new fixtures and fittings/ ADA upgrades to ramps/ space reconfigurations/ shear walls etc.	20,000	sf	15.00	300,000		
15	SUBTOTAL					300,000	
16	TOTAL - FOUNDATIONS						\$1,403,750

A20 BASEMENT CONSTRUCTION

21	A2010 BASEMENT EXCAVATION						
22	No Work in this section						
23	SUBTOTAL					-	
24							
25	A2020 BASEMENT WALLS						
26	No Work in this section						
27	SUBTOTAL					-	
28							
29	TOTAL - BASEMENT CONSTRUCTION						

B10 SUPERSTRUCTURE

34	B1010 FLOOR CONSTRUCTION						
35							
36	051200 STRUCTURAL STEEL FRAMING						
37	Allowance for reframing to accommodate enlarged courtyard including infilling floor framing back to existing column lines	12,000	sf	50.00	600,000		
38	Allowance for structural modifications including redesigning lateral force-resisting to resist current seismic loads	87,000	gsf	8.00	696,000		
40	SUBTOTAL					1,296,000	
41							
42	B1020 ROOF CONSTRUCTION						
43							
44	051200 STRUCTURAL STEEL FRAMING						
45	Allowance for reframing to accommodate enlarged courtyard including infilling roof framing back to existing column lines	2,000	sf	30.00	60,000		



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 550 STUDENTS

45	Allowance for supplemental support framing at new rooftop mechanical equipment - allowance (assume majority of new equipment can be placed on Addition)	62,000	sf	5.00	310,000		
46	SUBTOTAL					370,000	
TOTAL - SUPERSTRUCTURE							\$1,666,000

B20 EXTERIOR CLOSURE

52	B2010 EXTERIOR WALLS	18,510	sf		Total Exterior Closure		
53	040001 MASONRY						
54	Selectively repoint masonry at exterior walls as required						NR
55	Provide engineered concrete repairs at broken exterior header/ sill elements						NR
56	Allowance to infill openings with masonry including backup at removed unit ventilator louvers	24	loc	1,500.00	36,000		
57	New exterior closure at Courtyard - 40% brick, 40% metal panel including backup	9,568	sf	115.00	1,100,320		
58	Exterior metal, fiber cement or thin brick wall panel rainscreen on furring at ETR masonry wall	18,510	sf	80.00	1,480,800		
59	055000 MISCELLANOUS METALS						
60	Prepare and repaint steel lintels, plates and other exterior metal items	18,510	sf	1.00	18,510		
61	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
62	Liquid applied vapor barrier @ etr masonry walls	18,510	sf	7.50	138,825		
63	Air barrier/flashing at openings	1,634	lf	7.50	12,255		
64	Rake out existing masonry control joints; provide new backer rod and joint sealant - allow	18,510	sf	1.50	27,765		
65	072100 THERMAL INSULATION						
66	3" Rigid insulation	18,510	sf	4.00	74,040		
67	074213 WALL PANELS						
68	092900 GYPSUM BOARD ASSEMBLIES						
69	101400 SIGNAGE						
70	New signage	1	ls	15,000.00	15,000		
71	SUBTOTAL					2,903,515	
72	B2020 WINDOWS	3,267	sf				
73	092900 GYPSUM BOARD ASSEMBLIES						
74	Wood blocking at openings	1,634	lf	14.00	22,876		
75	079200 JOINT SEALANTS						
76	Backer rod & double sealant	1,634	lf	10.00	16,340		
77	080001 METAL WINDOWS						
78	Replace all existing windows, storefront and curtainwall, double glazed - 15%	3,267	sf	150.00	490,050		
79	New exterior closure at Courtyard - 20% windows/ curtainwall Greenhouse glazing	2,392	sf	150.00	358,800		demolished in this option
80	089100 LOUVERS						
81	Louvers						N/A
82	SUBTOTAL					888,066	
83	B2030 EXTERIOR DOORS						
84	Exterior door replacement allowance	87,000	gsf	1.50	130,500		



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 550 STUDENTS

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SUBTOTAL 130,500

TOTAL - EXTERIOR CLOSURE \$3,922,081

B30 ROOFING

B3010 ROOF COVERINGS

Replace w/ new adhered PVC roofing includes edge coping, blocking, flashings and roof accessories etc. (assumes removal of existing included w/ haz mat) **62,000** sf 36.00 2,232,000

SUBTOTAL 2,232,000

B3020 ROOF OPENINGS

Allowance to replace roof hatches, ladders etc. **1** ls 30,000.00 30,000

SUBTOTAL 30,000

TOTAL - ROOFING \$2,262,000

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Modify interior CMU/GWB walls, glazed partitions + BL's, operable walls etc. to accommodate code upgrades and reconfigured spaces - kitchen and gymnasium layouts to remain. **87,000** gsf 35.00 3,045,000

Seismic clips at the top of interior masonry walls - allow @ 32" oc **87,000** gsf 4.00 348,000

SUBTOTAL 3,393,000

C1020 INTERIOR DOORS

New doors and hardware throughout **87,000** gsf 7.00 609,000

SUBTOTAL 609,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Railing at open to below **100** lf 500.00 50,000

Miscellaneous metals complete including ceiling grid supports **87,000** gsf 2.50 217,500

064100 FINISH CARPENTRY

New millwork throughout **87,000** gsf 4.00 348,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building **87,000** gsf 1.00 87,000

101100 VISUAL DISPLAY SURFACES

Marker boards/TB complete **87,000** gsf 1.60 139,200

101400 SIGNAGE

New interior signage **87,000** gsf 0.80 69,600

102110 TOILET COMPARTMENTS + ACCESSORIES

New toilet partitions/bathroom accessories **87,000** gsf 1.00 87,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets **1** ls 7,500.00 7,500

AED cabinets **1** ls 1,500.00 1,500

105113 LOCKERS

New corridor and locker room lockers throughout **87,000** gsf 1.50 130,500

SUBTOTAL 1,137,800

TOTAL - INTERIOR CONSTRUCTION \$5,139,800



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 550 STUDENTS

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs; complete	4	flt	45,000.00	180,000	
New ramp guardrails and handrails to meet ADA requirements - allowance	1	ls	20,000.00	20,000	

SUBTOTAL 200,000

C2020 STAIR FINISHES

New finishes at stairs	4	flt	5,000.00	20,000	
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SUBTOTAL 20,000

TOTAL - STAIRCASES \$220,000

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Prep and paint all etr and new interior walls	87,000	gsf	3.00	261,000	
New tile in bathrooms and shower rooms	2,400	sf	36.00	86,400	
Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	87,000	sf	1.50	130,500	

SUBTOTAL 477,900

C3020 FLOOR FINISHES

Allowance for leveler at new floor finishes	75,600	sf	3.00	226,800	
Replace finishes throughout with VCT flooring and resilient base	63,350	sf	5.00	316,750	
Premium for carpet in Admin spaces, Media center etc. including resilient base	7,500	sf	1.50	11,250	
Premium for tile in bathrooms	2,000	sf	35.00	70,000	
Gymnasium flooring	9,000	sf		assume ETR	
Quarry tile in kitchen & support spaces	2,400	sf		assume ETR	
Concrete sealer in Mech/ Elec/ Boiler spaces	2,750	sf		assume ETR	
Allowance to clean etr floors	14,150	sf	2.00	28,300	

SUBTOTAL 653,100

C3030 CEILING FINISHES

ACT ceiling replacement throughout	71,200	sf	7.00	498,400	
Premium for healthzone or similar ACT in kitchen and bathrooms	4,400	sf	2.00	8,800	
Gymnasium, Cafetorium and Platform - paint exposed deck	15,800	sf	3.50	55,300	
Allowance for prep and paint etr gwb ceilings and soffits	87,000	gsf	2.00	174,000	

SUBTOTAL 736,500

TOTAL - INTERIOR FINISHES \$1,867,500

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

142000 ELEVATOR

New 2-stop elevator	1	ea	180,000.00	180,000	
New platform lift from Cafeteria to Stage level	1	ea	50,000.00	50,000	

SUBTOTAL 230,000

TOTAL - CONVEYING SYSTEMS \$230,000

D20 PLUMBING

D20 PLUMBING, GENERALLY



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 550 STUDENTS

221	RENOVATION: Plumbing system complete; replace each system, fixtures & all equipment including domestic water, AG sanitary W&V and AG storm.	87,000	gsf	27.00	2,349,000			
222	Demolition; cut & cap, make safe, removal by others	87,000	gsf	0.70	60,900			
223						2,409,900		
224	SUBTOTAL							
225	TOTAL - PLUMBING							\$2,409,900

D30 HVAC

230	D30 HVAC, GENERALLY							
231	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	87,000	gsf	93.00	8,091,000			
232	Demolition; cut & cap existing HVAC; removal by others	87,000	gsf	1.25	108,750			
233	SUBTOTAL					8,199,750		
234	TOTAL - HVAC							\$8,199,750

D40 FIRE PROTECTION

239	D40 FIRE PROTECTION, GENERALLY							
240	Fire protection complete system	87,000	gsf	8.50	739,500			
241	Demolition	87,000	gsf	0.65	56,550			
242	SUBTOTAL					796,050		
243	TOTAL - FIRE PROTECTION							\$796,050

D50 ELECTRICAL

249	Electrical system incl demo, normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA etc.	87,000	gsf	62.00	5,394,000			
250	AV sound system and projection at Gym/Café	1	ls	200,000.00	200,000			
251	Network switches	87,000	sf	1.50	130,500			
252	Wi-Fi equipment	87,000	sf	1.00	87,000			
253	Video Surveillance system	87,000	sf	2.00	174,000			
254	Access Control system	87,000	sf	1.00	87,000			
255	VOIP telephone system	87,000	sf	1.50	130,500			
256	SUBTOTAL					6,203,000		
257	TOTAL - ELECTRICAL							\$6,203,000

E10 EQUIPMENT

263	E10 EQUIPMENT, GENERALLY						
264	114000 FOODSERVICE EQUIPMENT						
284	Kitchen equipment - allowance for replacement of wood work surfaces and shelving to stainless steel. Replace exhaust ventilators and interior grease traps w/ stainless steel. Replace two hoods. New serving line equipment. Tray & pot washing area upgrades	1	ls	640,000.00	640,000		
285	116200 THEATRE EQUIPMENT						
286							
287	New curtain and rigging allowance in Cafetorium	1	ls	30,000.00	30,000		
288	New portable risers in Band room	1	ls	24,375.00	24,375		
289	116600 ATHLETIC EQUIPMENT						
290							



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 550 STUDENTS

291	Gym safety wall pads	2,145	sf	20.00	42,900			
292	Replace operable partitions in Gymnasium	2	ea	35,000.00	70,000			
293	Replace basketball backstops	8	ea	10,000.00	80,000			
294	Volley ball standards and inserts	1	ls	5,000.00	5,000			
295	Score board - allow	1	ea	20,000.00	20,000			
296	New telescopic bleachers - seating capacity 650	1	ls	130,000.00	130,000			
297								
298	119000 MISCELLANEOUS EQUIPMENT							
299	Allowance to replace projection screens, residential appliances science room equipment, kiln etc.	87,000	gsf	0.50	43,500			
300	SUBTOTAL					1,085,775		
301								
302	TOTAL - EQUIPMENT						\$1,085,775	

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

308								
309	122100 WINDOW TREATMENT							
310	Window treatment replacements - allowance	1	ls	40,000.00	40,000			
311								
312	123000 CASEWORK							
313	New casework throughout	87,000	gsf	12.00	1,044,000			
314	SUBTOTAL					1,084,000		
315								
316	E2020 MOVABLE FURNISHINGS							
317	All movable furnishings to be provided and installed by owner							
318	SUBTOTAL					NIC		
319								
320	TOTAL - FURNISHINGS						\$1,084,000	

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

325	SUBTOTAL							
326								
327								
328	TOTAL - SPECIAL CONSTRUCTION							

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

332							
333	F2010 BUILDING ELEMENTS DEMOLITION						
334	Demo and remove existing floor slab including at enlarged courtyard	30,300	sf	8.00	242,400		
335	Demo and remove existing courtyard finishes	1,700	sf	8.00	13,600		
336	Allowance for heavy equipment access into Courtyard - selective demolition of floor and roof framing between two column lines to create an equipment corridor	1	ls	250,000.00	250,000		
337	Demo and remove upper floor for new courtyard, including shoring	10,240	sf	30.00	307,200		
338	Remove exterior windows and storefront	3,267	sf	8.00	26,136		
339	Demo and remove exterior wall at connection to new additions, shore as necessary	7,220	sf	15.00	108,300		
340	Demo and remove interior floor finishes, ceilings and wall finishes etc.	87,000	gsf	4.00	348,000		
341	Misc. selective interior demolition as req'd, partitions, specialties, furnishings, door hardware etc. - allowance	87,000	gsf	10.00	870,000		
342	Selective interior MEP demolition including removal of cut & capped MEP equipment & fixtures	87,000	gsf	4.00	348,000		
343	Demolish existing greenhouse	594	gsf	15.00	8,910		
344	SUBTOTAL					2,522,546	
345							



Clinton Middle School
Clinton, MA

30-May-23

PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 550 STUDENTS

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F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION							\$2,522,546
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TRADE SUBTOTAL

\$39,012,152



CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 700 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	36,000
Second Floor	33,000

TOTAL GROSS FLOOR AREA (GFA)	69,000 sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	101	CY	\$852	/cy
Foundation Walls	232	CY	\$1,269	/cy
Spread Footings	357	CY	\$769	/cy
Grade beams	54	CY	\$1,312	/cy
Piers	42	CY	\$1,921	/cy

Total Foundation Concrete 786 CY

Strip footing, typical: 2'-4" x 12"

Formwork	2,240	sf	16.00	35,840
Re-bar	11,200	lbs.	2.00	22,400
Concrete material	101	cy	155.00	15,655
Placing concrete	101	cy	120.00	12,120

Foundation wall: 16" thick

Formwork	8,960	sf	20.00	179,200
Re-bar	20,160	lbs.	2.00	40,320
Concrete material	232	cy	155.00	35,960
Placing concrete	232	cy	120.00	27,840
Form shelf	1,120	lf	10.00	11,200

Exterior spread footings, typical: 7'-0" x 7'-0" x 22"

Formwork	1,896	sf	18.00	34,128
Re-bar	17,575	lbs.	2.00	35,150
Concrete material	129	cy	155.00	19,995
Placing concrete	129	cy	120.00	15,480
Set anchor bolts grout plates	37	ea	150.00	5,550

Interior spread footings, typical: 9'-6" x 9'-6" x 26"

Formwork	2,470	sf	18.00	44,460
Re-bar	26,250	lbs.	2.00	52,500
Concrete material	228	cy	155.00	35,340
Placing concrete	228	cy	120.00	27,360
Set anchor bolts grout plates	30	ea	150.00	4,500

Grade beams at braced frames, allow

Formwork	1,400	sf	15.00	21,000
Re-bar	17,500	lbs.	2.00	35,000
Concrete material	54	cy	155.00	8,370
Placing concrete	54	cy	120.00	6,480

Piers/Pilasters

Formwork	2,251	sf	20.00	45,020
Re-bar	12,060	lbs.	2.00	24,120
Concrete material	42	cy	155.00	6,510
Placing concrete	42	cy	120.00	5,040

Miscellaneous

Elevator pit				NR
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Trowelled-on bituminous mastic dam proofing at foundation walls	4,480	sf	4.00	17,920
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072100 THERMAL INSULATION

2" Insulation at foundation walls	4,480	sf	3.00	13,440
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312000 EARTHWORK

Strip footings/Fdn wall

Excavation	747	cy	10.00	7,470
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PSR Submission Estimate

GFA 69,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 700 STUDENTS

55	Remove off-site	747	cy	32.00	23,904		
56	Backfill with imported material	646	cy	48.00	31,008		
57	<u>Spread footings/Grade beams</u>						
58	Excavation	1,233	cy	10.00	12,330		
59	Remove off-site	1,233	cy	32.00	39,456		
60	Backfill with imported material	822	cy	48.00	39,456		
61	<u>Building</u>						
62	Cut; assumed 2 feet	2,667	cy	15.00	40,005		
63	Fill - granular fill pad; allow 2 feet	2,667	cy	48.00	128,016		
64	<u>Miscellaneous</u>						
65	Gravel fill beneath footings, 12"	290	cy	40.00	11,600		
66	Perimeter drain	1,120	lf	30.00	33,600		
67	Temporary dewatering for foundation work	1	ls	20,000.00	20,000		
68	SUBTOTAL					1,224,743	

A1020 SPECIAL FOUNDATIONS

71	Allowance for rammed aggregate piers				Assumed NR		
72	SUBTOTAL						-

A1030 LOWEST FLOOR CONSTRUCTION

76	033000 CONCRETE						
77	<u>Slab on grade</u>	36,000	sf				
78	Vapor barrier at slab on grade	36,000	sf	1.25	45,000		
79	WWF reinforcement	41,400	sf	1.80	74,520		
80	Concrete - 6" thick	700	cy	155.00	108,500		
81	Barrier One Admixture	700	cy		Assumed Not Required		
82	Placing concrete	700	cy	90.00	63,000		
83	Finishing and curing concrete	36,000	sf	3.00	108,000		
84	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	5,000.00	5,000		
85	<u>Miscellaneous</u>						
86	Equipment pads	1	ls	10,000.00	10,000		
87	Radon system	36,000	sf	3.00	108,000		
89	072100 THERMAL INSULATION						
90	Slab insulation, 2" thick; 2' @ perimeter only	4,480	sf	2.50	11,200		
92	312000 EARTHWORK						
92	Improve soils/ground improvement allowance	36,000	sf	8.00	288,000		
93	<u>Building</u>						
94	Gravel base, 12"	1,333	cy	48.00	63,984		
95	Compact existing sub-grade	36,000	sf	1.00	36,000		
96	Under slab E&B for plumbing	36,000	sf	1.50	54,000		
97	SUBTOTAL					975,204	

TOTAL - FOUNDATIONS	\$2,199,947
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

105	No Work in this section						
106	SUBTOTAL						-

A2020 BASEMENT WALLS

109	No Work in this section						
110	SUBTOTAL						-

TOTAL - BASEMENT CONSTRUCTION	
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PSR Submission Estimate

GFA

69,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 700 STUDENTS

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

14.5 lbs/sf
500 tns excluding roof screens and canopies
\$6,749 \$/Ton

033000 CONCRETE

WWF reinforcement	37,950	sf	1.80	68,310
Concrete fill to metal deck; 3-1/2" normal weight, total thickness 5 1/2"	588	cy	160.00	94,080
Place and finish concrete	33,000	sf	3.50	115,500
Rebar to decks	9,900	lbs	2.00	19,800

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf	239	tns	5,500.00	1,314,500
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	8,250	ea	3.50	28,875
2" metal floor deck	33,000	sf	6.50	214,500
Allowance for expansion joint	1	ls	10,000.00	10,000

078100 FIREPROOFING/FIRESTOPPING

Fire proofing to columns and beams	33,000	sf	2.75	90,750
Intumescent allowance	1	ls	35,000.00	35,000

1,991,315

B1020 ROOF CONSTRUCTION

033000 CONCRETE

Allowance at mechanical equipment/low roof

Concrete fill to metal roof deck	5,000	sf	10.00	50,000
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051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;				
Floor framing 14.5 lbs/sf at typical roof	261	tns	5,500.00	1,435,500
Allowance for additional miscellaneous steel angles, plates etc.				assume included in lbs/sf tns
Shear studs	9,000	ea	3.50	31,500
1-1/2" metal floor deck at typical roof	36,000	sf	6.00	216,000
HSS support framing at roof screen @ 110 lbs/lf	10	tns	5,800.00	58,000
Steel framing at canopies @ 20 lbs/sf	13	tns	5,800.00	75,400

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to roof deck and structure				NR
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1,866,400

TOTAL - SUPERSTRUCTURE \$3,857,715

B20 EXTERIOR CLOSURE

32,500 sf

B2010 EXTERIOR WALLS

32,500 sf Total Exterior Closure

040001 MASONRY

Brick veneer; 40%	13,000	sf	44.00	572,000
Precast trim	13,000	sf	2.00	26,000
Staging/Lifts to exterior wall				Included

055000 MISCELLANEOUS METALS

Miscellaneous metals to exterior; lintels, angles etc.	13,000	sf	1.00	13,000
Relieving angles				assume included in lbs/sf tns

070001 WATERPROOFING, DAMPPROOFING AND CAULKING



PSR Submission Estimate

GFA 69,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST	
OPTION AR-2: ADDITION 700 STUDENTS								
176	Air barrier	26,000	sf	8.80	228,800			
177	Air barrier/flashing at windows	2,167	lf	6.25	13,544			
178	Air barrier @ overhangs/soffits	1,325	sf	8.50	11,263			
179	Miscellaneous sealants to closure	26,000	sf	0.50	13,000			
180								
181	072100 THERMAL INSULATION							
182	3" Rigid insulation	26,000	sf	4.00	104,000			
183	Spray insulation; 2" typical	26,000	sf	3.00	78,000			
184	3" Rigid insulation @ overhangs/soffits	1,325	sf	4.00	5,300			
185	Insulation at window openings	2,167	lf	6.00	13,002			
186								
187	074213 WALL PANELS							
188	Alucobond metal panels: 40%	13,000	sf	90.00	1,170,000			
189	Prefinished aluminum panels at roof overhang soffits	1,325	sf	90.00	119,250			
190	Pre-finished metal fascia, assume 12" wide	1,120	lf	90.00	100,800			
191	Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750			
192								
193	092900 GYPSUM BOARD ASSEMBLIES							
194	Framing at soffits	1,325	sf	18.00	23,850			
195	8" metal stud backup, typical	26,000	sf	14.00	364,000			
196	Gypsum Sheathing	26,000	sf	3.50	91,000			
197	Drywall lining to interior face of stud backup	26,000	sf	4.00	104,000			
198								
199	101400 SIGNAGE							
200	Signage	1	ls	10,000.00	10,000			
201	SUBTOTAL					3,174,559		
202								
203	B2020 WINDOWS; 20% glazed	6,500	sf					
204								
205	092900 GYPSUM BOARD ASSEMBLIES							
206	Wood blocking at openings	2,167	lf	14.00	30,338			
207								
208	079200 JOINT SEALANTS							
209	Backer rod & double sealant	2,167	lf	10.00	21,670			
210								
211	080001 METAL WINDOWS							
212	Aluminum windows/CW/Storefront; double glazed	6,500	sf	145.00	942,500			
213	Sun control at south facing classrooms - allow	350	lf	250.00	87,500			
214	Premium for 3M security film @ first floor	900	sf	40.00	36,000			
215	Premium for triple glazing						Excluded	
216								
217	089100 LOUVERS							
218	Louvers - allowance	100	sf	85.00	8,500			
219	SUBTOTAL					1,126,508		
220								
221	B2030 EXTERIOR DOORS							
222								
223	Exterior door allowance	69,000	gsf	1.50	103,500			
224	SUBTOTAL					103,500		
225								
226	TOTAL - EXTERIOR CLOSURE						\$4,404,567	
227								
228								
229	B30 ROOFING							
230								
231	B3010 ROOF COVERINGS							
232								
233	PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	36,000	sf	32.00	1,152,000			
234	Pre-finished metal coping	1,120	lf	50.00	56,000			
235	Canopy roof system	1,325	sf	32.00	42,400			
236	Allowance for roof hatches, ladders, walkway pads etc.	1	ls	30,000.00	30,000			
237	SUBTOTAL					1,280,400		



PSR Submission Estimate

GFA 69,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 700 STUDENTS

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B3020 ROOF OPENINGS
No items in this section
SUBTOTAL

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TOTAL - ROOFING							\$1,280,400
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Interior partitions; gwb/ metal stud partitions including premium for CMU in Stairs, Gym and kitchen and allowance for glazed partitions throughout. Abuse resistant board at select areas.

69,000 sf 37.00 2,553,000

SUBTOTAL 2,553,000

C1020 INTERIOR DOORS

Interior doors; complete

69,000 gsf 7.00 483,000

SUBTOTAL 483,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals complete including ceiling grid supports

69,000 gsf 2.50 172,500

064100 FINISH CARPENTRY

Millwork allowance

69,000 gsf 4.00 276,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building

69,000 gsf 1.00 69,000

101100 VISUAL DISPLAY SURFACES

Marker boards/TB/ Flagpoles complete

69,000 gsf 1.60 110,400

Interactive White Board projectors FF&E

101400 SIGNAGE

Signage; complete package

69,000 gsf 0.80 55,200

102110 TOILET COMPARTMENTS + ACCESSORIES

Toilet partitions/bathroom accessories

69,000 gsf 1.00 69,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets

1 ls 10,000.00 10,000

AED cabinets

1 ls 1,500.00 1,500

105113 LOCKERS

Student lockers/ cubbies, kitchen lockers etc.

69,000 gsf 1.50 103,500

SUBTOTAL 867,100

TOTAL - INTERIOR CONSTRUCTION							\$3,903,100
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs; complete

2 flt 45,000.00 90,000

SUBTOTAL 90,000

C2020 STAIR FINISHES

Finishes complete

2 flt 5,000.00 10,000

SUBTOTAL 10,000

TOTAL - STAIRCASES							\$100,000
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PSR Submission Estimate

GFA 69,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 700 STUDENTS

305	C30 INTERIOR FINISHES						
306							
307	C3010 WALL FINISHES						
308	Paint to walls	69,000	gsf	2.50	172,500		
309	CT to toilet walls	6,360	sf	32.00	203,520		
310	Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	69,000	gsf	2.00	138,000		
311	SUBTOTAL					514,020	
312							
313							
314	C3020 FLOOR FINISHES						
315	VCT/ Carpet flooring	62,700	sf	5.00	313,500		
316	Ceramic tile in toilets	4,000	sf	40.00	160,000		
317	Sealed concrete in BOH	2,000	sf	2.50	5,000		
318	Entry mats - walk-off mats	300	sf	20.00	6,000		
319	Allowances for bases throughout	1	ls	48,450.00	48,450		
320	SUBTOTAL					532,950	
321							
322							
323	C3030 CEILING FINISHES						
324	Armstrong ACT Ultima, typical, 2x2	59,550	sf	7.00	416,850		
325	Armstrong ACT Health Zone ceilings in toilets, 2x2	4,000	sf	9.00	36,000		
326	Armstrong wood acoustic panels Woodworks - allowance	2,000	sf	55.00	110,000		
327	Miscellaneous soffits/GWB	69,000	gsf	3.00	207,000		
328	SUBTOTAL					769,850	
329							
330							
331	TOTAL - INTERIOR FINISHES						\$1,816,820
332							
333							
334	D10 CONVEYING SYSTEMS						
335							
336	D1010 ELEVATOR						W/ RENOVATION
337	SUBTOTAL					-	
338							
339	TOTAL - CONVEYING SYSTEMS						
340							
341							
342	D20 PLUMBING						
343							
344	D20 PLUMBING, GENERALLY						
345	ADDITION: Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm, acid W&V & natural gas piping.	69,000	gsf	27.00	1,863,000		
346	SUBTOTAL					1,863,000	
347							
348	TOTAL - PLUMBING						\$1,863,000
349							
350							
351	D30 HVAC						
352							
353	D30 HVAC, GENERALLY						
354	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	69,000	gsf	93.00	6,417,000		
355	SUBTOTAL					6,417,000	
356							
357	TOTAL - HVAC						\$6,417,000
358							
359							
360	D40 FIRE PROTECTION						
361							
362	D40 FIRE PROTECTION, GENERALLY						



PSR Submission Estimate

GFA 69,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 700 STUDENTS

363	Fire protection complete system	69,000	gsf	8.50	586,500			
364	SUBTOTAL					586,500		
365	TOTAL - FIRE PROTECTION							\$586,500

D50 ELECTRICAL

367	D50 ELECTRICAL							
368	D50 ELECTRICAL							
369	Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA etc.	69,000	gsf	60.00	4,140,000			
370	AV sound system and projection at Gym/Café	1	ls	200,000.00	See Reno			
371	Network switches	69,000	sf	1.50	103,500			
372	Wi-Fi equipment	69,000	sf	1.00	69,000			
373	Video Surveillance system	69,000	sf	2.00	138,000			
374	Access Control system	69,000	sf	1.00	69,000			
375	VOIP telephone system	69,000	sf	1.50	103,500			
376	SUBTOTAL					4,623,000		
377	TOTAL - ELECTRICAL							\$4,623,000

E10 EQUIPMENT

382	E10 EQUIPMENT, GENERALLY							
383	E10 EQUIPMENT, GENERALLY							
384	E10 EQUIPMENT, GENERALLY							
385	E10 EQUIPMENT, GENERALLY							
386	E10 EQUIPMENT, GENERALLY							
387	E10 EQUIPMENT, GENERALLY							
388	119000 MISCELLANEOUS EQUIPMENT							
389	Allowance for miscellaneous equipment	69,000	gsf	1.00	69,000			
390	SUBTOTAL					69,000		
391	TOTAL - EQUIPMENT							\$69,000

E20 FURNISHINGS

392	E20 FURNISHINGS							
393	E2010 FIXED FURNISHINGS							
394	E2010 FIXED FURNISHINGS							
395	E2010 FIXED FURNISHINGS							
396	E2010 FIXED FURNISHINGS							
397	E2010 FIXED FURNISHINGS							
398	E2010 FIXED FURNISHINGS							
399	122100 WINDOW TREATMENT							
400	Shades; allowance	6,500	sf	8.00	52,000			
401	123000 CASEWORK							
402	Wood casework w/ solid surface counters throughout	69,000	gsf	12.00	828,000			
403	SUBTOTAL					880,000		
404	E2020 MOVABLE FURNISHINGS							
405	E2020 MOVABLE FURNISHINGS							
406	E2020 MOVABLE FURNISHINGS							
407	All movable furnishings to be provided and installed by owner							
408	SUBTOTAL						NIC	
409	TOTAL - FURNISHINGS							\$880,000

F10 SPECIAL CONSTRUCTION

410	F10 SPECIAL CONSTRUCTION							
411	F10 SPECIAL CONSTRUCTION							
412	F10 SPECIAL CONSTRUCTION							
413	F10 SPECIAL CONSTRUCTION							
414	F10 SPECIAL CONSTRUCTION							
415	F10 SPECIAL CONSTRUCTION							
416	F10 SPECIAL CONSTRUCTION							
417	F10 SPECIAL CONSTRUCTION							
418	TOTAL - SPECIAL CONSTRUCTION							



PSR Submission Estimate

GFA

69,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: ADDITION 700 STUDENTS

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F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION
SUBTOTAL

-

F2020 HAZARDOUS COMPONENTS ABATEMENT
See main summary for HazMat allowance
SUBTOTAL

See Summary

TOTAL - SELECTIVE BUILDING DEMOLITION

TRADE SUBTOTAL

\$32,001,049



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 700 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	62,000
Second Floor	25,000

TOTAL GROSS FLOOR AREA (GFA)	87,000 sf
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1	A1010 STANDARD FOUNDATIONS						
2	Shear wall footings to resist current seismic loads - allow	250	lf	500.00	125,000		
3	New foundations to cap existing building and to allow for new additions to be built separate from the existing building	460	lf	500.00	230,000		
4	Foundation system to support new courtyard	460	lf	1,000.00	460,000		
5	New concrete strip footing at replacement CMU walls - 30% allowance	1,650	lf	175.00	288,750		
6	SUBTOTAL					1,103,750	
7	A1020 SPECIAL FOUNDATIONS						
9	No work required per Engineer's report						
10	SUBTOTAL					-	
11							
12	A1030 LOWEST FLOOR CONSTRUCTION						
13							
14	033000 CONCRETE						
14	Remove and replace slab on grade as necessary to accommodate new fixtures and fittings/ ADA upgrades to ramps/ space reconfigurations/ shear walls etc.	20,000	sf	15.00	300,000		
15	SUBTOTAL					300,000	
16	TOTAL - FOUNDATIONS						\$1,403,750

A20 BASEMENT CONSTRUCTION

21	A2010 BASEMENT EXCAVATION						
22	No Work in this section						
23	SUBTOTAL					-	
24							
25	A2020 BASEMENT WALLS						
26	No Work in this section						
27	SUBTOTAL					-	
28							
29	TOTAL - BASEMENT CONSTRUCTION						

B10 SUPERSTRUCTURE

34	B1010 FLOOR CONSTRUCTION						
35							
36	051200 STRUCTURAL STEEL FRAMING						
37	Allowance for reframing to accommodate enlarged courtyard including infilling floor framing back to existing column lines	12,000	sf	50.00	600,000		
38	Allowance for structural modifications including redesigning lateral force-resisting to resist current seismic loads	87,000	gsf	5.00	435,000		
40	SUBTOTAL					1,035,000	
41							
42	B1020 ROOF CONSTRUCTION						
43							
44	051200 STRUCTURAL STEEL FRAMING						
45	Allowance for reframing to accommodate enlarged courtyard including infilling roof framing back to existing column lines	2,000	sf	30.00	60,000		



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 700 STUDENTS

45	Allowance for supplemental support framing at new rooftop mechanical equipment - allowance (assume majority of new equipment can be placed on Addition)	62,000	sf	5.00	310,000		
46	SUBTOTAL					370,000	
TOTAL - SUPERSTRUCTURE							\$1,405,000

B20 EXTERIOR CLOSURE

52	B2010 EXTERIOR WALLS	18,000	sf		Total Exterior Closure		
53	040001 MASONRY						
56	Selectively repoint masonry at exterior walls as required						NR
57	Provide engineered concrete repairs at broken exterior header/ sill elements						NR
58	Allowance to infill openings with masonry including backup at removed unit ventilator louvers	24	loc	1,500.00	36,000		
59	New exterior closure at Courtyard - 40% brick, 40% metal panel including backup	9,568	sf	115.00	1,100,320		
60	Exterior metal, fiber cement or thin brick wall panel rainscreen on furring at ETR masonry wall	18,000	sf	80.00	1,440,000		
61	055000 MISCELLANEOUS METALS						
63	Prepare and repaint steel lintels, plates and other exterior metal items	18,000	sf	1.00	18,000		
64	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
66	Liquid applied vapor barrier @ etr masonry walls	18,000	sf	7.50	135,000		
67	Air barrier/flashing at openings	1,589	lf	7.50	11,918		
68	Rake out existing masonry control joints; provide new backer rod and joint sealant - allow	18,000	sf	1.50	27,000		
69	072100 THERMAL INSULATION						
71	3" Rigid insulation	18,000	sf	4.00	72,000		
72	074213 WALL PANELS						
74	092900 GYPSUM BOARD ASSEMBLIES						
76	101400 SIGNAGE						
78	New signage	1	ls	15,000.00	15,000		
79	SUBTOTAL						2,855,238
80							
81	B2020 WINDOWS	3,177	sf				
82							
83	092900 GYPSUM BOARD ASSEMBLIES						
84	Wood blocking at openings	1,589	lf	14.00	22,246		
85	079200 JOINT SEALANTS						
86	Backer rod & double sealant	1,589	lf	10.00	15,890		
87							
88	080001 METAL WINDOWS						
89	Replace all existing windows, storefront and curtainwall, double glazed - 15%	3,177	sf	150.00	476,550		
90	New exterior closure at Courtyard - 20% windows/ curtainwall Greenhouse glazing	2,392	sf	150.00	358,800		demolished in this option
91							
92	089100 LOUVERS						
93	Louvers						N/A
94	SUBTOTAL						873,486
95							
96	B2030 EXTERIOR DOORS						
97							
98	Exterior door replacement allowance	87,000	gsf	1.50	130,500		
99							
100							



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 700 STUDENTS

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SUBTOTAL 130,500

TOTAL - EXTERIOR CLOSURE \$3,859,224

B30 ROOFING

B3010 ROOF COVERINGS

Replace w/ new adhered PVC roofing includes edge coping, blocking, flashings and roof accessories etc. (assumes removal of existing included w/ haz mat) **62,000** sf 35.00 2,170,000

SUBTOTAL 2,170,000

B3020 ROOF OPENINGS

Allowance to replace roof hatches, ladders etc. **1** ls 30,000.00 30,000

SUBTOTAL 30,000

TOTAL - ROOFING \$2,200,000

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Modify interior CMU/GWB walls, glazed partitions + BL's, operable walls etc. to accommodate code upgrades and reconfigured spaces - kitchen and gymnasium layouts to remain. **87,000** gsf 35.00 3,045,000

Seismic clips at the top of interior masonry walls - allow @ 32" oc **87,000** gsf 4.00 348,000

SUBTOTAL 3,393,000

C1020 INTERIOR DOORS

New doors and hardware throughout **87,000** gsf 7.00 609,000

SUBTOTAL 609,000

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Railing at open to below **100** lf 500.00 50,000

Miscellaneous metals complete including ceiling grid supports **87,000** gsf 2.50 217,500

064100 FINISH CARPENTRY

New millwork throughout **87,000** gsf 4.00 348,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building **87,000** gsf 1.00 87,000

101100 VISUAL DISPLAY SURFACES

Marker boards/TB complete **87,000** gsf 1.60 139,200

101400 SIGNAGE

New interior signage **87,000** gsf 0.80 69,600

102110 TOILET COMPARTMENTS + ACCESSORIES

New toilet partitions/bathroom accessories **87,000** gsf 1.00 87,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets **1** ls 7,500.00 7,500

AED cabinets **1** ls 1,500.00 1,500

105113 LOCKERS

New corridor and locker room lockers throughout **87,000** gsf 1.50 130,500

SUBTOTAL 1,137,800

TOTAL - INTERIOR CONSTRUCTION \$5,139,800



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 700 STUDENTS

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs; complete	4	flt	45,000.00	180,000	
New ramp guardrails and handrails to meet ADA requirements - allowance	1	ls	20,000.00	20,000	
SUBTOTAL					200,000

C2020 STAIR FINISHES

New finishes at stairs	4	flt	5,000.00	20,000	
SUBTOTAL					20,000

TOTAL - STAIRCASES \$220,000

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Prep and paint all etr and new interior walls	87,000	gsf	3.00	261,000	
New tile in bathrooms and shower rooms	2,400	sf	36.00	86,400	
Allowance for miscellaneous wall finishes; acoustic panels, FRP etc.	87,000	sf	1.50	130,500	
SUBTOTAL					477,900

C3020 FLOOR FINISHES

Allowance for leveler at new floor finishes	75,600	sf	3.00	226,800	
Replace finishes throughout with VCT flooring and resilient base	63,350	sf	5.00	316,750	
Premium for carpet in Admin spaces, Media center etc. including resilient base	7,500	sf	1.50	11,250	
Premium for tile in bathrooms	2,000	sf	35.00	70,000	
Gymnasium flooring	9,000	sf		assume ETR	
Quarry tile in kitchen & support spaces	2,400	sf		assume ETR	
Concrete sealer in Mech/ Elec/ Boiler spaces	2,750	sf		assume ETR	
Allowance to clean etr floors	14,150	sf	2.00	28,300	
SUBTOTAL					653,100

C3030 CEILING FINISHES

ACT ceiling replacement throughout	71,200	sf	7.00	498,400	
Premium for healthzone or similar ACT in kitchen and bathrooms	4,400	sf	2.00	8,800	
Gymnasium, Cafetorium and Platform - paint exposed deck	15,800	sf	3.50	55,300	
Allowance for prep and paint etr gwb ceilings and soffits	87,000	gsf	2.00	174,000	
SUBTOTAL					736,500

TOTAL - INTERIOR FINISHES \$1,867,500

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

142000 ELEVATOR					
New 2-stop elevator	1	ea	180,000.00	180,000	
New platform lift from Cafeteria to Stage level	1	ea	50,000.00	50,000	
SUBTOTAL					230,000

TOTAL - CONVEYING SYSTEMS \$230,000

D20 PLUMBING

D20 PLUMBING, GENERALLY



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 700 STUDENTS

221	RENOVATION: Plumbing system complete; replace each system, fixtures & all equipment including domestic water, AG sanitary W&V and AG storm	87,000	gsf	27.00	2,349,000		
222	Demolition; cut & cap, make safe, removal by others	87,000	gsf	0.70	60,900		
223	SUBTOTAL					2,409,900	
224	TOTAL - PLUMBING						
225							\$2,409,900

D30 HVAC

227	D30 HVAC, GENERALLY						
231	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS; reuse gym/media/cafeteria duct as noted.	87,000	gsf	93.00	8,091,000		
232	Demolition; cut & cap existing HVAC; removal by others	87,000	gsf	1.25	108,750		
233	SUBTOTAL					8,199,750	
234	TOTAL - HVAC						
235							\$8,199,750

D40 FIRE PROTECTION

239	D40 FIRE PROTECTION, GENERALLY						
240	Fire protection complete system	87,000	gsf	8.50	739,500		
241	Demolition	87,000	gsf	0.65	56,550		
242	SUBTOTAL					796,050	
244	TOTAL - FIRE PROTECTION						
245							\$796,050

D50 ELECTRICAL

249	Electrical system incl demo, normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA etc.	87,000	gsf	62.00	5,394,000		
250	AV sound system and projection at Gym/Café	1	ls	200,000.00	200,000		
259	Network switches	87,000	sf	1.50	130,500		
270	Wi-Fi equipment	87,000	sf	1.00	87,000		
271	Video Surveillance system	87,000	sf	2.00	174,000		
272	Access Control system	87,000	sf	1.00	87,000		
273	VOIP telephone system	87,000	sf	1.50	130,500		
274	SUBTOTAL					6,203,000	
275	TOTAL - ELECTRICAL						
276							\$6,203,000

E10 EQUIPMENT

281	E10 EQUIPMENT, GENERALLY						
282	114000 FOODSERVICE EQUIPMENT						
283							
284	Kitchen equipment - allowance for replacement of wood work surfaces and shelving to stainless steel. Replace exhaust ventilators and interior grease traps w/ stainless steel. Replace two hoods. New serving line equipment. Tray & pot washing area upgrades	1	ls	640,000.00	640,000		
285	116200 THEATRE EQUIPMENT						
286							
287	New curtain and rigging allowance in Cafetorium	1	ls	30,000.00	30,000		
288	New portable risers in Band room	1	ls	24,375.00	24,375		



PSR Submission Estimate

GFA 87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 700 STUDENTS

290	116600	ATHLETIC EQUIPMENT						
291		Gym safety wall pads	2,145	sf	20.00	42,900		
292		Replace operable partitions in Gymnasium	2	ea	35,000.00	70,000		
293		Replace basketball backstops	8	ea	10,000.00	80,000		
294		Volley ball standards and inserts	1	ls	5,000.00	5,000		
295		Score board - allow	1	ea	20,000.00	20,000		
296		New telescopic bleachers - seating capacity 650	1	ls	130,000.00	130,000		
297								
298	119000	MISCELLANEOUS EQUIPMENT						
299		Allowance to replace projection screens, residential appliances science room equipment, kiln etc.	87,000	gsf	0.50	43,500		
300		SUBTOTAL					1,085,775	
301								
302	TOTAL - EQUIPMENT							\$1,085,775

E20 FURNISHINGS

307	E2010 FIXED FURNISHINGS							
308								
309	122100	WINDOW TREATMENT						
310		Window treatment replacements - allowance	1	ls	40,000.00	40,000		
311								
312	123000	CASEWORK						
313		New casework throughout	87,000	gsf	12.00	1,044,000		
314		SUBTOTAL					1,084,000	
315								
316	E2020 MOVABLE FURNISHINGS							
317		All movable furnishings to be provided and installed by owner						
318		SUBTOTAL					NIC	
319								
320	TOTAL - FURNISHINGS							\$1,084,000

F10 SPECIAL CONSTRUCTION

324	F10 SPECIAL CONSTRUCTION							
325								
326		SUBTOTAL					-	
327								
328	TOTAL - SPECIAL CONSTRUCTION							

F20 SELECTIVE BUILDING DEMOLITION

332	F2010 BUILDING ELEMENTS DEMOLITION						
333							
334		Demo and remove existing floor slab including at enlarged courtyard	30,300	sf	8.00	242,400	
335		Demo and remove existing courtyard finishes	1,700	sf	8.00	13,600	
336		Allowance for heavy equipment access into Courtyard - selective demolition of floor and roof framing between two column lines to create an equipment corridor	1	ls	250,000.00	250,000	
337		Demo and remove upper floor for new courtyard, including shoring	10,240	sf	30.00	307,200	
338		Remove exterior windows and storefront	3,177	sf	8.00	25,416	
339		Demo and remove exterior wall at connection to new additions, shore as necessary	8,614	sf	15.00	129,210	
340		Demo and remove interior floor finishes, ceilings and wall finishes etc.	87,000	gsf	4.00	348,000	
341		Misc. selective interior demolition as req'd, partitions, specialties, furnishings, door hardware etc. - allowance	87,000	gsf	10.00	870,000	
342		Selective interior MEP demolition including removal of cut & capped MEP equipment & fixtures	87,000	gsf	4.00	348,000	
343		Demolish existing greenhouse	594	gsf	15.00	8,910	
344		SUBTOTAL					2,542,736
345							



Clinton Middle School
Clinton, MA

30-May-23

PSR Submission Estimate

GFA

87,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION AR-2: RENOVATION 700 STUDENTS

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F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION							\$2,542,736
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TRADE SUBTOTAL

\$38,646,485



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework: OPTION AR2

1	G	SITework	860,000	sf		-	
2							
3	G10	PHASING					
4		6' high site construction fence	4,500	lf	18.00	81,000	
5		Site construction entrance and removal/restoration	2	loc	12,000.00	24,000	
6		Temporary parking area - phase 1	1	ls	60,000.00	60,000	
7		Contractor laydown area - phase 1	1	ls	10,000.00	10,000	
8		Temporary utilities allowance	1	ls	50,000.00	50,000	
9		Temporary signage	1	ls	10,000.00	10,000	
10		Mobilizations	2	ea	35,000.00	70,000	
11		Street sweeping allowance	1	ls	10,000.00	10,000	
12		Traffic control measures for milling - allowance	1	ls	25,000.00	25,000	
13		Snow removal allowance	1	ls	25,000.00	25,000	
14		SUBTOTAL					365,000
15							
16	G10	SITE PREPARATION & DEMOLITION					
17	311000	GENERAL CONDITIONS					
18		Layout/As-builts/Survey	1	ls	15,000.00	15,000	
19	311000	SITE DEMOLITION AND RELOCATIONS					
20		Demolish existing pavement	60,000	sf	1.25	75,000	
21		Demolish existing basketball courts	1	ls	5,000.00	5,000	
22		Allowance for misc. demo	1	ls	50,000.00	50,000	
23	311000	UTILITY DEMOLITION					
24		Demolish existing utility allowance	1	ls	75,000.00	75,000	
25		Cut/cap allowance	1	ls	30,000.00	30,000	
26		Protection of utilities during construction allowance	1	ls	25,000.00	25,000	
27	311000	ROADWAY WORK - allowance					
28		Sawcut	320	lf	8.25	2,640	
29		Remove pavement	800	sf	3.50	2,800	
30		Temp pavement patching	800	sf	8.00	6,400	
31		Steel plates	1	ls	2,500.00	2,500	
32		Police details	7	dy	850.00	5,950	
33		Permanent pavement patch	800	sf	10.00	8,000	
34		Restore areas of utility connections	820	sf	10.00	8,200	
35	311000	VEGETATION & TOPSOIL MANAGEMENT					
36		Tree clearing allowance	1	ls	25,000.00	ETR	
38		Street sweeping allowance during hauling	1	ls	10,000.00	10,000	
39	312000	EROSION & SEDIMENT CONTROL					
40		Silt Fence; installation and removal	4,500	lf	12.00	54,000	
41		Silt Sacks; installation and removal	10	ea	250.00	2,500	
42		Erosion Control monitoring & maintenance	1	ls	15,000.00	15,000	
43		SUBTOTAL					392,990
44							
45	312000	SITE EARTHWORK					
37		Strip + stockpile topsoil	12,798	cy	10.00	127,980	
38		Load + remove topsoil; allowance	4,000	cy	45.00	180,000	
46		Site cut to design subgrade					
47		Cut + fills - assume 2 ft and balanced site	37,037	cy	15.00	555,555	
48		Fill - imported granular fill				Assumed Not Required	
49	312000	SOIL DISPOSAL					
50		Load excess soils for disposal				Assumed Not Required	
51		Less than RCS-1 site disposal 1.8x				Assumed Not Required	
52							
53	312000	ROCK REMOVAL - allowances				assume no rock	
54							
55	312000	ESTABLISHING GRADE					
57		Sub grade establishment	345,535	sf	0.15	51,830	
58		Fine grading throughout the site	345,535	sf	0.35	120,937	
59	312000	HAZARDOUS MATERIALS					
61		UST removal allowance				Already removed	
62		SUBTOTAL					1,036,302



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework: OPTION AR2

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G20 SITE IMPROVEMENTS

320000 ROADWAYS AND PARKING LOTS

Asphalt Paving; roadways/parking lots	143,965	sf					
gravel base; 12" thick	5,332	cy	60.00		319,920		
asphalt top; 1.5" thick	1,376	tns	225.00		309,600		
asphalt binder; 2.5" thick	2,290	tns	190.00		435,100		
320000 CURBING							
Vertical granite curb	4,825	lf	52.00		250,900		
ADA Curb cuts - allowance	1	ls	15,000.00		15,000		
320000 ROAD MARKINGS AND SIGNS							
Parking spot	172	ea	85.00		14,620		
Parking spot ADA	4	ea	250.00		1,000		
Sign allowance	1	ls	20,000.00		20,000		
Pavement markings allowance	1	ls	20,000.00		20,000		
Crosswalk hatching	2	loc	2,500.00		5,000		
SUBTOTAL						1,391,140	

320000 PEDESTRIAN PAVING

Concrete sidewalks	19,000	sf				
gravel base; 6" thick	352	cy	60.00		21,120	
Broom finish concrete paving; 4" thick pavement	19,000	sf	12.00		228,000	
Basketball Court	25,000	sf				
gravel base; 6" thick	463	cy	60.00		27,780	
asphalt top; 1" thick	159	tns	225.00		35,775	
asphalt binder; 2" thick	319	tns	190.00		60,610	
Allowance for color play surfacing	1	ls	25,000.00		25,000	
Basketball hoops	2	ea	5,000.00		10,000	
Concrete Plaza	250	sf				
gravel base; 6" thick	5	cy	60.00		300	
Broom finish concrete paving; 4" thick - colored pavement	250	sf	15.00		3,750	
Unit pavers	250	sf				
crushed stone; 8" thick	6	cy	55.00		330	
Unit Pavers	250	sf	32.00		8,000	
Geotextiles	250	sf	0.55		138	
Outdoor Plaza	1,000	sf				
gravel base; 6" thick	19	cy	60.00		1,140	
Broom finish concrete paving; 4" thick - colored pavement	1,000	sf	15.00		15,000	
Unit pavers	1,000	sf				
crushed stone; 8" thick	25	cy	55.00		1,375	
Unit Pavers	1,000	sf	32.00		32,000	
Geotextiles	1,000	sf	0.55		550	
SUBTOTAL						470,868

320000 SITE IMPROVEMENTS

320000 SITE FURNISHINGS

Bollards - utility	15	ea	1,200.00		18,000	
Bollards - stainless steel	15	ea	2,500.00		37,500	
Trash receptacles	5	ea	3,141.60		15,708	
Flagpole - 40' Ht.	1	ea	9,000.00		9,000	
Flagpole foundation	1	ea	3,200.00		3,200	
Benches	12	ea	3,500.00		42,000	
Benches - concrete	4	ea	4,000.00		16,000	
Bike racks	15	ea	850.00		12,750	
School sign	1	ls	25,000.00		25,000	
Landscape curbing allowance	1	ls	50,000.00		50,000	



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework: OPTION AR2							
123	Dumpster enclosure allowance	1	ls	10,000.00	10,000		
124							
125	Courtyard allowance	12,000	sf	60.00	720,000		
126							
127	320000 GRASS FIELD	140,000	sf				
128	Grass field/softball field with drainage	140,000	sf	8.00	1,120,000		
129	<u>Softball Infields</u>	6,570	sf				
130	Infield mix	132	tn	225.00	29,700		
131	Sand gravel fill; 12" thick	243	cy	50.00	12,150		
132	320000 PLAY AREAS						
133	<u>Playground - pour-in-place safety surfacing</u>	5,000	sf				
134	asphalt binder; 2" thick	64	tns	190.00	12,160		
135	crushed stone; 5" thick	77	cy	55.00	4,235		
136	Pour-in-place safety surface	5,000	sf	28.00	140,000		
137	Allowance for play equipment	1	ls	350,000.00	350,000		
138	320000 ATHLETIC EQUIPMENT						
139	<u>Softball</u>						
140	Softball mound	1	loc	3,500.00	3,500		
141	Softball bases	1	set	2,500.00	2,500		
142	Softball batters boxes	1	loc	3,500.00	3,500		
143	Softball foul poles	2	ea	4,800.00	9,600		
144	Softball backstop	1	ea	55,000.00	55,000		
145	Softball dugouts - players benches	4	ea	4,000.00	16,000		
146	Softball dugouts	2	ea	25,000.00	50,000		
138	320000 FENCING						
139	4' Ht - Chain link fence at playground	380	lf	65.00	24,700		
140	8' Ht - Chain link fence at perimeter	1,800	lf	85.00	153,000		
141	12' Ht - Chain link fence				deleted		
142	SUBTOTAL						2,945,203
143							
144	329900 SITE WALLS/Ramps/Stairs						
145	Allowance for retaining walls	650	lf	325.00	211,250		
146	Allowance for seating walls, steps etc.	1	ls	250,000.00	250,000		
147	SUBTOTAL						461,250
148							
149	Landscaping						
150	329900 LAWN AND SEED						
151	Screen topsoil	12,798	cy	15.00	191,970		
152	Export tailings from screening process - assume clean rock	3,839	cy	8.50	32,632		
153	Amend/Place	8,959	cy	26.00	232,934		
154	Rain gardens; planting	9,000	sf	10.00	90,000		
154	Soil and mulch at planting areas; 8" thick	1	ls	30,000.00	30,000		
155	Lawn seed mix	345,535	sf	0.35	120,937		
156	Irrigation at play fields	140,000	sf	2.00	280,000		
157	329900 PLANTS	Allowance					
158	Trees, Shrubs etc.	1	ls	250,000.00	250,000		
159	SUBTOTAL						1,228,473
160							
161	G30 CIVIL MECHANICAL UTILITIES						
162	210000 FIRE PROTECTION						
163	Allowance for new water supply for fire protection	1,750	lf	100.00	175,000		
164	Street connections	2	ea	15,000.00	30,000		
165	Fire hydrant	2	ea	6,500.00	13,000		
166	331000 WATER UTILITIES						
167	Allowance for new water supply for domestic service	150	lf	80.00	12,000		
168	SUBTOTAL						230,000
169							



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework: OPTION AR2

170	333000	SANITARY SEWER					
171		Allowance for new sewer service and grease trap	1	ls	125,000.00	125,000	
172		SUBTOTAL					125,000
173							
174	334000	STORM DRAINAGE					
175		Allowance for stormwater infiltration system	42,000	cf	12.00	504,000	
176		Allowance for structures/piping/rain gardens etc.	143,965	sf	7.00	1,007,755	
177		SUBTOTAL					1,511,755
178							
179	220001	NATURAL GAS					
180		No work in this section					
181		SUBTOTAL					-
182							

G40 ELECTRICAL UTILITIES

183		<u>Power</u>					
184		Power riser	1	ea	2,500.00	2,500	
185		Primary service duct bank	350	lf	80.00	28,000	
186		Pad mount transformer pad (TX by Utility Co)	1	ea	3,000.00	3,000	
187		3000A Secondary service duct bank	50	lf	1,500.00	75,000	
188		Generator					
189		Generator duct bank	70	lf	500.00	35,000	
190		Electric Vehicle Stations					
191		2-4" for future EV system	1	ls	15,000.00	15,000	
192		Security					
193		Site camera system, allow	1	ls	50,000.00	50,000	
194		Telecommunications					
195		Communication riser	1	ea	2,500.00	2,500	
196		Telcom duct bank 4-4" (empty)	350	lf	180.00	63,000	
197		<u>Site lighting</u>					
198		Site lighting allowance	143,965	sf	2.50	359,913	
199		Add Signals - flashing yellow lights				Assumed NR	
200		SUBTOTAL					633,913
201							
202							

TOTAL - SITE DEVELOPMENT

\$10,791,894



CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	82,500
Second Floor	37,000

TOTAL GROSS FLOOR AREA (GFA)				119,500 sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	168	CY	\$849 /cy	
Foundation Walls	384	CY	\$1,270 /cy	
Spread Footings	888	CY	\$761 /cy	
Grade beams	86	CY	\$1,298 /cy	
Piers	99	CY	\$1,932 /cy	

Total Foundation Concrete 1,625 CY

Strip footing, typical; 2'-4" x 12"

Formwork	3,710	sf	16.00	59,360
Re-bar	18,550	lbs.	2.00	37,100
Concrete material	168	cy	155.00	26,040
Placing concrete	168	cy	120.00	20,160

Strip footing at retaining wall; 4'-6" x 16" - assumed not required

Formwork		sf	16.00	
Re-bar		lbs.	2.00	
Concrete material		cy	155.00	
Placing concrete		cy	120.00	

Foundation wall; 16" thick

Formwork	14,840	sf	20.00	296,800
Re-bar	33,390	lbs.	2.00	66,780
Concrete material	384	cy	155.00	59,520
Placing concrete	384	cy	120.00	46,080
Form shelf	1,855	lf	10.00	18,550

Retaining wall; 16" thick x 5' high - assumed not required

Formwork		sf	22.00	
Re-bar		lbs.	2.00	
Concrete material		cy	155.00	
Placing concrete		cy	120.00	
Form shelf		lf	10.00	

Exterior spread footings, typical; 7'-0" x 7'-0" x 22"

Formwork	3,997	sf	18.00	71,946
Re-bar	37,050	lbs.	2.00	74,100
Concrete material	272	cy	155.00	42,160
Placing concrete	272	cy	120.00	32,640
Set anchor bolts grout plates	78	ea	150.00	11,700

Interior spread footings, typical; 9'-6" x 9'-6" x 26"

Formwork	6,670	sf	18.00	120,060
Re-bar	70,875	lbs.	2.00	141,750
Concrete material	616	cy	155.00	95,480
Placing concrete	616	cy	120.00	73,920
Set anchor bolts grout plates	81	ea	150.00	12,150

Grade beams at braced frames, allow

Formwork	2,200	sf	15.00	33,000
Re-bar	27,500	lbs.	2.00	55,000
Concrete material	86	cy	155.00	13,330
Placing concrete	86	cy	120.00	10,320

Piers/Pilasters

Formwork	5,342	sf	20.00	106,840
Re-bar	28,620	lbs.	2.00	57,240
Concrete material	99	cy	155.00	15,345
Placing concrete	99	cy	120.00	11,880

Miscellaneous



PSR Submission Estimate

GFA

119,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST	
OPTION NC-1: 500 STUDENTS								
55	Elevator pit	1	loc	40,000.00	40,000			
56								
57	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
58	Trowelled-on bituminous mastic dam proofing at foundation walls	7,420	sf	4.00	29,680			
59	Waterproofing at elevator pit	360	sf	16.00	5,760			
60								
61	072100 THERMAL INSULATION							
62	2" Insulation at foundation walls	7,420	sf	3.00	22,260			
63								
64	312000 EARTHWORK							
65	<u>Strip footings/Fdn wall</u>							
66	Excavation	1,237	cy	10.00	12,370			
67	Remove off-site	1,237	cy	32.00	39,584			
68	Backfill with imported material	1,069	cy	48.00	51,312			
69	<u>Spread footings/Grade beams</u>							
70	Excavation	2,924	cy	10.00	29,240			
71	Remove off-site	2,924	cy	32.00	93,568			
72	Backfill with imported material	1,950	cy	48.00	93,600			
73	<u>Building</u>							
74	Cut; assumed 2 feet	6,111	cy	15.00	91,665			
75	Fill - granular fill pad; allow 2 feet	6,111	cy	48.00	293,328			
76	<u>Miscellaneous</u>							
77	Gravel fill beneath footings, 12"	613	cy	40.00	24,520			
78	Perimeter drain	1,855	lf	30.00	55,650			
79	Temporary dewatering for foundation work	1	ls	20,000.00	20,000			
80	SUBTOTAL					2,511,788		
81								
82	A1020 SPECIAL FOUNDATIONS							
83	Allowance for rammed aggregate piers				Assumed NR			
84	SUBTOTAL					-		
85								
86	A1030 LOWEST FLOOR CONSTRUCTION							
87								
88	033000 CONCRETE							
89	<u>Slab on grade</u>	82,500	sf					
90	Vapor barrier at slab on grade	82,500	sf	1.25	103,125			
91	WWF reinforcement	94,875	sf	1.80	170,775			
92	Concrete - 6" thick	1,604	cy	155.00	248,620			
93	Barrier One Admixture	1,604	cy		Assumed Not Required			
94	Placing concrete	1,604	cy	90.00	144,360			
95	Finishing and curing concrete	82,500	sf	3.00	247,500			
96	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	5,000.00	5,000			
97	<u>Miscellaneous</u>							
98	Stage ramp	1	ls	50,000.00	50,000			
99	Equipment pads	1	ls	10,000.00	10,000			
100	Radon system	82,500	sf	3.00	247,500			
101								
102	072100 THERMAL INSULATION							
103	Slab insulation, 2" thick; 2' @ perimeter only	7,420	sf	2.50	18,550			
104								
105	312000 EARTHWORK							
106	<u>Building</u>							
106	Improve soils/ground improvement allowance	82,500	sf	8.00	660,000			
107	Gravel base, 12"	3,056	cy	48.00	146,688			
108	Compact existing sub-grade	82,500	sf	1.00	82,500			
109	Under slab E&B for plumbing	82,500	sf	1.50	123,750			
110	SUBTOTAL					2,258,368		
111								
112	TOTAL - FOUNDATIONS						\$4,770,156	
113								
114								



PSR Submission Estimate

GFA 119,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

No Work in this section

SUBTOTAL

-

A2020 BASEMENT WALLS

No Work in this section

SUBTOTAL

-

TOTAL - BASEMENT CONSTRUCTION

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

14.5 lbs/sf
866 tns excluding roof screens and canopies
\$6,769 \$/Ton

033000 CONCRETE

WWF reinforcement

42,550 sf 1.80 76,590

Concrete fill to metal deck; 3-1/2" normal weight, total thickness 5 1/2"

659 cy 160.00 105,440

Place and finish concrete

37,000 sf 3.50 129,500

Rebar to decks

11,100 lbs 2.00 22,200

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;

Floor framing 14.5 lbs/sf

268 tns 5,500.00 1,474,000

Allowance for additional miscellaneous steel angles, plates etc.

assume included in lbs/sf tns

Shear studs

9,250 ea 3.50 32,375

2" metal floor deck

37,000 sf 6.50 240,500

Allowance for expansion joint

1 ls 10,000.00 10,000

078100 FIREPROOFING/FIRESTOPPING

Fire proofing to columns and beams

37,000 sf 2.75 101,750

Intumescent allowance

1 ls 35,000.00 35,000

SUBTOTAL

2,227,355

B1020 ROOF CONSTRUCTION

033000 CONCRETE

Allowance at mechanical equipment/low roof

Concrete fill to metal roof deck

13,000 sf 10.00 130,000

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;

Floor framing 14.5 lbs/sf at typical roof

598 tns 5,500.00 3,289,000

Allowance for additional miscellaneous steel angles, plates etc.

assume included in lbs/sf tns

Shear studs

20,625 ea 3.50 72,188

1-1/2" metal floor deck at typical roof

82,500 sf 6.00 495,000

Premium for 3" acoustic deck at gymnasium

6,800 sf 6.50 44,200

HSS support framing at roof screen @ 110 lbs/lf

10 tns 5,800.00 58,000

Steel framing at canopies @ 20 lbs/sf

27 tns 5,800.00 156,600

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to roof deck and structure

NR

SUBTOTAL

4,244,988

TOTAL - SUPERSTRUCTURE \$6,472,343

B20 EXTERIOR CLOSURE

57,564 sf



PSR Submission Estimate

GFA

119,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

176							
177	B2010 EXTERIOR WALLS	57,564	sf		Total Exterior Closure		
178							
179	040001 MASONRY						
180							
181	Brick veneer; 40%	23,026	sf	44.00	1,013,144		
182	Precast trim	23,026	sf	2.00	46,052		
183	8" CMU backup at Kitchen and Receiving	1,395	sf	32.00	44,640		
184	Staging/Lifts to exterior wall				Included		
185							
186	055000 MISCELLANEOUS METALS						
187	Miscellaneous metals to exterior; lintels, angles etc.	23,026	sf	1.00	23,026		
188	Relieving angles				assume included in lbs/sf tns		
189							
190	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
191	Air barrier	46,052	sf	8.80	405,258		
192	Air barrier/flashing at windows	3,838	lf	6.25	23,988		
193	Air barrier @ overhangs/soffits	2,700	sf	8.50	22,950		
194	Miscellaneous sealants to closure	46,052	sf	0.50	23,026		
195							
196	072100 THERMAL INSULATION						
197	3" Rigid insulation	46,052	sf	4.00	184,208		
198	Spray insulation; 2" typical	46,052	sf	3.00	138,156		
199	3" Rigid insulation @ overhangs/soffits	2,700	sf	4.00	10,800		
200	Insulation at window openings	3,838	lf	6.00	23,028		
201							
202	074213 WALL PANELS						
203	Alucobond metal panels: 40%	23,026	sf	90.00	2,072,340		
204	Prefinished aluminum panels at roof overhang soffits	2,700	sf	90.00	243,000		
205	Pre-finished metal fascia, assume 12" wide	1,900	lf	90.00	171,000		
206	Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750		
207							
208	092900 GYPSUM BOARD ASSEMBLIES						
209	Framing at soffits	2,700	sf	18.00	48,600		
210	8" metal stud backup, typical	44,657	sf	14.00	625,198		
211	Gypsum Sheathing	44,657	sf	3.50	156,300		
212	Drywall lining to interior face of stud backup	44,657	sf	4.00	178,628		
213							
214	101400 SIGNAGE						
215	Signage	1	ls	10,000.00	10,000		
216	SUBTOTAL					5,577,092	
217							
218	B2020 WINDOWS; 20% glazed	11,513	sf				
219							
220	092900 GYPSUM BOARD ASSEMBLIES						
221	Wood blocking at openings	3,838	lf	14.00	53,732		
222							
223	079200 JOINT SEALANTS						
224	Backer rod & double sealant	3,838	lf	10.00	38,380		
225							
226	080001 METAL WINDOWS						
227	Aluminum windows/CW/Storefront; double glazed	11,513	sf	145.00	1,669,385		
228	Sun control at south facing classrooms - allow	500	lf	250.00	125,000		
229	Premium for 3M security film @ first floor	1,500	sf	40.00	60,000		
230	Premium for triple glazing				Excluded		
231							
232	089100 LOUVERS						
233	Louvers - allowance	100	sf	85.00	8,500		
234	SUBTOTAL					1,954,997	
235							
236	B2030 EXTERIOR DOORS						
237							



PSR Submission Estimate

GFA 119,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

238	Exterior door allowance	119,500	gsf	1.50	179,250		
239	SUBTOTAL					179,250	
TOTAL - EXTERIOR CLOSURE							\$7,711,339

B30 ROOFING

B3010 ROOF COVERINGS

247	PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	82,500	sf	32.00	2,640,000		
249	Pre-finished metal coping	1,900	lf	50.00	95,000		
250	Canopy roof system	2,700	sf	32.00	86,400		
251	Allowance for roof hatches, ladders, walkway pads etc.	1	ls	30,000.00	30,000		
252	SUBTOTAL					2,851,400	
B3020 ROOF OPENINGS							
255	No items in this section						
256	SUBTOTAL					-	
TOTAL - ROOFING							\$2,851,400

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

264	Interior partitions; gwb/ metal stud partitions including premium for CMU in Stairs, Gym and kitchen and allowance for glazed partitions throughout. Abuse resistant board at select areas.	119,500	sf	37.00	4,421,500		
266	SUBTOTAL					4,421,500	

C1020 INTERIOR DOORS

270	Interior doors; complete	119,500	gsf	7.00	836,500		
272	SUBTOTAL					836,500	

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

276	Miscellaneous metals complete including ceiling grid supports	119,500	gsf	2.50	298,750		
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064100 FINISH CARPENTRY

279	Millwork allowance	119,500	gsf	4.00	478,000		
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

282	Miscellaneous sealants throughout building	119,500	gsf	1.00	119,500		
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101100 VISUAL DISPLAY SURFACES

285	Marker boards/TB/ Flagpoles complete	119,500	gsf	1.60	191,200		
286	Interactive White Board projectors					FF&E	

101400 SIGNAGE

289	Signage; complete package	119,500	gsf	0.80	95,600		
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102110 TOILET COMPARTMENTS + ACCESSORIES

292	Toilet partitions/bathroom accessories	119,500	gsf	1.00	119,500		
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104400 FIRE PROTECTION SPECIALTIES

295	Fire extinguisher cabinets	1	ls	10,000.00	10,000		
296	AED cabinets	1	ls	1,500.00	1,500		

105113 LOCKERS

299	Student lockers/ cubbies, kitchen lockers etc.	119,500	gsf	1.50	179,250		
300	SUBTOTAL					1,493,300	



CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

TOTAL - INTERIOR CONSTRUCTION							\$6,751,300
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs; complete	3	flt	45,000.00	135,000	
Premium for Main stair	1	flt	15,000.00	15,000	
Platform steps	1	ls	5,000.00	5,000	
SUBTOTAL					155,000

C2020 STAIR FINISHES

Finishes complete	3	flt	5,000.00	15,000	
SUBTOTAL					15,000

TOTAL - STAIRCASES							\$170,000
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C30 INTERIOR FINISHES

C3010 WALL FINISHES

Paint to walls	119,500	gsf	2.50	298,750	
Proscenium - allowance	1	ls	25,000.00	25,000	
Allowance for specialty wall finishes; Fabric wrapped acoustic panels in Music & Practice rooms and Library	1,500	sf	40.00	60,000	
PT to corridor/stair walls on 5ft H, wainscot	16,635	sf	36.00	598,860	
CT to toilet walls	3,904	sf	32.00	124,928	
Wood veneer throughout - allowance	2,000	sf	80.00	160,000	
Vinyl graphics - allowance	1	ls	30,000.00	30,000	
FRP in kitchen	1,944	sf	14.00	27,216	
Tectum in Gymnasium	2,400	sf	22.00	52,800	
SUBTOTAL					1,377,554

C3020 FLOOR FINISHES

HD Sheet linoleum, patterned; typical	88,464	sf	8.00	707,712	
Epoxy floor in toilets	4,736	sf	20.00	94,720	
Sealed concrete in BOH/ receiving	2,000	sf	2.50	5,000	
Quarry tile in kitchen, mudset	3,200	sf	36.00	115,200	
HD linoleum flooring at cafeteria	5,800	sf	8.00	46,400	
Maple athletic flooring in gymnasium	7,600	sf	24.00	182,400	
Platform flooring	1,725	sf	28.00	48,300	
Entry mats - walk-off mats	500	sf	20.00	10,000	
Allowances for bases throughout	1	ls	120,973.20	120,973	
SUBTOTAL					1,330,705

C3030 CEILING FINISHES

Armstrong ACT Ultima, typical, 2x2	89,364	sf	7.00	625,548	
Armstrong ACT Health Zone ceilings in toilets, 2x2	4,736	sf	9.00	42,624	
Armstrong Clean room ceilings in kitchen, 2x2	3,200	sf	10.00	32,000	
Armstrong wood acoustic panels Woodworks - allowance	2,000	sf	55.00	110,000	
Paint exposed structure in Gym, Storage and Platform	9,325	sf	3.50	32,638	
Premium for fabric covered acoustical ceiling panel clouds at platform	1,200	sf	40.00	48,000	
GWB ceilings; painted	4,000	sf	16.00	64,000	
GWB ceilings; 2hr at elevator shaft, electric room etc.	900	sf	20.00	18,000	
Miscellaneous soffits/GWB	119,500	gsf	3.00	358,500	
SUBTOTAL					1,331,310



PSR Submission Estimate

GFA 119,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

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TOTAL - INTERIOR FINISHES							\$4,039,569
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR

142000	ELEVATOR						
	New two stop elevator	1	ea	180,000.00	180,000		
	Elevator sills and pit ladder	1	ls	3,000.00	3,000		
	SUBTOTAL					183,000	

TOTAL - CONVEYING SYSTEMS							\$183,000
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D20 PLUMBING

D20 PLUMBING, GENERALLY

	Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm, acid W&V & natural gas piping.	119,500	gsf	27.00	3,226,500		
	SUBTOTAL					3,226,500	

TOTAL - PLUMBING							\$3,226,500
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D30 HVAC

D30 HVAC, GENERALLY

	HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS	119,500	gsf	93.00	11,113,500		
	SUBTOTAL					11,113,500	

TOTAL - HVAC							\$11,113,500
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D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

	Fire protection complete system	119,500	gsf	8.50	1,015,750		
	SUBTOTAL					1,015,750	

TOTAL - FIRE PROTECTION							\$1,015,750
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D50 ELECTRICAL

D50 ELECTRICAL

	Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA etc.	119,500	gsf	60.00	7,170,000		
	AV sound system and projection at Gym/Café	1	ls	200,000.00	200,000		
	Network switches	119,500	sf	1.50	179,250		
	Wi-Fi equipment	119,500	sf	1.00	119,500		
	Video Surveillance system	119,500	sf	2.00	239,000		
	Access Control system	119,500	sf	1.00	119,500		
	VOIP telephone system	119,500	sf	1.50	179,250		
	SUBTOTAL					8,206,500	



PSR Submission Estimate

GFA 119,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

TOTAL - ELECTRICAL							\$8,206,500
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

113100	APPLIANCES						
	Residential appliances; allowance	1	ls	15,000.00	15,000		
114000	FOODSERVICE EQUIPMENT						
	Kitchen equipment per Colburn Guyette email dated 5/24/2023	1	ls	800,000.00	800,000		
115213	PROJECTION SCREENS						
	Projection screen - 12'-8" wide x 8' high; cafeteria stage	1	ea	10,000.00	10,000		
116200	THEATRE EQUIPMENT						
	Curtain and rigging; allowance	1	ls	30,000.00	30,000		
	Portable bleachers in Band room	1	ls	24,375.00	24,375		
116600	ATHLETIC EQUIPMENT						
	Gym safety wall pads	1,650	sf	20.00	33,000		
	Basketball backstops, motorized	6	ea	10,000.00	60,000		
	Gymnasium dividing curtain; (1) @ 60'	1,440	sf	18.00	25,920		
	Volleyball net and standards	1	ls	5,000.00	5,000		
	Score board in Gym - allow	1	ea	20,000.00	20,000		
	Bleachers; 550 capacity	1	ls	110,000.00	110,000		
	SUBTOTAL					1,133,295	

TOTAL - EQUIPMENT							\$1,133,295
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100	WINDOW TREATMENT						
	Shades; allowance	11,513	sf	8.00	92,104		
123000	CASEWORK						
	Wood casework w/ solid surface counters throughout	119,500	gsf	12.00	1,434,000		
	SUBTOTAL					1,526,104	

E2020 MOVABLE FURNISHINGS
All movable furnishings to be provided and installed by owner

	SUBTOTAL					NIC	
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TOTAL - FURNISHINGS							\$1,526,104
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

	SUBTOTAL					-	
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TOTAL - SPECIAL CONSTRUCTION							
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Clinton Middle School
Clinton, MA

31-May-23

PSR Submission Estimate

GFA

119,500

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION NC-1: 500 STUDENTS

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F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION
SUBTOTAL

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F2020 HAZARDOUS COMPONENTS ABATEMENT
See main summary for HazMat allowance
SUBTOTAL

See Summary

TOTAL - SELECTIVE BUILDING DEMOLITION

TRADE SUBTOTAL

\$59,170,756



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITWORK: OPTION NC-1

1	G	SITWORK	860,000	sf		-	
2							
3	G10	PHASING					
4		6' high site construction fence	4,500	lf	18.00	81,000	
5		Site construction entrance and removal/restoration	2	loc	12,000.00	24,000	
6		Temporary parking area - phase 1	1	ls	60,000.00	60,000	
7		Contractor laydown area - phase 1	1	ls	10,000.00	10,000	
8		Temporary utilities allowance	1	ls	50,000.00	50,000	
9		Temporary signage	1	ls	10,000.00	10,000	
10		Mobilizations	2	ea	35,000.00	70,000	
11		Street sweeping allowance	1	ls	10,000.00	10,000	
12		Traffic control measures for milling - allowance	1	ls	25,000.00	25,000	
13		Snow removal allowance	1	ls	25,000.00	25,000	
14		SUBTOTAL					365,000
15							
16	G10	SITE PREPARATION & DEMOLITION					
17	311000	GENERAL CONDITIONS					
18		Layout/As-builts/Survey	1	ls	15,000.00	15,000	
19	311000	SITE DEMOLITION AND RELOCATIONS					
20		Demolish existing pavement	60,000	sf	1.25	75,000	
21		Demolish existing basketball courts	1	ls	5,000.00	5,000	
22		Allowance for misc. demo	1	ls	100,000.00	100,000	
23	311000	UTILITY DEMOLITION					
24		Demolish existing utility allowance	1	ls	75,000.00	75,000	
25		Cut/cap allowance	1	ls	30,000.00	30,000	
26		Protection of utilities during construction allowance	1	ls	25,000.00	25,000	
27	311000	ROADWAY WORK - allowance					
28		Sawcut	320	lf	8.25	2,640	
29		Remove pavement	800	sf	3.50	2,800	
30		Temp pavement patching	800	sf	8.00	6,400	
31		Steel plates	1	ls	2,500.00	2,500	
32		Police details	7	dy	850.00	5,950	
33		Permanent pavement patch	800	sf	10.00	8,000	
34		Restore areas of utility connections	820	sf	10.00	8,200	
35	311000	VEGETATION & TOPSOIL MANAGEMENT					
36		Tree clearing allowance	1	ls	25,000.00	ETR	
37		Street sweeping allowance during hauling	1	ls	10,000.00	10,000	
38	312000	EROSION & SEDIMENT CONTROL					
39		Silt Fence; installation and removal	4,500	lf	12.00	54,000	
40		Silt Sacks; installation and removal	10	ea	250.00	2,500	
41		Erosion Control monitoring & maintenance	1	ls	15,000.00	15,000	
42		SUBTOTAL					442,990
43							
44	312000	SITE EARTHWORK					
45		Strip + stockpile topsoil; 12" thick	14,815	cy	10.00	148,150	
46		Load + remove topsoil; allowance	4,000	cy	45.00	180,000	
47		Site cut to design subgrade					
48		Cut + fills - assume 1 ft and balanced site	44,444	cy	15.00	666,660	
49		Fill - imported granular fill				Assumed Not Required	
50	312000	SOIL DISPOSAL					
51		Load excess soils for disposal				Assumed Not Required	
52		Less than RCS-1 site disposal 1.8x				Assumed Not Required	
53							
54							
55	312000	ROCK REMOVAL - allowances				assume no rock	
56							
57	312000	ESTABLISHING GRADE					
58		Sub grade establishment	400,000	sf	0.15	60,000	
59		Fine grading throughout the site	400,000	sf	0.35	140,000	
60							
61	312000	HAZARDOUS MATERIALS					
62		UST removal allowance				Already removed	
63		SUBTOTAL					1,194,810



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework: OPTION NC-1

64							
65	G20	SITE IMPROVEMENTS					
70	320000	ROADWAYS AND PARKING LOTS					
71		<u>Asphalt Paving; roadways/parking lots</u>	160,000	sf			
72		gravel base; 12" thick	5,926	cy	60.00	355,560	
73		asphalt top; 1.5" thick	1,530	tns	225.00	344,250	
74		asphalt binder; 2.5" thick	2,545	tns	190.00	483,550	
75	320000	CURBING					
76		Vertical granite curb	8,500	lf	52.00	442,000	
77		ADA Curb cuts - allowance	1	ls	15,000.00	15,000	
78	320000	ROAD MARKINGS AND SIGNS					
79		Parking spot	150	ea	85.00	12,750	
80		Parking spot ADA	4	ea	250.00	1,000	
81		Sign allowance	1	ls	20,000.00	20,000	
82		Pavement markings allowance	1	ls	20,000.00	20,000	
83		Crosswalk hatching	2	loc	2,500.00	5,000	
84		SUBTOTAL					1,699,110
85							
86	320000	PEDESTRIAN PAVING					
87		<u>Concrete sidewalks</u>	19,000	sf			
88		gravel base; 6" thick	352	cy	60.00	21,120	
89		Broom finish concrete paving; 4" thick pavement	19,000	sf	12.00	228,000	
90		<u>Basketball Court</u>	25,000	sf			
91		gravel base; 6" thick	463	cy	60.00	27,780	
92		asphalt top; 1" thick	159	tns	225.00	35,775	
93		asphalt binder; 2" thick	319	tns	190.00	60,610	
94		Allowance for color play surfacing	1	ls	25,000.00	25,000	
95		Basketball hoops	2	ea	5,000.00	10,000	
96		<u>Concrete Plaza</u>	1,200	sf			
97		gravel base; 6" thick	22	cy	60.00	1,320	
98		Broom finish concrete paving; 4" thick - colored pavement	1,200	sf	15.00	18,000	
99		<u>Unit pavers</u>	1,200	sf			
100		crushed stone; 8" thick	30	cy	55.00	1,650	
101		Unit Pavers	1,200	sf	32.00	38,400	
102		Geotextiles	1,200	sf	0.55	660	
103		<u>Outdoor Plaza</u>	1,750	sf			
104		gravel base; 6" thick	32	cy	60.00	1,920	
105		Broom finish concrete paving; 4" thick - colored pavement	1,750	sf	15.00	26,250	
106		<u>Unit pavers</u>	1,750	sf			
107		crushed stone; 8" thick	43	cy	55.00	2,365	
108		Unit Pavers	1,750	sf	32.00	56,000	
109		Geotextiles	1,750	sf	0.55	963	
110		SUBTOTAL					555,813
111							
112	320000	SITE IMPROVEMENTS					
113	320000	SITE FURNISHINGS					
114		Bollards - utility	15	ea	1,200.00	18,000	
115		Bollards - stainless steel	15	ea	2,500.00	37,500	
116		Trash receptacles	5	ea	3,141.60	15,708	
117		Flagpole - 40' Ht.	1	ea	9,000.00	9,000	
118		Flagpole foundation	1	ea	3,200.00	3,200	
119		Benches	12	ea	3,500.00	42,000	
120		Benches - concrete	4	ea	4,000.00	16,000	
121		Bike racks	15	ea	850.00	12,750	
122		School sign	1	ls	25,000.00	25,000	
123		Landscape curbing allowance	1	ls	50,000.00	50,000	



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework: OPTION NC-1							
124	Dumpster enclosure allowance	1	ls	10,000.00	10,000		
125	320000 GRASS FIELD	62,500	sf				
126	Grass field with drainage	62,500	sf	8.00	500,000		
127	320000 PLAY AREAS						
128	Playground - pour-in-place safety surfacing	2,000	sf				
129	asphalt binder; 2" thick	26	tns	190.00	4,940		
130	crushed stone; 5" thick	31	cy	55.00	1,705		
131	Pour-in-place safety surface	2,000	sf	28.00	56,000		
132	Allowance for play equipment	1	ls	350,000.00	350,000		
133	320000 FENCING						
134	4' Ht - Chain link fence at playground	380	lf	65.00	24,700		
135	8' Ht - Chain link fence at perimeter	1,800	lf	85.00	153,000		
136	12' Ht - Chain link fence				deleted		
137	SUBTOTAL						1,329,503
138							
139	329900 SITE WALLS/Ramps/Stairs						
140	Allowance for retaining walls	600	lf	325.00	195,000		
141	Allowance for seating walls, steps etc.	1	ls	250,000.00	250,000		
142	SUBTOTAL						445,000
143							
144	Landscaping						
145	329900 LAWN AND SEED						
146	Screen topsoil	14,815	cy	15.00	222,225		
147	Export tailings from screening process - assume clean rock	4,445	cy	8.50	37,783		
148	Amend/Place	10,370	cy	26.00	269,620		
149	Soil and mulch at planting areas; 8" thick	1	ls	30,000.00	30,000		
150	Rain gardens; planting	9,000	sf	10.00	90,000		
150	Lawn seed mix	400,000	sf	0.35	140,000		
151	Irrigation at play fields	62,500	sf	2.00	125,000		
152	329900 PLANTS	Allowance					
153	Trees, Shrubs etc.	1	ls	200,000.00	200,000		
154	SUBTOTAL						1,114,628
155							
156	G30 CIVIL MECHANICAL UTILITIES						
157	210000 FIRE PROTECTION						
158	Allowance for new water supply for fire protection	1,200	lf	100.00	120,000		
159	Street connections	2	ea	15,000.00	30,000		
160	Fire hydrant	2	ea	6,500.00	13,000		
161	331000 WATER UTILITIES						
162	Allowance for new water supply for domestic service	150	lf	80.00	12,000		
163	SUBTOTAL						175,000
164							
165	333000 SANITARY SEWER						
166	Allowance for new sewer service and grease trap	1	ls	125,000.00	125,000		
167	SUBTOTAL						125,000
168							
169	334000 STORM DRAINAGE						
170	Allowance for stormwater infiltration system	42,000	cf	12.00	504,000		
171	Allowance for structures/piping/rain gardens etc.	160,000	sf	7.00	1,120,000		
172	SUBTOTAL						1,624,000
173							
174	220001 NATURAL GAS						
175	No work in this section						
176	SUBTOTAL						-
177							
178	G40 ELECTRICAL UTILITIES						
179	Power						
180	Power riser	1	ea	2,500.00	2,500		



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework: OPTION NC-1							
181	Primary service duct bank	500	lf	80.00	40,000		
182	Pad mount transformer pad (TX by Utility Co)	1	ea	3,000.00	3,000		
183	3000A Secondary service duct bank	100	lf	1,500.00	150,000		
184	Generator						
185	Generator duct bank	70	lf	500.00	35,000		
186	Electric Vehicle Stations						
187	2-4" for future EV system	1	ls	15,000.00	15,000		
188	Security						
189	Site camera system, allow	1	ls	50,000.00	50,000		
190	Telecommunications						
191	Communication riser	1	ea	2,500.00	2,500		
192	Telcom duct bank 4-4" (empty)	500	lf	180.00	90,000		
193	<u>Site lighting</u>						
194	Site lighting allowance	160,000	sf	2.50	400,000		
195	Add Signals - flashing yellow lights				Assumed NR		
196	SUBTOTAL					788,000	
197							
TOTAL - SITE DEVELOPMENT							\$9,858,854



CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	84,000
Second Floor	52,000

TOTAL GROSS FLOOR AREA (GFA)					136,000 sf
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A1010 STANDARD FOUNDATIONS

033000 CONCRETE

4	Strip Footings	166	CY	\$848 /cy		
5	Foundation Walls	378	CY	\$1,271 /cy		
6	Spread Footings	888	CY	\$761 /cy		
7	Grade beams	86	CY	\$1,298 /cy		
8	Piers	99	CY	\$1,932 /cy		
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PSR Submission Estimate

GFA 136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST	
OPTION NC-1 R1: 700 STUDENTS								
55	Elevator pit	1	loc	40,000.00	40,000			
56								
57	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
58	Trowelled-on bituminous mastic dam proofing at foundation walls	7,312	sf	4.00	29,248			
59	Waterproofing at elevator pit	360	sf	16.00	5,760			
60								
61	072100 THERMAL INSULATION							
62	2" Insulation at foundation walls	7,312	sf	3.00	21,936			
63								
64	312000 EARTHWORK							
65	<u>Strip footings/Fdn wall</u>							
66	Excavation	1,219	cy	10.00	12,190			
67	Remove off-site	1,219	cy	32.00	39,008			
68	Backfill with imported material	1,053	cy	48.00	50,544			
69	<u>Spread footings/Grade beams</u>							
70	Excavation	2,924	cy	10.00	29,240			
71	Remove off-site	2,924	cy	32.00	93,568			
72	Backfill with imported material	1,950	cy	48.00	93,600			
73	<u>Building</u>							
74	Cut; assumed 2 feet	6,222	cy	15.00	93,330			
75	Fill - granular fill pad; allow 2 feet	6,222	cy	48.00	298,656			
76	<u>Miscellaneous</u>							
77	Gravel fill beneath footings, 12"	611	cy	40.00	24,440			
78	Perimeter drain	1,828	lf	30.00	54,840			
79	Temporary dewatering for foundation work	1	ls	20,000.00	20,000			
80	SUBTOTAL					2,506,445		
81								
82	A1020 SPECIAL FOUNDATIONS							
83	Allowance for rammed aggregate piers				Assumed NR			
84	SUBTOTAL					-		
85								
86	A1030 LOWEST FLOOR CONSTRUCTION							
87								
88	033000 CONCRETE							
89	<u>Slab on grade</u>	84,000	sf					
90	Vapor barrier at slab on grade	84,000	sf	1.25	105,000			
91	WWF reinforcement	96,600	sf	1.80	173,880			
92	Concrete - 6" thick	1,633	cy	155.00	253,115			
93	Barrier One Admixture	1,633	cy		Assumed Not Required			
94	Placing concrete	1,633	cy	90.00	146,970			
95	Finishing and curing concrete	84,000	sf	3.00	252,000			
96	Allowance for slab depressions at entries, first floor toilets and Gym	1	ls	5,000.00	5,000			
97	<u>Miscellaneous</u>							
98	Stage ramp	1	ls	50,000.00	50,000			
99	Equipment pads	1	ls	10,000.00	10,000			
100	Radon system	84,000	sf	3.00	252,000			
101								
102	072100 THERMAL INSULATION							
103	Slab insulation, 2" thick; 2' @ perimeter only	7,312	sf	2.50	18,280			
104								
105	312000 EARTHWORK							
106	<u>Building</u>							
107	Improve soils/ground improvement allowance	84,000	sf	8.00	672,000			
108	Gravel base, 12"	3,111	cy	48.00	149,328			
109	Compact existing sub-grade	84,000	sf	1.00	84,000			
110	Under slab E&B for plumbing	84,000	sf	1.50	126,000			
111	SUBTOTAL					2,297,573		
112								
113	TOTAL - FOUNDATIONS						\$4,804,018	



PSR Submission Estimate

GFA 136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

No Work in this section

SUBTOTAL

A2020 BASEMENT WALLS

No Work in this section

SUBTOTAL

TOTAL - BASEMENT CONSTRUCTION

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

14.5 lbs/sf
986 tns excluding roof screens and canopies
\$6,737 \$/Ton

033000 CONCRETE

WWF reinforcement

59,800 sf 1.80 107,640

Concrete fill to metal deck; 3-1/2" normal weight, total thickness 5 1/2"

926 cy 160.00 148,160

Place and finish concrete

52,000 sf 3.50 182,000

Rebar to decks

15,600 lbs 2.00 31,200

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;

Floor framing 14.5 lbs/sf

377 tns 5,500.00 2,073,500

Allowance for additional miscellaneous steel angles, plates etc.

assume included in lbs/sf tns

Shear studs

13,000 ea 3.50 45,500

2" metal floor deck

52,000 sf 6.50 338,000

Allowance for expansion joint

1 ls 10,000.00 10,000

078100 FIREPROOFING/FIRESTOPPING

Fire proofing to columns and beams

52,000 sf 2.75 143,000

Intumescent allowance

1 ls 35,000.00 35,000

SUBTOTAL

3,114,000

B1020 ROOF CONSTRUCTION

033000 CONCRETE

Allowance at mechanical equipment/low roof

Concrete fill to metal roof deck

13,000 sf 10.00 130,000

051200 STRUCTURAL STEEL FRAMING

Steel floor framing, columns and lateral bracing;

Floor framing 14.5 lbs/sf at typical roof

609 tns 5,500.00 3,349,500

Allowance for additional miscellaneous steel angles, plates etc.

assume included in lbs/sf tns

Shear studs

21,000 ea 3.50 73,500

1-1/2" metal floor deck at typical roof

84,000 sf 6.00 504,000

Premium for 3" acoustic deck at gymnasium

6,800 sf 6.50 44,200

HSS support framing at roof screen @ 110 lbs/lf

10 tns 5,800.00 58,000

Steel framing at canopies @ 20 lbs/sf

27 tns 5,800.00 156,600

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to roof deck and structure

NR

SUBTOTAL

4,315,800

TOTAL - SUPERSTRUCTURE \$7,429,800

B20 EXTERIOR CLOSURE

57.779 sf



PSR Submission Estimate

GFA 136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

177							
178	B2010 EXTERIOR WALLS	57,779	sf				Total Exterior Closure
179							
180	040001 MASONRY						
181							
182	Brick veneer; 40%	23,112	sf	44.00	1,016,928		
183	Precast trim	23,112	sf	2.00	46,224		
184	8" CMU backup at Kitchen and Receiving	1,395	sf	32.00	44,640		
185	Staging/Lifts to exterior wall						Included
186							
187	055000 MISCELLANEOUS METALS						
188	Miscellaneous metals to exterior; lintels, angles etc.	23,112	sf	1.00	23,112		
189	Relieving angles						assume included in lbs/sf tns
190							
191	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
192	Air barrier	46,224	sf	8.80	406,771		
193	Air barrier/flashing at windows	3,852	lf	6.25	24,075		
194	Air barrier @ overhangs/soffits	2,700	sf	8.50	22,950		
195	Miscellaneous sealants to closure	46,224	sf	0.50	23,112		
196							
197	072100 THERMAL INSULATION						
198	3" Rigid insulation	46,224	sf	4.00	184,896		
199	Spray insulation; 2" typical	46,224	sf	3.00	138,672		
200	3" Rigid insulation @ overhangs/soffits	2,700	sf	4.00	10,800		
201	Insulation at window openings	3,852	lf	6.00	23,112		
202							
203	074213 WALL PANELS						
204	Alucobond metal panels: 40%	23,112	sf	90.00	2,080,080		
205	Prefinished aluminum panels at roof overhang soffits	2,700	sf	90.00	243,000		
206	Pre-finished metal fascia, assume 12" wide	1,941	lf	90.00	174,690		
207	Roof screen; allow 175 LF x 10ft H	1,750	sf	65.00	113,750		
208							
209	092900 GYPSUM BOARD ASSEMBLIES						
210	Framing at soffits	2,700	sf	18.00	48,600		
211	8" metal stud backup, typical	44,829	sf	14.00	627,606		
212	Gypsum Sheathing	44,829	sf	3.50	156,902		
213	Drywall lining to interior face of stud backup	44,829	sf	4.00	179,316		
214							
215	101400 SIGNAGE						
216	Signage	1	ls	10,000.00	10,000		
217	SUBTOTAL						5,599,236
218							
219	B2020 WINDOWS; 20% glazed	11,556	sf				
220							
221	092900 GYPSUM BOARD ASSEMBLIES						
222	Wood blocking at openings	3,852	lf	14.00	53,928		
223							
224	079200 JOINT SEALANTS						
225	Backer rod & double sealant	3,852	lf	10.00	38,520		
226							
227	080001 METAL WINDOWS						
228	Aluminum windows/CW/Storefront; double glazed	11,556	sf	145.00	1,675,620		
229	Sun control at south facing classrooms - allow	500	lf	250.00	125,000		
230	Premium for 3M security film @ first floor	1,500	sf	40.00	60,000		
231	Premium for triple glazing						Excluded
232							
233	089100 LOUVERS						
234	Louvers - allowance	100	sf	85.00	8,500		
235	SUBTOTAL						1,961,568
236							
237	B2030 EXTERIOR DOORS						
238							



PSR Submission Estimate

GFA 136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

239	Exterior door allowance	136,000	gsf	1.50	204,000		
240	SUBTOTAL					204,000	
TOTAL - EXTERIOR CLOSURE							\$7,764,804

B30 ROOFING

B3010 ROOF COVERINGS

247	PVC roofing membrane; Sarnafil, single ply w/ 8" insulation and vapor barrier includes blocking and flashings etc.	84,000	sf	32.00	2,688,000			
248	Pre-finished metal coping	1,941	lf	50.00	97,050			
249	Canopy roof system	2,700	sf	32.00	86,400			
250	Allowance for roof hatches, ladders, walkway pads etc.	1	ls	30,000.00	30,000			
251	SUBTOTAL					2,901,450		
252	B3020 ROOF OPENINGS							
253	No items in this section							
254	SUBTOTAL					-		
TOTAL - ROOFING							\$2,901,450	

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

262	Interior partitions; gwb/ metal stud partitions including premium for CMU in Stairs, Gym and kitchen and allowance for glazed partitions throughout. Abuse resistant board at select areas.	136,000	sf	37.00	5,032,000		
263	SUBTOTAL					5,032,000	

C1020 INTERIOR DOORS

264	Interior doors; complete	136,000	gsf	7.00	952,000		
265	SUBTOTAL					952,000	

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

266	Miscellaneous metals complete including ceiling grid supports	136,000	gsf	2.50	340,000		
267	Guardrails for open to below areas	210	lf	450.00	94,500		

064100 FINISH CARPENTRY

268	Millwork allowance	136,000	gsf	4.00	544,000		
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

269	Miscellaneous sealants throughout building	136,000	gsf	1.00	136,000		
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101100 VISUAL DISPLAY SURFACES

270	Marker boards/TB/ Flagpoles complete	136,000	gsf	1.60	217,600		
271	Interactive White Board projectors					FF&E	

101400 SIGNAGE

272	Signage; complete package	136,000	gsf	0.80	108,800		
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102110 TOILET COMPARTMENTS + ACCESSORIES

273	Toilet partitions/bathroom accessories	136,000	gsf	1.00	136,000		
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104400 FIRE PROTECTION SPECIALTIES

274	Fire extinguisher cabinets	1	ls	10,000.00	10,000		
275	AED cabinets	1	ls	1,500.00	1,500		

105113 LOCKERS

276	Student lockers/ cubbies, kitchen lockers etc.	136,000	gsf	1.50	204,000		
277	SUBTOTAL					1,792,400	



PSR Submission Estimate

GFA 136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

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TOTAL - INTERIOR CONSTRUCTION							\$7,776,400
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs; complete	4	flt	45,000.00	180,000	
Premium for Main stair	1	flt	15,000.00	15,000	
Platform steps	1	ls	5,000.00	5,000	
SUBTOTAL					200,000

C2020 STAIR FINISHES

Finishes complete	4	flt	5,000.00	20,000	
SUBTOTAL					20,000

TOTAL - STAIRCASES							\$220,000
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C30 INTERIOR FINISHES

C3010 WALL FINISHES

Paint to walls	136,000	gsf	2.50	340,000	
Proscenium - allowance	1	ls	25,000.00	25,000	
Allowance for specialty wall finishes;					
Fabric wrapped acoustic panels in Music & Practice rooms and Library	1,500	sf	40.00	60,000	
PT to corridor/stair walls on 5ft H, wainscot	22,510	sf	36.00	810,360	
CT to toilet walls	3,904	sf	32.00	124,928	
Wood veneer throughout - allowance	2,000	sf	80.00	160,000	
Vinyl graphics - allowance	1	ls	30,000.00	30,000	
FRP in kitchen	1,944	sf	14.00	27,216	
Tectum in Gymnasium	2,400	sf	22.00	52,800	
SUBTOTAL					1,630,304

C3020 FLOOR FINISHES

HD Sheet linoleum, patterned; typical	104,139	sf	8.00	833,112	
Epoxy floor in toilets	4,736	sf	20.00	94,720	
Sealed concrete in BOH/ receiving	2,000	sf	2.50	5,000	
Quarry tile in kitchen, mudset	3,200	sf	36.00	115,200	
HD linoleum flooring at cafeteria	5,800	sf	8.00	46,400	
Maple athletic flooring in gymnasium	7,600	sf	24.00	182,400	
Platform flooring	1,725	sf	28.00	48,300	
Entry mats - walk-off mats	500	sf	20.00	10,000	
Allowances for bases throughout	1	ls	133,513.20	133,513	
SUBTOTAL					1,468,645

C3030 CEILING FINISHES

Armstrong ACT Ultima, typical, 2x2	105,039	sf	7.00	735,273	
Armstrong ACT Health Zone ceilings in toilets, 2x2	4,736	sf	9.00	42,624	
Armstrong Clean room ceilings in kitchen, 2x2	3,200	sf	10.00	32,000	
Armstrong wood acoustic panels Woodworks - allowance	2,000	sf	55.00	110,000	
Paint exposed structure in Gym, Storage and Platform	9,325	sf	3.50	32,638	
Premium for fabric covered acoustical ceiling panel clouds at platform	1,200	sf	40.00	48,000	
GWB ceilings; painted	4,000	sf	16.00	64,000	
GWB ceilings; 2hr at elevator shaft, electric room etc.	900	sf	20.00	18,000	
Miscellaneous soffits/GWB	136,000	gsf	3.00	408,000	



PSR Submission Estimate

GFA 136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	ESTD COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

364 SUBTOTAL 1,490,535

TOTAL - INTERIOR FINISHES						\$4,589,484
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR

142000 ELEVATOR

374 New two stop elevator 1 ea 180,000.00 180,000
 375 Elevator sills and pit ladder 1 ls 3,000.00 3,000
 376 SUBTOTAL 183,000

TOTAL - CONVEYING SYSTEMS						\$183,000
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D20 PLUMBING

D20 PLUMBING, GENERALLY

384 Plumbing system complete; new fixtures & equipment including domestic water, sanitary W&V, storm, acid W&V & natural gas piping. 136,000 gsf 27.00 3,672,000

385 SUBTOTAL 3,672,000

TOTAL - PLUMBING						\$3,672,000
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D30 HVAC

D30 HVAC, GENERALLY

393 HVAC system complete; 120 ton modular air-to-water heat pump system; condensing gas-fired boiler; VRF systems for admin, gym, media, cafeteria, DOAS (DX heat pump), hydronic piping, VAV's, terminal heating, TAB, BMS 136,000 gsf 93.00 12,648,000

394 SUBTOTAL 12,648,000

TOTAL - HVAC						\$12,648,000
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D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

402 Fire protection complete system 136,000 gsf 8.50 1,156,000

403 SUBTOTAL 1,156,000

TOTAL - FIRE PROTECTION						\$1,156,000
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D50 ELECTRICAL

D50 ELECTRICAL

411 Electrical system incl normal power, generator power, Mech wiring, lighting, controls, receptacles, circuitry, fire alarm, stage lighting, PV infrastructure, BDA, DAS, TD (RI and devices and cabling), security system, AV rough-in, lightning protection system, assisted listening systems, master clock/PA etc. 136,000 gsf 60.00 8,160,000

412 AV sound system and projection at Gym/Café 1 ls 200,000.00 200,000

413 Network switches 136,000 sf 1.50 204,000

414 Wi-Fi equipment 136,000 sf 1.00 136,000

415 Video Surveillance system 136,000 sf 2.00 272,000

416 Access Control system 136,000 sf 1.00 136,000

417 VOIP telephone system 136,000 sf 1.50 204,000



PSR Submission Estimate

GFA 136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

418 SUBTOTAL 9,312,000

TOTAL - ELECTRICAL						\$9,312,000
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

113100 APPLIANCES

Residential appliances; allowance 1 ls 15,000.00 15,000

114000 FOODSERVICE EQUIPMENT

Kitchen equipment per Colburn Guyette email dated 5/24/2023 1 ls 800,000.00 800,000

115213 PROJECTION SCREENS

Projection screen - 12'-8" wide x 8' high; cafeteria stage 1 ea 10,000.00 10,000

116200 THEATRE EQUIPMENT

Curtain and rigging; allowance 1 ls 30,000.00 30,000

Portable bleachers in Band room 1 ls 24,375.00 24,375

116600 ATHLETIC EQUIPMENT

Gym safety wall pads 1,650 sf 20.00 33,000

Basketball backstops, motorized 6 ea 10,000.00 60,000

Gymnasium dividing curtain; (1) @ 60' 1,440 sf 18.00 25,920

Volleyball net and standards 1 ls 5,000.00 5,000

Score board in Gym - allow 1 ea 20,000.00 20,000

Bleachers; 550 capacity 1 ls 110,000.00 110,000

448 SUBTOTAL 1,133,295

TOTAL - EQUIPMENT						\$1,133,295
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Shades; allowance 11,556 sf 8.00 92,448

123000 CASEWORK

Wood casework w/ solid surface counters throughout 136,000 gsf 12.00 1,632,000

462 SUBTOTAL 1,724,448

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

466 SUBTOTAL NIC

TOTAL - FURNISHINGS						\$1,724,448
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

474 SUBTOTAL -

TOTAL - SPECIAL CONSTRUCTION						
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Clinton Middle School
Clinton, MA

31-May-23

PSR Submission Estimate

GFA

136,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION NC-1 R1: 700 STUDENTS

479
480
481
482
483
484
485
486
487
488
489
490

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION
SUBTOTAL

-

F2020 HAZARDOUS COMPONENTS ABATEMENT
See main summary for HazMat allowance
SUBTOTAL

See Summary

TOTAL - SELECTIVE BUILDING DEMOLITION

TRADE SUBTOTAL

\$65,314,699



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITWORK: OPTION NC-1 R1

1	G	SITWORK	860,000	sf		-	
2							
3	G10	PHASING					
4		6' high site construction fence	4,500	lf	18.00	81,000	
5		Site construction entrance and removal/restoration	2	loc	12,000.00	24,000	
6		Temporary parking area - phase 1	1	ls	60,000.00	60,000	
7		Contractor laydown area - phase 1	1	ls	10,000.00	10,000	
8		Temporary utilities allowance	1	ls	50,000.00	50,000	
9		Temporary signage	1	ls	10,000.00	10,000	
10		Mobilizations	2	ea	35,000.00	70,000	
11		Street sweeping allowance	1	ls	10,000.00	10,000	
12		Traffic control measures for milling - allowance	1	ls	25,000.00	25,000	
13		Snow removal allowance	1	ls	25,000.00	25,000	
14		SUBTOTAL					365,000
15							
16	G10	SITE PREPARATION & DEMOLITION					
17	311000	GENERAL CONDITIONS					
18		Layout/As-builts/Survey	1	ls	15,000.00	15,000	
19	311000	SITE DEMOLITION AND RELOCATIONS					
20		Demolish existing pavement	60,000	sf	1.25	75,000	
21		Demolish existing basketball courts	1	ls	5,000.00	5,000	
22		Allowance for misc. demo	1	ls	50,000.00	50,000	
23	311000	UTILITY DEMOLITION					
24		Demolish existing utility allowance	1	ls	75,000.00	75,000	
25		Cut/cap allowance	1	ls	30,000.00	30,000	
26		Protection of utilities during construction allowance	1	ls	25,000.00	25,000	
27	311000	ROADWAY WORK - allowance					
28		Sawcut	320	lf	8.25	2,640	
29		Remove pavement	800	sf	3.50	2,800	
30		Temp pavement patching	800	sf	8.00	6,400	
31		Steel plates	1	ls	2,500.00	2,500	
32		Police details	7	dy	850.00	5,950	
33		Permanent pavement patch	800	sf	10.00	8,000	
34		Restore areas of utility connections	820	sf	10.00	8,200	
35	311000	VEGETATION & TOPSOIL MANAGEMENT					
36		Tree clearing allowance	1	ls	25,000.00	ETR	
37		Strip + stockpile topsoil	7,407	cy	11.50	See Below	
38		Street sweeping allowance during hauling	1	ls	10,000.00	10,000	
39	312000	EROSION & SEDIMENT CONTROL					
40		Silt Fence; installation and removal	4,500	lf	12.00	54,000	
41		Silt Sacks; installation and removal	10	ea	250.00	2,500	
42		Erosion Control monitoring & maintenance	1	ls	15,000.00	15,000	
43		SUBTOTAL					392,990
44							
45	312000	SITE EARTHWORK					
46		Strip + stockpile topsoil; 12" thick	14,815	cy	10.00	148,150	
47		Load + remove topsoil; allowance	4,000	cy	45.00	180,000	
48		Site cut to design subgrade					
49		Cut + fills - assume 1 ft and balanced site	44,444	cy	15.00	666,660	
50		Fill - imported granular fill				Assumed Not Required	
51	312000	SOIL DISPOSAL					
52		Load excess soils for disposal				Assumed Not Required	
53		Less than RCS-1 site disposal 1.8x				Assumed Not Required	
54							
55	312000	ROCK REMOVAL - allowances				assume no rock	
56							
57	312000	ESTABLISHING GRADE					
58		Sub grade establishment	400,000	sf	0.15	60,000	
59		Fine grading throughout the site	400,000	sf	0.35	140,000	
60							
61	312000	HAZARDOUS MATERIALS					
62		UST removal allowance				Already removed	
63							



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITWORK: OPTION NC-1 R1

64 SUBTOTAL 1,194,810

65 **G20 SITE IMPROVEMENTS**

66 **320000 ROADWAYS AND PARKING LOTS**

71 Asphalt Paving: roadways/parking lots 175,000 sf
 72 gravel base; 12" thick 6,481 cy 60.00 388,860
 73 asphalt top; 1.5" thick 1,673 tns 225.00 376,425
 74 asphalt binder; 2.5" thick 2,784 tns 190.00 528,960

75 **320000 CURBING**

76 Vertical granite curb 8,500 lf 52.00 442,000
 77 ADA Curb cuts - allowance 1 ls 15,000.00 15,000

78 **320000 ROAD MARKINGS AND SIGNS**

79 Parking spot 170 ea 85.00 14,450
 80 Parking spot ADA 4 ea 250.00 1,000
 81 Sign allowance 1 ls 20,000.00 20,000
 82 Pavement markings allowance 1 ls 20,000.00 20,000
 83 Crosswalk hatching 2 loc 2,500.00 5,000

84 SUBTOTAL 1,811,695

85 **320000 PEDESTRIAN PAVING**

86 Concrete sidewalks 19,000 sf
 87 gravel base; 6" thick 352 cy 60.00 21,120
 88 Broom finish concrete paving; 4" thick pavement 19,000 sf 12.00 228,000

89 Basketball Court 25,000 sf

90 gravel base; 6" thick 463 cy 60.00 27,780
 91 asphalt top; 1" thick 159 tns 225.00 35,775
 92 asphalt binder; 2" thick 319 tns 190.00 60,610
 93 Allowance for color play surfacing 1 ls 25,000.00 25,000
 94 Basketball hoops 2 ea 5,000.00 10,000

95 Concrete Plaza 1,200 sf

96 gravel base; 6" thick 22 cy 60.00 1,320
 97 Broom finish concrete paving; 4" thick - colored pavement 1,200 sf 15.00 18,000

98 Unit pavers 1,200 sf

99 crushed stone; 8" thick 30 cy 55.00 1,650
 100 Unit Pavers 1,200 sf 32.00 38,400
 101 Geotextiles 1,200 sf 0.55 660

102 Outdoor Plaza 1,750 sf

103 gravel base; 6" thick 32 cy 60.00 1,920
 104 Broom finish concrete paving; 4" thick - colored pavement 1,750 sf 15.00 26,250

105 Unit pavers 1,750 sf

106 crushed stone; 8" thick 43 cy 55.00 2,365
 107 Unit Pavers 1,750 sf 32.00 56,000
 108 Geotextiles 1,750 sf 0.55 963

109 SUBTOTAL 555,813

110 **320000 SITE IMPROVEMENTS**

111 **320000 SITE FURNISHINGS**

112 Bollards - utility 15 ea 1,200.00 18,000
 113 Bollards - stainless steel 15 ea 2,500.00 37,500
 114 Trash receptacles 5 ea 3,141.60 15,708
 115 Flagpole - 40' Ht. 1 ea 9,000.00 9,000
 116 Flagpole foundation 1 ea 3,200.00 3,200
 117 Benches 12 ea 3,500.00 42,000
 118 Benches - concrete 4 ea 4,000.00 16,000
 119 Bike racks 15 ea 850.00 12,750
 120 School sign 1 ls 25,000.00 25,000



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework: OPTION NC-1 R1							
124	Landscape curbing allowance	1	ls	50,000.00	50,000		
125	Dumpster enclosure allowance	1	ls	10,000.00	10,000		
126	320000 GRASS FIELD	62,500	sf				
127	Grass field with drainage	62,500	sf	8.00	500,000		
128	320000 PLAY AREAS						
129	Playground - pour-in-place safety surfacing	2,000	sf				
130	asphalt binder; 2" thick	26	tns	190.00	4,940		
131	crushed stone; 5" thick	31	cy	55.00	1,705		
132	Pour-in-place safety surface	2,000	sf	28.00	56,000		
133	Allowance for play equipment	1	ls	350,000.00	350,000		
134	320000 FENCING						
135	4' Ht - Chain link fence at playground	380	lf	65.00	24,700		
136	8' Ht - Chain link fence at perimeter	1,800	lf	85.00	153,000		
137	12' Ht - Chain link fence				deleted		
138	SUBTOTAL						1,329,503
139							
140	329900 SITE WALLS/Ramps/Stairs						
141	Allowance for retaining walls	600	lf	325.00	195,000		
142	Allowance for seating walls, steps etc.	1	ls	250,000.00	250,000		
143	SUBTOTAL						445,000
144							
145	Landscaping						
146	329900 LAWN AND SEED						
147	Screen topsoil	14,815	cy	15.00	222,225		
148	Export tailings from screening process - assume clean rock	4,445	cy	8.50	37,783		
149	Amend/Place	10,370	cy	26.00	269,620		
150	Soil and mulch at planting areas; 8" thick	1	ls	30,000.00	30,000		
151	Lawn seed mix	400,000	sf	0.35	140,000		
152	Rain gardens; planting	9,000	sf	10.00	90,000		
153	Irrigation at play fields	62,500	sf	2.00	125,000		
154	329900 PLANTS	Allowance					
155	Trees, Shrubs etc.	1	ls	200,000.00	200,000		
156	SUBTOTAL						1,114,628
157							
158	G30 CIVIL MECHANICAL UTILITIES						
159	210000 FIRE PROTECTION						
160	Allowance for new water supply for fire protection	1,200	lf	100.00	120,000		
161	Street connections	2	ea	15,000.00	30,000		
162	Fire hydrant	2	ea	6,500.00	13,000		
163	331000 WATER UTILITIES						
164	Allowance for new water supply for domestic service	150	lf	80.00	12,000		
165	SUBTOTAL						175,000
166							
167	333000 SANITARY SEWER						
168	Allowance for new sewer service and grease trap	1	ls	125,000.00	125,000		
169	SUBTOTAL						125,000
170							
171	334000 STORM DRAINAGE						
172	Allowance for stormwater infiltration system	42,000	cf	12.00	504,000		
173	Allowance for structures/piping/rain gardens etc.	175,000	sf	7.00	1,225,000		
174	SUBTOTAL						1,729,000
175							
176	220001 NATURAL GAS						
177	No work in this section						
178	SUBTOTAL						-
179							
180	G40 ELECTRICAL UTILITIES						
181	Power						



PSR Submission Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITWORK: OPTION NC-1 R1							
182	Power riser	1	ea	2,500.00	2,500		
183	Primary service duct bank	500	lf	80.00	40,000		
184	Pad mount transformer pad (TX by Utility Co)	1	ea	3,000.00	3,000		
185	3000A Secondary service duct bank	100	lf	1,500.00	150,000		
186	Generator						
187	Generator duct bank	70	lf	500.00	35,000		
188	Electric Vehicle Stations						
189	2-4" for future EV system	1	ls	15,000.00	15,000		
190	Security						
191	Site camera system, allow	1	ls	50,000.00	50,000		
192	Telecommunications						
193	Communication riser	1	ea	2,500.00	2,500		
194	Telcom duct bank 4-4" (empty)	500	lf	180.00	90,000		
195	<u>Site lighting</u>						
196	Site lighting allowance	175,000	sf	2.50	437,500		
197	Add Signals - flashing yellow lights				Assumed NR		
198	SUBTOTAL					825,500	
199							
TOTAL - SITE DEVELOPMENT							\$10,063,939

Preliminary Design Pricing Table Math Check Review Template
Clinton Middle School

 =calculation, do not overwrite

(AM Fogerty Estimated Costs)

Option	Total Gross (sf)	SF of Renovated Space (\$/sf)	SF of New Construction (\$/sf)	Site, Building Takedown, Haz Mat Etc. (\$)	Estimated Total Construction (\$)	Estimated Total Project Costs (\$)
BR	130,000 sf	130,000 sf	- sf	\$ 12,625,557	\$ 83,718,657	\$ 118,597,994
Base Repair		\$ 546.87 \$/sf	\$ - \$/sf		\$ 643.99 \$/sf	

Check	130,000 sf				\$ 83,718,657	
					\$ 643.99 \$/sf	
	0				\$ -	
					\$ 0.00	

Option AR1	134,000 sf	120,000 sf	14,000 sf	\$ 16,937,117	\$ 70,095,497	\$ 134,261,291
550		\$ 382.16 \$/sf	\$ 521.37 \$/sf		\$ 532.10 \$/sf	

Check	134,000 sf				\$ 70,095,497	
					\$ 523.10 \$/sf	
	0				\$ -	
					\$ 9.00	

Option AR1	145,500 sf	120,000 sf	25,500 sf	\$ 17,612,456	\$ 75,513,296	\$ 143,815,270
700		\$ 381.51 \$/sf	\$ 475.28 \$/sf		\$ 518.99 \$/sf	

Check	145,500 sf				\$ 75,513,296	
					\$ 518.99 \$/sf	
	0				\$ -	
					\$ (0.00)	

Option AR1.5	143,500 sf	99,000 sf	44,500 sf	\$ 11,189,117	\$ 72,223,922	\$ 138,966,978
550		\$ 382.16 \$/sf	\$ 521.37 \$/sf		\$ 503.30 \$/sf	

Check	143,500 sf				\$ 72,223,922	
					\$ 503.30 \$/sf	
	0				\$ -	
					\$ (0.00)	

Option AR1.5	150,000 sf	112,000 sf	38,000 sf	\$ 11,708,456	\$ 72,571,016	\$ 140,640,860
700		\$ 382.16 \$/sf	\$ 475.28 \$/sf		\$ 483.81 \$/sf	

Check	150,000 sf				\$ 72,571,016	
					\$ 483.81 \$/sf	
	0				\$ -	
					\$ 0.00	

Option AR2	141,000 sf	87,000 sf	54,000 sf	\$ 13,613,007	\$ 76,492,467	\$ 145,519,000
550		\$ 435.64 \$/sf	\$ 462.57 \$/sf		\$ 542.50 \$/sf	

Check	141,000 sf				\$ 76,492,467	
					\$ 542.50 \$/sf	
	0				\$ -	
					\$ 0.00	

Option AR2	156,000 sf	69,000 sf	87,000 sf	\$ 13,610,007	\$ 82,581,057	\$ 155,986,300
700		\$ 450.85 \$/sf	\$ 435.20 \$/sf		\$ 529.37 \$/sf	

Check	156,000 sf				\$ 82,581,057	
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					\$ 529.37 \$/sf
	0				\$ -
					\$ 0.00

Option NC1	119,500 sf	- sf	119,500 sf	\$ 13,308,135	\$ 72,951,780	\$ 132,267,036
New Constr.		\$ - \$/sf	\$ 499.11 \$/sf		\$ 610.48 \$/sf	

550

Check	119,500 sf				\$ 72,951,780	
					\$ 610.48 \$/sf	
	0				\$ -	
					\$ 0.00	

Option NC1	136,000 sf	- sf	136,000 sf	\$ 13,288,135	\$ 78,574,935	\$ 142,184,781
New Cons.**		\$ - \$/sf	\$ 480.05 \$/sf		\$ 577.76 \$/sf	

700

Check	136,000 sf				\$ 78,574,935	
					\$ 577.76 \$/sf	
	0				\$ -	
					\$ 0.00	

3.3.3 FINAL EVALUATION OF ALTERNATIVES

F. Summary of Merits & Limitations Narrative

As mentioned previously, the PDP identified three (3) options for further development and during the Preferred Schematic Report (PSR) phase an additional hybrid option was added and the “base repair” option was maintained as a metric of comparison for this Feasibility Study. Here is the complete list of options studied as part of the PSR:

- Base Repair Option, BR
- Addition/Renovation Option, AR-1; 550 and 700 student grade configurations
- Addition/Renovation Option, AR-2; 550 and 700 student grade configurations
- Addition/Renovation Option, AR-1.5; 550 and 700 student grade configurations
- New Construction Option, NC-1; 550 and 700 student grade configurations

The following is a description of the criteria used to evaluate each of the Options. The criteria are weighted from 1-5, 5 being the most important to the Town and School District. The ratings were developed as part of the Steering committee and School meetings. Each of the options were given a score between 1 and 5 for each of these criteria.

OPTION RANKING CRITERIA	
CRITERIA	DESCRIPTION
EDUCATIONAL PROGRAM FULFILLMENT	Rated based on the ability of the building to support the full educational program including separation of lower school (4-6) from upper school (7-8), separation between public core/community spaces and academic areas, organization of core academic areas into neighborhoods, exterior access, and views/daylighting
SPACE SUMMARY VARIATIONS	Rated based on the ability to provide the spaces required by the educational program (size & quantity) and the overall efficiency of the floor plan in respect to gross square footage.
SITE AND FACILITY GOALS & OBJECTIVES	Rated on a combination of factors including vehicular & pedestrian access, potential impact on traffic, ability to meet the desired site athletic field program, proximity to existing high school, and parking requirements.
ENERGY EFFICIENCY & UTILITIES	Rated on a combination of factors including impact on utilities (sewer, water, electrical power, fiber, natural gas) soils, other development issues (regulatory requirements, stormwater, etc.), and level of sustainable design compliance (orientation, envelope & building system performance)
CONSTRUCTION PHASING IMPACT	Rating reflects aspects of the site/building that may result in delays to the project target occupancy of Fall 2027 or extended construction beyond building occupancy, duration & level of impact on staff/students, and any additional costs associated with construction (modulars, general conditions, etc.)
ESTIMATED LOCAL SHARE	Rated according to the estimated town share derived from the preliminary total project budget forms produced by the OPM

BASE REPAIR [BR]		
RATING SCALE: 0=Negative → 5=Positive		
CRITERIA	SCORE	NOTES
EDUCATIONAL PROGRAM FULFILLMENT	1	<ul style="list-style-type: none"> ▪ No clear separation between upper & lower school ▪ No separation between public & academic spaces ▪ No neighborhood configurations ▪ Desired programmatic adjacencies not achieved
SPACE SUMMARY VARIATIONS	1	<ul style="list-style-type: none"> ▪ Does not provide the number and size of spaces needed to support either population. ▪ Provides larger Cafeteria & Gymnasium than baseline MSBA Space Summary Template ▪ Floor plan is slightly inefficient
SITE AND FACILITY GOALS & OBJECTIVES	4	<ul style="list-style-type: none"> ▪ Improves vehicular circulation ▪ Maintains existing playfields ▪ Proximity to High School is good ▪ Provides more parking than required
ENERGY EFFICIENCY & UTILITIES	4	<ul style="list-style-type: none"> ▪ Following utilities would require an upgrade/relocation: electrical & water ▪ Existing stormwater management to remain ▪ Envelope & building systems to be upgraded to comply with new energy codes ▪ Existing roof cannot support PV panels
CONSTRUCTION PHASING IMPACT	2	<ul style="list-style-type: none"> ▪ Estimated project duration 5–10 years ▪ Temporary Modulars are required ▪ Impact on staff/students would be significant
ESTIMATED LOCAL SHARE	1	<ul style="list-style-type: none"> ▪ This option has the highest estimated local share cost
TOTAL	13	

ADDITION/RENOVATION – 1 [AR-1]			
RATING SCALE: 0=Negative → 5=Positive			
CRITERIA	SCORE [550]	SCORE [700]	NOTES
EDUCATIONAL PROGRAM FULFILLMENT	2	3	<ul style="list-style-type: none"> ▪ Upper & lower school separated by floor level ▪ No separation between public & academic spaces ▪ Marginal neighborhood configurations ▪ Desired programmatic adjacencies are marginal
SPACE SUMMARY VARIATIONS	3	3	<ul style="list-style-type: none"> ▪ Provides the number and size of spaces needed to support either population. ▪ Provides larger Cafeteria & Gymnasium than baseline MSBA Space Summary Template ▪ Floor plan is slightly inefficient
SITE AND FACILITY GOALS & OBJECTIVES	4	4	<ul style="list-style-type: none"> ▪ Improves vehicular circulation ▪ Minor impact to existing playfields ▪ Proximity to High School is good ▪ Provides more parking than required
ENERGY EFFICIENCY & UTILITIES	4	4	<ul style="list-style-type: none"> ▪ Following utilities would require an upgrade/ relocation: electrical, water, & sewer ▪ Existing stormwater management to remain ▪ Envelope & building systems to be upgraded to comply with new energy codes ▪ Only the addition roof can support PV panels
CONSTRUCTION PHASING IMPACT	2	2	<ul style="list-style-type: none"> ▪ Estimated project duration 4 years ▪ Temporary Modulars are required ▪ Impact on staff/students would be significant
ESTIMATED LOCAL SHARE	5	4	<ul style="list-style-type: none"> ▪ This option has the lowest estimated local share cost
TOTAL	20	20	

ADDITION/RENOVATION – 2 [AR-2]			
RATING SCALE: 0=Negative → 5=Positive			
CRITERIA	SCORE [550]	SCORE [700]	NOTES
EDUCATIONAL PROGRAM FULFILLMENT	4	4	<ul style="list-style-type: none"> ▪ Upper & lower school separated by wings with a 6th grade neighborhood bridge between them ▪ Marginal separation between public & academic spaces ▪ Desirable neighborhood configurations with the exception of the 6th grade neighborhood ▪ Desired programmatic adjacencies are good
SPACE SUMMARY VARIATIONS	2	1	<ul style="list-style-type: none"> ▪ Provides the number and size of spaces needed to support either population. ▪ Provides larger Cafeteria & Gymnasium than baseline MSBA Space Summary Template ▪ Floor plan is extremely inefficient
SITE AND FACILITY GOALS & OBJECTIVES	4	4	<ul style="list-style-type: none"> ▪ Improves vehicular circulation ▪ Marginal impact to existing playfields ▪ Proximity to High School is best ▪ Provides the required parking
ENERGY EFFICIENCY & UTILITIES	3	3	<ul style="list-style-type: none"> ▪ Following utilities would require an upgrade/relocation: electrical, water, & sewer ▪ Existing stormwater management would need to be upgraded ▪ Envelope & building systems to be upgraded to comply with new energy codes ▪ Only the addition roofs can support PV panels
CONSTRUCTION PHASING IMPACT	3	3	<ul style="list-style-type: none"> ▪ Estimated project duration 4 years ▪ Temporary Modulars are not required ▪ Impact on staff/students would be significant
ESTIMATED LOCAL SHARE	3	2	<ul style="list-style-type: none"> ▪ This option has the second highest estimated local share cost
TOTAL	19	17	

ADDITION/RENOVATION – 1.5 [AR-1.5]			
RATING SCALE: 0=Negative → 5=Positive			
CRITERIA	SCORE [550]	SCORE [700]	NOTES
EDUCATIONAL PROGRAM FULFILLMENT	3	3	<ul style="list-style-type: none"> ▪ Upper school will be housed in the new addition and the lower school in the existing building. ▪ Marginal separation between public & academic spaces ▪ Desirable neighborhood configurations for 7/8th grades and marginal for grades 4–6 ▪ Desired programmatic adjacencies are marginal
SPACE SUMMARY VARIATIONS	1	2	<ul style="list-style-type: none"> ▪ Provides the number and size of spaces needed to support either population. ▪ Provides larger Cafeteria & Gymnasium than baseline MSBA Space Summary Template ▪ Floor plan is marginally inefficient
SITE AND FACILITY GOALS & OBJECTIVES	4	4	<ul style="list-style-type: none"> ▪ Improves vehicular circulation ▪ Marginal impact to existing playfields ▪ Proximity to High School is good ▪ Provides more parking than required
ENERGY EFFICIENCY & UTILITIES	4	4	<ul style="list-style-type: none"> ▪ Following utilities would require an upgrade/ relocation: electrical, water, & sewer ▪ Existing stormwater management would need to be upgraded ▪ Envelope & building systems to be upgraded to comply with new energy codes ▪ Only the addition roof can support PV panels
CONSTRUCTION PHASING IMPACT	3	3	<ul style="list-style-type: none"> ▪ Estimated project duration 4 years ▪ Temporary Modulars are not required ▪ Impact on staff/students would be significant
ESTIMATED LOCAL SHARE	5	5	<ul style="list-style-type: none"> ▪ This option has the second lowest estimated local share cost
TOTAL	20	21	

NEW CONSTRUCTION – 1 [NC-1]			
RATING SCALE: 0=Negative → 5=Positive			
CRITERIA	SCORE [550]	SCORE [700]	NOTES
EDUCATIONAL PROGRAM FULFILLMENT	5	5	<ul style="list-style-type: none"> ▪ Upper & lower school separated by wings ▪ Excellent separation between public & academic spaces ▪ Desirable neighborhood configurations achieved for all grade levels ▪ Desired programmatic adjacencies are excellent
SPACE SUMMARY VARIATIONS	5	5	<ul style="list-style-type: none"> ▪ Provides the number and size of spaces needed to support either population. ▪ Smaller Cafeteria & Gymnasium than other options ▪ Floor plan is very efficient
SITE AND FACILITY GOALS & OBJECTIVES	4	4	<ul style="list-style-type: none"> ▪ True separation of vehicular circulation is achieved ▪ Significant impact to existing playfields ▪ Proximity to High School is poor ▪ Provides the required parking
ENERGY EFFICIENCY & UTILITIES	4	4	<ul style="list-style-type: none"> ▪ All utilities would require an upgrade/relocation ▪ Existing stormwater management would need to be upgraded/supplemented ▪ Envelope & building systems to comply with new energy codes ▪ All roofs can support PV panels
CONSTRUCTION PHASING IMPACT	4	4	<ul style="list-style-type: none"> ▪ Estimated project duration 3 years ▪ Temporary Modulars are not required ▪ Impact on staff/students would be minor
ESTIMATED LOCAL SHARE	3	3	<ul style="list-style-type: none"> ▪ This option has the third lowest estimated local share cost
TOTAL	25	25	

Refer to the following charts for the full comparison matrix for each of the study enrollments and explanation of the Preferred Solution.

OPTIONS COMPARISON [550 STUDENTS]					
CRITERIA	BASE REPAIR [BR]	ADDITION/RENOVATION-1 [AR-1]	ADDITION/RENOVATION-2 [AR-2]	ADDITION/RENOVATION-1.5 [AR-1.5]	NEW CONSTRUCTION - 1 [NC-1]
EDUCATIONAL PROGRAM FULFILLMENT	1	2	4	3	5
SPACE SUMMARY VARIATIONS	1	3	2	1	5
SITE AND FACILITY GOALS & OBJECTIVES	4	4	4	4	4
ENERGY EFFICIENCY & UTILITIES	4	4	3	4	4
CONSTRUCTION PHASING IMPACT	2	2	3	3	4
ESTIMATED LOCAL SHARE	1	5	3	5	3
TOTAL	13	20	19	20	25

OPTIONS COMPARISON [700 STUDENTS]					
CRITERIA	BASE REPAIR [BR]	ADDITION/RENOVATION-1 [AR-1]	ADDITION/RENOVATION-2 [AR-2]	ADDITION/RENOVATION-1.5 [AR-1.5]	NEW CONSTRUCTION - 1 [NC-1]
EDUCATIONAL PROGRAM FULFILLMENT	1	3	4	3	5
SPACE SUMMARY VARIATIONS	1	3	1	2	5
SITE AND FACILITY GOALS & OBJECTIVES	4	4	4	4	4
ENERGY EFFICIENCY & UTILITIES	4	4	3	4	4
CONSTRUCTION PHASING IMPACT	2	2	3	3	4
ESTIMATED LOCAL SHARE	1	4	2	5	3
TOTAL	13	20	17	21	25

PSR Preferred Solution: At the June 20, 2023 School Building/Permanent Building Committee meeting, Option New Constructon - 1 [NC-1] was unanimously approved as the Preferred Solution.

3.3.4 PREFERRED SOLUTION

- A. Updated Educational Program
- B. Updated Space Summary
- C. Sustainable Design
- D. Building Floor Plans
- E. Site Plans & Section
- F. Budget Statement for Preferred Solution
- G. Updated Project Schedule

3.3.4 PREFERRED SOLUTION

- A. Updated Educational Program
 - 1. Redlined Educational Program
 - 2. Educational Program with Designer Responses

OVERVIEW

The following educational program narrative has been developed by Clinton Public Schools (CPS) in collaboration with their designer Lamoureux Pagano & Associates Architects (LPA|A) and their OPM, Dore + Whittier (D+W). It communicates the District's existing and future educational program offerings, defines expected educational activities, and provides an in-depth description of the District's position on key curriculum goals, objectives, and policies. Information contained in this section is organized to align with the expectations identified in the MSBA Module 3, Section 3.1.2.

The educational program applies to a new or renovated facility serving one of two agreed-upon enrollments:

- **Enrollment 1:** 550 students, 5th through 8th grade
- **Enrollment 2:** 700 students, 4th through 8th grade

Ultimately, the intent of this section of the Preliminary Design Program document is to establish a clear roadmap for the development of a few conceptual design alternatives based on the criteria outlined, and to create a basis for evaluation to identify a preferred alternative. Currently the Clinton Elementary School houses grades PreK through 4, and Clinton Middle School supports grades 5–8. The Elementary School is experiencing overcrowding and does not have sufficient space to offer full time Pre-K to all students in the district. Historically, the grade configuration has fluctuated between 4–8 and 5–8 over the years depending on the enrollment and condition of other buildings.

Additionally, on February 13, 2023 the Clinton School Committee voted unanimously to endorse a future 4–8 Grade Configuration at the Clinton Middle School. Regardless of the final grade configuration, much of this document will remain the same; therefore, the District has structured this as a single narrative outlining the requirements to support grades 4–8 at the Middle School.

To provide context through which to view this document, the Clinton Public Schools Mission Statement, Vision Statement, and Core Values are listed below:

Clinton Public Schools Mission Statement

The mission of Clinton Public Schools is to provide students with rigorous, engaging, and academically challenging educational opportunities in a safe and secure environment. These opportunities aim to develop academic and social skills while recognizing individual differences and promoting the discovery

MSBA Module 3

Feasibility Study PSR

3.3.4 PREFERRED SOLUTION

- A. Updated Educational Program
- 1. Redlined Educational Program

and development of individual strengths, talents, and interests. Through partnerships with the community, Clinton Public Schools aims to teach students how to learn and adapt to be competitive and successful in a global society.

Vision Statement

Clinton Public Schools' vision is to be a high performing school system where students develop as lifelong learners who are healthy, able to work collaboratively, think critically to solve complex problems, overcome adversity, and effectively utilize technology. Our students will be prepared to connect with our local community as well as be responsible, knowledgeable, and productive members of our global society.

Core Values

ACADEMIC ACHIEVEMENT: Clinton Public Schools strives for all students to achieve at their highest level of academic performance while stimulating intellectual curiosity and developing the skills necessary to adapt and change to ensure college and career readiness.

SAFETY & WELLNESS: Clinton Public Schools aims to provide a safe and supportive learning environment which promotes social-emotional and physical wellness for all.

GLOBAL COMMUNITY: Clinton Public Schools embraces diversity and aspires for all of our staff and students to be productive, active, and caring members of not only the local community, but the global society as well.

Clinton Public Schools is a suburban public school district serving approximately 1,970 students in grades PreK–12 across three schools. Of those schools, Clinton Middle School, first opened in 1974 and currently serves approximately 545 students in grades 5–8. The school has gone through a number of transformations over its almost 50 years of existence including major interior renovations to create classrooms out of open-concept learning spaces. As of the 2021–2022 school year, more than 40% of Clinton Middle School's population identify as individuals of color, the majority of whom identify as

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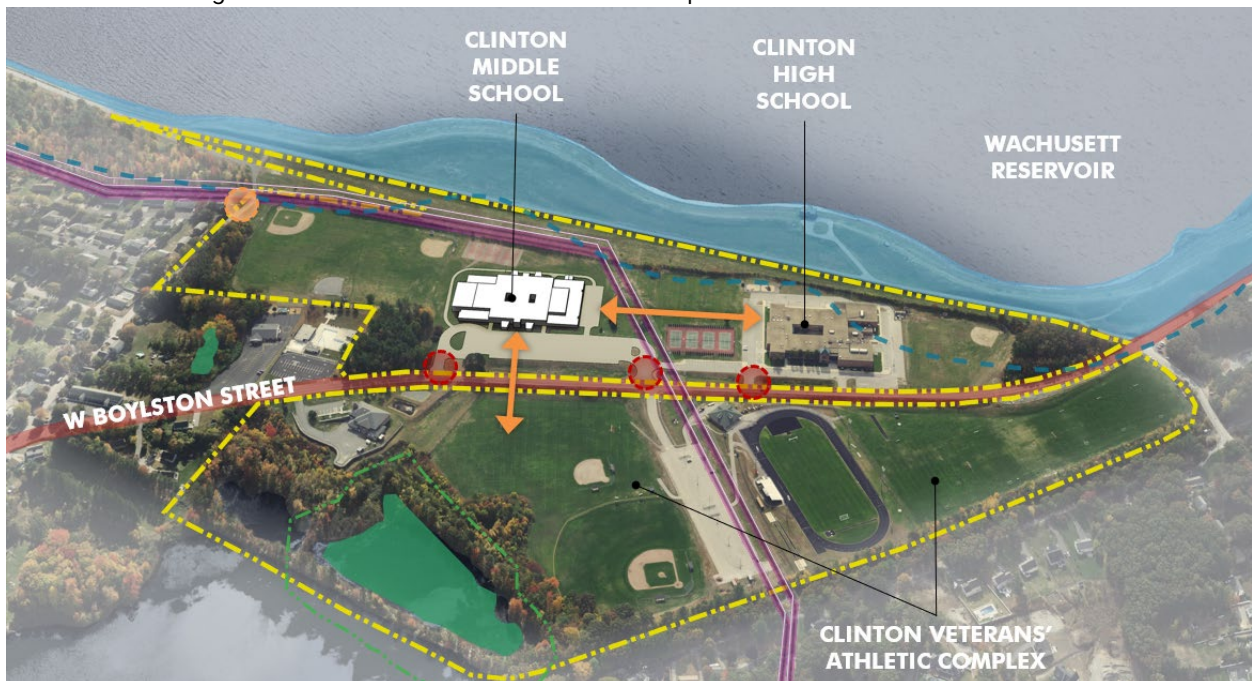
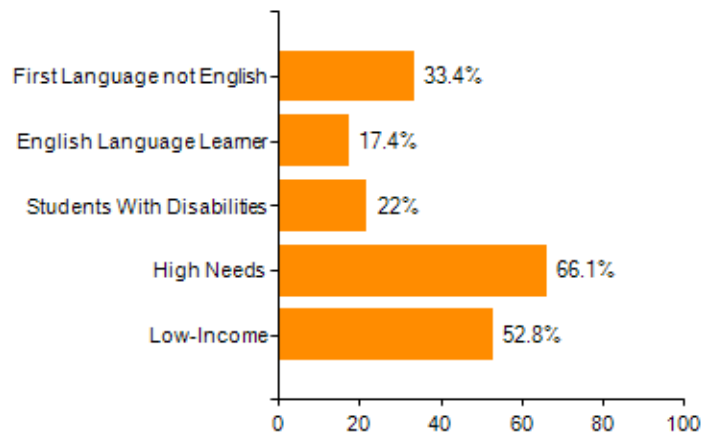
Hispanic/Latino. More than 54% of the school population is considered economically disadvantaged, and 17.4% of students are English Language Learners.

Clinton Public Schools only has three buildings that serve students. Typically, students start in Clinton Elementary School, then they attend Clinton Middle School, and then Clinton High School. Some students may start Pre-K in Clinton High School and then proceed to Clinton Elementary and follow the rest of the progression. It is also important to note that Clinton Middle School and Clinton High School are located on the same campus. Across the street from these two buildings is the Clinton Veteran's Athletic Complex.

3.3.4 PREFERRED SOLUTION

- A. Updated Educational Program
- 1. Redlined Educational Program

Selected Populations



A. Updated Educational Program

1. Redlined Educational Program

DOCUMENTATION OF EXISTING EDUCATIONAL PROGRAM

Clinton Public Schools and the Town of Clinton have taken many necessary steps to try to make Clinton Middle School the type of learning environment that would allow the students of Clinton to excel academically, be healthy physically and emotionally, and to become members of the global society. However, the building has outlived its ability to live up to these core values. Clinton Middle School has a retrofitted classroom construction, which makes the rooms small, oddly shaped, and not ideal for learning. Additionally, these retrofits, and the original design, have left the classrooms with very little natural light or opportunities for fresh air. This creates an environment that does not promote physical or mental health. Finally, the ever-growing number of services that students require as well as the influx of technology have made it challenging for CMS to truly meet the needs of all learners and allow them to become part of the global community.

In spite of these challenges, the CMS staff work tirelessly to meet the needs of all students. The school now operates on two distinct schedules, one for grades 5 & 6 and one for grades 7 & 8. Most classes in the lower grades are in two-person teams and in the upper grades four-person teams. CMS has made major changes to the curricula over the last few years. A substantial investment has been made into purchasing high quality curricula for math and ELA. Additionally, CMS has added a STEM focus over the last few years with the introduction of Project Lead the Way. In addition to those changes, CMS has implemented an intervention (or WINN) block into the schedule and through strategic use of that block is also able to provide teams with common planning time. The CMS staff is ready to move forward to help meet the needs of all of the students of Clinton, they just need a more modern facility to allow them to take a true step forward.

Despite the challenges of the existing facility, the district is committed to the future educational vision described below.

A. Updated Educational Program

1. Redlined Educational Program

DESCRIPTION OF FUTURE EDUCATIONAL PROGRAM

It is difficult to imagine what education will look like in fifty years, and thus extremely difficult to plan for it. One can only assume that given the ever-increasing rise of technology that schools will need to focus on teaching students how to effectively use technology, how to continuously learn, and how to work collaboratively to solve complex problems. However, it is fair to say that designing a new school must include some level of flexibility to adapt to best current practices to achieve these goals. This section attempts to describe the future educational program with this in mind. There are some key objectives that the Town of Clinton would like to try to achieve through this building project in order ensure that this building complements the elementary school and high school buildings and that it is able to meet some of the needs of the town as a whole. These objectives are outlined below:

1. Provide a developmentally appropriate elementary education to the students in grade 4 through 6. This includes building rooms that are elementary in nature, with appropriate space, storage, and sinks. These rooms should have some interconnectedness to support the two-person team model, as well as smaller spaces for pull-outs and interventions. Additionally, the building should be designed in such a manner as to provide natural separation between the elementary grades and the middle school grades. Finally, there should be age specific structures, such as a playground available for these students. An additional space to support STEM education in grades 4-6 should also be provided. The vision is that this would be a flexible, power and technology rich multi-media maker space that 4-6 grade teachers would be able to schedule for more hands-on project-based learning. The space would be equipped with sinks, material storage, flexible work tables and age-appropriate tools to support a variety of hands-on projects in one central location. This space should be located close to the Grade 4-6 neighborhoods, and in proximity to the learning commons and STEM commons.
2. Provide a well-rounded education to 7th and 8th graders to help prepare them for high school. Due to the nature of the middle school and high school “campus”, any building project should be completed with promoting the alignment and interconnectedness of these two buildings in mind. Given the overall size of the school district, having this type of alignment helps from not only a course offering, but also a staffing perspective. The building should support the organization of the 7th and 8th grades into two neighborhoods; one for STEM (Math and Science) and one for Humanities (English Language Arts and Social Studies). While most rooms should be built with a flexible, multiple use concept in mind, there should also be rooms designed specifically as

A. Updated Educational Program 1. Redlined Educational Program

science labs and other educational technology or vocational labs to support student exploration and growth.

3. Serve as a community center. The town of Clinton has a lack of recreational space for children and young adults. One goal of this project would be to make sure that the recreational space is sufficient to meet the needs of the community and to ensure that the building is designed in such a manner as to allow this space to be accessed after school hours to support any community needs.
4. A final overarching goal of the new educational facility will be to meet the needs of all learners by providing an inclusive, equity focused, learning environment that provides opportunities for students to learn through multiple modalities, supporting a universal design for learning model.

Grade and School Configuration Policies

The current grade configuration of Clinton Public Schools is governed by School Committee policies IE, Organization of Instruction. This policy states that:

The District offers a diversified educational program compatible with the needs of the community and state standards.

The organizational plan is designed to facilitate the philosophy of educating every student, each to his or her fullest potential.

The structure will consist of three levels (Primary/Elementary, Middle and Secondary).

The Primary/Elementary level includes schools with kindergarten through grade four. The Middle level consists of schools for grades five, six, seven and eight. The Secondary level consists of schools with grades nine, ten, eleven, and twelve.

Special Education services are integrated across each grade level in all schools.

The organization is designed to meet the standards established by the Department of Elementary and Secondary Education's Curriculum Frameworks, by Time and Learning regulations, and in order to serve the needs of all students.

This policy was last revised in 2020 to reflect the fact that grade four was moved back to the Elementary Level. Prior to the 2018–2019 school year the fourth grade had attended Clinton Middles School.

Clinton Public Schools does consist of three schools, an elementary, a middle, and high school. Currently, students start in Clinton Elementary School from Kindergarten to Grade 4, then they attend

A. Updated Educational Program

1. Redlined Educational Program

Clinton Middle School from grades 5 through 8, and then Clinton High School from grades 9 through 12. Pre-K is offered in both Clinton Elementary School and Clinton High School on a limited basis.

During the 2017–2018 school year, Clinton Public School engaged the community in a survey regarding the state of the schools and then followed-up on that by forming a committee to develop a five-year strategic plan. One of the main pieces of feedback that was collected through the survey was the lack of age-appropriate facilities at Clinton Middle School for fourth graders. This feedback, combined with the lack of available space at Clinton Middle School, resulted in the district moving the fourth grade to Clinton Elementary School for the fall of 2018.

However, given the opportunity to correct these shortcomings, it is important that the district explore an option that would allow Clinton Middle School to meet the developmental needs of fourth graders. While having the fourth grade in Clinton Elementary School is working, it is now creating space challenges as Clinton continues to see a need to expand pre-kindergarten, special education, and English Learner programming in that building.

On February 13, 2023, the School Committee voted 5–0 to endorse a building project that would be focused on a future grade configuration of 4–8. This vote was made with the understanding that any building project would take into consideration the developmental needs of 4th grade students. Additionally, this vote was made to address the overcrowding at Clinton Elementary School based on the growing number of students who are “doubling up” with family members and moving into the district. It is believed that this population was not accounted for in the MSBA enrollment certification. Finally, CPS has made Pre-K free with a goal of offering universal Pre-K in the future. However, enrollment is currently capped due to space constrictions at Clinton Elementary School. The only concern expressed by the school committee when taking this vote was not related to the educational programming, but rather looking at the cost differential between the two enrollment options.

Class Size Policies

Clinton Public Schools does not have a formal policy regarding class size and the contract with the teachers is silent on this point. However, when allocating resources, CPS often refers to the MA DESE 2017 Policy Brief on “Class Size and Resource Allocation”. Based on the data presented in that briefing, CPS strives to have middle school range classrooms with approximately 20–25 students per class. CPS tries to avoid having middle school classes with over 25 students in the classroom with the exception of some singleton courses, specials, or electives. Often, an effort is made to stay at approximately 20

A. Updated Educational Program

1. Redlined Educational Program

students if the class requires significant support such as an inclusion special education class or one with many English Learners. Substantially Separate Special Education classrooms are scheduled to include approximately 8–12 students per class.

The proposed design shall be sized to support approximately 25 students per class in general classrooms and 8–12 students in Substantially Separate Classrooms.

School Scheduling Method

Currently, Clinton Middle School operates on two significantly different schedules. While all students start at 8:00 and end at 2:30, the schedule for grades 5 and 6 is significantly different than that of grades 7 and 8.

Grades 5 and 6 are treated more as “upper elementary” grades and the primary structure for educating these students is in teams of two. In these teams, one teacher is the primary instructor for Math and Science, and the other teacher is the primary instructor for ELA and Social Studies. Part of this shift was to allow the teachers to be flexible with their time as needed in order to address all the necessary standards as well as to explore interdisciplinary work when possible. Some of these teams may have more inclusion special education students or English Learner students than others so that these classrooms may be better supported through additional staffing. Each class attends one special each day, these are either Music, Art, or Physical Education. Finally, there are some pull-out supports, such as resource room and therapeutic learning that exist as well.

Grades 7 and 8 are on a more traditional schedule with essentially 7 periods throughout the day. Students are placed on a team and they will have Math, Science, ELA, and Social Studies for a period each within their team. In addition to those four core subjects, these students have one period of STEM (Tech Ed. or Project Lead the Way) and one special period (Art, Physical Education, Executive Functioning) each day. They have their appropriate STEM or special class for a trimester at a time. Similar to the 5th and 6th grade, some teams may have additional support to address the needs of special education or English Learner students, and there are pull-out programs as well.

It is the vision of the district to maintain this separation in the pedagogical approaches to these “Upper Elementary” and “Middle School” grade levels in order to provide instruction in a developmentally appropriate manner and to help with the transitions from elementary school and to high school.

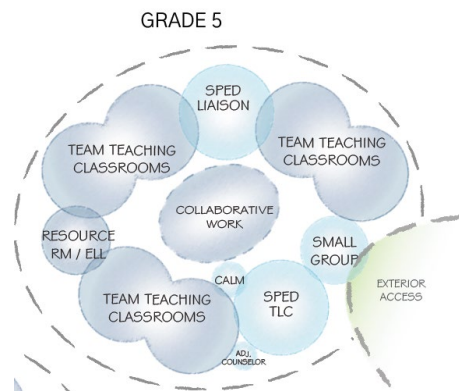
Teaching Methodology and Structure

The Clinton Middle School teaching methodology is currently a fairly traditional approach. Teachers deliver instruction in owned classrooms working largely in isolation. While significant investments have been made in providing professional development on Universal Design for Learning, and high-quality curriculum materials, there has been little to no structural change to support full scale instructional change.

As we look towards the future of Clinton Middle School, the goal is to have a flexible learning environment that is based on Universal Design for Learning principles. In order to do this effectively, in addition to more traditional methods, teachers will need access to current technology, and additional hands-on learning spaces so that students can have multiple means to construct and demonstrate their learning. Additionally, having the ability for teams to be located near each other will allow for the integration of more multi-disciplinary project-based learning.

A new or renovated facility would ideally be designed to better facilitate this transformed learning environment by providing varied and flexible learning spaces. It is likely that any given day will require the use of both a classroom and a collaboration/break-out space simultaneously. It will be important for any facility designs to provide a variety of sizes for classrooms and to support visual connections between classrooms and break-out/collaboration spaces.

In a new or renovated facility, the team teaching approach for the “upper elementary” grades would be continued and additionally supported by organization into grade level neighborhoods, increased connection between teamed classrooms, access to small group rooms, dedicated Special Education classrooms, and collaborative work areas.



The future vision for Grades 7 and 8 organization would be to pivot from a grade level team structure to dual neighborhoods with a more departmental focus. One neighborhood would have a STEM focus, and would include Math classrooms, Science labs and related Special Education and EL support spaces. The other neighborhood would have a Humanities focus, and would include English Language Arts and Social Studies classrooms, and related Special Education and EL support spaces.

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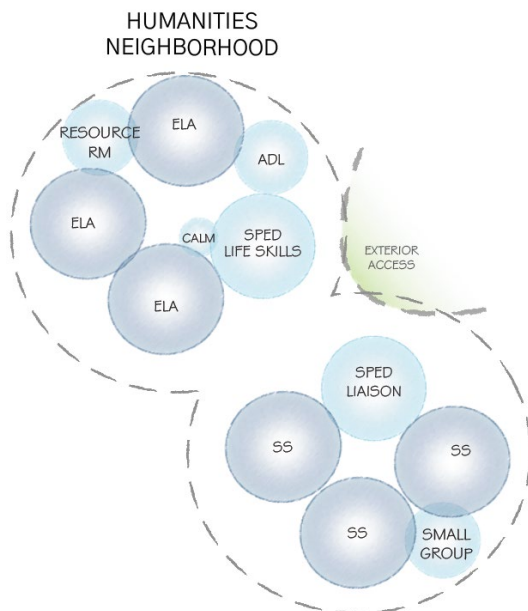
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3.3.4 PREFERRED SOLUTION

- A. Updated Educational Program
 - 1. Redlined Educational Program

~~Both neighborhoods would have a centralized collaborative work area to support cross-discipline collaboration.~~ A main driver for the shift from traditional teams to a departmental focus is to create a more equitable learning environment by allowing students to interact more freely rather than be confined to the team that may have the appropriate support available for that student. ~~One of the drawbacks of the teaming that has been happening at CMS is the inherent segregation of students that has inadvertently happened. Specifically, CMS currently offers advanced math courses in grades 7 and 8, but due to our size, there is typically only one section of these courses offered. By placing these singleton courses on a team, you in essence create a de facto “honors” team. Consequently, just based on the numbers, the students who are not on the “honors” team end up on teams that tend to have a disproportionate number of either special education or EL students, thus creating an inequitable learning environment.~~

However, the departmental grouping also has other positives. Many of the collaborative activities that are done across disciplines tend to include a math/science or ELA/Social Studies combination. By placing these rooms near each other, we support this collaboration. Furthermore, this serves as an extension of the upper elementary grades where one teacher was teaching math/science and the other ELA/Social Studies.



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Feasibility Study PSR

3.3.4 PREFERRED SOLUTION

- A. Updated Educational Program
 - 1. Redlined Educational Program

English Language Arts/Literacy

Clinton Public Schools currently uses Wit & Wisdom as the high quality ELA curriculum for grades K through 6. Beginning in grade 7, this program changes to Into Literature, also a high quality curriculum, that extends into the high school.

In order to implement these high quality curricula with fidelity, it is imperative that teachers have ample time and space to plan together. CPS strives to ensure that all students receive high quality Tier I instruction, and common planning is essential to meeting that goal.

While this curricula does not necessarily require additional space to be implemented, the existing rooms do not have sufficient space for differentiation and the implementation of Universal Design for Learning practices.

Any building project would include adequately sized ELA classrooms organized to support the two teacher team approach for grades 4–6, and the Humanities Team approach for grades 7 and 8. Lastly, the ELA program would benefit from collaborative work areas for grades 4–6, which would allow space for cross discipline collaboration and projects.

Mathematics

Clinton Public Schools currently uses Eureka Math as the high quality math curriculum for grades K through 5. Beginning in grade 6, this program changes to Open Up Resources, also a high quality curriculum, that extends into the high school.

In order to implement these high quality curricula with fidelity, it is imperative that teachers have ample time and space to plan together. CPS strives to ensure that all students receive high quality Tier I instruction, and common planning is essential to meeting that goal.

Any building project would include adequately sized Math classrooms organized to support the two teacher team approach for grades 4–6, and the STEM Team approach for grades 7 and 8. Lastly, the Math program would benefit from collaborative work areas for grades 4–6 which would allow space for cross discipline collaboration and hands-on projects. The addition of updated classroom infrastructure and technology along with connecting classroom doors will further encourage team teaching and collaborative curriculum methods.

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Feasibility Study PSR

3.3.4 PREFERRED SOLUTION

A. Updated Educational Program

1. Redlined Educational Program

Science

Mystery Science is taught in grade 5. Students in grades 6 through 8 are taught using the Inspire Science curriculum from McGraw Hill. While grades 7 & 8 typically incorporate labs into their curriculum, there are less opportunities for that in the current grades 5 and 6 since they do not have science labs. Any building project should have a Makerspace or lab area that teachers in grades 4 through 6 can use to incorporate more hands-on activities into the curriculum.

The science labs in the existing building are insufficient in terms of size, infrastructure and flexibility. Any building project would include adequately sized Science labs within the STEM Team for Grades 7 and 8. For grades 4–6 Science is taught within one of the team teaching classrooms, which will each be equipped with sinks to support these projects. The addition of updated science lab infrastructure and technology along with connecting classroom doors will further encourage team teaching and collaborative curriculum methods. Lastly, a Maker Space will be provided within the Media Center, which will provide an additional STE space for grades 4–6 for larger or more complex hands-on projects that cannot be completed within the classroom.

Social Studies

CMS currently uses a textbook series from McGraw–Hill to teach social studies. However, students in grade 8 also complete a civics project. Typically, this civics project results in a mock town meeting held at the town hall. In order to complete this, it requires successful coordination and collaboration across all 8th grade social studies classes.

Any building project would include adequately sized Social Studies classrooms organized to support the two teacher team approach for grades 4–6, and the Humanities Team approach for grades 7 and 8. Lastly, the Social Studies program would benefit from collaborative work areas for grades 4–6, which would allow space for cross discipline collaboration and projects.

World Languages

Currently CMS does not offer any world languages in the building. Students in 8th grade may participate in the “dual school” program and elect to take world language offerings at Clinton High School.

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A. Updated Educational Program

1. Redlined Educational Program

Academic Support Programming Spaces

CMS provides a variety of academic support programming. These can range from push-in supports, to pull-out supports, to partial sub-separate programming.

Using Title I funds, CMS currently has a reading interventionist and intends to add a math interventionist for FY24. These interventionists typically provide pull-out support based on student need.

CMS also has a large number of EL students. The number of minutes of instruction that EL students are required to have is outlined in the DESE guidelines. This time varies by the level of the EL student. Based on an equity audit that the district conducted in 2022, it was recommended that CPS increase our EL staffing based on our increased EL population. The district goal is to continue to add EL staffing throughout the district until there is one EL teacher for each grade level. When possible, EL staff may push into classrooms to support sections with large numbers of EL students; however, most of the instruction, particularly for beginners, is conducted in a pull-out setting.

In addition to the services described above, CMS provides a plethora of special education services. There are two sub-separate programs, the Therapeutic Learning Center (TLC) and the ABA//Life Skill program. While there are typically students in these sub-separate programs all day, it is the goal of the district to create flexible student schedules that allow students to be included in general education classrooms as much as possible. There are typically two rooms for each of these programs and students are assigned as appropriate and to avoid exceeding a 48 month age difference per DESE regulations.

Grade level liaisons often provide push-in support to classrooms, but they also conduct pull-out classes as well. Often students may have a certain number of minutes of pull-out support on their IEP and the grade level liaisons typically provide this. While the grade level liaisons typically have a small group of students, they often require a full sized classroom so that they can have the appropriate space to support students for all subjects.

Finally, CMS provides related services, such as Speech and OT/PT. These services are also provided using a combination of push-in and pull-out support. Most of these pull-out services are provided in 1:1 or small group settings.

Refer to the small group/WINN section below.

Student Guidance and Support Services

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 - 1. Redlined Educational Program

CMS offers student support services through the guidance department; however, not all members of the guidance department are housed in a traditional guidance office.

The district model for TLC classrooms is to have an adjustment counselor located in the vicinity of the TLC classroom to support those students at any time.

Additionally, the ABA classrooms require BCBA support, and a similar goal of having the BCBA in the same vicinity as the ABA classroom is ideal.

While the guidance office itself handles things such as student records, scheduling, and MCAS; they also provide triage services to students who are in need of social emotional support.

Students who require on-going social emotional or mental health support are often connected to an outside counselor and CMS provides office space for these counselors to meet with the students.

Refer to the Social Emotional/Guidance and Special Education sections below.

Teacher Certification and Assignment

CMS teachers through grade 6 teach multiple subject areas. Therefore, we have required, and will continue to require that these teachers be licensed as Elementary 1–6. Teachers in grades 7 and 8 are content specific teachers and we currently require, and will continue to require, that they hold a content specific license for the 5–8 grade span.

Teacher Planning and Room Assignment Policies

Currently teachers at Clinton Middle School are assigned to a specific room that doubles as their professional home–base. These spaces go largely unoccupied **one period a day during teacher prep time**. A few teachers may share a classroom due to space constraints. Teachers have limited time to plan collaboratively. Typically, common planning time is only able to be provided once a week.

In a new or renovated facility, having sufficient space for teacher planning is of paramount importance. At a minimum, there should be a teacher’s room for grades 4–6 and a room for grades 7 & 8. These rooms would also store resources so that teachers had access to their curricular materials during common planning and other preparation meetings. The Teacher Planning spaces shall be large enough to support an acoustically separate copy/work room with kitchenette, and a flexible, technology–rich conference room area for common planning time meetings, data analysis and curriculum development.

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One of the primary struggles with implementing high quality curriculum with fidelity is the ability to have all teachers of the same plan together. The goal of these work rooms would be to have a professional space where teachers would collaboratively plan together. These rooms would be used multiple periods every day for assigned common planning meetings. For the other periods, these spaces will also be used for teacher planning, professional practice, and cross disciplinary meetings, and house the necessary tools such as a copier, storage, white board, and short throw projector.

These rooms would also be used throughout the day for teachers to conduct individual work during their prep times. Additionally, teachers, instructional assistants, and paraprofessionals that travel between buildings will need this “home base” to store personal belongings and/or instructional materials. These work spaces would be used throughout the day by Instructional Assistants during their contractual prep time.

Finally, CPS believes in job-embedded professional development. Currently our focus is on developing a Multi-tiered System of Support. Our first steps have been to work on solidifying our Tier I curriculum with high quality resources. We are currently working on implementing Universal Design for Learning practices into our instruction. Our goal for next year is to develop more co-teaching models to ensure that classes with two teachers or those with a teacher and an instructional assistant are collaborating and interacting in an effective manner. These work rooms would also be a space that our professional development providers would use with small groups of teachers during job-embedded professional development days.

CPS has been working with Commonwealth consulting for the last three years and plans to continue working with them in the future. The focus for the first few years was the elementary school, and beginning with the 2023-2024 school year the focus will shift to CMS. The primary objective of this work is to create a fully developed multi-tiered system of support. This would include string tier I curricula, Universal Design for Learning practices, interventions, and an inclusive environment focused on co-teaching. Providing multiple means for student expression is a key component of UDL and the goal is for teachers to learn how to move towards project-based learning to allow students to express their learning in a way that works for them.

Pre-kindergarten

There are no plans to include the school district’s preschool program as a component of this project.

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 - 1. Redlined Educational Program

Kindergarten

There are no plans to include the school district's kindergarten program as a component of this project.

Lunch Programs

Clinton Middle School provides mandatory Breakfast and lunch to all students, and is 100% free to all students. CPS also provides free lunches to students throughout the summer months. To support this robust food service program, a full-service kitchen and servery with (3) serving stations and (3) Point of Sale stations would be required in a new or renovated school building.

The proposed kitchen would be equipped to support on-site cooking, dry goods storage, walk-in refrigerators and freezer, a dishwashing area and dedicated support spaces for 8–10 staff members.

An additional space is desired as a “grab and go” kiosk in the lobby to serve breakfast to students “after the bell” when schedule does not allow them to enjoy breakfast in the cafeteria prior to the start of the school day. This “grab and go” kiosk could also be used to distribute healthy “a la cart” items during the lunch periods.

The current lunch program at Clinton Middle School consists of 3 lunch blocks each 25 minutes in duration. Students are scheduled based on their grade level. While grades 5 and 6 eat together and 7 and 8 eat separately.

In designing a new building, it would be important for the cafeteria to be able to house two different grades at the same time. Having two “sides” of the cafeteria would allow the upper elementary lunches to run on one schedule and the grade 7 and 8 lunches to run on another without any fear of overlapping.

Additionally, the lunch spaces should be designed so that they can be used for more than just the lunch period. Moveable furniture should allow the cafeteria to become a flexible learning space during non-lunch periods.

It would make sense to explore other uses for cafeteria space after school. For example, by making the ceiling the right height and the floor of a suitable material, the space could be used for cheerleading practice after school.

- A. Updated Educational Program
 - 1. Redlined Educational Program

Technology Instruction Policies and Program Requirements

Clinton Public Schools is currently a 1:1 district, with all students in grades 1–12 either being issued or having access to a dedicated Chromebook. Classrooms should be equipped with the necessary technology to help teachers leverage these Chromebooks as instructional resources. **Students in grades 5 & 6 utilize Chromebooks provided within the classrooms, while students in grades 7 and 8 are able to take their Chromebooks home each day. Any students who do not have access to internet at home are provided assistance through district issued hotspots. CPS has offered hotspots to students without internet access since 2020 and will continue to do so. However, it should be noted that the number of students without internet access is minimal.**

Each classroom shall be equipped with a robust Wifi Network, Laser (bulb-less) interactive short throw projectors, document cameras, Chromecasts, and speech reinforcement systems. Each classroom will have a dedicated plug for a Chromebook charging cart, and will have perimeter power outlets for individual charging if required. Each classroom will also be equipped with a VOIP phone, PA system, Emergency Call Switches, and digital clocks that are capable of displaying emergency messages.

The Media Center/Learning commons will be equipped with several high powered computers to run programs that are beyond the computing and graphic capabilities of the Chromebooks.

In terms of Technology Instruction, Clinton Middle School has three primary technology courses. Students in grades 7 & 8 take one trimester of Technology Education, this is more an industrial arts setting, and then two trimesters of Project Lead The Way. These are currently taught out of classrooms that have been retrofitted for this type of STEM work.

Any building project should take these STEM courses into consideration. It is important that Clinton Middle School have dedicated STEM labs for Industrial Arts, Computer Science, and Life Science. It is through the continued development of these areas that Clinton Middle School hopes to expose 7th and 8th grade students to different vocations to help students find their interests and promote student engagement. Additionally, for Grades 4–6 the building project will include a STEM space dedicated to project-based learning and technology instruction. The requirements for each of these STE spaces will be outlined in greater detail in the Vocational Education section below.

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- A. Updated Educational Program
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Media Center

The current media center at CMS is obsolete and very rarely used except to house larger groups of students or staff. The goal of any building project would be to make the media center more a true learning area where students would come to truly engage in their learning.

While a new media center or “learning commons” should still contain some volumes of text, there should also be an area with more robust computer technology and advanced printing capabilities. Additionally, a portion of the Media Center area allotted by the MSBA guidelines will be dedicated to a Maker Space.

This Maker Space will serve as an STE lab for grades 4–6, and will be a flexible space for project based learning and science/technology curriculum. This space will be equipped with sinks, durable materials, and overhead power to support a variety of hands-on projects. Storage will be provided for project materials, and display of completed projects can be highlighted in the media center or in other common areas. The Maker Space scheduling will be overseen by the Media Specialist, and will be able to be booked by any teacher within the school.

Since the upper elementary grades do not have science labs, this Maker Space will serve as the de facto science laboratory for grades 4–6. Using a google sheet, the Media Specialist will be able to support the scheduling of the space with these teachers. This process would be similar to how computer labs used to be reserved prior to the district going 1:1.

Art

Art classes are recognized as an important part of the curriculum at Clinton Middle School as evidenced by the fact that every student takes art every year. However, currently there are two “art rooms”, one is extremely outdated, and the other is just a regular classroom. While we would intend to continue to have two art teachers and art for all students, any building project should explore the development of a comprehensive art studio for both Grades 4–6 and Grades 7&8.

The two art studios should be centrally located with access from all grade levels, and adjacent to each other to share storage space and a kiln. Art storage should include secure and appropriately ventilated space for any toxic and hazardous materials as well as an accessible file of material safety data sheets (“MSDS”). Additionally, safety equipment such as safety goggles should be provided and utilized as required by the curriculum. Both studios should have flexible spaces that not only the art teachers can

- A. Updated Educational Program
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share, but that classroom teachers could bring their classes to use and to create as the schedule allows. This studio should have areas for dry work, wet work, computer work, and plenty of storage.

Some of the areas of importance as identified by the art teachers are: natural light, preferably through north or south facing windows; overhead lighting; storage closets; glass display cases; bulletin boards; kilns with proper ventilation, pottery wheels, trough style sinks, and adequate access to overhead hanging power outlets.

Music/Performing Arts

Clinton Middle School offers general music to all 5th and 6th graders and then there are band and chorus ensembles in which students may elect to participate. The school does not have a theater arts course. However, drama is offered as an after-school activity. Many performances, both drama and music, are held in the high school auditorium rather than the middle school cafeteria.

Ideally, the new or renovated school should have a music and performing arts studio. This area should have one large Band Room / General Music classroom. This space will be large enough to support the school's largest band ensemble, and flexible to allow for general music classes to take place as well, with sufficient room for movement and dance. The suite will also contain a secure space for instrument storage, ~~and two dedicated practice rooms and an office for teachers and instrument repair.~~ This performing arts space will be located adjacent to the Stage, so that the stage can be used for Choral practice. The stage must be equipped with a robust acoustic separation from the Cafeteria, as choral practices are often scheduled simultaneously with lunches. The Stage should also be sized to accommodate these spaces to allow sufficient wing space for students and performers to enter and exit

Each music area should have high ceilings, low pile carpets, and acoustic paneling to mitigate high noise levels. Every room should have a sink and access to drinking water.

Physical Education

Clinton Middle School students take physical education and health as a wellness course every year. ~~Every student in every grade takes wellness for one-third, or one-trimester, of the school year.~~ Physical education and life-long fitness and health are important to the Clinton community. The school has two full-time physical education/health teachers. There is one full-size gymnasium, a boys locker room, a girls locker room, and a health room.

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To meet the needs of the students and the community, any investment into a building project should include, at a minimum, a gymnasium of a size that replicates the existing gymnasium, which is able to be divided comfortably into two basketball side courts, and possibly more smaller areas. This would also allow for elementary gym and grade 7 and 8 gym to occur on different schedules in different sides of the gym. Additionally, the gym should be equipped with coaches' offices and locker rooms/restrooms for all genders, including a gender-neutral locker room area that could double as a training room and changing area for coaches and officials after school hours. The gymnasium space should also incorporate areas for non-traditional activities such as a rock-climbing wall as well as some windows to allow for some natural light into the area.

In addition to the purely curricular needs of this space, there are also extra-curricular considerations that should be considered such as a scoreboard, speaker and projector system, and bleachers.

Additionally, a classroom space should be available for ~~Adaptive and Alternative PE, and~~ health classes. ~~Health education is part of the Wellness curriculum. While taking wellness the assigned location of the class may vary depending on if it is a PE day or a health day. The health classroom would be shared by both PE teachers and all students would receive their health instruction in this space. Adaptive PE would be an auxiliary gym space to provide alternate activities, such as yoga or weight training, to appeal to the interests all students. This space would support alternative and Adaptive PE for Special Education students and could be utilized for unified sports activities after school. Additionally, this space may be used by specialized service providers, such as the occupational therapist, when appropriate to meet specific student needs. This Adaptive PE Space should be adjacent to the Executive Functioning classroom so that it can be used for yoga and medication. The Executive Functioning classroom setting could also be used for Health classes when a typical classroom setup is required. Adjacent ample storage will be required to secure weights, mats, and physical education equipment~~

Outside spaces for physical education should also be considered. Currently, CMS has ample field space, and any building project should work to replace any field space that is lost, or to replace it with more multi-use space, such as an artificial turf area. For the elementary outdoor area, there should be an age-appropriate playground structure and "gaga pits". Additionally, restrooms that can be accessed directly from the outside of the building should be available to support the outside activities.

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Additional health and safety considerations include water fountain access either in the gym or immediately outside of it, proper padding on the walls, and a small trainer's room able to be equipped with an ice machine.

Depending on the final size and layout of the gymnasium, an elevated indoor track would also be an ideal addition to this space. The indoor track could be used not only for PE classes, but also would support physical and social emotional wellness for all classes throughout the day, track practice and community use.

Special Education

There are currently 9 full-time special educators on staff. Three of these educators run pull-out sub-separate programs (Resource Room, TLC, ABA). The other 5 special educators are grade level liaisons with grade 5 having two and the each other grade having one. The grade level liaisons have schedules that include of combination of pull-out and push-in services to meet student needs.

Therapeutic Learning Classroom (TLC)

TLC classrooms house one dedicated Special Education teacher and 8–12 students. The curriculum focus includes helping to support students who have primarily social-emotional disabilities. This classroom is typically supported with multiple Instructional Assistants. While some students may spend most of their day in this classroom, typically students in the TLC program are included in regular education classes and addend those classes when regulated and able to do so. When dysregulated, they are provided education and support in the TLC room. Given the spatial needs of the students and staff, a full-sized classroom is desired. A new or renovated school would include two TLC classrooms, one associated with Grades 4–6, and one associated with Grades 7 and 8. Each TLC classroom requires an adjacent calm down area with direct visibility from the classroom, **as well as an adjacent TLC office space to house an adjustment counselor who supports the program.**

Applied Behavioral Analyst (ABA)

ABA classrooms house one dedicated Special Education teacher and 8–12 students. The curriculum focus includes teaching pragmatic skills to students who are typically on the Autism spectrum. This classroom is typically supported with multiple Instructional Assistants. Students in this program have a variety of needs and typically need support understanding social cues and their executive functioning skills. Sometimes students in this program may become frustrated and aggressive. Given the spatial needs of the students and staff, a full-sized classroom is desired. A new or renovated school would include **one**

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~~two~~ ABA classrooms, ~~both~~ associated with the ~~fourth grade~~ “upper elementary” neighborhood and it would serve students in grades 4–6. ~~The One of the~~ ABA classrooms requires an adjacent calm down area with direct visibility from the classroom, as well as an adjacent office for the BCBA (Board Certified Behavioral Analyst). Typically, students who are in the ABA program in grades 4–6 would either transition to the Life Skills classroom as they enter grade 7.

Life Skills

Life Skills classrooms house one dedicated Special Education teacher and 8–12 students. The curriculum focus includes teaching students adult daily living skills. These students are typically not on a graduation pathway and they will be in the district until they age out at 22. A primary focus of this program is to support the ability of these students to hopefully become self-sufficient at some point in their lives. Given the spatial needs of the students and staff, a classroom larger than a full sized classroom is desired. A new or renovated school would include one Life skills classroom associated with the upper grade neighborhoods. The Life Skills classroom should be directly adjacent to accessible toilet room(s) larger enough for a hoier lift and a calm-down area with visibility from the classroom. The classroom should be located ~~close to OT/PT and~~ directly adjacent to Adult Daily living.

Adult Daily Living (ADL)

The center would provide an area to support students in the Life Skills class that would teach skills for day-to-day living. This area would need to provide model areas where students can learn such skills as using a washer/dryer, dishwasher, stovetop, oven, and other household appliances, as well as basic work skills. Ideally the ADL could function as an informal Café for the Clinton MS teachers and staff. The ADL would provide workstations to teach skills needed for working with cash registers, and learning skills such as cooking, sorting, folding, labeling, and packing items to be sold in the Café. The ADL classroom would also be used to teach day-to-day life skills such as hygiene and nutrition to students not in the Life Skills program, and should be located within one of the 7 & 8th grade neighborhoods.

Grade Level Liaisons

Each grade level should have one classroom to house a grade/team level liaison special education teacher. This room would also serve as a classroom for pull-out instruction. These classrooms can support up to 20 students at a time, and may also be scheduled for use as English Learner classrooms to increase efficiency and utilization. For flexibility of scheduling and to provide adequate space to be utilized as a full inclusion classroom, these classrooms should be designated as full-sized classrooms. Based on the number of special education and EL students in each grade level, it is likely that there would be close to a full classroom of students in this areas during most periods of the day.

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Small Group Rooms/ WINN

Each grade level and neighborhood should be equipped with two dedicated small group rooms. These small group rooms will be used for pull-out Special Education and English language learner services, and for Speech, reading and math specialists/interventionists. These spaces may be half sized classrooms, and should be integrated within the neighborhoods, with corridor access as well as connecting doors to adjacent classroom spaces. **Due to being associated with the corridor it allows for a greater number of students to gather. Additionally, all other spaces are scheduled for learning and will allow for flexible scheduling for collaboration/support. This allows students more freedom to complete their work and supports our Universal Design for Learning model.**

The small group rooms, and would be distributed throughout the classroom neighborhoods for ease of access and reduced transition time. The small group rooms will be located strategically for supervision from teachers, and will also be equipped with sidelites and windows to allow for increased visual supervision.

The small group rooms will support between 8-12 students and will be utilized ~~consistently every period~~ throughout the day. **Additionally, these are spaces where small groups and larger groups of students (2 classrooms) may go to work collaboratively or possibly receive intervention or support. Cross disciplinary collaboration will also occur to support project-based learning.**

The WINN program stands for “What I Need Now” and is scheduled for one period per day in the middle school. During this period, students can receive extra help, take on collaborative group projects, or take on more advanced challenges. The small group rooms would be one of the spaces used to support the WINN period.

In addition to the special education teachers, there is also (1) school psychologist, (2) speech language pathologists, (1) a Board Certified Behavior Analyst (BCBA), (1) part-time occupational therapist and (1) part-time physical therapist. Each of these staff have an office/small room to work in except the OT and PT who share a space.

Related services are a large part of the special education program at CMS. These providers, speech and language pathologist, physical therapy, and occupational therapy all require their own specialized spaces. These areas should be able to accommodate small groups of up to 8 students and include adequate secure storage for testing materials and confidential information. Considerations should be

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made to these areas so that they are not isolated from other instructional areas and to ensure that they are quiet ~~for to allow to~~ students testing. Speech and Language pathologists will utilize small group rooms or speech classrooms in each of the neighborhoods. The OT/PT classroom shall be centrally located close to the Physical Education facilities ~~and Adaptive PE~~. Soundproofing may be required depending on the location.

Adaptive PE / OT-PT

The Adaptive PE / OT/PT classroom shall be centrally located close to the Physical Education facilities and the Health Classroom, and will be used by the occupational therapist and physical therapist to meet the specific needs of students. The Adaptive PE / OT/PT space would be used to support the Special Education curriculum by providing a separate area for smaller instruction. ~~In addition to being used for OT/PT services,~~ this space may be used by the physical educational teachers to provide alternate physical education activities that are consistent with a student's special needs. Additionally, specific adaptive PE gym classes are typically scheduled based on the number of students with these specific needs. ~~Finally, this space may be an additional area that the occupational therapist or physical therapist uses to meet the specific needs of students.~~

Each room should have a window in the entry so that administration or other staff can check on the room when the related service provider is working with a student one on one.

Executive Functioning

Currently all 7th and 8th grade students have a course called Executive Functioning. This course teaches students social emotional skills, organization, time management and self control. While this course is considered a "special", it is more closely related to guidance and Special Education than the other more traditional specials. This course requires a room that has a flexible arrangement to allow for students to work as individuals, in small groups, or to move the furniture to do other activities such as stretching or yoga. Dimmable lighting and sound proofing are also required in this space. Adjacency to the Adaptive PE/ OT/PT ~~Wellness space~~ would be beneficial. ~~for the Yoga and meditation portions of the curriculum could take place in this flexible wellness space.~~ Adjacent ample storage will be required to secure yoga mats, and equipment, so ~~these two spaces could additionally share a storage area. for things, such as yoga mats.~~

By locating this room near the guidance suite, it could also serve as a location for guidance counselors to meet with groups of students when it is not in use for the executive functioning course.

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English Learners

Clinton Middle School has a growing population of EL students. Currently there are three EL teachers in the building, each teacher has access to their own classroom in order to provide pull-out services, and they also spend part of their day in classrooms providing push-in services.

Based on the increased numbers of EL students at the elementary and middle school level, each grade level/neighborhood should have spaces that the EL teachers can use for small group and whole group instruction. These small group rooms should be sized to accommodate 8–12 students, with classroom technology and storage. In addition to pull-out support, part of the vision for Clinton Middle School is to increase push-in support services. Each classroom should be equipped with an additional small group table for an EL teacher to use for push-in EL instruction.

Vocational Education Programs

While Clinton Middle School does not have a true vocational education program, the existing school does offer the following courses: PLTW Design & Modeling, PLTW Automation and Robotics, PLTW Medical Detectives, and Educational Technology. These classes offer students hands-on, real-life experiences that often trigger a passion in a student. These classes also represent a shift to a more robust STEAM (Science, Technology, Engineering, Arts, and Math) interdisciplinary curriculum in the future.

Though these three classes are rooted in project-based learning and STEAM, the facilities that currently house the programs them are not ideally located or adequately sized. In a new or renovated facility, these programs should be housed in “da Vinci Studios” – spaces outfitted for design, engineering, and fabrication, imbedded in teams and fully equipped for the hands-on, active learning that occurs there.

The proposed educational program calls for three separate lab spaces, each with a unique STEAM focus to align with the PLTW curriculum to be delivered. CMS has three full time teachers that all have a full schedule of at least 5 periods per day in each of these STEAM labs. All students in grades 7 and 8 have a trimester course in each of these areas each year.

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1. Industrial Arts: A hands-on fabrication lab, with wood shop equipment such as drill presses, hand tools, and a CNC router, to support the Design and Modeling curriculum.
2. Computer Science: A high-tech maker space to support programming, 3D printing, and the PLTW Automation and Robotics curriculum.
3. Life Science: A specialized science lab space with dedicated prep room, deep sinks and lab tables to support biology instruction and the PLTW Medical Detectives curriculum.

Ideally these studios would be located near each other to allow for collaboration and sharing of resources among the teachers and classes. A STEM Collaborative work area is desired, which could be used for cross discipline collaboration and testing of projects. These classrooms should include adequate soundproofing, ventilation (for things like sawdust), and sinks. These classrooms should be made of very durable materials that are designed to be worked on and include plenty of lockable storage to secure equipment and supplies. Finally, large movable work benches with storage and access to overhead electrical outlets are essential. The design team will refer to the [The MSBA's "Review and Recommendations of Best Practices for K-12 STEM Learning Spaces" report](#) and [Staff Recommendation for 2018 Science/Technology/Engineering Area Guidelines](#) as the design progresses.

Currently, PLTW is not taught in grades 5 and 6 at the middle school. In a building project in which the fourth grade is added to the building, an additional "special" would be necessary. The goal is for this special to be PLTW design and modeling, offered to 6th grade students for a trimester. This design and modeling course could be taught out of the media center maker space, or in the STEM labs throughout the day, as the schedule allows.

Social Emotional Learning / Guidance

Social emotional learning is a growing aspect of the educational space. Guidance offices are used to provide counselor and emotional support as opposed to just handling schedules, records, and testing. The currently counseling suite is connected to the main office and consists of three offices and a reception area. However, CMS currently has four guidance staff with one of them being housed in a small classroom.

The guidance office should include a reception area and a safe (lockable storage area) for student records. There should be ~~five~~ four dedicated guidance offices, ~~one per grade~~, as well as ~~two~~ one smaller office areas for outside counselors to meet with students. Additionally, ~~the guidance suite~~ should ~~have access to be in close proximity to a~~ conference room with a short throw projector in the guidance area in

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which to hold parent meetings. These offices should be large enough to host meetings with four people, and have adequate sound proofing to ensure confidentiality. There should be at least one unisex restroom in the suite to support student and staff needs. The guidance suite should be located adjacent to the Main administration and the medical suite.

Finally, guidance has also taken on the role of helping to provide essential items to our students and families in need. There should be a pantry that can be used to store food and clothing for distribution, as well as a dedicated area to collect donations

Nursing

The challenges that COVID has presented have highlighted the need for adequate medical facilities in schools. Currently the nurse's office is located adjacent to the guidance suite. This area consists of a waiting area, an office for the nurse, a treatment area, and one other room.

A new nurses office should include many of these same items, but there needs to be adequate lockable storage room for medical supplies. The medical suite should include a small waiting area, an open resting area for two beds, a medicine supply and distribution room, and a discrete examination room. There should be adequate sound proofing to provide a confidential environment so that students in the waiting area are not hearing conversations in the treatment area or phone calls to parents or physicians. The actual office for the nurse should be large enough to support two individuals. This area should have a least one unisex restroom. ~~Additionally, given the increase in the use of telehealth, a small office area dedicated to telehealth visits should be included.~~

Transportation Policies

Currently, Clinton Public Schools employs a three-tier bus system with Clinton Middle School on its own tier, the second tier. When designing a building project, it should be noted that aligning the 7th and 8th grade to the high school, and putting those students on the first tier of busing could be advantageous. This would help to eliminate some of the overcrowding and "double runs" that currently exist on the second and third tier of busing. For future flexibility, the future site design should allow space for (10) buses to queue on site, as well as dedicated spaces for two smaller buses to load and unload students.

A. Updated Educational Program
1. Redlined Educational Program

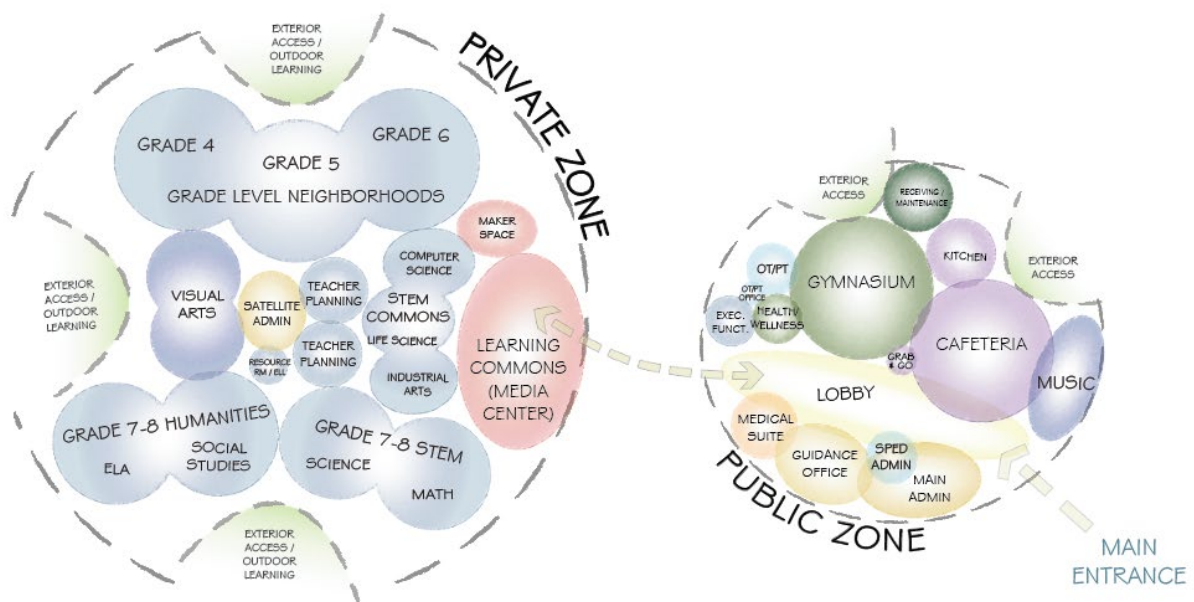
Also, even though Clinton Public Schools has a very generous busing policy, there are still a large number of parent pick-ups. This parent pick-up traffic needs to be considered and the building designed with a traffic flow so that the parent pick-up traffic does not hold up the buses.

Functional and Spatial Relationships and Adjacencies

Ideally, Clinton Middle School would be organized into three separate zones. One zone would be for the primary instruction of students in grades 4-6, the next zone would be for the primary instruction of grades 7 & 8, and the final zone would be all of the common areas and specialized rooms and labs.

Furthermore, due to the shared campus nature of Clinton Middle School and Clinton High School, there are 8th grade students who travel to the high school to take high school level courses. Consideration should be given to supporting the transition of eighth grade students to the high school during the school day.

Finally, in order for the building to effectively support the community needs, the areas that would typically serve the community need to be able to be isolated from the rest of the school easily. This area will be referred to as the public zone.



A. Updated Educational Program 1. Redlined Educational Program

Within the public zone, any design alternatives should express the following:

- Administrative suite immediately adjacent to the main entry of the facility with direct visual access to the building approach and the main entry
- Guidance component of the administrative suite must possess its own entry and waiting area separate from the main office area
- Medical Suite immediately adjacent to and internally connected to the main office administrative suite
- Gymnasium and bulk of cafeteria area located immediately adjacent to one another to the greatest extent possible such that the seating area of the cafeteria can also serve as lobby space for the gymnasium and the cafeteria could be used to support athletic practices
- Music/ Performing Arts department located adjacent to the Cafetorium / Stage
- Kitchen located immediately adjacent to bulk of cafeteria are in close proximity to site service entry
- Programmed custodial and maintenance spaces located near kitchen and site service entry

Within the private zone, any design alternatives should express the following:

- A **Media Center** / “Learning Commons” – a diffuse media center within the circulation zone that serves as the connective tissue between teams that includes stacks, ad hoc breakout/ collaboration spaces, presentation spaces, niches and alcoves for student-to-student collaboration, the development of project materials.
- A satellite Administration area, which would house the Dean of School Culture and a small group/resource room. ~~instructional coach office and small conference room.~~
- For Grades 4–6:
 - (3) Sets of Team-teaching classroom (consisting of (2) connected classrooms)
 - (1) Shared collaborative work area
 - (1) SPED Liaison Classroom
 - (1) SPED Substantially Separate Classroom (ABA or TLC)
 - (2–3) Small group / resource rooms for delivering Special Education, English Learner, Speech Services, and other interventions.
 - Direct outside access for each grade
- For Grades 7 & 8:
 - (1) Humanities neighborhood consisting of:
 - (3) ELA Classrooms
 - (3) Social Studies Classrooms
 - ~~▪ (1) Collaborative work area~~

MSBA Module 3

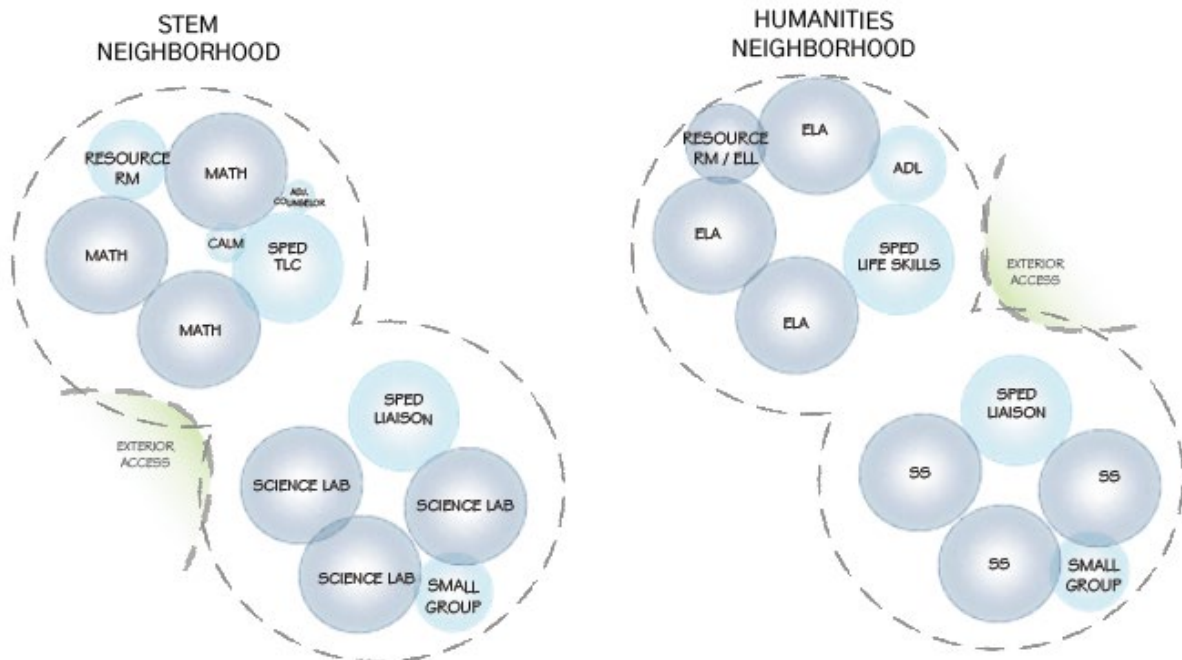
Feasibility Study PSR

3.3.4 PREFERRED SOLUTION

A. Updated Educational Program

1. Redlined Educational Program

- (1) SPED Liaison Classroom
- (1) SPED Substantially Separate Classroom (Life Skills/ADL or TLC)
- (2) Small group room/resource rooms for delivering Special Education and English learner, Speech Services, and other interventions.
- Direct outside access
- (1) STEM neighborhood consisting of:
 - (3) Math Classrooms
 - (3) Science Labs with Prep rooms
 - ~~(1) Collaborative work area~~
 - (1) SPED Liaison Classroom
 - (1) SPED Substantially Separate Classroom (Life Skills/ADL or TLC)
 - (2) Small group room/resource rooms for delivering Special Education and English learner, Speech Services, and other interventions.
 - Direct outside access



- Specialized Areas:
 - Specialized Studios as described above for:
 - Visual Arts: (2) Art Studios
 - Performing Arts: (1) Music Studio with access to Stage

A. Updated Educational Program 1. Redlined Educational Program

- STEM Commons: (1) Industrial Arts, (1) Computer Science, (1) Life Science (1) ~~4-6 Grade STEM room.~~
- Learning Commons / Media Center **with Maker Space**
 - (2) Teacher planning rooms, one for Grades 4–6, one for Grades 7&8.
- Each pair of teams should have direct access to an outdoor learning area
- All rooms should have natural lighting

Security and Visual Access Requirements

Currently the Clinton Middle School facility is not as secure as the district desires. The Clinton Public School's Crisis response plan is included in the PDP in section 3.1.2.C Supporting documents.

A recently installed key card entry system and multiple security cameras have all helped to make the facility more secure than in past years. Although these three upgrades have helped, the aging facility requires additional upgrades to ensure optimal levels of security for students and staff.

Security is more than equipment and technology. It is also important that the architectural design also support safety and security. Specific features to be considered include:

- Separation of the public use spaces such as gymnasium and cafeteria from the more private spaces where the bulk of instruction occurs
- Direct visual access from the main administrative area to both the main entry and any approaches to the building from parking areas
- A secured entry sequence consisting of a controlled vestibule or other such architectural strategy to limit visitor access prior until checking in with school personnel
- Strategically placed interior glazing to foster an interdisciplinary educational delivery methodology while still permitting effective shelter in place protocols
- Egress planning that both meets the building code requirements and permits effective evacuation protocols
- Spatial relationship strategies that allow portions of the building to be secured independently in a lock-down
- The entire building should have security cameras with remote viewing access and adequate memory for video storage
- The building should be equipped with an alarm system to secure it after hours. This alarm should be able to be operated remotely.

MSBA Module 3

Feasibility Study PSR

3.3.4 PREFERRED SOLUTION

A. Updated Educational Program

1. Redlined Educational Program

- All doors should work on electronic key card access

The district's goal is that a new or renovated facility would be a fully secure building, while at the same time have welcoming, community feel that is not compromised but rather enhanced by the additional security features.

PSR Update with Designer Responses: June 2023

OVERVIEW

The following educational program narrative has been developed by Clinton Public Schools (CPS) in collaboration with their designer Lamoureux Pagano & Associates Architects (LPA|A) and their OPM, Dore + Whittier (D+W). It communicates the District's existing and future educational program offerings, defines expected educational activities, and provides an in-depth description of the District's position on key curriculum goals, objectives, and policies. Information contained in this section is organized to align with the expectations identified in the MSBA Module 3, Section 3.1.2.

The educational program applies to a new or renovated facility serving one of two agreed-upon enrollments:

- **Enrollment 1:** 550 students, 5th through 8th grade
- **Enrollment 2:** 700 students, 4th through 8th grade

Ultimately, the intent of this section of the Preliminary Design Program document is to establish a clear roadmap for the development of a few conceptual design alternatives based on the criteria outlined, and to create a basis for evaluation to identify a preferred alternative. Currently the Clinton Elementary School houses grades PreK through 4, and Clinton Middle School supports grades 5–8. The Elementary School is experiencing overcrowding and does not have sufficient space to offer full time Pre–K to all students in the district. Historically, the grade configuration has fluctuated between 4–8 and 5–8 over the years depending on the enrollment and condition of other buildings.

Additionally, on February 13, 2023 the Clinton School Committee voted unanimously to endorse a future 4–8 Grade Configuration at the Clinton Middle School. Regardless of the final grade configuration, much of this document will remain the same; therefore, the District has structured this as a single narrative outlining the requirements to support grades 4–8 at the Middle School.

To provide context through which to view this document, the Clinton Public Schools Mission Statement, Vision Statement, and Core Values are listed below:

2. Educational Program with Designer Responses

Clinton Public Schools Mission Statement

The mission of Clinton Public Schools is to provide students with rigorous, engaging, and academically challenging educational opportunities in a safe and secure environment. These opportunities aim to develop academic and social skills while recognizing individual differences and promoting the discovery and development of individual strengths, talents, and interests. Through partnerships with the community, Clinton Public Schools aims to teach students how to learn and adapt to be competitive and successful in a global society.

Vision Statement

Clinton Public Schools' vision is to be a high performing school system where students develop as lifelong learners who are healthy, able to work collaboratively, think critically to solve complex problems, overcome adversity, and effectively utilize technology. Our students will be prepared to connect with our local community as well as be responsible, knowledgeable, and productive members of our global society.

Core Values

ACADEMIC ACHIEVEMENT: *Clinton Public Schools strives for all students to achieve at their highest level of academic performance while stimulating intellectual curiosity and developing the skills necessary to adapt and change to ensure college and career readiness.*

SAFETY & WELLNESS: *Clinton Public Schools aims to provide a safe and supportive learning environment which promotes social-emotional and physical wellness for all.*

GLOBAL COMMUNITY: *Clinton Public Schools embraces diversity and aspires for all of our staff and students to be productive, active, and caring members of not only the local community, but the global society as well.*

Clinton Public Schools is a suburban public school district serving approximately 1,970 students in grades PreK–12 across three schools. Of those schools, Clinton Middle School, first opened in 1974 and currently serves approximately 545 students in grades 5–8. The school has gone through a number of transformations over its almost 50 years of existence including major interior renovations to create classrooms out of open-concept learning spaces. As of the 2021–2022 school year, more than 40% of Clinton Middle School's population identify as individuals of color, the majority of whom identify as

MSBA Module 3

Feasibility Study PSR

Hispanic/Latino. More than 54% of the school population is considered economically disadvantaged, and 17.4% of students are English Language Learners.

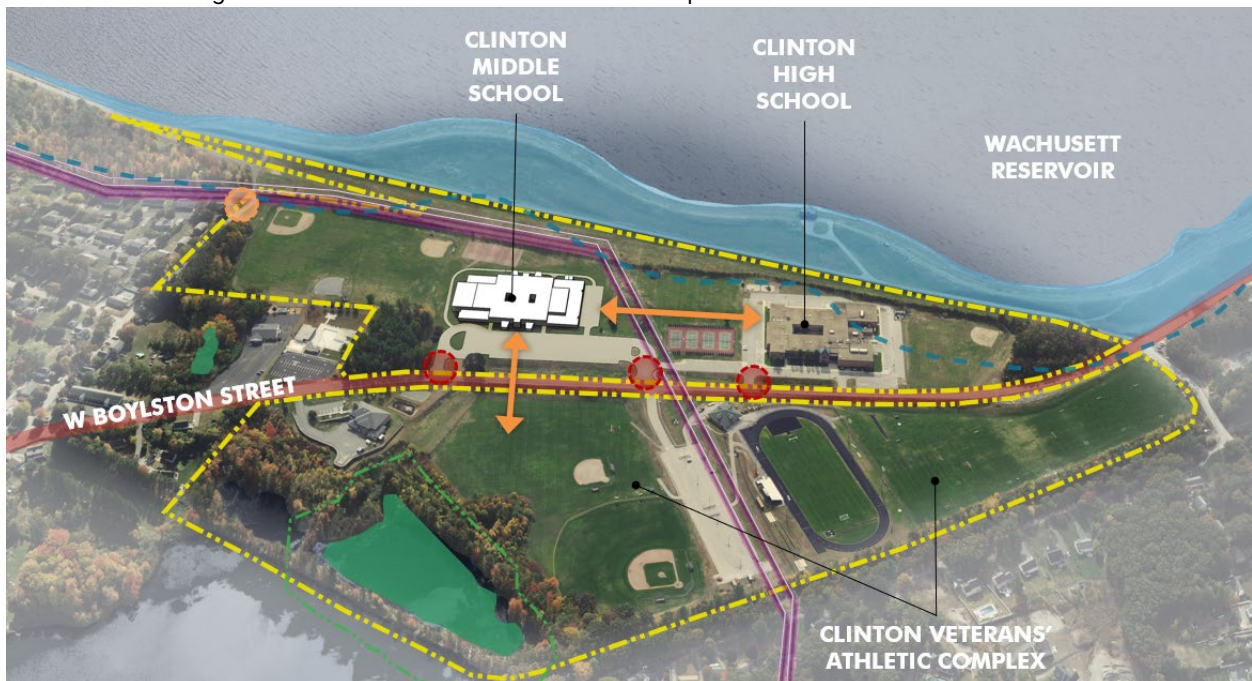
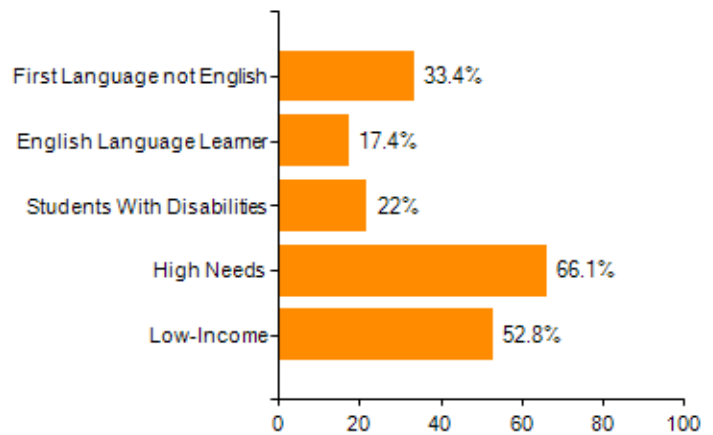
Clinton Public Schools only has three buildings that serve students. Typically, students start in Clinton Elementary School, then they attend Clinton Middle School, and then Clinton High School. Some students may start Pre-K in Clinton High School and then proceed to Clinton Elementary and follow the rest of the progression. It is also important to note that Clinton Middle School and Clinton High School are located on the same campus. Across the street from these two buildings is the Clinton Veteran's Athletic Complex.

3.3.4 PREFERRED SOLUTION

A. Updated Educational Program

2. Educational Program with Designer Responses

Selected Populations



DOCUMENTATION OF EXISTING EDUCATIONAL PROGRAM

Clinton Public Schools and the Town of Clinton have taken many necessary steps to try to make Clinton Middle School the type of learning environment that would allow the students of Clinton to excel academically, be healthy physically and emotionally, and to become members of the global society. However, the building has outlived its ability to live up to these core values. Clinton Middle School has a retrofitted classroom construction, which makes the rooms small, oddly shaped, and not ideal for learning. Additionally, these retrofits, and the original design, have left the classrooms with very little natural light or opportunities for fresh air. This creates an environment that does not promote physical or mental health. Finally, the ever-growing number of services that students require as well as the influx of technology have made it challenging for CMS to truly meet the needs of all learners and allow them to become part of the global community.

In spite of these challenges, the CMS staff work tirelessly to meet the needs of all students. The school now operates on two distinct schedules, one for grades 5 & 6 and one for grades 7 & 8. Most classes in the lower grades are in two-person teams and in the upper grades four-person teams. CMS has made major changes to the curricula over the last few years. A substantial investment has been made into purchasing high quality curricula for math and ELA. Additionally, CMS has added a STEM focus over the last few years with the introduction of Project Lead the Way. In addition to those changes, CMS has implemented an intervention (or WINN) block into the schedule and through strategic use of that block is also able to provide teams with common planning time. The CMS staff is ready to move forward to help meet the needs of all of the students of Clinton, they just need a more modern facility to allow them to take a true step forward.

Despite the challenges of the existing facility, the district is committed to the future educational vision described below.

DESCRIPTION OF FUTURE EDUCATIONAL PROGRAM

It is difficult to imagine what education will look like in fifty years, and thus extremely difficult to plan for it. One can only assume that given the ever-increasing rise of technology that schools will need to focus on teaching students how to effectively use technology, how to continuously learn, and how to work collaboratively to solve complex problems. However, it is fair to say that designing a new school must include some level of flexibility to adapt to best current practices to achieve these goals. This section attempts to describe the future educational program with this in mind. There are some key objectives that the Town of Clinton would like to try to achieve through this building project in order ensure that this building complements the elementary school and high school buildings and that it is able to meet some of the needs of the town as a whole. These objectives are outlined below:

1. Provide a developmentally appropriate elementary education to the students in grade 4 through 6. This includes building rooms that are elementary in nature, with appropriate space, storage, and sinks. These rooms should have some interconnectedness to support the two-person team model, as well as smaller spaces for pull-outs and interventions. Additionally, the building should be designed in such a manner as to provide natural separation between the elementary grades and the middle school grades. Finally, there should be age specific structures, such as a playground available for these students. An additional space to support STEM education in grades 4-6 should also be provided. The vision is that this would be a flexible, power and technology rich multi-media maker space that 4-6 grade teachers would be able to schedule for more hands-on project-based learning. The space would be equipped with sinks, material storage, flexible work tables and age-appropriate tools to support a variety of hands-on projects in one central location. This space should be located close to the Grade 4-6 neighborhoods, and in proximity to the learning commons and STEM commons.
2. Provide a well-rounded education to 7th and 8th graders to help prepare them for high school. Due to the nature of the middle school and high school “campus”, any building project should be completed with promoting the alignment and interconnectedness of these two buildings in mind. Given the overall size of the school district, having this type of alignment helps from not only a course offering, but also a staffing perspective. The building should support the organization of the 7th and 8th grades into two neighborhoods; one for STEM (Math and Science) and one for Humanities (English Language Arts and Social Studies). While most rooms should be built with a flexible, multiple use concept in mind, there should also be rooms designed specifically as

2. Educational Program with Designer Responses

science labs and other educational technology or vocational labs to support student exploration and growth.

3. Serve as a community center. The town of Clinton has a lack of recreational space for children and young adults. One goal of this project would be to make sure that the recreational space is sufficient to meet the needs of the community and to ensure that the building is designed in such a manner as to allow this space to be accessed after school hours to support any community needs.
4. A final overarching goal of the new educational facility will be to meet the needs of all learners by providing an inclusive, equity focused, learning environment that provides opportunities for students to learn through multiple modalities, supporting a universal design for learning model.

Grade and School Configuration Policies

The current grade configuration of Clinton Public Schools is governed by School Committee policies IE, Organization of Instruction. This policy states that:

The District offers a diversified educational program compatible with the needs of the community and state standards.

The organizational plan is designed to facilitate the philosophy of educating every student, each to his or her fullest potential.

The structure will consist of three levels (Primary/Elementary, Middle and Secondary).

The Primary/Elementary level includes schools with kindergarten through grade four. The Middle level consists of schools for grades five, six, seven and eight. The Secondary level consists of schools with grades nine, ten, eleven, and twelve.

Special Education services are integrated across each grade level in all schools.

The organization is designed to meet the standards established by the Department of Elementary and Secondary Education's Curriculum Frameworks, by Time and Learning regulations, and in order to serve the needs of all students.

This policy was last revised in 2020 to reflect the fact that grade four was moved back to the Elementary Level. Prior to the 2018–2019 school year the fourth grade had attended Clinton Middles School.

Clinton Public Schools does consist of three schools, an elementary, a middle, and high school. Currently, students start in Clinton Elementary School from Kindergarten to Grade 4, then they attend

2. Educational Program with Designer Responses

Clinton Middle School from grades 5 through 8, and then Clinton High School from grades 9 through 12. Pre-K is offered in both Clinton Elementary School and Clinton High School on a limited basis.

During the 2017–2018 school year, Clinton Public School engaged the community in a survey regarding the state of the schools and then followed-up on that by forming a committee to develop a five-year strategic plan. One of the main pieces of feedback that was collected through the survey was the lack of age-appropriate facilities at Clinton Middle School for fourth graders. This feedback, combined with the lack of available space at Clinton Middle School, resulted in the district moving the fourth grade to Clinton Elementary School for the fall of 2018.

However, given the opportunity to correct these shortcomings, it is important that the district explore an option that would allow Clinton Middle School to meet the developmental needs of fourth graders. While having the fourth grade in Clinton Elementary School is working, it is now creating space challenges as Clinton continues to see a need to expand pre-kindergarten, special education, and English Learner programming in that building.

On February 13, 2023, the School Committee voted 5–0 to endorse a building project that would be focused on a future grade configuration of 4–8. This vote was made with the understanding that any building project would take into consideration the developmental needs of 4th grade students. Additionally, this vote was made to address the overcrowding at Clinton Elementary School based on the growing number of students who are “doubling up” with family members and moving into the district. It is believed that this population was not accounted for in the MSBA enrollment certification. Finally, CPS has made Pre-K free with a goal of offering universal Pre-K in the future. However, enrollment is currently capped due to space constrictions at Clinton Elementary School. The only concern expressed by the school committee when taking this vote was not related to the educational programming, but rather looking at the cost differential between the two enrollment options.

LPA|A Response: The building is designed to support the grades 4–8 enrollment of 700 students. The building form and location allow the opportunity for future expansion via extension of the existing academic wings or through the connection of those wings creating a courtyard.

Class Size Policies

Clinton Public Schools does not have a formal policy regarding class size and the contract with the teachers is silent on this point. However, when allocating resources, CPS often refers to the MA DESE 2017 Policy Brief on “Class Size and Resource Allocation”. Based on the data presented in that briefing, CPS strives to have middle school range classrooms with approximately 20–25 students per class. CPS tries to avoid having middle school classes with over 25 students in the classroom with the exception of some singleton courses, specials, or electives. Often, an effort is made to stay at approximately 20 students if the class requires significant support such as an inclusion special education class or one with many English Learners. Substantially Separate Special Education classrooms are scheduled to include approximately 8–12 students per class.

The proposed design shall be sized to support approximately 25 students per class in general classrooms and 8–12 students in Substantially Separate Classrooms.

LPA|A Response: Classrooms are sized at 900 NSF to accommodate an average of 24–25 students per class, flexibility for a variety of teaching methods, and space for inclusion services.

School Scheduling Method

Currently, Clinton Middle School operates on two significantly different schedules. While all students start at 8:00 and end at 2:30, the schedule for grades 5 and 6 is significantly different than that of grades 7 and 8.

Grades 5 and 6 are treated more as “upper elementary” grades and the primary structure for educating these students is in teams of two. In these teams, one teacher is the primary instructor for Math and Science, and the other teacher is the primary instructor for ELA and Social Studies. Part of this shift was to allow the teachers to be flexible with their time as needed in order to address all the necessary standards as well as to explore interdisciplinary work when possible. Some of these teams may have more inclusion special education students or English Learner students than others so that these classrooms may be better supported through additional staffing. Each class attends one special each day, these are either Music, Art, or Physical Education. Finally, there are some pull-out supports, such as resource room and therapeutic learning that exist as well.

2. Educational Program with Designer Responses

Grades 7 and 8 are on a more traditional schedule with essentially 7 periods throughout the day. Students are placed on a team and they will have Math, Science, ELA, and Social Studies for a period each within their team. In addition to those four core subjects, these students have one period of STEM (Tech Ed. or Project Lead the Way) and one special period (Art, Physical Education, Executive Functioning) each day. They have their appropriate STEM or special class for a trimester at a time. Similar to the 5th and 6th grade, some teams may have additional support to address the needs of special education or English Learner students, and there are pull-out programs as well.

It is the vision of the district to maintain this separation in the pedagogical approaches to these “Upper Elementary” and “Middle School” grade levels in order to provide instruction in a developmentally appropriate manner and to help with the transitions from elementary school and to high school.

LPA|A Response: The building is organized so that the “Middle School” (7–8) and “Upper Elementary” (4–6) have clear separation from one another. The “Middle School” is housed in the two-story academic wing on the southeast side of the building while the “Upper Elementary” is housed in the two-story academic wing on the north side of the building. This prevents students from either the “Middle School” or “Upper Elementary” from ever having to circulate through each other’s neighborhoods to get to the shared core spaces. This will reduce disruptions to the classrooms and reinforce the strong sense of identity and belonging for each grade level neighborhood. The number of teaching stations indicated in the space summary aligns with the number of spaces needed within the projected schedule to support 700 students. The building is configured in a way to reduce between class travel time.

Teaching Methodology and Structure

The Clinton Middle School teaching methodology is currently a fairly traditional approach. Teachers deliver instruction in owned classrooms working largely in isolation. While significant investments have been made in providing professional development on Universal Design for Learning, and high-quality curriculum materials, there has been little to no structural change to support full scale instructional change.

As we look towards the future of Clinton Middle School, the goal is to have a flexible learning environment that is based on Universal Design for Learning principles. In order to do this effectively, in addition to more traditional methods, teachers will need access to current technology, and additional hands-on learning spaces so that students can have multiple means to construct and demonstrate their learning.

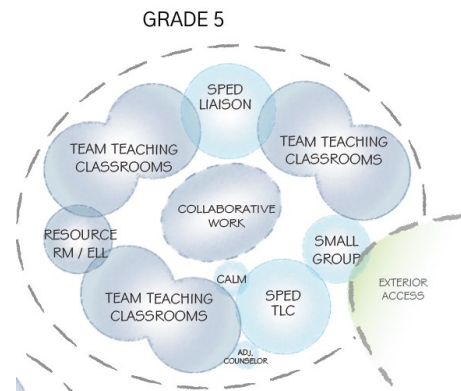
2. Educational Program with Designer Responses

Additionally, having the ability for teams to be located near each other will allow for the integration of more multi-disciplinary project-based learning.

LPA|A Response: All grade level teams will be housed in their own distinct neighborhood allowing for ease of travel between classrooms. Communicating doors between classrooms (All Grades) and Common Rooms (Grades 4-6) are designed to support team teaching, project based learning, and special education inclusion programs.

A new or renovated facility would ideally be designed to better facilitate this transformed learning environment by providing varied and flexible learning spaces. It is likely that any given day will require the use of both a classroom and a collaboration/break-out space simultaneously. It will be important for any facility designs to provide a variety of sizes for classrooms and to support visual connections between classrooms and break-out/collaboration spaces.

In a new or renovated facility, the team teaching approach for the “upper elementary” grades would be continued and additionally supported by organization into grade level neighborhoods, increased connection between teamed classrooms, access to small group rooms, dedicated Special Education classrooms, and collaborative work areas.



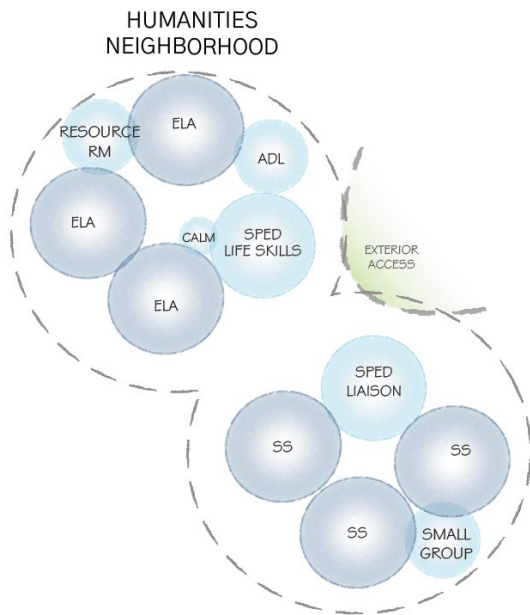
LPA|A Response: As shown in the diagram above all “Upper Elementary” neighborhoods are designed and organized in a way to ensure each classroom has a communicating door to at least one if not two classrooms to reinforce team teaching and collaboration in the collaborative work area.

The future vision for Grades 7 and 8 organization would be to pivot from a grade level team structure to dual neighborhoods with a more departmental focus. One neighborhood would have a STEM focus, and would include Math classrooms, Science labs and related Special Education and EL support spaces. The other neighborhood would have a Humanities focus, and would include English Language Arts and Social Studies classrooms, and related Special Education and EL support spaces.

2. Educational Program with Designer Responses

A main driver for the shift from traditional teams to a departmental focus is to create a more equitable learning environment by allowing students to interact more freely rather than be confined to the team that may have the appropriate support available for that student. One of the drawbacks of the teaming that has been happening at CMS is the inherent segregation of students that has inadvertently happened. Specifically, CMS currently offers advanced math courses in grades 7 and 8, but due to our size, there is typically only one section of these courses offered. By placing these singleton courses on a team, you in essence create a de facto “honors” team. Consequently, just based on the numbers, the students who are not on the “honors” team end up on teams that tend to have a disproportionate number of either special education or EL students, thus creating an inequitable learning environment.

However, the departmental grouping also has other positives. Many of the collaborative activities that are done across disciplines tend to include a math/science or ELA/Social Studies combination. By placing these rooms near each other, we support this collaboration. Furthermore, this serves as an extension of the upper elementary grades where one teacher was teaching math/science and the other ELA/Social Studies.



2. Educational Program with Designer Responses

LPA|A Response: The “Middle School” is organized in a two-story academic wing with the STEM (Math/Science) neighborhood on the first floor and the Humanities Neighborhood (ELA/Social Studies) on the second floor. This will reinforce collaboration amongst the subject matters that have the greatest tendency for collaboration as mentioned above while also preparing students for their transition to the High School.

English Language Arts/Literacy

Clinton Public Schools currently uses Wit & Wisdom as the high quality ELA curriculum for grades K through 6. Beginning in grade 7, this program changes to Into Literature, also a high quality curriculum, that extends into the high school.

In order to implement these high quality curricula with fidelity, it is imperative that teachers have ample time and space to plan together. CPS strives to ensure that all students receive high quality Tier I instruction, and common planning is essential to meeting that goal.

While this curricula does not necessarily require additional space to be implemented, the existing rooms do not have sufficient space for differentiation and the implementation of Universal Design for Learning practices.

Any building project would include adequately sized ELA classrooms organized to support the two teacher team approach for grades 4–6, and the Humanities Team approach for grades 7 and 8. Lastly, the ELA program would benefit from collaborative work areas for grades 4–6, which would allow space for cross discipline collaboration and projects.

LPA|A Response: In the “Middle School” (7–8) ELA is housed in the same neighborhood as Social Studies to facilitate cross discipline collaboration. In the “Upper Elementary” (4–6) classrooms are located with connecting doors to at least one other classroom to facilitate team teaching and have access to the neighborhood collaborative work area for cross discipline collaboration.

Mathematics

Clinton Public Schools currently uses Eureka Math as the high quality math curriculum for grades K through 5. Beginning in grade 6, this program changes to Open Up Resources, also a high quality curriculum, that extends into the high school.

2. Educational Program with Designer Responses

In order to implement these high quality curricula with fidelity, it is imperative that teachers have ample time and space to plan together. CPS strives to ensure that all students receive high quality Tier I instruction, and common planning is essential to meeting that goal.

Any building project would include adequately sized Math classrooms organized to support the two teacher team approach for grades 4–6, and the STEM Team approach for grades 7 and 8. Lastly, the Math program would benefit from collaborative work areas for grades 4–6 which would allow space for cross discipline collaboration and hands–on projects. The addition of updated classroom infrastructure and technology along with connecting classroom doors will further encourage team teaching and collaborative curriculum methods.

LPA|A Response: In the “Middle School” (7–8) Math is housed in the same neighborhood as Science/Vocational Education to facilitate cross discipline collaboration. In the “Upper Elementary” (4–6) classrooms are located with connecting doors to at least one other classroom to facilitate team teaching and have access to the neighborhood collaborative work area for cross discipline collaboration.

Science

Mystery Science is taught in grade 5. Students in grades 6 through 8 are taught using the Inspire Science curriculum from McGraw Hill. While grades 7 & 8 typically incorporate labs into their curriculum, there are less opportunities for that in the current grades 5 and 6 since they do not have science labs. Any building project should have a Makerspace or lab area that teachers in grades 4 through 6 can use to incorporate more hands–on activities into the curriculum.

The science labs in the existing building are insufficient in terms of size, infrastructure and flexibility. Any building project would include adequately sized Science labs within the STEM Team for Grades 7 and 8. For grades 4–6 Science is taught within one of the team teaching classrooms, which will each be equipped with sinks to support these projects. The addition of updated science lab infrastructure and technology along with connecting classroom doors will further encourage team teaching and collaborative curriculum methods. Lastly, a Maker Space will be provided within the Media Center, which will provide an additional STE space for grades 4–6 for larger or more complex hands–on projects that cannot be completed within the classroom.

2. Educational Program with Designer Responses

LPA|A Response: In the “Middle School” (7–8) Science is housed in the same neighborhood as Math to facilitate cross discipline collaboration. In the “Upper Elementary” (4–6) classrooms are located with connecting doors to at least one other classroom to facilitate team teaching and have access to the neighborhood collaborative work area for cross discipline collaboration. Additionally, a maker space will be provided as part of the Media Center which is centrally located in the building.

Social Studies

CMS currently uses a textbook series from McGraw–Hill to teach social studies. However, students in grade 8 also complete a civics project. Typically, this civics project results in a mock town meeting held at the town hall. In order to complete this, it requires successful coordination and collaboration across all 8th grade social studies classes.

Any building project would include adequately sized Social Studies classrooms organized to support the two teacher team approach for grades 4–6, and the Humanities Team approach for grades 7 and 8. Lastly, the Social Studies program would benefit from collaborative work areas for grades 4–6, which would allow space for cross discipline collaboration and projects.

LPA|A Response: In the “Middle School” (7–8) Social Studies is housed in the same neighborhood as ELA to facilitate cross discipline collaboration. In the “Upper Elementary” (4–6) classrooms are located with connecting doors to at least one other classroom to facilitate team teaching and have access to the neighborhood collaborative work area for cross discipline collaboration.

World Languages

Currently CMS does not offer any world languages in the building. Students in 8th grade may participate in the “dual school” program and elect to take world language offerings at Clinton High School.

Academic Support Programming Spaces

CMS provides a variety of academic support programming. These can range from push–in supports, to pull–out supports, to partial sub–separate programming.

Using Title I funds, CMS currently has a reading interventionist and intends to add a math interventionist for FY24. These interventionists typically provide pull–out support based on student need.

2. Educational Program with Designer Responses

CMS also has a large number of EL students. The number of minutes of instruction that EL students are required to have is outlined in the DESE guidelines. This time varies by the level of the EL student. Based on an equity audit that the district conducted in 2022, it was recommended that CPS increase our EL staffing based on our increased EL population. The district goal is to continue to add EL staffing throughout the district until there is one EL teacher for each grade level. When possible, EL staff may push into classrooms to support sections with large numbers of EL students; however, most of the instruction, particularly for beginners, is conducted in a pull-out setting.

In addition to the services described above, CMS provides a plethora of special education services. There are two sub-separate programs, the Therapeutic Learning Center (TLC) and the ABA/Life Skill program. While there are typically students in these sub-separate programs all day, it is the goal of the district to create flexible student schedules that allow students to be included in general education classrooms as much as possible. There are typically two rooms for each of these programs and students are assigned as appropriate and to avoid exceeding a 48 month age difference per DESE regulations.

Grade level liaisons often provide push-in support to classrooms, but they also conduct pull-out classes as well. Often students may have a certain number of minutes of pull-out support on their IEP and the grade level liaisons typically provide this. While the grade level liaisons typically have a small group of students, they often require a full sized classroom so that they can have the appropriate space to support students for all subjects.

Finally, CMS provides related services, such as Speech and OT/PT. These services are also provided using a combination of push-in and pull-out support. Most of these pull-out services are provided in 1:1 or small group settings.

Refer to the small group/WINN section below.

LPA|A Response: All Academic Support Spaces are located to ensure inclusion and ease of access. This is achieved through strategic placement in the neighborhoods themselves and distribution throughout the building as a whole.

Student Guidance and Support Services

CMS offers student support services through the guidance department; however, not all members of the guidance department are housed in a traditional guidance office.

2. Educational Program with Designer Responses

The district model for TLC classrooms is to have an adjustment counselor located in the vicinity of the TLC classroom to support those students at any time.

Additionally, the ABA classrooms require BCBA support, and a similar goal of having the BCBA in the same vicinity as the ABA classroom is ideal.

While the guidance office itself handles things such as student records, scheduling, and MCAS; they also provide triage services to students who are in need of social emotional support.

Students who require on-going social emotional or mental health support are often connected to an outside counselor and CMS provides office space for these counselors to meet with the students.

Refer to the Social Emotional/Guidance and Special Education sections below.

LPA|A Response: All Student Guidance and Support Spaces are located to ensure inclusion and ease of access. This is achieved through strategic placement of a centralized guidance office, and integration of the TLC and ABA programs within the academic neighborhoods.

Teacher Certification and Assignment

CMS teachers through grade 6 teach multiple subject areas. Therefore, we have required, and will continue to require that these teachers be licensed as Elementary 1–6. Teachers in grades 7 and 8 are content specific teachers and we currently require, and will continue to require, that they hold a content specific license for the 5–8 grade span.

Teacher Planning and Room Assignment Policies

Currently teachers at Clinton Middle School are assigned to a specific room that doubles as their professional home-base. These spaces go largely unoccupied one period a day during teacher prep time. A few teachers may share a classroom due to space constraints. Teachers have limited time to plan collaboratively. Typically, common planning time is only able to be provided once a week.

In a new or renovated facility, having sufficient space for teacher planning is of paramount importance. At a minimum, there should be a teacher’s room for grades 4–6 and a room for grades 7 & 8. These rooms would also store resources so that teachers had access to their curricular materials during common planning and other preparation meetings. The Teacher Planning spaces shall be large enough to support an acoustically separate copy/work room with kitchenette, and a flexible, technology-rich conference room area for common planning time meetings, data analysis and curriculum development.

2. Educational Program with Designer Responses

One of the primary struggles with implementing high quality curriculum with fidelity is the ability to have all teachers of the same plan together. The goal of these work rooms would be to have a professional space where teachers would collaboratively plan together. These rooms would be used multiple periods every day for assigned common planning meetings. For the other periods, these spaces will also be used for teacher planning, professional practice, and cross disciplinary meetings, and house the necessary tools such as a copier, storage, white board, and short throw projector.

These rooms would also be used throughout the day for teachers to conduct individual work during their prep times. Additionally, teachers, instructional assistants, and paraprofessionals that travel between buildings will need this “home base” to store personal belongings and/or instructional materials. These work spaces would be used throughout the day by Instructional Assistants during their contractual prep time.

Finally, CPS believes in job-embedded professional development. Currently our focus is on developing a Multi-tiered System of Support. Our first steps have been to work on solidifying our Tier I curriculum with high quality resources. We are currently working on implementing Universal Design for Learning practices into our instruction. Our goal for next year is to develop more co-teaching models to ensure that classes with two teachers or those with a teacher and an instructional assistant are collaborating and interacting in an effective manner. These work rooms would also be a space that our professional development providers would use with small groups of teachers during job-embedded professional development days.

CPS has been working with Commonwealth consulting for the last three years and plans to continue working with them in the future. The focus for the first few years was the elementary school, and beginning with the 2023-2024 school year the focus will shift to CMS. The primary objective of this work is to create a fully developed multi-tiered system of support. This would include string tier I curricula, Universal Design for Learning practices, interventions, and an inclusive environment focused on co-teaching. Providing multiple means for student expression is a key component of UDL and the goal is for teachers to learn how to move towards project-based learning to allow students to express their learning in a way that works for them.

LPA|A Response: The two teacher planning spaces are centrally located to ensure ease of access and use for staff. These locations also allow staff to keep an eye out on students as they come and go from the shared core spaces. The number of teaching stations indicated in the space summary aligns with the number of spaces needed within the projected schedule to support 700 students.

2. Educational Program with Designer Responses

Pre-kindergarten

There are no plans to include the school district's preschool program as a component of this project.

Kindergarten

There are no plans to include the school district's kindergarten program as a component of this project.

Lunch Programs

Clinton Middle School provides mandatory Breakfast and lunch to all students, and is 100% free to all students. CPS also provides free lunches to students throughout the summer months. To support this robust food service program, a full-service kitchen and servery with (3) serving stations and (3) Point of Sale stations would be required in a new or renovated school building.

The proposed kitchen would be equipped to support on-site cooking, dry goods storage, walk-in refrigerators and freezer, a dishwashing area and dedicated support spaces for 8-10 staff members.

An additional space is desired as a "grab and go" kiosk in the lobby to serve breakfast to students "after the bell" when schedule does not allow them to enjoy breakfast in the cafeteria prior to the start of the school day. This "grab and go" kiosk could also be used to distribute healthy "a la cart" items during the lunch periods.

The current lunch program at Clinton Middle School consists of 3 lunch blocks each 25 minutes in duration. Students are scheduled based on their grade level. While grades 5 and 6 eat together and 7 and 8 eat separately.

In designing a new building, it would be important for the cafeteria to be able to house two different grades at the same time. Having two "sides" of the cafeteria would allow the upper elementary lunches to run on one schedule and the grade 7 and 8 lunches to run on another without any fear of overlapping.

Additionally, the lunch spaces should be designed so that they can be used for more than just the lunch period. Moveable furniture should allow the cafeteria to become a flexible learning space during non-lunch periods.

It would make sense to explore other uses for cafeteria space after school. For example, by making the ceiling the right height and the floor of a suitable material, the space could be used for cheerleading practice after school.

2. Educational Program with Designer Responses

LPA|A Response: The Cafeteria is centrally located off the main lobby for ease of access for students and after school programs and events. The proposed kitchen, servery, cafeteria and grab-and-go station are sized and located to support the district's goal to efficiently provide nutritious food to 700 students.

Technology Instruction Policies and Program Requirements

Clinton Public Schools is currently a 1:1 district, with all students in grades 1–12 either being issued or having access to a dedicated Chromebook. Classrooms should be equipped with the necessary technology to help teachers leverage these Chromebooks as instructional resources. Students in grades 5 & 6 utilize Chromebooks provided within the classrooms, while students in grades 7 and 8 are able to take their Chromebooks home each day. Any students who do not have access to internet at home are provided assistance through district issued hotspots. CPS has offered hotspots to students without internet access since 2020 and will continue to do so. However, it should be noted that the number of students without internet access is minimal.

Each classroom shall be equipped with a robust Wifi Network, Laser (bulb-less) interactive short throw projectors, document cameras, Chromecasts, and speech reinforcement systems. Each classroom will have a dedicated plug for a Chromebook charging cart, and will have perimeter power outlets for individual charging if required. Each classroom will also be equipped with a VOIP phone, PA system, Emergency Call Switches, and digital clocks that are capable of displaying emergency messages.

The Media Center/Learning commons will be equipped with several high powered computers to run programs that are beyond the computing and graphic capabilities of the Chromebooks.

In terms of Technology Instruction, Clinton Middle School has three primary technology courses. Students in grades 7 & 8 take one trimester of Technology Education, this is more an industrial arts setting, and then two trimesters of Project Lead The Way. These are currently taught out of classrooms that have been retrofitted for this type of STEM work.

Any building project should take these STEM courses into consideration. It is important that Clinton Middle School have dedicated STEM labs for Industrial Arts, Computer Science, and Life Science. It is through the continued development of these areas that Clinton Middle School hopes to expose 7th and 8th grade students to different vocations to help students find their interests and promote student engagement. Additionally, for Grades 4–6 the building project will include a STEM space dedicated to

2. Educational Program with Designer Responses

project-based learning and technology instruction. The requirements for each of these STE spaces will be outlined in greater detail in the Vocational Education section below.

LPA|A Response: The appropriate spaces and infrastructure will be distributed throughout the building as required to support the school's technology program.

Media Center

The current media center at CMS is obsolete and very rarely used except to house larger groups of students or staff. The goal of any building project would be to make the media center more a true learning area where students would come to truly engage in their learning.

While a new media center or “learning commons” should still contain some volumes of text, there should also be an area with more robust computer technology and advanced printing capabilities. Additionally, a portion of the Media Center area allotted by the MSBA guidelines will be dedicated to a Maker Space.

This Maker Space will serve as an STE lab for grades 4–6, and will be a flexible space for project based learning and science/technology curriculum. This space will be equipped with sinks, durable materials, and overhead power to support a variety of hands-on projects. Storage will be provided for project materials, and display of completed projects can be highlighted in the media center or in other common areas. The Maker Space scheduling will be overseen by the Media Specialist, and will be able to be booked by any teacher within the school.

Since the upper elementary grades do not have science labs, this Maker Space will serve as the de facto science laboratory for grades 4–6. Using a google sheet, the Media Specialist will be able to support the scheduling of the space with these teachers. This process would be similar to how computer labs used to be reserved prior to the district going 1:1.

LPA|A Response: The Media Center will be centrally located for efficient access from the academic spaces. The space(s) will be equipped with technology and will be outfitted with flexible furniture to accommodate a variety of uses.

Art

Art classes are recognized as an important part of the curriculum at Clinton Middle School as evidenced by the fact that every student takes art every year. However, currently there are two “art rooms”, one is

2. Educational Program with Designer Responses

extremely outdated, and the other is just a regular classroom. While we would intend to continue to have two art teachers and art for all students, any building project should explore the development of a comprehensive art studio for both Grades 4–6 and Grades 7&8.

The two art studios should be centrally located with access from all grade levels, and adjacent to each other to share storage space and a kiln. Art storage should include secure and appropriately ventilated space for any toxic and hazardous materials as well as an accessible file of material safety data sheets (“MSDS”). Additionally, safety equipment such as safety goggles should be provided and utilized as required by the curriculum. Both studios should have flexible spaces that not only the art teachers can share, but that classroom teachers could bring their classes to use and to create as the schedule allows. This studio should have areas for dry work, wet work, computer work, and plenty of storage.

Some of the areas of importance as identified by the art teachers are: natural light, preferably through north or south facing windows; overhead lighting; storage closets; glass display cases; bulletin boards; kilns with proper ventilation, pottery wheels, trough style sinks, and adequate access to overhead hanging power outlets.

LPA|A Response: The Art classrooms are centrally on the second floor above the Media Center just off the lobby. This offers the opportunity for an open gallery/display to be integrated into the school at a prominent intersection of circulation paths.

Music/Performing Arts

Clinton Middle School offers general music to all 5th and 6th graders and then there are band and chorus ensembles in which students may elect to participate. The school does not have a theater arts course. However, drama is offered as an after-school activity. Many performances, both drama and music, are held in the high school auditorium rather than the middle school cafeteria.

Ideally, the new or renovated school should have a music and performing arts studio. This area should have one large Band Room / General Music classroom. This space will be large enough to support the school’s largest band ensemble, and flexible to allow for general music classes to take place as well, with sufficient room for movement and dance. The suite will also contain a secure space for instrument storage, and two dedicated practice rooms. This performing arts space will be located adjacent to the Stage, so that the stage can be used for Choral practice. The stage must be equipped with a robust acoustic separation from the Cafeteria, as choral practices are often scheduled simultaneously with lunches. The Stage should also be sized to accommodate these spaces to allow sufficient wing space for students and performers to enter and exit.

2. Educational Program with Designer Responses

Each music area should have high ceilings, low pile carpets, and acoustic paneling to mitigate high noise levels. Every room should have a sink and access to drinking water.

LPA|A Response: The Band Room is located on the first-floor level directly adjacent to the cafeteria stage. This allows for the band room to act as a green room for the stage for special events/programs. The stage will be equipped with a high acoustically performing operable partition to separate it from the cafeteria. This will allow for the stage to be used as an additional teaching station for the music program.

Physical Education

Clinton Middle School students take physical education and health as a wellness course every year. Every student in every grade takes wellness for one-third, or one-trimester, of the school year. Physical education and life-long fitness and health are important to the Clinton community. The school has two full-time physical education/health teachers. There is one full-size gymnasium, a boys locker room, a girls locker room, and a health room.

To meet the needs of the students and the community, any investment into a building project should include, at a minimum, a gymnasium of a size that replicates the existing gymnasium, which is able to be divided comfortably into two basketball side courts, and possibly more smaller areas. This would also allow for elementary gym and grade 7 and 8 gym to occur on different schedules in different sides of the gym. Additionally, the gym should be equipped with coaches' offices and locker rooms/restrooms for all genders, including a gender-neutral locker room area that could double as a training room and changing area for coaches and officials after school hours. The gymnasium space should also incorporate areas for non-traditional activities such as a rock-climbing wall as well as some windows to allow for some natural light into the area.

In addition to the purely curricular needs of this space, there are also extra-curricular considerations that should be considered such as a scoreboard, speaker and projector system, and bleachers.

Additionally, a classroom space should be available for health classes. Health education is part of the Wellness curriculum. While taking wellness the assigned location of the class may vary depending on if it is a PE day or a health day. The health classroom would be shared by both PE teachers and all students would receive their health instruction in this space.

2. Educational Program with Designer Responses

Outside spaces for physical education should also be considered. Currently, CMS has ample field space, and any building project should work to replace any field space that is lost, or to replace it with more multi-use space, such as an artificial turf area. For the elementary outdoor area, there should be an age-appropriate playground structure and “gaga pits”. Additionally, restrooms that can be accessed directly from the outside of the building should be available to support the outside activities.

Additional health and safety considerations include water fountain access either in the gym or immediately outside of it, proper padding on the walls, and a small trainer’s room able to be equipped with an ice machine.

Depending on the final size and layout of the gymnasium, an elevated indoor track would also be an ideal addition to this space. The indoor track could be used not only for PE classes, but also would support physical and social emotional wellness for all classes throughout the day, track practice and community use.

LPA|A Response: The Physical Education and health spaces are clustered together on the first-floor level in order to facilitate exterior access from the gymnasium to the athletic fields. The PE spaces are organized to achieve maximum flexibility and utilization and for that reason additional space was required to be able to offer a full-size competition court and associated bleachers. The location off the main lobby allows for secure after hours use for programs/events.

Special Education

There are currently 9 full-time special educators on staff. Three of these educators run pull-out sub-separate programs (Resource Room, TLC, ABA). The other 5 special educators are grade level liaisons with grade 5 having two and the each other grade having one. The grade level liaisons have schedules that include of combination of pull-out and push-in services to meet student needs.

Therapeutic Learning Classroom (TLC)

TLC classrooms house one dedicated Special Education teacher and 8–12 students. The curriculum focus includes helping to support students who have primarily social-emotional disabilities. This classroom is typically supported with multiple Instructional Assistants. While some students may spend most of their day in this classroom, typically students in the TLC program are included in regular education classes and attend those classes when regulated and able to do so. When dysregulated, they are provided education and support in the TLC room. Given the spatial needs of the students and staff, a full-sized classroom is

2. Educational Program with Designer Responses

desired. A new or renovated school would include two TLC classrooms, one associated with Grades 4–6, and one associated with Grades 7 and 8. Each TLC classroom requires an adjacent calm down area with direct visibility from the classroom, as well as an adjacent TLC office space to house an adjustment counselor who supports the program.

Applied Behavioral Analyst (ABA)

ABA classrooms house one dedicated Special Education teacher and 8–12 students. The curriculum focus includes teaching pragmatic skills to students who are typically on the Autism spectrum. This classroom is typically supported with multiple Instructional Assistants. Students in this program have a variety of needs and typically need support understanding social cues and their executive functioning skills. Sometimes students in this program may become frustrated and aggressive. Given the spatial needs of the students and staff, a full-sized classroom is desired. A new or renovated school would include one ABA classroom, associated with the fourth grade neighborhood and it would serve students in grades 4–6. The ABA classroom requires an adjacent calm down area with direct visibility from the classroom, as well as an adjacent office for the BCBA (Board Certified Behavioral Analyst). Typically, students who are in the ABA program in grades 4–6 would either transition to the Life Skills classroom as they enter grade 7.

Life Skills

Life Skills classrooms house one dedicated Special Education teacher and 8–12 students. The curriculum focus includes teaching students adult daily living skills. These students are typically not on a graduation pathway and they will be in the district until they age out at 22. A primary focus of this program is to support the ability of these students to hopefully become self-sufficient at some point in their lives. Given the spatial needs of the students and staff, a classroom larger than a full-sized classroom is desired. A new or renovated school would include one Life skills classroom associated with the upper grade neighborhoods. The Life Skills classroom should be directly adjacent to accessible toilet room(s) larger enough for a hooyer lift and a calm-down area with visibility from the classroom. The classroom should be located directly adjacent to Adult Daily living.

Adult Daily Living (ADL)

The center would provide an area to support students in the Life Skills class that would teach skills for day-to-day living. This area would need to provide model areas where students can learn such skills as using a washer/dryer, dishwasher, stovetop, oven, and other household appliances, as well as basic work skills. Ideally the ADL could function as an informal Café for the Clinton MS teachers and staff. The ADL would provide workstations to teach skills needed for working with cash registers, and learning skills such

2. Educational Program with Designer Responses

as cooking, sorting, folding, labeling, and packing items to be sold in the Café. The ADL classroom would also be used to teach day-to-day life skills such as hygiene and nutrition to students not in the Life Skills program, and should be located within one of the 7 & 8th grade neighborhoods.

Grade Level Liaisons

Each grade level should have one classroom to house a grade/team level liaison special education teacher. This room would also serve as a classroom for pull-out instruction. These classrooms can support up to 20 students at a time, and may also be scheduled for use as English Learner classrooms to increase efficiency and utilization. For flexibility of scheduling and to provide adequate space to be utilized as a full inclusion classroom, these classrooms should be designated as full-sized classrooms. Based on the number of special education and EL students in each grade level, it is likely that there would be close to a full classroom of students in this areas during most periods of the day.

Small Group Rooms/ WINN

Each grade level and neighborhood should be equipped with two dedicated small group rooms. These small group rooms will be used for pull-out Special Education and English language learner services, and for Speech, reading and math specialists/interventionists. These spaces may be half sized classrooms, and should be integrated within the neighborhoods, with corridor access as well as connecting doors to adjacent classroom spaces. Due to being associated with the corridor it allows for a greater number of students to gather. Additionally, all other spaces are scheduled for learning and will allow for flexible scheduling for collaboration/support. This allows students more freedom to complete their work and supports our Universal Design for Learning model.

The small group rooms, and would be distributed throughout the classroom neighborhoods for ease of access and reduced transition time. The small group rooms will be located strategically for supervision from teachers, and will also be equipped with sidelites and windows to allow for increased visual supervision.

The small group rooms will support between 8-12 students and will be utilized every period throughout the day. Additionally, these are spaces where small groups and larger groups of students (2 classrooms) may go to work collaboratively or possibly receive intervention or support. Cross disciplinary collaboration will also occur to support project-based learning.

The WINN program stands for “What I Need Now” and is scheduled for one period per day in the middle school. During this period, students can receive extra help, take on collaborative group projects, or take

2. Educational Program with Designer Responses

on more advanced challenges. The small group rooms would be one of the spaces used to support the WINN period.

In addition to the special education teachers, there is also (1) school psychologist, (2) speech language pathologists, (1) a Board Certified Behavior Analyst (BCBA), (1) part-time occupational therapist and (1) part-time physical therapist. Each of these staff have an office/small room to work in except the OT and PT who share a space.

Related services are a large part of the special education program at CMS. These providers, speech and language pathologist, physical therapy, and occupational therapy all require their own specialized spaces. These areas should be able to accommodate small groups of up to 8 students and include adequate secure storage for testing materials and confidential information. Considerations should be made to these areas so that they are not isolated from other instructional areas and to ensure that they are quiet for student testing. Speech and Language pathologists will utilize small group rooms or speech classrooms in each of the neighborhoods. The OT/PT classroom shall be centrally located close to the Physical Education facilities. Soundproofing may be required depending on the location.

Adaptive PE / OT-PT

The Adaptive PE / OT/PT classroom shall be centrally located close to the Physical Education facilities and the Health Classroom, and will be used by the occupational therapist and physical therapist to meet the specific needs of students. The Adaptive PE / OT/PT space would be used to support the Special Education curriculum by providing a separate area for smaller instruction. In addition to being used for OT/PT services, this space may be used by the physical educational teachers to provide alternate physical education activities that are consistent with a student's special needs. Additionally, specific adaptive PE gym classes are typically scheduled based on the number of students with these specific needs.

Each room should have a window in the entry so that administration or other staff can check on the room when the related service provider is working with a student one on one.

Executive Functioning

Currently all 7th and 8th grade students have a course called Executive Functioning. This course teaches students social emotional skills, organization, time management and self control. While this course is considered a "special", it is more closely related to guidance and Special Education than the other more traditional specials. This course requires a room that has a flexible arrangement to allow for students to work as individuals, in small groups, or to move the furniture to do other activities such as stretching or

2. Educational Program with Designer Responses

yoga. Dimmable lighting and sound proofing are also required in this space. Adjacency to the Adaptive PE/OT/PT would be beneficial. Adjacent ample storage will be required to secure yoga mats, and equipment, so these two spaces could additionally share a storage area.

By locating this room near the guidance suite, it could also serve as a location for guidance counselors to meet with groups of students when it is not in use for the executive functioning course.

LPA|A Response: The Special Education spaces required to fulfill the education program are distributed throughout the school to provide equal access and eliminate stigma. The Life Skills and ADL programs are located adjacent to each other, and the Adaptive PE/OT/PT room is centrally located adjacent to the PE & Health Spaces.

English Learners

Clinton Middle School has a growing population of EL students. Currently there are three EL teachers in the building, each teacher has access to their own classroom in order to provide pull-out services, and they also spend part of their day in classrooms providing push-in services.

Based on the increased numbers of EL students at the elementary and middle school level, each grade level/neighborhood should have spaces that the EL teachers can use for small group and whole group instruction. These small group rooms should be sized to accommodate 8–12 students, with classroom technology and storage. In addition to pull-out support, part of the vision for Clinton Middle School is to increase push-in support services. Each classroom should be equipped with an additional small group table for an EL teacher to use for push-in EL instruction.

LPA|A Response: The English Learner spaces required to fulfill the education program are distributed throughout the school to provide equal access and eliminate stigma.

Vocational Education Programs

While Clinton Middle School does not have a true vocational education program, the existing school does offer the following courses: PLTW Design & Modeling, PLTW Automation and Robotics, PLTW Medical Detectives, and Educational Technology. These classes offer students hands-on, real-life experiences that often trigger a passion in a student. These classes also represent a shift to a more robust STEAM (Science, Technology, Engineering, Arts, and Math) interdisciplinary curriculum in the future.

A. Updated Educational Program

2. Educational Program with Designer Responses

Though these three classes are rooted in project-based learning and STEAM, the facilities that currently house the programs them are not ideally located or adequately sized. In a new or renovated facility, these programs should be housed in “da Vinci Studios” – spaces outfitted for design, engineering, and fabrication, imbedded in teams and fully equipped for the hands-on, active learning that occurs there.

The proposed educational program calls for three separate lab spaces, each with a unique STEAM focus to align with the PLTW curriculum to be delivered. CMS has three full time teachers that all have a full schedule of at least 5 periods per day in each of these STEAM labs. All students in grades 7 and 8 have a trimester course in each of these areas each year.

1. Industrial Arts: A hands-on fabrication lab, with wood shop equipment such as drill presses, hand tools, and a CNC router, to support the Design and Modeling curriculum.
2. Computer Science: A high-tech maker space to support programming, 3D printing, and the PLTW Automation and Robotics curriculum.
3. Life Science: A specialized science lab space with dedicated prep room, deep sinks and lab tables to support biology instruction and the PLTW Medical Detectives curriculum.

Ideally these studios would be located near each other to allow for collaboration and sharing of resources among the teachers and classes. A STEM Collaborative work area is desired, which could be used for cross discipline collaboration and testing of projects. These classrooms should include adequate soundproofing, ventilation (for things like sawdust), and sinks. These classrooms should be made of very durable materials that are designed to be worked on and include plenty of lockable storage to secure equipment and supplies. Finally, large movable work benches with storage and access to overhead electrical outlets are essential. The design team will refer to the The MSBA’s “Review and Recommendations of Best Practices for K-12 STEM Learning Spaces” report and Staff Recommendation for 2018 Science/Technology/Engineering Area Guidelines as the design progresses.

Currently, PLTW is not taught in grades 5 and 6 at the middle school. In a building project in which the fourth grade is added to the building, an additional “special” would be necessary. The goal is for this special to be PLTW design and modeling, offered to 6th grade students for a trimester. This design and modeling course could be taught out of the media center maker space, or in the STEM labs throughout the day, as the schedule allows.

2. Educational Program with Designer Responses

LPA|A Response: The Vocational Education spaces are located at the end of the STEM Neighborhood closest to the Main Lobby. This location helps facilitate cross discipline collaboration with Math and Science. These spaces will be double height spaces to support current and future vocational programs. These spaces will have direct access to the exterior and are located adjacent to the main loading dock.

Social Emotional Learning / Guidance

Social emotional learning is a growing aspect of the educational space. Guidance offices are used to provide counselor and emotional support as opposed to just handling schedules, records, and testing. The currently counseling suite is connected to the main office and consists of three offices and a reception area. However, CMS currently has four guidance staff with one of them being housed in a small classroom.

The guidance office should include a reception area and a safe (lockable storage area) for student records. There should be four dedicated guidance offices, as well as one smaller office area for outside counselors to meet with students. Additionally, the guidance suite should be in close proximity to a conference room with a short throw projector in the guidance area in which to hold parent meetings. These offices should be large enough to host meetings with four people, and have adequate sound proofing to ensure confidentiality. There should be at least one unisex restroom in the suite to support student and staff needs. The guidance suite should be located adjacent to the Main administration and the medical suite.

Finally, guidance has also taken on the role of helping to provide essential items to our students and families in need. There should be a pantry that can be used to store food and clothing for distribution, as well as a dedicated area to collect donations.

LPA|A Response: The Guidance Suite is located adjacent to both the Admin. and Nursing Suites, and includes a waiting area, private counselor offices, a dedicated conference room, and storage.

Nursing

The challenges that COVID has presented have highlighted the need for adequate medical facilities in schools. Currently the nurse's office is located adjacent to the guidance suite. This area consists of a waiting area, an office for the nurse, a treatment area, and one other room.

2. Educational Program with Designer Responses

A new nurses office should include many of these same items, but there needs to be adequate lockable storage room for medical supplies. The medical suite should include a small waiting area, an open resting area for two beds, a medicine supply and distribution room, and a discrete examination room. There should be adequate sound proofing to provide a confidential environment so that students in the waiting area are not hearing conversations in the treatment area or phone calls to parents or physicians. The actual office for the nurse should be large enough to support two individuals. This area should have a least one unisex restroom.

LPA|A Response: The Nursing Suite is located adjacent to the Admin. & Guidance Suites, and gymnasium. The suite includes a waiting area, private exam room, unisex toilet, and storage. The Medical Suite will have exterior access to help facilitate medical transportation should an emergency arise.

Transportation Policies

Currently, Clinton Public Schools employs a three-tier bus system with Clinton Middle School on its own tier, the second tier. When designing a building project, it should be noted that aligning the 7th and 8th grade to the high school, and putting those students on the first tier of busing could be advantageous. This would help to eliminate some of the overcrowding and “double runs” that currently exist on the second and third tier of busing. For future flexibility, the future site design should allow space for (10) buses to queue on site, as well as dedicated spaces for two smaller buses to load and unload students.

Also, even though Clinton Public Schools has a very generous busing policy, there are still a large number of parent pick-ups. This parent pick-up traffic needs to be considered and the building designed with a traffic flow so that the parent pick-up traffic does not hold up the buses.

LPA|A Response: The site is developed in a way to ensure that bus traffic is not impeded by parent pick-up and drop-off. The siting of the new building also creates more than enough on-site queuing than is needed and will ensure traffic does not back up on to Route 110.

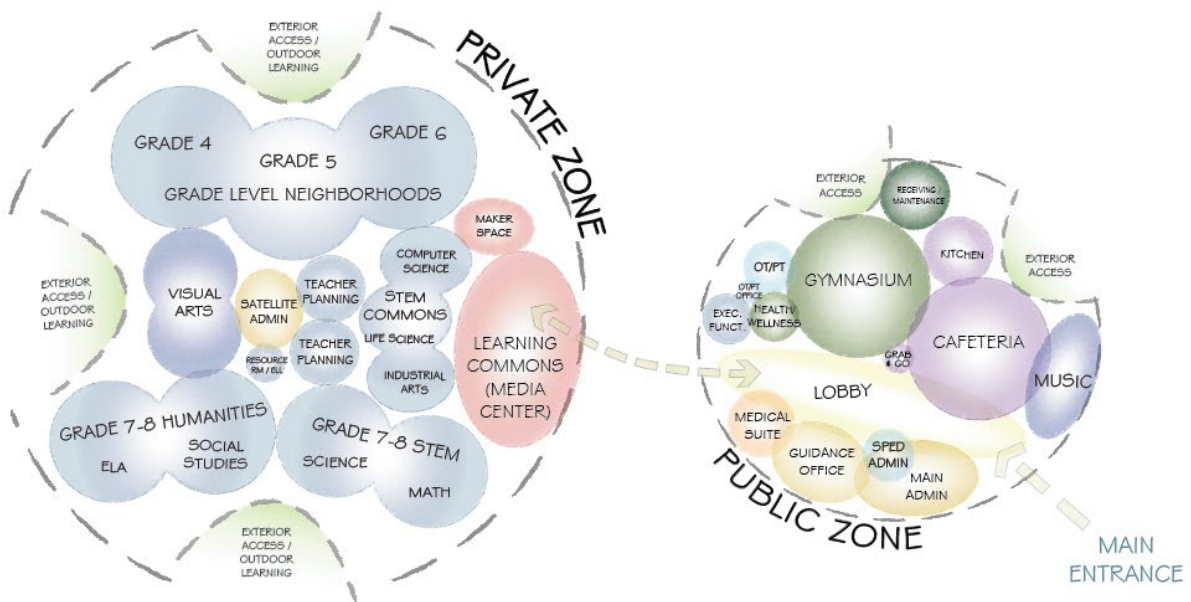
Functional and Spatial Relationships and Adjacencies

Ideally, Clinton Middle School would be organized into three separate zones. One zone would be for the primary instruction of students in grades 4-6, the next zone would be for the primary instruction of grades 7 & 8, and the final zone would be all of the common areas and specialized rooms and labs.

2. Educational Program with Designer Responses

Furthermore, due to the shared campus nature of Clinton Middle School and Clinton High School, there are 8th grade students who travel to the high school to take high school level courses. Consideration should be given to supporting the transition of eighth grade students to the high school during the school day.

Finally, in order for the building to effectively support the community needs, the areas that would typically serve the community need to be able to be isolated from the rest of the school easily. This area will be referred to as the public zone.



Within the public zone, any design alternatives should express the following:

- Administrative suite immediately adjacent to the main entry of the facility with direct visual access to the building approach and the main entry
- Guidance component of the administrative suite must possess its own entry and waiting area separate from the main office area
- Medical Suite immediately adjacent to and internally connected to the main office administrative suite
- Gymnasium and bulk of cafeteria area located immediately adjacent to one another to the greatest extent possible such that the seating area of the cafeteria can also serve as lobby space for the gymnasium and the cafeteria could be used to support athletic practices
- Music/ Performing Arts department located adjacent to the Cafetorium / Stage

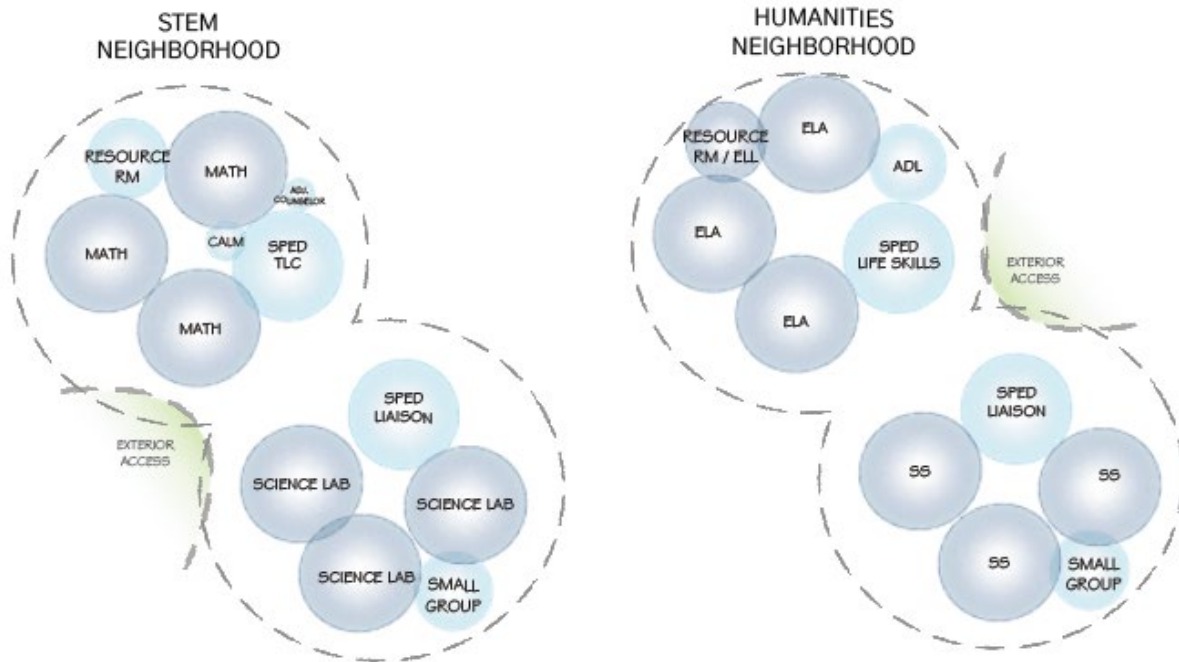
2. Educational Program with Designer Responses

- Kitchen located immediately adjacent to bulk of cafeteria are in close proximity to site service entry
- Programmed custodial and maintenance spaces located near kitchen and site service entry

Within the private zone, any design alternatives should express the following:

- A Media Center / “Learning Commons” – a diffuse media center within the circulation zone that serves as the connective tissue between teams that includes stacks, ad hoc breakout/ collaboration spaces, presentation spaces, niches and alcoves for student-to-student collaboration, the development of project materials.
- A satellite Administration area, which would house the Dean of School Culture and a small group/resource room.
- For Grades 4–6:
 - (3) Sets of Team-teaching classroom (consisting of (2) connected classrooms)
 - (1) Shared collaborative work area
 - (1) SPED Liaison Classroom
 - (1) SPED Substantially Separate Classroom (ABA or TLC)
 - (2–3) Small group / resource rooms for delivering Special Education, English Learner, Speech Services, and other interventions.
 - Direct outside access for each grade
- For Grades 7 & 8:
 - (1) Humanities neighborhood consisting of:
 - (3) ELA Classrooms
 - (3) Social Studies Classrooms
 - (1) SPED Liaison Classroom
 - (1) SPED Substantially Separate Classroom (Life Skills/ADL or TLC)
 - (2) Small group room/resource rooms for delivering Special Education and English learner, Speech Services, and other interventions.
 - Direct outside access
 - (1) STEM neighborhood consisting of:
 - (3) Math Classrooms
 - (3) Science Labs with Prep rooms
 - (1) SPED Liaison Classroom
 - (1) SPED Substantially Separate Classroom (Life Skills/ADL or TLC)
 - (2) Small group room/resource rooms for delivering Special Education and English learner, Speech Services, and other interventions.

- Direct outside access



- Specialized Areas:
 - Specialized Studios as described above for:
 - Visual Arts: (2) Art Studios
 - Performing Arts: (1) Music Studio with access to Stage
 - STEM Commons: (1) Industrial Arts, (1) Computer Science, (1) Life Science (1)
 - Learning Commons / Media Center with Maker Space
 - (2) Teacher planning rooms, one for Grades 4–6, one for Grades 7&8.
- Each pair of teams should have direct access to an outdoor learning area
- All rooms should have natural lighting

LPA|A Response: All of the above stated objectives are achievable in the design and layout of the preferred solution.

Security and Visual Access Requirements

Currently the Clinton Middle School facility is not as secure as the district desires. The Clinton Public School’s Crisis response plan is included in the PDP in section 3.1.2.C Supporting documents.

2. Educational Program with Designer Responses

A recently installed key card entry system and multiple security cameras have all helped to make the facility more secure than in past years. Although these three upgrades have helped, the aging facility requires additional upgrades to ensure optimal levels of security for students and staff.

Security is more than equipment and technology. It is also important that the architectural design also support safety and security. Specific features to be considered include:

- Separation of the public use spaces such as gymnasium and cafeteria from the more private spaces where the bulk of instruction occurs
- Direct visual access from the main administrative area to both the main entry and any approaches to the building from parking areas
- A secured entry sequence consisting of a controlled vestibule or other such architectural strategy to limit visitor access prior until checking in with school personnel
- Strategically placed interior glazing to foster an interdisciplinary educational delivery methodology while still permitting effective shelter in place protocols
- Egress planning that both meets the building code requirements and permits effective evacuation protocols
- Spatial relationship strategies that allow portions of the building to be secured independently in a lock-down
- The entire building should have security cameras with remote viewing access and adequate memory for video storage
- The building should be equipped with an alarm system to secure it after hours. This alarm should be able to be operated remotely.
- All doors should work on electronic key card access

The district's goal is that a new or renovated facility would be a fully secure building, while at the same time have welcoming, community feel that is not compromised but rather enhanced by the additional security features.

LPA|A Response: All of the above stated security and visual access requirements are achievable in the design and layout of the preferred solution. The design team will continue to discuss security protocols in greater detail with local and district authorities as the design progresses.

3.3.4 PREFERRED SOLUTION

- B. Updated Space Summary
 - 1. Space Summary Template–
700
 - 2. Space Summary Template
Variation Narrative
 - 3. Updated Existing vs.
Proposed Diagram–700

Proposed Space Summary - Middle Schools

CLINTON MIDDLE SCHOOL [4-8]			
ROOM TYPE	Existing Conditions		
	ROOM NFA ¹	# OF RMS	area totals
HEALTH & PHYSICAL EDUCATION			12,951
Gymnasium	8,723	1	8,723
Gym Storeroom		2	663
Health Instructor's Office w/ Shower & Toilet		2	234
Locker Rooms - Boys / Girls w/ Toilets		2	3,331
MEDIA CENTER			3,758
Media Center / Reading Room	3,758	1	3,758
Marker Space			
DINING & FOOD SERVICE			9,754
Cafetorium / Dining	5,955	1	5,955
Stage	706	1	706
Chair / Table / Equipment Storage	159	1	159
Kitchen / Servery / Grab & Go	2,415	1	2,415
Staff Lunch Room	519	1	519
MEDICAL			677
Medical Suite Toilet		1	69
Nurses' Office / Waiting Room		1	273
Examination Room / Resting		1	335
Telehealth Office			
Med Supply			
ADMINISTRATION & GUIDANCE			4,096
General Office / Waiting Room / Toilet		1	464
Teachers' Mail and Time Room		1	205
Duplicating Room			
Records Room			
Principal's Office w/ Conference Area		1	179
Principal's Secretary / Waiting			
Assistant Principal's Office - AP1		1	152
Assistant Principal's Office - AP2 [Dean of School Culture Office]		1	296
Supervisory / Spare Office [SRO]		1	76
Conference Room		3	1,172
Guidance Office		3	412
Guidance Waiting Room		1	311
Guidance Storeroom			
Teachers' Work Room		1	829
Social / Emotional Learning [detention]			
Guidance Conference Room			
Outside Provider Offices			
Food Pantry [Karen's Closet]			
CUSTODIAL & MAINTENANCE			3,155
Custodian's Office		1	80
Custodian's Workshop		1	830
Custodian's Storage			715
Recycling Room / Trash		0	0
Receiving and General Supply		1	468
Storeroom (Exterior Equipment)		1	741
Network / Telecom Room		1	321
OTHER			727
Other (specify)			
Greenhouse		1	623
Food Pantry		1	104
Total Building Net Floor Area (NFA)			85,349
Proposed Student Capacity / Enrollment			

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		0			9,400			9,400
		0	7,000	1	7,000		1	7,000
		0	150	1	150		1	150
		0	125	2	250		2	250
		0	1,000	2	2,000		2	2,000
		0			4,405			4,405
		0	3,405	1	3,405		1	3,405
			1,000	1	1,000		1	1,000
		0			10,558			10,558
		0	5,250	1	5,250		1	5,250
		0	1,600	1	1,600		1	1,600
		0	433	1	433		1	433
		0	3,000	1	3,000		1	3,000
		0	275	1	275		1	275
		0			660			660
		0	60	1	60		1	60
		0	250	1	250		1	250
		0	100	3	300		3	300
			0	0	0		0	0
			50	1	50		1	50
		0			3,500			3,500
		0	450	1	450		1	450
		0	100	1	100		1	100
		0	200	1	200		1	200
		0	200	1	200		1	200
		0	300	1	300		1	300
		0	125	1	125		1	125
		0	150	1	150		1	150
		0	150	1	150		1	150
		0	150	1	150		1	150
		0	350	1	350		1	350
		0	150	4	600		4	600
		0	100	1	100		1	100
		0	50	1	50		1	50
		0	450	1	450		1	450
			0	0	0		0	0
			0	0	0		0	0
			125	1	125		1	125
			0	0	0		0	0
		0			2,175			2,175
		0	150	1	150		1	150
		0	250	1	250		1	250
		0	375	1	375		1	375
		0	400	1	400		1	400
		0	333	1	333		1	333
		0	467	1	467		1	467
		0	200	1	200		1	200
		0			0			0
		0			90,438			90,438

Difference to MSBA Guidelines		
ROOM NFA1	# OF RMS	area totals
		1,000
		0
		1,000
		50
		0
		0
		9,750

Date: Enter Date Enter Submittal			
MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA ¹	# OF RMS	area totals	Comments
		8,400	Excess PE Spaces Policy
6,000	1	6,000	Size - Supt. to talk to AD about size needed
150	1	150	
250	1	250	
1,000	2	2,000	
		4,405	
4,405	1	4,405	
		9,558	
5,250	1	5,250	2 seatings - 15SF per seat
1,600	1	1,600	
433	1	433	
2,000	1	2,000	1600 SF for first 300 + 1 SF/student Add'l
275	1	275	20 SF/Occupant
		610	
60	1	60	Second out fo gross potentially
250	1	250	
100	3	300	
		3,500	
450	1	450	
100	1	100	
200	1	200	
200	1	200	
375	1	375	
125	1	125	
150	1	150	
150	1	150	Reconcile Space
150	1	150	Reconcile Spaces
350	1	350	
150	4	600	
100	1	100	
50	1	50	
500	1	500	
		2,175	
150	1	150	
250	1	250	
375	1	375	
400	1	400	
333	1	333	
467	1	467	
200	1	200	
		0	
		80,688	
		700	Enter grade enrollments below
		420	Lower Middle; Grades 4-6
		280	Upper Middle; Grades 7-8

Proposed Space Summary - Middle Schools

CLINTON MIDDLE SCHOOL [4-8]			
Existing Conditions			
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
NON-PROGRAMMED SPACES			
Other Occupied Rooms (list separately)			
Unoccupied MEP/FP Spaces		0	
Unoccupied Closets, Supply Rooms & Storage Rooms		0	
Toilet Rooms		0	
Circulation (corridors, stairs, ramps & elevators)		0	
Remaining ³		0	
Total Building Gross Floor Area (GFA)²			130,000
Grossing factor (GFA/NFA)			1.52

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
	% of GFA	0		% of GFA	0		% of GFA	45,562
	#DIV/0!			0%			0%	
	#DIV/0!			0%			0%	
	#DIV/0!			0%			0%	
	#DIV/0!			0%			0%	
	#DIV/0!			0%			0%	
	#DIV/0!			0%			0%	
	#DIV/0!	0		0%			34%	45,562
		0			136,000			136,000
		#DIV/0!			1.50			1.50

Difference to MSBA Guidelines		
ROOM NFA1	# OF RMS	area totals
		21,000

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA ¹	# OF RMS	area totals	Comments
			Non-Programmed space areas are required to be included in the following submittals:
			Schematic Design Submittal
			Design Development Submittal
			60% Construction Documents
			90% Construction Documents
			Final Construction Documents
		115,000	
		1.43	

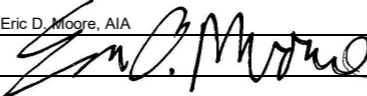
- ¹ **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.
- ² **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls
- ³ **Remaining** Includes exterior walls, interior partitions, chases, and other areas not listed above. Do not calculate this area, it is assumed to equal the difference between the Total Building Gross Floor Area and area not accounted for above.

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: Lamoureux Pagano Associates | Architects

Name of Principal Architect: Eric D. Moore, AIA

Signature of Principal Architect: 

Date: 27-Jun-23

The following changes have been made to the Space Summary Template since the PDP submission. All changes have been highlighted in red font on the attached Space Summary Template.

Core Academic Spaces

- As requested or in response to the MSBA PDP review comments, the following revisions were made:
 - Increase in “Small Group Seminar” rooms from 4 to 5
 - Reduction in size of “Collaborative Work Areas” from 900 to 750 square feet each for grades 4–6
 - Elimination of the “Collaborative Work Areas” for grade 7 & 8
 - Elimination of the “STEM Rooms” and “STEM Storage” for grades 4–6
 - Reduction in “Teacher Planning” from 2 spaces to 1 [net total is still 2 spaces one is accounted for under the “Administration & Guidance”]
 - Reclassification of the “Executive Functioning/Health/Wellness Classroom” from “Special Education” to “Core Academic Spaces”
- The results of addressing MSBA’s PDP comments and the efforts put in, by the entire project team, to maximize flexibility and reduce cost, was a net reduction in square footage for this category of **(-1,660 NSF)**

Special Education

- As requested or in response to the MSBA PDP review comments, the following revisions were made:
 - Reduction in “Self-Contained SPED – ABA” from 2 spaces to 1
 - Reduction in size of “Self-Contained – Life Skills” from 1,080 to 900 square feet
 - Reduction in size of “Adult Daily living” from 900 to 450 square feet
 - Reclassification of the “Executive Functioning/Health/Wellness Classroom” from “Special Education” to “Core Academic Spaces”
 - Addition of an “OT/PT Office”
 - Reduction in “Calming – 7–8” from 2 spaces to 1
 - Reconfiguration of “Office – Director” to “Office Adjustment Counselor – TLC” from 1 space to 2.
- The results of addressing MSBA’s PDP comments and the efforts put in, by the entire project team, to maximize flexibility and reduce cost, was a net reduction in square footage for this category of **(-4,330 NSF)**

Art/Music

- In an effort to ensure equity amongst the faculty and staff, the music office was eliminated.
(-150 NSF)

Vocations & Technology

- No changes from the PDP Submission

Health & Physical Education

- In an effort to maximize flexibility and reduce cost, the “Gymnasium” was reduce from 8,750 to 7,000 net square feet (-1,750 NSF)

Media Center

- No changes in square footage since the PDP submission; a “Maker Space” will now be part of the overall Media Center program.

Dining/Food Service

- No changes since the PDP submission

Medical

- In an effort to maximize flexibility and reduce cost, the telehealth office was eliminated
(-150 NSF)

Administration

- In an effort to maximize flexibility and reduce cost, the following revisions were made:
 - Reduction in size of the “Principal’s Office w/ Conference Area” from 375 to 300 net square feet
 - Reduction in “Guidance Offices” from 5 spaces to 4
 - Reduction in size of the “Guidance Waiting” from 200 to 100 net square feet
 - Elimination of “Social/Emotional Learning [detention]”
 - Elimination of “Guidance Conference Room”
 - Reduction in “Outside Provider Offices” from 2 spaces to 1
 - Elimination of “Food Pantry [Karen’s Closet]”

- The results of the efforts put in, by the entire project team, to maximize flexibility and reduce cost, was a net reduction in square footage for this category of **(-1,850 NSF)**

Custodial and Maintenance

- No changes since the PDP submission.

Other

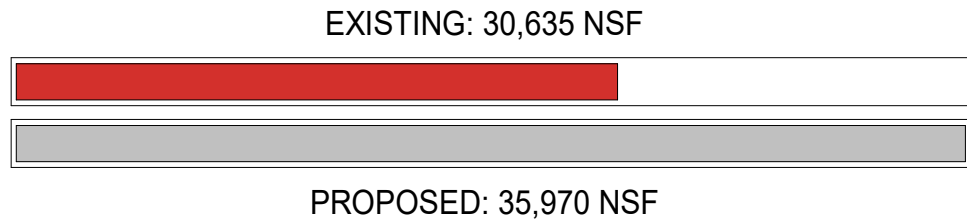
- No changes since the PDP submission.

Grossing Factor

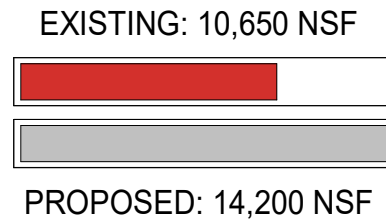
The grossing factor is 1.5; no changes since the PDP submission

In summary, since the PDP submission the Total Building Gross Floor Area has changed since by a total of -14,000 GSF to a total of **136,000 GSF**.

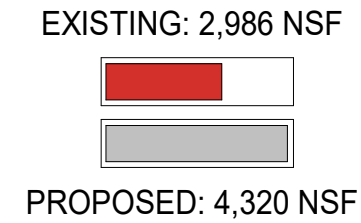
ACADEMIC



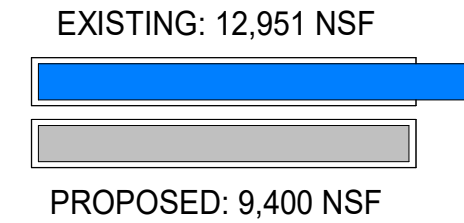
SPECIAL EDUCATION



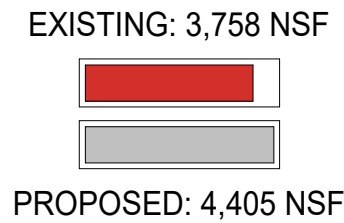
VOCATIONAL/ TECHNICAL



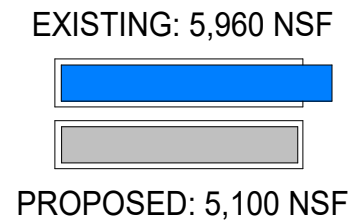
HEALTH & PHYSICAL EDUCATION



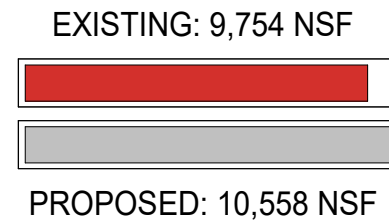
MEDIA CENTER



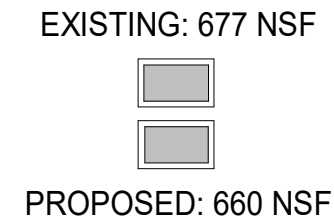
ART/MUSIC



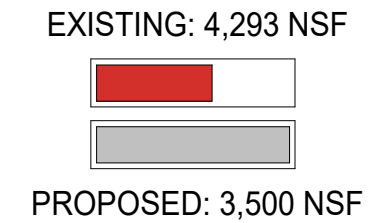
DINING & FOOD SERVICE



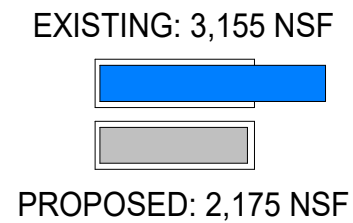
MEDICAL



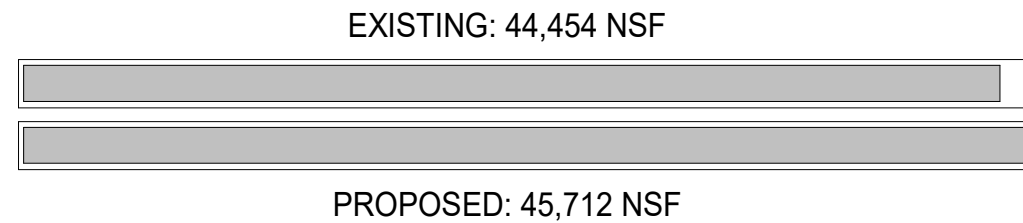
ADMIN & GUIDANCE



CUSTODIAL & MAINTENANCE



CIRCULATION, MECHANICAL, TOILETS, STORAGE, ETC.



ADDITIONAL AREA REQUIRED BY EDUCATION PROGRAM

20,000 GSF

TOTAL BUILDING AREA

130,000 GSF

TOTAL BUILDING AREA REQUIRED BY EDUCATIONAL PROGRAM

136,000 GSF

*ASSUMES 700 STUDENT ENROLLMENT GRADES 4-8



3.3.4 PREFERRED SOLUTION

- C. Sustainable Design
 - 1. LEED-S V.4 Sustainability Scorecard
 - 2. Designer Statement



LEEDv4 BD+C: Schools (LEEDv4 SC) Project Scorecard

Project: **Clinton School**

Address: **100 W Boylston Street, Clinton, MA 01510**

Date: **6/23/23**

Yes			Maybe			No				
0			1			0			INTEGRATIVE PROCESS	
1			1			1			1	
D			1			IPc1 Integrative Process				1
2			4			9			LOCATION & TRANSPORTATION	
D						N LTc1 LEED for Neighborhood Development Location				15
D	1					LTc2 Sensitive Land Protection				1
D			2			LTc3 High Priority Site				1-2
D					5	LTc4 Surrounding Density and Diverse Uses				1-5
D					4	LTc5 Access to Quality Transit				1-4
D			1			LTc6 Bicycle Facilities				1
D			1			LTc7 Reduced Parking Footprint				1
D	1					LTc8 Green Vehicles				1
4			8			0			SUSTAINABLE SITES	
C	Y					SSpr1 Construction Activity Pollution Prevention				Req'd
D	Y					SSpr2 Environmental Site Assessment				Req'd
D	1					SSc1 Site Assessment				1
D			2			SSc2 Site Development - Protect or Restore Habitat				1-2
D	1					SSc3 Open Space				1
D			3			SSc4 Rainwater Management				2-3
D			2			SSc5 Heat Island Reduction				1-2
D	1					SSc6 Light Pollution Reduction				1
D			1			SSc7 Site Master Plan				1
D	1					SSc8 Joint Use of Facilities				1
5			7			0			WATER EFFICIENCY	
D	Y					WEpr1 Outdoor Water Use Reduction				Req'd
D	Y					WEpr2 Indoor Water Use Reduction				Req'd
D	Y					WEpr3 Building-level Water Metering				Req'd
D	1		1			WEc1 Outdoor Water Use Reduction				1-2
D	3		4			WEc2 Indoor Water Use Reduction				1-7
D			2			WEc3 Cooling Tower Water Use				1-2
D	1					WEc4 Water Metering				1
20			11			0			ENERGY & ATMOSPHERE	
C	Y					EApr1 Fundamental Commissioning and Verification				Req'd
D	Y					EApr2 Minimum Energy Performance				Req'd
D	Y					EApr3 Building-level Energy Metering				Req'd
D	Y					EApr4 Fundamental Refrigerant Management				Req'd
C	6					EAc1 Enhanced Commissioning				2-6
D	14		2			EAc2 Optimize Energy Performance				1-16
D			1			EAc3 Advanced Energy Metering				1
C			2			EAc4 Demand Response				1-2
D			3			EAc5 Renewable Energy Production				1-3
D			1			EAc6 Enhanced Refrigerant Management				1
C			2			EAc7 Green Power and Carbon Offsets				1-2

Yes Maybe No

			MATERIALS & RESOURCES	13
D	Y		MRpr1 Storage & Collection of Recyclables	Req'd
C	Y		MRpr2 Construction and Demolition Waste Management Plan	Req'd
C		4 1	MRC1 Building Life-Cycle Impact Reduction	2-5
C	1	1	MRC2 Building Product Disclosure & Optimization-EPD's	1-2
C		2	MRC3 Building Product Disclosure & Optimization-Raw Materials	1-2
C	1	1	MRc4 Building Product Disclosure & Optimization-Material Ingredients	1-2
C	2		MRc5 Construction and Demolition Waste Management	1-2

Yes Maybe No

			INDOOR ENVIRONMENTAL QUALITY	16
D	Y		EQpr1 Minimum IAQ Performance	Req'd
D	Y		EQpr2 Environmental Tobacco Smoke (ETS) Control	Req'd
D	Y		EQpr3 Minimum Acoustical Performance	Req'd
D	2		EQc1 Enhanced IAQ Strategies	1-2
C	3		EQc2 Low-Emitting Materials	1-3
C	1		EQc3 Construction IAQ Management Plan	1
C	1	1	EQc4 IAQ Assessment	1-2
D	1		EQc5 Thermal Comfort	1
D	1	1	EQc6 Interior Lighting	1-2
D		3	EQc7 Daylight	1-3
D		1	EQc8 Quality Views	1
D		1	EQc9 Acoustic Performance	1

Yes Maybe No

			INNOVATION	6
D	1		INc1.1 Innovation:	1
D	1		INc1.2 Innovation:	1
D	1		INc1.3 Innovation:	1
C	1		INc1.4 Innovation:	1
C	1		INc1.5 Innovation:	1
C	1		INc2 LEED Accredited Professional	1

Yes Maybe No

			REGIONAL PRIORITY 01510 (underlined)	4
D		1	RPc1 <u>Renewable Energy Production (2 pnts)</u>	1
D		1	RPc2 <u>Building Life-Cycle Impact Reduction v4.1 (2 pnts)</u>	1
D		1	RPc3 <u>Outdoor Water Use Reduction (2 pnts)</u>	1
D	1		RPc4 <u>Optimize Energy Performance (8 pnts)</u>	1
			RPcX <u>High Priority Site (2 pnts)</u>	1
			RPcX <u>Surrounding Density and Diverse Uses (4 pnts)</u>	1

Yes Maybe No

			PROJECT TOTALS (Certification Estimates)	110
	51	49 10		

Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80+ points

After review and discussion, the decision was made by the Clinton Public School District to proceed with the project using LEED v4.

This is an acknowledgement that the Clinton Public School District has identified a goal of 4% additional reimbursement from the MSBA High Efficiency Green School Program. As their Designer, I have submitted a completed LEED scorecard showing all prerequisites and a minimum of fifty one (51) attempted points.

The scope of work for this project will include the construction elements and performance tasks to achieve that goal, and all subsequent documents, including but not limited to, specifications, drawings and cost estimates will match the scope of work indicated in the submitted scorecard.

Eric D. Moore, AIA

Lamoureux Pagano Associates | Architects



3.3.4 PREFERRED SOLUTION

D. Building Floor Plans

700 STUDENT ENROLLMENT

TOTAL AREA: 136,000 GSF

1st FLOOR: 84,000 GSF
2nd FLOOR: 52,000 GSF



1 NC-1 Preferred Solution FIRST FLOOR
1" = 40'-0"



700 STUDENT ENROLLMENT

TOTAL AREA: 136,000 GSF

1st FLOOR: 84,000 GSF
2nd FLOOR: 52,000 GSF



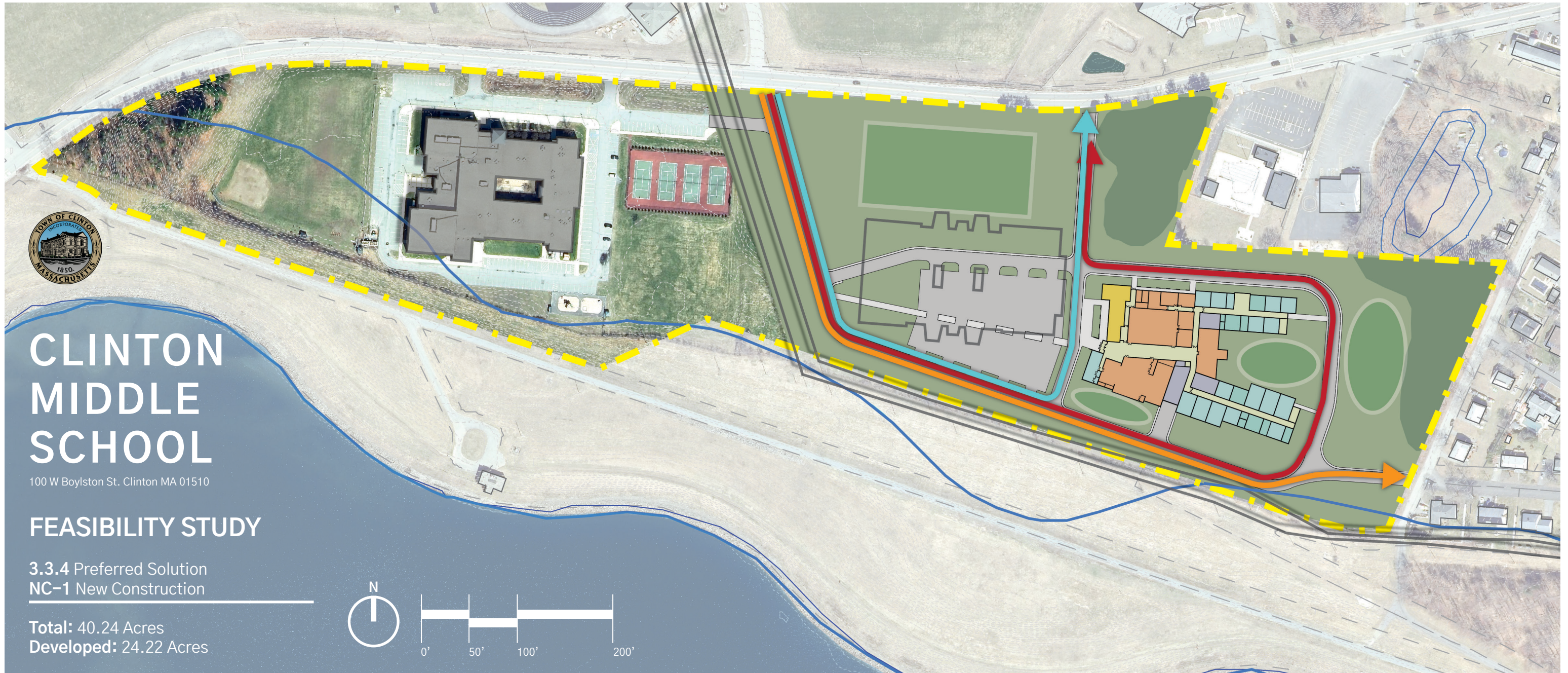
1 NC-1 Preferred Solution SECOND FLOOR
1" = 40'-0"



3.3.4 PREFERRED SOLUTION

E. Site Plans & Sections

1. Site Plans
2. Site Utility Plan
3. Massing
4. Site Sections



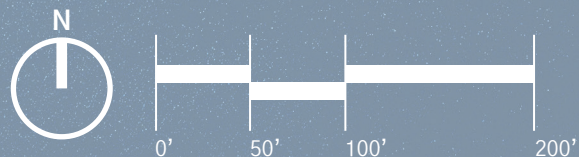
CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.4 Preferred Solution
NC-1 New Construction

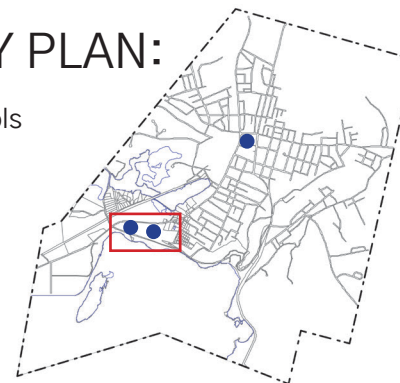
Total: 40.24 Acres
Developed: 24.22 Acres



NOTES:

QUADRANT KEY PLAN:

- Existing K-12 Schools
- Proposed Site



LEGEND:

- Parcel Property Line
- Bus Circulation
- New Construction
- Parent Circulation
- New Athletic Field
- Existing Building
- DCR Buffer Zone
- Access Road

STAMP

PROGRESS PRINT:
NOT FOR CONSTRUCTION

ALL DIMENSIONS ARE SUBJECT
TO FIELD VERIFICATION

CONSULTANT



PROJECT



MSBA Module 3

Clinton Middle
School

100W Boylston St, Clinton MA 01510

DRAWING TITLE

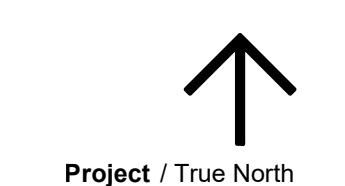
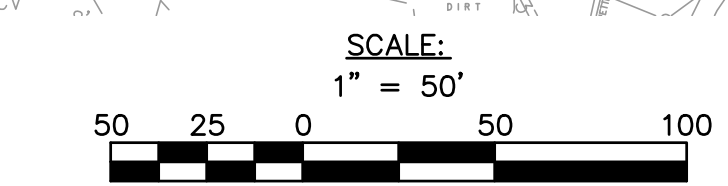
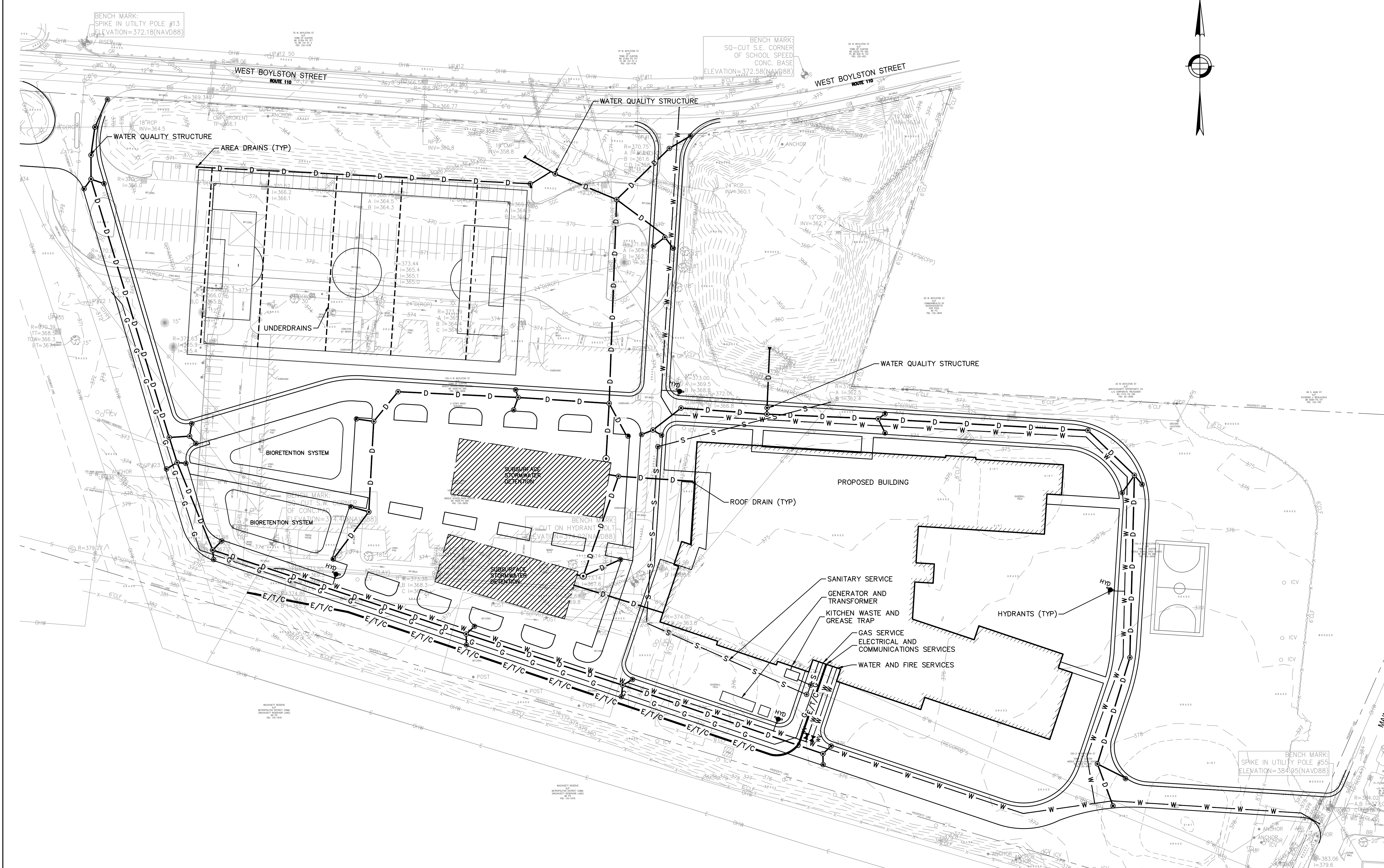
CONCEPTUAL
SITE UTILITY
PLAN

REVISIONS

No.	Description	Date
-----	-------------	------

FILE:	
JOB NO:	#1605
SCALE:	
DWN. BY:	AC
CKD. BY:	CRC
DATE:	June 23, 2023

CP-1





CLINTON MIDDLE SCHOOL

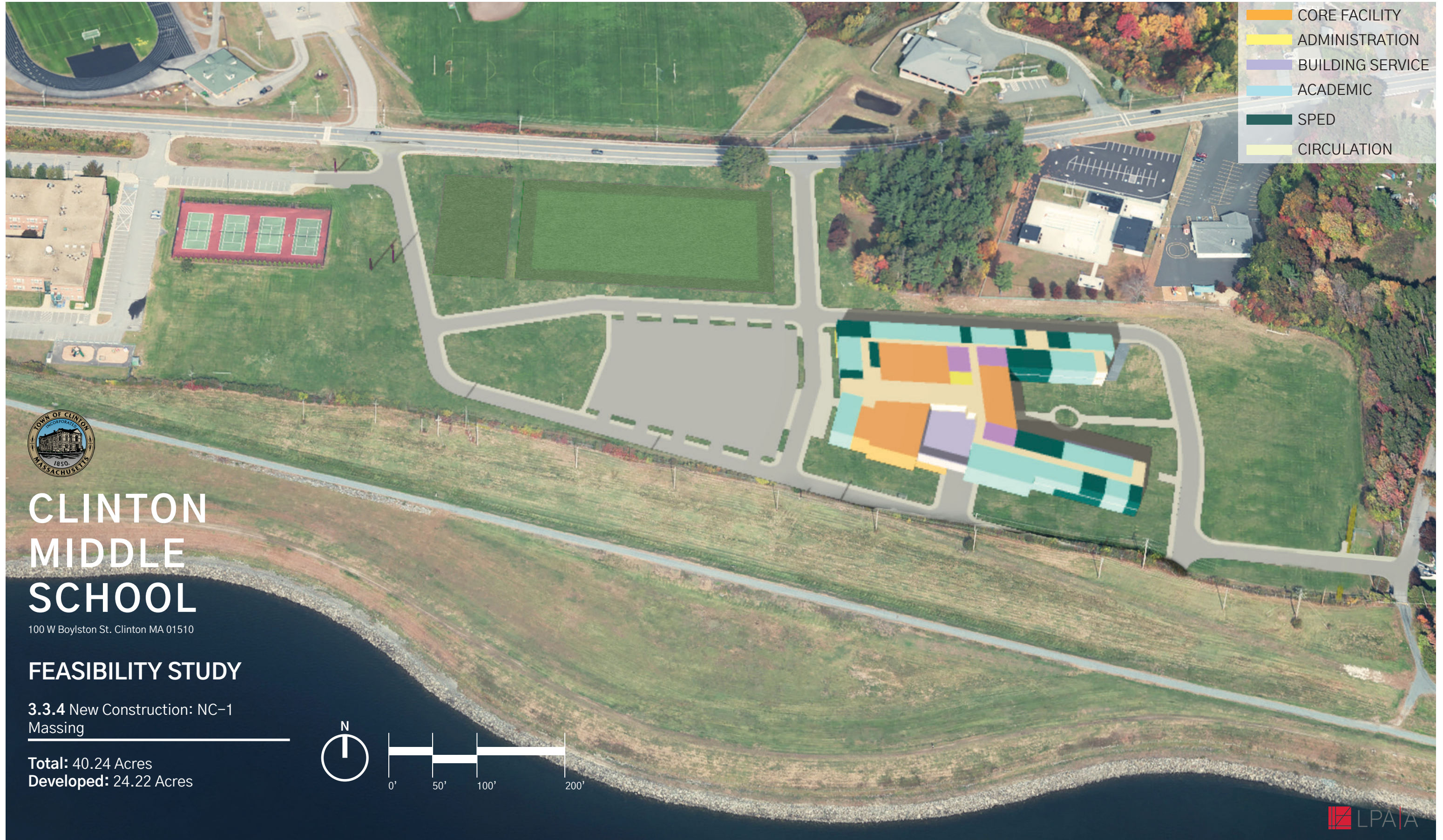
100 W Boylston St. Clinton MA 01510

FEASIBILITY STUDY

3.3.4 New Construction: NC-1
Massing

Total: 40.24 Acres
Developed: 24.22 Acres







CLINTON MIDDLE SCHOOL

100 W Boylston St. Clinton MA 01510

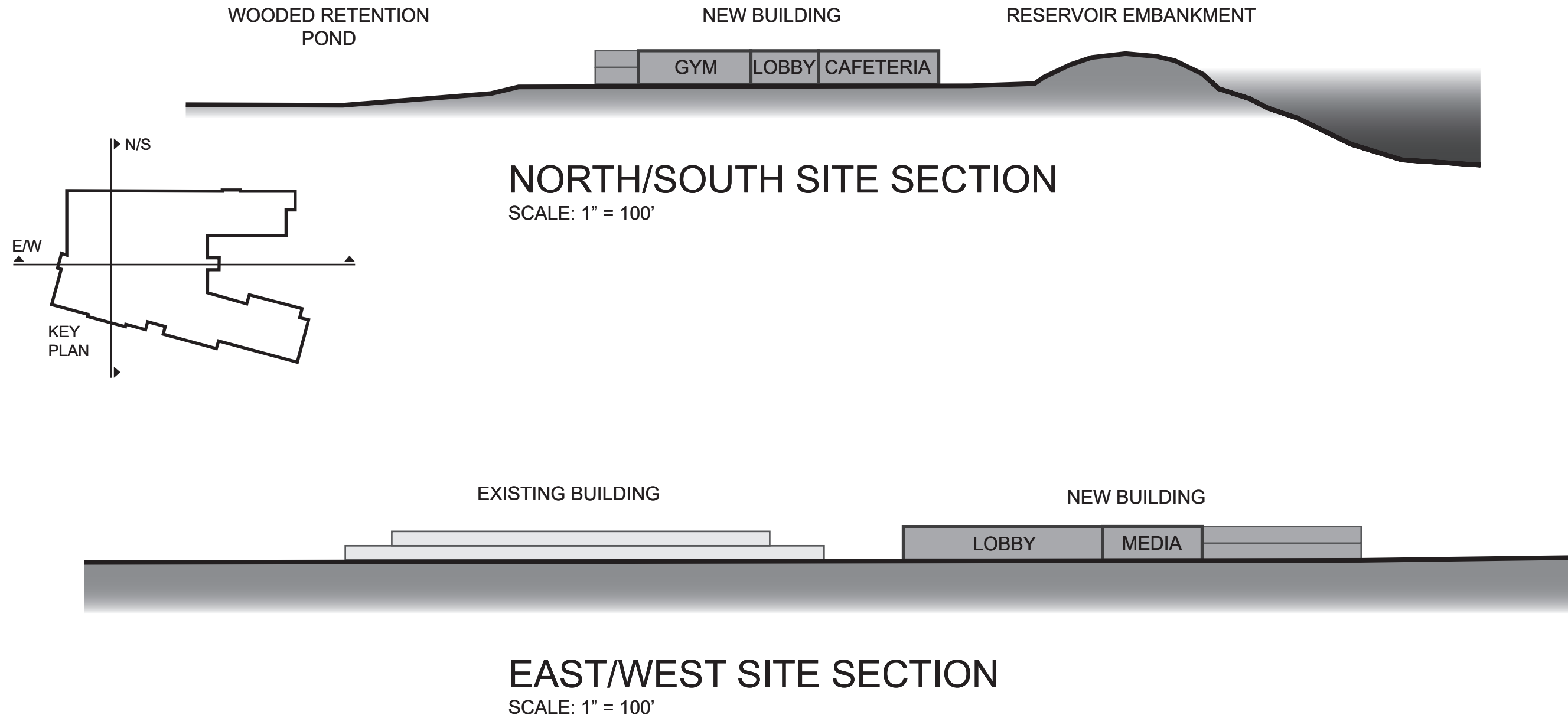
FEASIBILITY STUDY

3.3.4 New Construction: NC-1
Massing

Total: 40.24 Acres
Developed: 24.22 Acres







3.3.4 PREFERRED SOLUTION

- F. Budget Statement for Preferred Solution
 - 1. Capital Budget Statement
 - 2. Fiscal Year Budget



TOWN OF CLINTON

Office of the Selectmen
242 Church Street
Clinton, Massachusetts 01510
Tel: (978) 365-4120 • Fax: (978) 365-4130

BOARD OF SELECTMEN

Edward J. Devault
Mary Rose Dickhaut
Sean J. Kerrigan
Matthew H. Kobus
Julie K. Perusse

Michael J. Ward
Town Administrator

Budget Overview

The OPM's consultant PM&C and the Designer's consultant A.M. Fogarty & Associates prepared detailed cost estimates for each option that were reconciled. A copy of each of these estimates can be found in the Appendix. Below is a summary and overview of the Preferred Option Total Project Budget and local funding process.

Estimated Total Construction Cost

\$115,977,030.00

Estimated Total Project Cost

\$142,184,781

Estimated Funding Capacity

The Town of Clinton intends to issue short term BANs and long-term Bonds to fund the Town's share of the total project cost for the school project. The Town's bonding limit is \$92,692,410. The Town has \$9,178,797 in debt outstanding as of June 30, 2023, of which \$3,048,640 is self-supporting debt funded by enterprise funds and \$2,365,510 is funded by debt exclusion. The Town is operating sufficiently below the debt limit so it will be able to adequately cover the anticipated bonding needs resulting from an approved project. There was no new borrowing authorized for the current fiscal year and none expected for the upcoming fiscal year. The projected debt payment for borrowing using revenues under Proposition 2½ in the next fiscal year is \$1.1 million on a preliminary general fund budget of \$56.5 million.

List of Other Municipal Projects Underway

The Town of Clinton anticipates the reconstruction of the Town Library that requires renovations in the next 10 years. The funding source for that project will be through the Massachusetts Public Library Construction Program. The Town of Clinton anticipates no additional major projects at this time.

District's Not-to-Exceed Total Project Budget

Based on other current comparable school projects, it is anticipated that the total project budget for the Clinton Middle School will cost approximately \$1,000 +/- per square foot. Based on the available

bonding capacity and the projected MSBA grant funding contribution, the district anticipates that the Not-to-Exceed Total Project Budget would be around \$150 million +/- . The district's final Not-to-Exceed Total Project Budget will be refined and established in the Schematic Design Phase submission.

Local Process for Funding Project

The borrowing authorization for the School Project will require a loan supported by a debt exclusion, which will be the responsibility of the Town of Clinton residents. This authorization must be approved by a vote in the Town Meeting on the first Monday in June of 2024 and by majority approval at a local election by ballot held on the second Monday in June 2024.

Estimated Impact to Local Property Tax

The Town of Clinton anticipates that the tax impact to the residents based on an anticipated local share of the project cost of \$85 million +/- . The impact on the median tax bill is based on a 30-year equal principal bond at a rate between 4% and 5%. The impact on the average household is anticipated to be over the 30 years and would be approximately \$800.00 +/- annually. In the Schematic Design phase this information will be refined and vetted with local Bond Counsel .

As reported on the school district's most recent three end of year information, please updated to the 3 latest fiscal year periods and complete the fields below.

Category	2019-2020		2020-2021		2021-2022		Change from Previous Year		Post-Constuction Budget		New Facility vs. Current	
	FY2020 Staff (FTE)	FY2020 Budget	FY2021 Staff (FTE)	FY2021 Budget	FY2022 Staff	FY2022 Budget	Staff (FTE)	Budget	Staff	Budget	Staff (FTE)	Budget
Salaries												
Administration												
Admin. Secretary	8.50	458,802	8.50	475,544	10.00	504,185	1.50	28,641	10.00	561,955	0.00	57,770
Assistant Principal	3.00	291,506	3.00	315,309	3.00	307,401	0.00	(7,908)	4.00	456,831	1.00	149,430
Business Office	2.50	145,286	2.50	198,476	2.50	212,829	0.00	14,353	2.00	189,772	-0.50	(23,057)
Curriculum Director/Coord.	0.50	43,561	0.50	50,400	1.00	91,600	0.50	41,200	1.00	102,096	0.00	10,496
Custodians/Maintenance Staff	11.00	616,223	11.00	686,988	11.00	696,909	0.00	9,921	11.00	776,762	0.00	79,853
Executive Secretary	1.00	71,543	1.00	73,853	1.00	91,772	0.00	17,919	1.00	102,287	0.00	10,515
Facilities Manager	0.50	45,986	0.50	34,686	0.50	48,087	0.00	13,401	0.50	53,597	0.00	5,510
Guidance	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Adjustment Counselor	4.50	373,153	4.50	397,422	5.00	408,397	0.50	10,975	5.00	455,192	0.00	46,795
Guidance Counselors	2.00	163,716	2.00	167,808	2.00	146,113	0.00	(21,695)	2.00	162,855	0.00	16,742
Guidance Director	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Legal	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Nurse	5.00	333,116	5.00	324,780	5.00	328,907	0.00	4,127	5.00	366,594	0.00	37,687
Other	7.00	484,958	8.00	668,253	8.60	707,127	0.60	38,874	9.00	824,809	0.40	117,682
Principal	3.00	368,263	3.00	336,215	3.00	347,880	0.00	11,665	3.00	387,741	0.00	39,861
Special Education Admin	2.00	104,636	1.00	95,000	1.00	97,850	0.00	2,850	1.00	109,062	0.00	11,212
Superintendent/Asst. Superintendent	2.00	279,528	2.00	285,850	2.00	291,489	0.00	5,639	2.00	324,888	0.00	33,399
Transportation	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Treasurer	1.00	95,000	1.30	125,315	1.30	129,648	0.00	4,333	1.00	111,156	-0.30	(18,492)
Total Administration	53.50	3,875,277	53.80	4,235,899	56.90	4,410,194	3.10	174,295	57.50	4,985,597	0.60	575,403
Instruction - Teaching Services												
Arts	3.50	190,618	3.50	151,797	3.50	202,393	0.00	50,596	4.00	257,810	0.50	55,417
Business	1.00	84,250	1.00	91,761	1.00	89,308	0.00	(2,453)	1.00	99,541	0.00	10,233
Communications	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Coping Instructor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Culinary Arts	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
ELL	8.00	577,025	8.00	596,605	10.00	708,430	2.00	111,825	12.00	947,524	2.00	239,094
English Language	8.00	632,421	8.00	697,457	9.00	741,640	1.00	44,183	9.00	826,618	0.00	84,978
Family Consumer Services	1.00	61,138	1.00	66,983	1.00	73,912	0.00	6,929	1.00	82,381	0.00	8,469
Foreign Language	4.50	312,194	4.00	196,737	3.00	253,039	-1.00	56,302	3.00	282,033	0.00	28,994
Health Services	9.00	676,824	9.00	665,021	9.75	716,873	0.75	51,852	9.75	799,013	0.00	82,140
History & Social Science	4.80	340,926	6.00	496,141	8.00	577,620	2.00	81,479	8.00	643,805	0.00	66,185
Instructional Assistant/Paraprofessionals	35.00	1,038,682	34.00	991,260	39.00	1,200,049	5.00	208,789	39.00	1,337,552	0.00	137,503
Library/Media	2.66	165,102	1.00	81,110	1.00	85,170	0.00	4,060	2.00	189,858	1.00	104,688
Mathematics	6.00	398,770	6.00	532,355	8.00	556,056	2.00	23,701	8.00	619,770	0.00	63,714
MCAS	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Music	3.30	225,340	3.30	250,678	4.00	305,675	0.70	54,997	4.00	340,700	0.00	35,025
Other	49.00	3,299,522	53.00	3,850,566	54.00	3,878,287	1.00	27,721	52.00	4,162,568	-2.00	284,281
Physical Education	6.00	399,866	6.00	436,929	6.00	446,026	0.00	9,097	6.00	497,132	0.00	51,106
Reading	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
School Adjustment Counselor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Science	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Biology	3.00	211,488	5.00	414,118	4.00	252,087	-1.00	(162,031)	4.00	280,972	0.00	28,885
Botany	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Chemistry	2.00	144,090	2.00	148,413	2.00	153,014	0.00	4,601	2.00	170,547	0.00	17,533
Geology	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Physics	1.00	80,303	0.50	31,300	0.50	26,002	0.00	(5,298)	1.00	57,963	0.50	31,961
Special Education	29.00	2,141,272	29.00	2,148,113	31.00	2,245,627	2.00	97,514	31.00	2,502,934	0.00	257,307
Substitute Teachers	2.50	111,972	3.00	157,037	5.00	271,467	2.00	114,430	5.00	302,572	0.00	31,105
Technology	6.00	472,320	7.00	543,984	7.00	523,853	0.00	(20,131)	7.00	583,877	0.00	60,024
Vocational Tech.	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-

Total Instruction - Teaching Services	185.26	11,564,123	190.30	12,548,365	206.75	13,306,528	16.45	758,163	208.75	14,985,169	2.00	1,678,641
Total Salaries Administration & Instruction	238.76	15,439,400	244.10	16,784,264	263.65	17,716,722	19.55	932,458	266.25	19,970,766	2.60	2,254,044
Employee Benefits												
All employee-related fringe (health insurance, retirement etc)		4,150,264		4,400,199		4,525,110		124,911		6,022,921		1,497,811
Materials & Services												
Materials												
Audio-visual Materials		-		-		-		-		-		-
Culinary Arts Materials		-		-		-		-		-		-
General Office Supplies		165,267		165,689		144,971		(20,718)		159,468		14,497
Information technology		-		-		-		-		-		-
Hardware		257,722		249,062		148,783		(100,279)		163,661		14,878
Software		49,064		78,997		173,136		94,139		190,450		17,314
Library Materials		273		956		-		(956)		-		-
Non intro-tech equipment		35,298		44,326		94,654		50,328		104,119		9,465
Testing Materials & Supplies		13,316		11,756		12,316		560		13,548		1,232
Textbooks		115,036		147,072		228,575		81,503		251,433		22,858
Vocational Program Materials		-		-		-		-		-		-
Total Materials		635,976		697,858		802,435		104,577		882,679		80,244
Services												
Athletics		277,863		334,993		421,207		86,214		463,328		42,121
Attendance		-		-		-		-		-		-
Food Service		27,477		-		-		-		-		-
Health Services		525,556		452,780		460,238		7,458		506,262		46,024
Other Student Activities		90,798		74,582		87,264		12,682		95,990		8,726
Psychological Services		11,250		12,850		21,000		8,150		23,100		2,100
School Security		-		-		-		-		-		-
Student Transportation		1,426,282		1,672,052		1,722,119		50,067		1,894,331		172,212
Total Services		2,359,226		2,547,257		2,711,828		28,290		2,983,011		271,183
Total Material & Services		2,995,202		3,245,115		3,514,263		132,867		3,865,689		351,426
Facility Costs & Capital Improvements												
Facility Costs												
Custodial Supplies		106,012		100,654		129,015		28,361		141,917		12,902
Electricity		444,401		480,748		468,474		(12,274)		515,321		46,847
Heating Oil		-		-		-		-		-		-
Maintenance												
Building Security Maintenance		-		-		-		-		-		-
Elevator		-		-		-		-		-		-
Equipment Maintenance		-		-		-		-		-		-
Exterminating		-		-		-		-		-		-
Facility Maintenance		383,030		312,316		396,584		84,268		436,242		39,658
Fire Alarm		-		-		-		-		-		-
Fire Extinguisher Inspection		-		-		-		-		-		-
Generator		-		-		-		-		-		-
HVAC Maintenance		-		-		-		-		-		-
Other		-		-		-		-		-		-
Site Maintenance (Grounds)		176,062		185,249		154,749		(30,500)		170,224		15,475
Technology		304,436		436,066		602,872		166,806		663,159		60,287
Trash Removal		32,160		32,627		27,635		(4,992)		30,399		2,764
Natural Gas		235,087		231,850		232,188		338		255,407		23,219

Snow Removal	-	-	-	-	-	-	-	-	-	-		
Telephone	20,128	25,477	26,544	1,067	29,198	2,654						
Water/Sewer	68,018	55,099	49,716	(5,383)	54,688	4,972						
Total Facility Costs	1,769,334	1,860,086	2,087,777	227,691	2,296,555	208,778						
Capital Improvements												
Capital Improvements	645,413	101,341	-	(101,341)	-	-						
Total Facility Costs & Capital Improvements	2,414,747	1,961,427	2,087,777	126,350	2,296,555	208,778						
Debt Service												
Short-term	-	-	-	-	-	-						
Long-term	719,888	484,338	519,667	35,329	571,634	51,967						
Total Debt Service	719,888	484,338	519,667	35,329	571,634	51,967						
Total Budget & Staff	238.76	25,719,501	244.10	26,875,343	263.65	28,363,539	20	1,351,915	266	32,727,565	3	4,364,026

As reported on the school district's most recent three End of Year Pupil and Financial Reports schedule 1, please update to the 3 latest fiscal year periods and report sources of revenue in the fields below.

	FY22 End of Year Financial Report							FY21 End of Year Financial Report							FY20 End of Year Financial Report						
	Regular Day	Special Education	C74 Occupational Day	Adult Education	Other Programs	Un-distributed	Total	Regular Day	Special Education	C74 Occupational Day	Adult Education	Other Programs	Un-distributed	Total	Regular Day	Special Education	C74 Occupational Day	Adult Education	Other Programs	Un-distributed	Total
A. Revenue from Local Sources																					
Assessments received by Regional Schools	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E&D Fund Appropriations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuition from Individuals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuition from Other Districts in Comm.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuition from Districts in Other States	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Previous Year Unexpended Encumbrances (Carry Forward)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transportation Fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings on Investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rental of School Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Revenue	190,985	-	-	-	-	-	190,985	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Care and Assistance	-	297,047	-	-	-	-	297,047	-	175,246	-	-	-	175,246	-	126,179	-	-	-	-	-	126,179
Non Revenue Receipts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue From Local Sources	190,985	297,047	-	-	-	-	488,032	-	175,246	-	-	-	175,246	-	126,179	-	-	-	-	-	126,179
B. Revenue from State Aid																					
School Aid (Chapter 70)	-	-	-	-	-	14,938,662	14,938,662	-	-	-	-	14,367,225	14,367,225	-	-	-	-	-	13,416,101	13,416,101	-
Mass School Building Authority - Construction Aid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pupil Transportation (Ch. 71, 71A, 71B, 74)	-	-	-	-	-	3,987	3,987	-	-	-	-	19,412	19,412	-	-	-	-	-	-	-	-
Charter Tuition Reimbursements & Charter Facilities Aid	-	195,729	-	-	-	80,762	276,491	-	138,622	-	-	77,563	216,185	-	31,932	-	-	-	70,041	101,973	-
Circuit Breaker	-	-	-	-	-	741,850	741,850	-	-	-	-	628,465	628,465	-	-	-	-	-	568,950	568,950	-
Foundation Reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue From State Aid	-	195,729	-	-	-	15,765,261	15,960,990	-	138,622	-	-	15,092,665	15,231,287	-	31,932	-	-	-	14,055,092	14,087,024	-
C. Revenue from Federal Grants																					
ESE Administered Grants	381,986	591,785	22,450	-	1,842	1,301,594	2,299,657	272,724	542,426	19,420	-	-	904,441	1,739,011	326,769	533,030	20,172	-	-	104,307	984,278
Direct Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue Federal Grants	381,986	591,785	22,450	-	1,842	1,301,594	2,299,657	272,724	542,426	19,420	-	-	904,441	1,739,011	326,769	533,030	20,172	-	-	104,307	984,278
D. Revenue from State Grants																					
ESE Administered Grants	-	-	-	421,264	-	83,200	504,464	-	-	-	395,463	-	136,724	532,187	-	-	-	335,699	-	22,508	358,207
Other State Grants	-	-	-	-	157,330	-	157,330	-	-	-	-	157,330	-	157,330	2,500	28,289	-	-	155,705	30,000	216,494
Total Revenue From State Grants	-	-	-	421,264	157,330	83,200	661,794	-	-	-	395,463	157,330	136,724	689,517	2,500	28,289	-	335,699	155,705	52,508	574,701
E. Revenue - Revolving & Special Funds																					
School Lunch Receipts	-	-	-	-	-	1,198,020	1,198,020	-	-	-	-	-	918,109	918,109	-	-	-	-	-	605,949	605,949
Athletic Receipts	-	-	-	-	-	27,884	27,884	-	-	-	-	-	-	-	-	-	-	-	-	17,394	17,394
Tuition Receipts - School Choice	342,450	128,282	-	-	-	-	470,732	331,000	182,791	-	-	-	513,791	365,600	165,679	-	-	-	-	-	531,279
Tuition Receipts - Other	42,622	-	-	-	-	-	42,622	5,682	34,960	-	-	5,183	45,825	46,500	-	-	-	149,185	-	-	195,685
Other Local Receipts	-	-	-	-	190,253	20,750	211,003	-	-	-	-	-	43,130	43,130	-	-	-	-	-	73,670	73,670
Private Grants	-	-	-	-	89,186	6,000	95,186	-	-	-	-	251,764	77,000	328,764	-	-	-	-	79,351	-	79,351
Total Revenue Revolving & Special Funds	385,072	128,282	-	-	279,439	1,252,654	2,045,447	336,682	217,751	-	-	256,947	1,038,239	1,849,619	412,100	165,679	-	-	228,536	697,013	1,503,328
Total Revenue All Sources	958,043	1,212,843	22,450	421,264	438,611	18,402,709	21,455,920	609,406	1,074,045	19,420	395,463	414,277	17,172,069	19,684,680	741,369	885,109	20,172	335,699	384,241	14,908,920	17,275,510

3.3.4 PREFERRED SOLUTION

G. Updated Project Schedule

Clinton Middle School Project

ID	Task Name	Duration	Start	Finish	Timeline																							
					2023	2024	2025	2026	2027	2028																		
					Qtr 2	Qtr 3	Qtr 4	1st Half	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 2	2nd Half	Qtr 3	Qtr 4	1st Half	Qtr 2	2nd Half	Qtr 3	Qtr 4	
1	MSBA Module 2 - 7	1640 days?	Fri 8/5/22	Thu 11/16/28	[Timeline bar]																							
2	Mod 2 - Architect selection process	57 days	Fri 8/5/22	Mon 10/24/22	[Timeline bar]																							
14	Module 3 - Feasibility Study	181 days	Wed 12/21/22	Wed 8/30/23	[Timeline bar]																							
15	Preferred Design Program (PDP)	90 days	Wed 12/21/22	Tue 4/25/23	[Timeline bar]																							
28	Preferred Schematic Report (PSR)	104 days	Fri 4/7/23	Wed 8/30/23	[Timeline bar]																							
29	Final evaluation of of alternatives	30 days	Fri 4/7/23	Thu 5/18/23	[Timeline bar]																							
30	Preferred solution	25 days	Fri 5/12/23	Thu 6/15/23	[Timeline bar]																							
31	Local action and approvals	7 days	Fri 6/16/23	Mon 6/26/23	[Timeline bar]																							
32	Submit PSR to MSBA	1 day	Tue 6/27/23	Tue 6/27/23	[Timeline bar]																							
33	MSBA Board Approval to proceed with schematic design 8/30/23	46 days	Wed 6/28/23	Wed 8/30/23	[Timeline bar]																							
34	MSBA staff review	20 days	Wed 6/28/23	Tue 7/25/23	[Timeline bar]																							
35	MSBA PSR review and comment	15 days	Wed 6/28/23	Tue 7/18/23	[Timeline bar]																							
36	Respond to MSBA PSR comments	5 days	Wed 7/19/23	Tue 7/25/23	[Timeline bar]																							
37	Facilities assessment subcommittee review	31 days	Wed 7/19/23	Wed 8/30/23	[Timeline bar]																							
38	FAS Mtg #1	1 day	Wed 7/19/23	Wed 7/19/23	[Timeline bar]																							
39	FAS Mtg #2 (if required)	1 day	Wed 8/2/23	Wed 8/2/23	[Timeline bar]																							
40	Respond to FAS comments	5 days	Thu 8/3/23	Wed 8/9/23	[Timeline bar]																							
41	MSBA Board Approval - 8-30-23	1 day	Wed 8/30/23	Wed 8/30/23	[Timeline bar]																							
42	Module 4 - Schematic Design	169 days	Thu 8/31/23	Tue 4/23/24	[Timeline bar]																							
43	SD Submission Development	169 days	Thu 8/31/23	Tue 4/23/24	[Timeline bar]																							
44	DESE Submittal Development	120 days	Thu 8/31/23	Wed 2/14/24	[Timeline bar]																							
45	Schematic Design Binder	85 days	Thu 8/31/23	Wed 12/27/23	[Timeline bar]																							
46	Schematic Design Project Manual	85 days	Thu 8/31/23	Wed 12/27/23	[Timeline bar]																							
47	Schematic Design Drawings	85 days	Thu 8/31/23	Wed 12/27/23	[Timeline bar]																							
48	Schematic Design Estimating	20 days	Thu 12/28/23	Wed 1/24/24	[Timeline bar]																							
49	SD Estimate Reconciliation & Budget	6 days	Thu 1/25/24	Thu 2/1/24	[Timeline bar]																							
50	Local actions and approvals	15 days	Fri 2/2/24	Thu 2/22/24	[Timeline bar]																							
51	Submit SD to MSBA	1 day	Fri 2/23/24	Fri 2/23/24	[Timeline bar]																							
52	Review and approve SD submission	25 days	Mon 2/26/24	Fri 3/29/24	[Timeline bar]																							
53	MSBA Staff review	25 days	Mon 2/26/24	Fri 3/29/24	[Timeline bar]																							
54	MSBA SD review and comment	15 days	Mon 2/26/24	Fri 3/15/24	[Timeline bar]																							
55	Response to MSBA SD comments	10 days	Mon 3/18/24	Fri 3/29/24	[Timeline bar]																							
56	Final submission review	1 day	Mon 4/1/24	Mon 4/1/24	[Timeline bar]																							
57	MSBA Board approval - date TBD	15 days	Tue 4/2/24	Mon 4/22/24	[Timeline bar]																							
58	MSBA Board Action Letter Issued	1 day	Tue 4/23/24	Tue 4/23/24	[Timeline bar]																							
59	DESE review and approval letter	4 days	Mon 3/18/24	Thu 3/21/24	[Timeline bar]																							
60	Module 5 - Funding the Project	50 days	Tue 4/23/24	Mon 7/1/24	[Timeline bar]																							
61	Project scope and budget agreement	10 days	Wed 4/24/24	Tue 5/7/24	[Timeline bar]																							
62	Total Project Budget & Exhibit Development	3 days	Wed 4/24/24	Fri 4/26/24	[Timeline bar]																							
63	Reimbursement rate - signed Certification	3 days	Mon 4/29/24	Wed 5/1/24	[Timeline bar]																							
64	Prerequisites to MSBA Execution of PS&B	3 days	Mon 4/29/24	Wed 5/1/24	[Timeline bar]																							

CMS - PSR Option NC1 (700)
06.27.2023

Task		Project Summary		Manual Task		Start-only		Manual	Deadline	
Split		Inactive Task		Duration-only		Finish-only		External Tasks	Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Milestone		Manual Progress		
Summary		Inactive Summary		Manual Summary		External Milestone				

3.3.5 LOCAL ACTIONS AND APPROVALS

- A. Narrative
- B. Local Actions & Approvals
Certification
- C. Certified Copy of SBC Meeting
Minutes
- D. SBC & Public Meeting Minutes

3.3.5 LOCAL ACTIONS AND APPROVAL CERTIFICATION

A. Narrative

A proactive community outreach effort has been consistent throughout the Feasibility Study. Some of the key steps include the following:

- The project website continued to be maintained and updated so the public will have current information and can be found here: <https://www.clintonmiddleschoolbuildingproject.com/>
As discussed in the PDP, the intent is to continue to upload public documents (i.e. general information, existing conditions, meeting minutes, reports, graphics, schedules, project photos, presentations, etc.) available for viewing on this website. The District has also added a link to submit questions or comments.
- A Sustainable Workshop was held on April 24, 2023. Hosted by The Green Engineer, the purpose of the sustainability workshop was to discuss the sustainability goals for the project and collaborate on possible opportunities for the project. It started with a discussion on site and location and discussed bicycle storage and network, parking and electric vehicle parking spaces, outdoor infrastructure, and open space areas for the project. During the energy discussion, energy efficient and cost-efficient systems were recognized. Air source heat pumps, geothermal, and a hybrid system were all discussed as well as the possibility of complete electrification of the building. Photovoltaic arrays were also discussed as part of the project. Water usage was another important topic including irrigating the site, rainwater capture and reuse, flush and flow fixtures, and water metering for the building. Lastly, indoor air quality was discussed at great length including natural daylight, operable windows, healthy air quality, and green cleaning. At the end of the workshop, the Owner opted to proceed with LEED certification for the project.
- All-Boards Meeting: The project team presented an update to the All-Boards group at a televised meeting that took place on June 14th, 2023 in the Cafetorium of the existing Middle School. The All-Boards group consists of the following town boards:
 - Board of Selectmen
 - School Committee
 - Finance Committee
 - Permanent Building Committee / School Building Committee

LPA|A presented an update on the project to date, including the three (3) options that were selected in the PDP, the base repair option, as well as the new hybrid option that was developed during the PSR. The agenda and minutes for this meeting can be found in section 3.3.5, D.

- School Building Committee (SBC) Meetings: All SBC meetings have been conducted in accordance with the state’s open meeting law. All agendas and minutes of these meetings can be found in section 3.3.5, D. The final SBC meeting for the PSR was held on June 20, 2023 at the Middle School Media Center where the preferred option was selected for Schematic Design.
- Clinton Public School has made every effort to keep the public informed of the MSBA process. The Clinton Middle School/MSBA project is a regular agenda item for all CPS school committee meetings. All CPS school committee meetings are live-streamed and the recordings are available online. Additionally, the local paper has run multiple articles in which the CMS/MSBA updates from the school committee meeting have been feature articles. Finally, multiple updates have been provided to the Clinton Board of Selectmen and the Clinton Finance Committee. These meetings are broadcast on Clinton Cable TV and the recordings are available online.
- A letter by the superintendent, Steve Meyer, Ed.D, was released to the public on June 21, 2023 that described the public meeting held by the Clinton Permanent Building Committee on June 20, 2023 where committee members discussed and voted on the preferred solution.



CLINTON PUBLIC SCHOOLS

150 School Street
Clinton, Massachusetts
978-365-4200
FAX: 978-365-5037
Email: smeyer@clinton.k12.ma.us

SCHOOL COMMITTEE

Brendan Bailey
Joel Bates
Pam Gaw
Matthew Varakis
Tena Zapanits

Dr. Steven Meyer
Superintendent

Clinton Public Schools Press Release For Immediate Release

Date: June 21, 2023

Re: Clinton Middle School Preferred Schematic Design Selected

From: Steven C. Meyer, Ed.D - Superintendent

The Clinton Permanent Building Committee voted unanimously in an open public meeting held on June 20, 2023 to move forward in the Massachusetts School Building Authority process with the new construction schematic design option known as NC-1-700.

This option is to build a new middle school where the current middle school fields are located. This new building would be built for an enrollment of 700 students and is designed to accommodate grades 4 through 8.

Clinton's owner's project manager, Dore and Whittier, and architects LPA|A presented several options for either new construction or renovation, which were thoroughly reviewed and discussed in the lead up to this unanimous vote.

The committee considered many factors when making this decision, including how the finished project would improve educational programming, the disruption to students, and the overall cost of the project.

This preferred schematic will be brought to the MSBA for approval. If approved, then the project would move into the schematic design phase. The final project scope and budget agreement for the project would also need to be approved by the MSBA in April of 2024.

If everything is approved by the MSBA, the project would come to the June 2024 town meeting for a vote and then a ballot vote the following week for a debt exclusion.

One important item that the permanent building committee wants to continue to explore is the estimated total cost of a non-MSBA reimbursed renovation. While it is known that there are major projects such as boiler replacement and roof replacement that must be completed in the immediate future, these projects will also trigger other required upgrades to make the building meet the current building codes.

The next meeting of the building committee is scheduled for July 18 at 6:30. It will be a virtual meeting.

3.3.5 LOCAL ACTIONS AND APPROVAL CERTIFICATION

- B. Local Actions and Approvals Certification
 - 1. Preferred Solution Vote Certification
 - 2. Vote to Submit PSR
 - 3. Local Actions & Approval Certification

Vote certification:

The PBC held an In-Person meeting at Clinton Middle School on June 20th, 2023, to submit the Preferred Schematic Report to the MSBA

Clinton Middle School Project

Each PBC Member has reviewed the options and voted to select the following building option _____ and to submit the Preferred Schematic Report to the MSBA. The vote to submit the PSR to the MSBA by each voting member is represented and certified by the chair and superintendent below.

I Chris Magliozzi make a motion to submit the Preferred Schematic Report to the MSBA
I Brian Delory second the motion.

Discussion:

	Call Vote	Yes	No	Abstain
1	Michael Ward	✓		
2	Steve Meyer	✓		
3	Chris Magliozzi	✓		
4	Michael Moran	✓		
5	Brian Delory	✓		
6	Timothy O' Toole			
7	Chris McGown	✓		

Vote on the motion: Those FOR 6
Those AGAINST 0; ABSTAIN 0
Motion Passes (Pass/Fail)

Certification of the vote for the Clinton Middle School PBC as being authentic

Vote Certified:

Chris McGown
Chris McGown - PBC Chair
Steve Meyer
Steve Meyer - Superintendent of Schools

Permenant Building Committee
Preferred Schematic Report Tally
Clinton Middle School Building Project
Project Number: 202000640305
06/20/2023 - SBC Meeting No. 13

Each Member to state their preferred 1 option.

PBC MEMBERS		Construction Options							
		AR.1		AR.1.5		AR.2		NC-1	
		550	700	550	700	550	700	550	700
1	Michael Ward								
2	Steven Meyer								
3	Chris Magliozzi								
4	Michael Moran								
5	Brian Delory								
6	Timothy O'Toole								
7	Chris McGown								
Totals									

I, Chris Magliozzi make a motion to submit option NC1 (700), as the Permanent School Committee Recommended building option for the PSR submission, I, Brian Delory, second the motion.

Discussion:

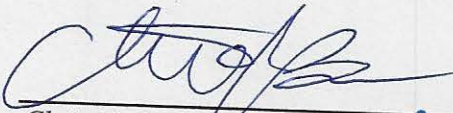
Call Vote:

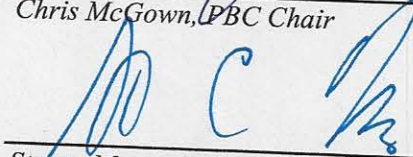
1 Michael Ward (Y)	4 Michael Moran (Y)
2 Steven Meyer (Y)	5 Brian Delory (Y)
3 Chris Magliozzi (Y)	6 Timothy O'Toole (N/A)
	7 Chris McGown (Y)

FOR: 6 ; AGAINST: 0 ABSTAIN: 0

Motion: Pass (Pass/Fail)

Vote Certified By:


Chris McGown, PBC Chair 6/20/23
Date


Steven Meyer, Superintendent of Schools 6/20/23
Date



TOWN OF CLINTON

Office of the Selectmen

242 Church Street,

Clinton, Massachusetts 01510

Tel: (978) 365-4120 • Fax: (978) 365 4130

BOARD OF SELECTMAN

Edward J. Devault
Mary Rose Dickhaut
Sean J. Kerrigan
Matthew H. Kobus
Julie K. Perusse

Michael J. Ward
Town Administrator

06/27/2023

Ms. Mary Pichetti
Director of Capital Planning
40 Broad Street
Boston, Massachusetts 02109

Dear Ms. Pichetti:

The Clinton Middle School Permanent Building Committee ("PBC") has completed its review of the Feasibility Study Preferred Schematic Report for the Clinton Middle School (the "Project"), and on June 27th, 2023, the PBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study related materials to the MSBA for its consideration. A certified copy of the PBC Preferred Schematic Vote Certification and meeting minutes, which include the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors invited the town to conduct a Feasibility Study on March 2, 2022, the PBC has held 13 meetings regarding the proposed project, in compliance with the state Open Meeting Law. These meetings include:

- August 09, 2022
- August 30, 2022
- September 27, 2022
- November 01, 2022
- November 29, 2022
- December 20, 2022
- January 10, 2023
- February 06, 2023
- March 07, 2023
- March 21, 2023
- April 25, 2023
- June 06, 2023
- June 20, 2023

Notices for these meetings were posted and made available for public review in Clinton Middle School (100 W. Boylston St, Clinton, MA 01510). Notices were also made available on our project website.

In addition to the PBC meetings listed above, The Town held Community Visioning Sessions and public meetings. (Which was posted in compliance with the state Open Meeting Law, at which the Project was discussed. These meetings include:

- **January 30th, 2023** – Teacher/Facility and Resident Visioning Session with Owner's Project Manager DWMP, and Designer LPA|A, students from Clinton Middle School and Superintendent of Schools Steve Meyer. Topics discussed: Project and Visioning Overview, Future Ready Teaching and Learning, Priority Goal Setting, Design Patterns, Blue sky ideas, and Q&A.



TOWN OF CLINTON

Office of the Selectmen

242 Church Street,

Clinton, Massachusetts 01510

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BOARD OF SELECTMAN

Edward J. Devault
Mary Rose Dickhaut
Sean J. Kerrigan
Matthew H. Kobus
Julie K. Perusse

Michael J. Ward
Town Administrator

- **February 3rd, 2023** – Student Visioning Session with Owner’s Project Manager DWMP, and Designer LPA|A, students from Clinton Middle School and Superintendent of Schools Steve Meyer.
- **March 15th, 2023** – All Board Public Meeting with Owner’s Project Manager DWMP, Designer LPA|A, and Superintendent of Schools Steve Meyer. Topics discussed: Project Team & Organization, Process & Schedule, Educational Goals & Programming, and Existing Conditions Overview.
- **June 14th, 2023** – All Board Public Meeting with Owner’s Project Manager DWMP, Designer LPA|A, Superintendent of Schools Steve Meyer, Topics discussed: Building Options with cost estimates

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review by visiting the school’s project website:

www.clintonmiddleschoolbuildingproject.com > **Committee**
[\(Clinton Middle School Building Project\)](#)

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 *et seq.*

If you have any questions or require any additional information, please contact the Owner’s Project Manager, Dore & Whittier Management Partners, at (978) 499-2999.

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By:
Michael Ward
Title: Chief Executive Officer
& Town Administrator

Date: 6/20/2023

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By:
Steve Meyer
Title: Superintendent of Schools

Date: 6/20/23

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By:
Chris McGown
Title: Chair of the Permanent Building Committee

Date: 6/20/23

3.3.5 LOCAL ACTIONS AND APPROVAL CERTIFICATION

- C. Certified Copy of SBC Meeting Minutes where PSR Submittal was Approved by Vote



**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE
MEETING MINUTES**

Project: Clinton Middle School
 Subject: School Building Committee Meeting
 Location: 100 West Boylston Street, Clinton, MA 01510
 Distribution: Attendees, Project File

Project No: 20200640305
 Meeting Date: 03/21/2023
 Time: 6:30 PM
 Prepared By: E. Grijalva

Present	Name	Affiliation	Prese	Name	Affiliation
x	Michael Ward*	Town Administrator -PBC Member		Mike Burton	DWMP
	Sean Kerrigan	Selectman	x	Trip Elmore	DWMP
	Brendon Bailey	School Committee Chair		Steve Brown	DWMP
x	Matthew Varakis	School Committee Vice-Chair	x	Elias Grijalva	DWMP
x	Steven Meyer*	Superintendent – PBC Member		Mike Cox	DWMP
x	Brian Farragher	Director of Facilities		Rachel Rincon	DWMP
x	Chris McGown*	Chair of PBC, Head of DPW		Kathryn Crockett	LPAA
	Courtney Harter	CMS Principal	x	Peter Caruso	LPAA
x	Shane McCarthy	Teacher		Sean Brennan	LPAA
	Bill McGrail	Finance Committee Co-Chair	x	Christina Bazelmans	LPAA
x	Chris Magliozzi*	Vice-Chair of PBC	x	Eric Moore	LPAA
x	Michael Moran*	PBC Member			
	Brian Delory*	PBC Member			
	Timothy O'Toole*	PBC Member			
x	Phil Duffy	Director of Community & Econ.			
x	Kelly Turcotte	Special Education Parent Advisory			
	Laura Taylor	Parent-Teacher Association			
	Angelica Arroyo	English Learners Parent Advisor			

Item No.	Description	Action
10.1	<p>Call to Order: 6:35 PM meeting was called to order by PBC Chair C. McGown with 5 of 7 voting members in attendance.</p>	Record
10.2	<p>Previous Topics & Approval of March 07, 2023, Meeting Minutes: A motion to approve the 03/07/2023 meeting minutes was submitted by M. Ward and seconded by M. Moran.</p> <p>Discussion: None.</p> <p>Roll Call Vote: M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown (Y)</p> <p>All in favor, motion passes, March 07, 2023, meetings are certified as approved.</p>	Record
10.3	<p>LPA A Public All Boards Meeting Sticker Results Update:</p> <p>E. Moore briefly recaps each building option and provides the results from the All-Boards & Public straw poll vote that took place on March 15th, 2023. Committee members and members of the public are given (3) stickers to place on their favorite top (3) building option, to see what options the community is steering towards.</p> <p>Green Stickers: Committees opinion Red Stickers: Public opinion</p> <p><u>*Refer to March 21st, meeting package for pictures of the results</u></p> <p><u>Building Options:</u></p> <ul style="list-style-type: none"> • <u>Base Repair</u> (550 enrollment) • <u>Addition/ Renovation Building Options</u> (550 & 700 enrollment) <ul style="list-style-type: none"> ○ AR.1 (700 enrollment) – (3) votes ○ AR.2 (700 enrollment) – (21) votes • <u>New Construction Building Options</u> (550 & 700 enrollment) <ul style="list-style-type: none"> ○ NC.1 (700 enrollment)- (29) votes ○ NC.2 (700 enrollment)- (24) votes ○ NC.3 (700 enrollment)- (21) votes ○ NC.4 – (0) votes ○ NC.5- (0) votes 	Record

Discussion:

S. Meyer requested clarification on building option AR.1 vs AR.2 in terms of disruption to the students and minimizing modular or displacement of the students.

E. Moore both AR.1 & AR.2 will require the displacement of the students temporarily, either through modular classrooms by or building out an addition, keep in mind that building an addition will prolong the project. In either case, you're going to have to drive down the student population and then it's a matter of hopscotching around the building, so in this option, we would have to take advantage of the summer vacations to maximize productivity.

P. Duffy asked if we are obligated to explore AR.1 & AR.2.

E. Moore the MSBA requires you to study an option that maximizes the use of the existing building.

C. McGown states that the executive committee has had a lengthy discussion regarding the building options, and we think that building options NC.1, NC.2, and NC.3 are basically the same with slight variations. AR.1 appears to be the least expensive AR.2 with a major renovation. One of our thoughts was to pick (1) of the new construction and pick both AR.1 and AR.2 which will give us a range of projects for further study.

C. Magliozzi agrees with C. McGown. If you pick the two renovation numbers, you get the cheapest renovation, and you'll get an expensive renovation with varying degrees of disruption. I think that the New Construction options one through three are essentially the same project when you go through the actual design.

M. Varakis' response I don't disagree with you. I think the part that shouldn't get lost here is it makes no sense to go down the path of AR.1 and AR.2 if they don't really satisfy the optimal Educational Plan, which is what we're here for. This is not just a construction project, it's an education project.

C. Bazelmans refers to the building options AR.1 and AR.2, those building options did respectively score a 3 and 4, which indicates that it meets the space needs, but the adjacencies are not quite there, because certain spaces like the gym will stay in its current location. We wouldn't have provided these options if it was a total flop. There are pros and cons to consider in the building options.

M. Moran ask if across the street is an option for a new building. I think it would be the least disruptive for a new building.

E. Moore responded with the land is considered article 97 land which is open space. To change the status, you'll need a vote in the legislature.

	<p>M. Ward we're trying to figure that out. There was a vote in the legislature to transfer the property to the town.</p> <p>P. Duffy from a practical matter if this land is still under article 97. You're talking about a substantial delay to get back into the legislature or the process for the article 97 disposition.</p> <p>S. Meyer, I don't see why that site would be any more advantageous than the locations already suggested in the building options.</p> <p>T. Elmore to P. Duffy's point, when we were looking at the site, article 97 was a deterrent looking at that location.</p> <p>S. Meyer we are all in agreement that building options NC.1, NC.2, and NC.3 are essentially the same option. I think we are also in agreement to move forward with AR.1, AR.2, and NC.1, which will give us a good cost comparison between the options.</p>	
10.4	<p>School Building Committee Discussion and SBC Poll Vote for Preferred option</p> <p>C.McGown states that I think we have all come to a consensus from the previous discussion. We can move forward to the next agenda item.</p> <p>Discussion: None</p>	Record
10.5	<p>PBC and SBC Vote on top (3) building options for PDP submission.</p> <p>Top (3) building options PBC results:</p> <ul style="list-style-type: none"> o M.Ward: AR.1(700), AR.2(700), NC.2(700) o S. Meyer: AR.1(700), AR.2(700), NC.1(700) o C. Magliozzi: AR.1(700), AR.2(700), NC.1(700) o M.Moran AR.1(700), AR.2(700), NC.3(700) o C.McGown: AR.1(700), AR.2(700), NC.1(700) <p>Total Results: (5) AR.1, (5) AR.2, (3) NC.1, (1) NC.2, (1) NC.3 <u>*700 enrollment building options</u></p> <p>A motion was made by C. Magliozzi and seconded by S. Meyer to select building options AR.1 (700), AR.2(700), and NC.1(700) for the PDP submission.</p> <p>Discussion: None</p> <p>All in favor, unanimous vote, motion passes.</p>	Record

10.6	<p>Permanent Building Committee Vote to submit PDP to MSBA</p> <p>A motion was made by M. Moran and seconded by M. Ward to select building options AR.1 (700), AR.2(700), and NC.1(700) for further study in the next phase of the project and to have the OPM and Architect submit the PDP to the MSBA for their review and comments.</p> <p>Discussion: None</p> <p>All in favor, unanimous vote, motion passes.</p>	Record
10.5	<p>Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.</p> <p>Discussion: None.</p>	Record
10.6	<p>Public Comment:</p> <p>Discussion: None</p>	Record
10.7	<p>Next Meeting:</p> <ul style="list-style-type: none"> • SBC Meeting No .011- April 25th, 2023 – virtual meeting. 	Record
10.8	<p>Adjourn 7:39 PM A motion was made by C. Magliozzi and seconded by M. Moran to adjourn the meeting.</p> <p>Discussion: None.</p> <p>All in favor, the meeting is adjourned.</p>	Record

Sincerely,
DORE + WHITTIER

Elias Grijalva
 Assistant Project Manager
 Cc: Attendees, File

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.



**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE
MEETING MINUTES**

Project: Clinton Middle School
 Subject: School Building Committee Meeting
 Location: Zoom
 Distribution: Attendees, Project File

Project No: 202000640305
 Meeting Date: 04/25/2023
 Time: 6:30 PM
 Prepared By: E. Grijalva

Present	Name	Affiliation	Prese	Name	Affiliation
x	Michael Ward*	Town Administrator -PBC Member		Mike Burton	DWMP
	Sean Kerrigan	Selectman	x	Trip Elmore	DWMP
x	Brendon Bailey	School Committee Chair		Steve Brown	DWMP
x	Matthew Varakis	School Committee Vice-Chair	x	Elias Grijalva	DWMP
x	Steven Meyer*	Superintendent – PBC Member		Mike Cox	DWMP
	Brian Farragher	Director of Facilities	x	Rachel Rincon	DWMP
x	Chris McGown*	Chair of PBC, Head of DPW		Kathryn Crockett	LPAA
	Courtney Harter	CMS Principal	x	Peter Caruso	LPAA
x	Shane McCarthy	Teacher	x	Sean Brennan	LPAA
	Bill McGrail	Finance Committee Co-Chair	x	Christina Bazelmans	LPAA
x	Chris Magliozzi*	Vice-Chair of PBC	x	Eric Moore	LPAA
	Michael Moran*	PBC Member			
x	Brian Delory*	PBC Member			
	Timothy O'Toole*	PBC Member			
	Phil Duffy	Director of Community & Econ.			
	Kelly Turcotte	Special Education Parent Advisory			
	Laura Taylor	Parent-Teacher Association			
	Angelica Arroyo	English Learners Parent Advisor			

Item No.	Description	Action
11.1	<p>Call to Order: 6:37 PM meeting was called to order by PBC Chair C. McGown with 5 of 7 voting members in attendance.</p> <p>*PBC Member M. Ward joined @ 6:53 PM.</p>	Record
11.2	<p>Previous Topics & Approval of March 21, 2023, Meeting Minutes: A motion to approve the 03/21/2023 meeting minutes was submitted by S. Meyer and seconded by C. Magliozzi.</p> <p>Discussion: None. Roll Call Vote: S. Meyer (Y), C. Magliozzi (Y), B. Delory (Y), C. McGown (Y) Abstentions: None</p> <p>All in favor, motion passes, March 21, 2023, meetings are certified as approved.</p>	Record
11.3	<p>Clinton Senior Center Award – Painting Repairs</p> <p>C.McGown shares that Fox Painting was the low bidder for the Clinton Senior Center and received positive recommendations from engineers and previous Clinton town hall projects.</p> <p>A motion was made by S. Meyer and seconded by B. Delory to approve Fox Painting’s proposal of <u>\$210,000.00</u>.</p> <p>Discussion: None. Roll Call Vote: S. Meyer (Y), C. Magliozzi (Y), B. Delory (Y), C. McGown (Y) Abstentions: None</p> <p>Motion passes to approve Fox Painting Proposal.</p>	Record
11.4	<p>Invoices and Commitments</p> <p>Invoice 1: DWMP March Invoice No. 008, in the amount of <u>\$15,000.00</u></p> <p>A motion was made by B. Delory and seconded by C. Magliozzi for the approval of DWMP Invoice No. 008</p> <p>Discussion: None. Roll Call Vote M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown Abstentions: None</p> <p>Motion passes to approve DWMP Invoice No. 008 for payment.</p>	Record

<p>Invoice 2: LPA A March Invoice No. 003, in the amount of <u>\$39,646.00</u></p> <p>A motion was made by S. Meyer and seconded by C. Magliozzi for the approval of LPA A Invoice No. 003</p> <p>Discussion: None. Roll Call Vote M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown Abstentions: None</p> <p>Motion passes to approve LPA A Invoice No. 003 for payment.</p>	
<p>DWMP Amendment No.001: DWMP Fee Cost Estimate, in the amount of <u>\$6,600.00</u></p> <p>A motion was made by C. Magliozzi and seconded by B. Delory for the approval of DWMP Amendment No.001 PSR Estimate.</p> <p>Discussion: None. Roll Call Vote M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown Abstentions: None</p> <p>Motion passes to approve DWMP Amendment No.001.</p>	
<p>Budget Revision Request</p> <p>T. Elmore briefly explains the funds being transferred.</p> <ul style="list-style-type: none"> • Moving funds from Class Code 0003-0000 -Environmental& Site to Class Code 0001-0000- OPM Feasibility in the amount of \$30,000.00 <ul style="list-style-type: none"> ○ <u>0003-0000 - Class Code Remaining Balance: \$61,860.00</u> • Moving funds from Class Code 0004-0000-Other to class code 0001-0000- OPM Feasibility in the amount of \$60,600.00 <ul style="list-style-type: none"> ○ <u>0004-0000 – Class Code Remaining Balance: \$38,432.32</u> • <u>Conclusion:</u> Transferring \$90,600.00 from two different class codes to the 0001-0000 OPM feasibility. <p>Discussion: None</p>	
<p>11.5 PDP Submission Update</p> <p>T. Elmore informs the SBC & PBC that we received comments from the MSBA on the PDP submission on April 18, 2023, and we must respond within 14 Days. Our plan is to respond to the MSBA by May 1st.</p> <p>Discussion: None</p>	Record

11.6	<p>LPA A Option Design Update</p> <p>S. Brennan recaps the MSBA process and updates the SBC/PBC where we stand today on the project.</p> <ul style="list-style-type: none">• Module 3 Feasibility Study:<ul style="list-style-type: none">○ Preliminary Design Program – submitted 03.28.2023○ Preferred Schematic Report – upcoming submission 06.28.2023 <p>P. Caruso shares that LPA A held a sustainability workshop with representatives from the town, OPM, and LPA A consultants to discuss the sustainability goals for this project.</p> <p>Sustainability Workshop</p> <p><u>Site & Location</u></p> <ul style="list-style-type: none">• Alternative transportation methods• Siting of the building• Access to open space• Opportunities for health and wellness• Exterior lighting• Landscape – native and drought-tolerant plants• Rainwater management – low-impact development <p><u>Energy Conservation Measures</u></p> <ul style="list-style-type: none">• HVAC System• All electric options• Building Envelope• Lighting design and target improvement beyond code• Domestic hot water system and plumbing fixtures• Process loads• Passive strategies• Renewables <p><u>Water Use</u></p> <ul style="list-style-type: none">• Outdoor Potable Water use reduction• Rainwater capture/reuse• Efficient Water Fixtures – Waster sense labeled.• Water metering prerequisite/data sharing and water sub-metering credit• Bottle Fillers• Commercial Kitchen – process water reduction <p><u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none">• Air Quality• Visual Comfort• Thermal Comfort• Acoustic Comfort• Green Cleaning <p><u>LEED and NE-CHPS Comparison</u></p> <ul style="list-style-type: none">• Pros/Cons of each	Record
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Discussion:

B. Delory asks if we have to file for LEED standards.

T. Elmore explains that we must file to get two reimbursement incentive points from the MSBA. We're shooting for LEED SILVER.

C. Maglioizzi states I'm assuming we need to get those incentive points to get our maximum reimbursement from the MSBA for this project.

T. Elmore confirms that we do and states to achieve LEED Silver we need to score 50 points.

Option Design Update

Addition/Renovation -AR.1 (700 Enrollment) - 147,000GSE

- Adding a large addition on the east side of the 1st-floor building
- Adding a small addition to the northwest side of the 1st-floor building
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Corridors will have skylights for natural light.
- Classroom – any interconnecting wall will be blown out; spaces are 10% under according to MSBA requirements for this enrollment.
- Traffic – Parent drops off in the back; Bus drops off in front of the building.
- Modular classrooms are required for swing space.

Addition/Renovation - AR.1 (550 Enrollment) - 134,500 GSE

- Adding a small addition to the northwest side of the 1st-floor building
- Adding a small Addition on the East side of the floor building
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Traffic – Parent drops off in the back; Bus drops off in front of the building.
- Modular classrooms are required as swing space.
- Corridors will have skylights for natural light.

Addition/Renovation - AR.2 (700 Enrollment) – 167,000 GSE

- Adding a large addition at the northwest side of the 1st & 2nd floors
- Adding a large addition at the southeast side of the 1st & 2nd floors
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are required for swing space.

Addition/Renovation- AR.2 (550 Enrollment) – 153,000 GSE

- Adding a large addition at the northwest side of the 1st & 2nd floors
- Adding a large addition at the southeast side of the 1st only

- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are required for swing space.

New Construction - NC-1 (700 Enrollment) – 150,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Three Story Building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building, where the car park will be relocated.

New Construction - NC-1 (550 Enrollment) – 134,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Two-story building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building where the car park will be relocated.

New Construction - NC-1R (700 Enrollment) 147,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Two-story building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building.

New Construction - NC-1R Hybrid (550 Enrollment) 134,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Two-story building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building.

Discussion:

S. Brennan recommends building options NC-1 (700 enrollment) and NC-1 (550 enrollment) floorplans to carry forward into the remainder of the PSR.

M. Ward agrees that a two-story building makes more sense than a three-story one, financially.

C. Magliozi states the recommended options are cheaper, but we have no economic feedback about these options. We don't know any numbers.

T. Elmore explains that we did have some numbers running for the PDP, the numbers that are out for schools right now are somewhere in the range of \$1,000 a square foot. When we first looked at the PDP, option NC1 was coming in around 153,000 GSF and now we're at 147,000 GSF. You're talking 6,000 GSF, that's almost 6 million dollars. And that's all on the district because you're going to, you're going to cap out the MSBA reimbursement because of their restrictions. And so, that would be all districts, you know, funding.

C. McGown states I think that's why we have the Add/Reno options in there but the add/reno options might or might not be less expensive, depending on, the MSBA reimbursements for the classroom space and stuff like that and the disruption of the people but that's where I think we'll see if there are differences in costs that are substantial.

T. Elmore states that the plan is to get these floorplans further defined and then get them to the estimators by Mid-May and by the beginning of June, we" have estimates back and I take that information and build a spreadsheet that captures all project cost, then I take a stab at trying to figure out what is going to be deemed reimbursable and not reimbursable. This is where the bad news comes in and suddenly, the 75% reimbursement realistically comes back to under 50%. So, the idea would be that we would have numbers at the beginning of June, and we'd call another remote meeting where we could review the numbers and what local share impact is likely to be prior to the public meeting and all boards meeting on June 14th because we will have numbers for that meeting.

M. Varakis asks how much of a runway you're going to give for people to digest this information, because if you're running up to me at the beginning of June, and then you hit us with two or three sets of numbers that this board can evaluate on. What's the percentage of Add/Reno versus New Construction? I mean, they're going to need more than like six days to digest this and then bring it public.

T. Elmore states that the current tracking timeline has us trying to get on the August 30 board of directors meeting where the MSBA bless, going into schematic design. Now if we miss the August meeting, we are potentially impacting the project for six months.

C. McGown states it all depends really on how compelling and accurate the numbers are because if you start getting into stuff and there's a lot of questions, we're getting back to maps runway concept, you know in the delay. The biggest difference in cost here is not the difference between two similarly sized buildings, it's going to be the difference in a renovation and the non-reimbursable costs being clearly spelled. So, one versus the other and the disruption somehow quantified both monetarily and emotionally disruption.

T. Elmore states It always is a challenge when you're talking about the disruption, and you're talking about the length of time the renovation is going to take. The new building just shows the nature of the building and the hopscotching effect that you would have in a renovation is just going to elongate a time. There will be quite a bit of disruption. And for a long time, like three years. That's a hard thing to quantify in money.

11.5	Other Topics not Reasonably Anticipated 48 hours prior to the Meeting. Discussion: None.	Record
11.6	Public Comment: Discussion: None	Record
11.7	Next Meeting: <ul style="list-style-type: none"> • SBC Meeting No. 013 – June 6th, 2023 – Cost numbers to be made public. • Public Community Meeting – June 14th, 2023 – Community public presentation • SBC Meeting No. 014 - June 21st, 2023 – Vote on preferred solution 	Record
11.8	Adjourn: 7:36 PM A motion was made by B. Delory and seconded by C. Magliozi to adjourn the meeting. Discussion: None. All in favor, the meeting is adjourned.	Record

Sincerely,

DORE + WHITTIER

Elias Grijalva

Assistant Project Manager

Cc: Attendees, File

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

3.3.5 LOCAL ACTIONS AND APPROVAL CERTIFICATION

- D. SBC and Public Meeting
Minutes

1. Agenda: Clinton Middle School Building Committee	3/21/2023
2. Minutes: Clinton Middle School Building Committee	3/21/2023
3. Agenda: Clinton Middle School Building Committee	4/25/2023
4. Minutes: Clinton Middle School Building Committee	4/25/2023
5. Agenda: Clinton Middle School Building Committee	6/06/2023
6. Minutes: Clinton Middle School Building Committee	6/06/2023
7. Agenda: Clinton Middle School Building Committee	6/20/2023
8. Minutes: Clinton Middle School Building Committee (not approved)	6/06/2023

PERMANENT BUILDING COMMITTEE SCHOOL BUILDING SUB-COMMITTEE MEETING AGENDA



Meeting Date: March 21, 2023
Meeting Time: 6:30 PM
Project Name: Clinton Middle School
Project Number: 202000640305
Meeting Purpose: SBC Meeting No. 010
Meeting Location: 100 West Boylston Street, Clinton, MA 01510

1. Call to Order & number of voting members present:
2. Previous Topics and Approval of March 07, 2023, Meeting Minutes:
3. LPA|A Public All-Boards Meeting Sticker Results Update
4. School Building Committee Discussion and SBC poll vote for preferred options.
5. PBC and SBC Vote on top (3) building options for PDP submission
6. Permanent Building Committee Vote to submit PDP to MSBA
7. Local Actions Letter Approval
8. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.
9. Public Comment
10. Next Meetings
11. Adjourn:



**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE
MEETING MINUTES**

Project: Clinton Middle School
 Subject: School Building Committee Meeting
 Location: 100 West Boylston Street, Clinton, MA 01510
 Distribution: Attendees, Project File

Project No: 202000640305
 Meeting Date: 03/21/2023
 Time: 6:30 PM
 Prepared By: E. Grijalva

Present	Name	Affiliation	Prese	Name	Affiliation
x	Michael Ward*	Town Administrator -PBC Member		Mike Burton	DWMP
	Sean Kerrigan	Selectman	x	Trip Elmore	DWMP
	Brendon Bailey	School Committee Chair		Steve Brown	DWMP
x	Matthew Varakis	School Committee Vice-Chair	x	Elias Grijalva	DWMP
x	Steven Meyer*	Superintendent – PBC Member		Mike Cox	DWMP
x	Brian Farragher	Director of Facilities		Rachel Rincon	DWMP
x	Chris McGown*	Chair of PBC, Head of DPW		Kathryn Crockett	LPAA
	Courtney Harter	CMS Principal	x	Peter Caruso	LPAA
x	Shane McCarthy	Teacher		Sean Brennan	LPAA
	Bill McGrail	Finance Committee Co-Chair	x	Christina Bazelmans	LPAA
x	Chris Magliozzi*	Vice-Chair of PBC	x	Eric Moore	LPAA
x	Michael Moran*	PBC Member			
	Brian Delory*	PBC Member			
	Timothy O'Toole*	PBC Member			
x	Phil Duffy	Director of Community & Econ.			
x	Kelly Turcotte	Special Education Parent Advisory			
	Laura Taylor	Parent-Teacher Association			
	Angelica Arroyo	English Learners Parent Advisor			

Item No.	Description	Action
10.1	<p>Call to Order: 6:35 PM meeting was called to order by PBC Chair C. McGown with 5 of 7 voting members in attendance.</p>	Record
10.2	<p>Previous Topics & Approval of March 07, 2023, Meeting Minutes: A motion to approve the 03/07/2023 meeting minutes was submitted by M. Ward and seconded by M. Moran.</p> <p>Discussion: None.</p> <p>Roll Call Vote: M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown (Y)</p> <p>All in favor, motion passes, March 07, 2023, meetings are certified as approved.</p>	Record
10.3	<p>LPA A Public All Boards Meeting Sticker Results Update:</p> <p>E. Moore briefly recaps each building option and provides the results from the All-Boards & Public straw poll vote that took place on March 15th, 2023. Committee members and members of the public are given (3) stickers to place on their favorite top (3) building option, to see what options the community is steering towards.</p> <p>Green Stickers: Committees opinion Red Stickers: Public opinion</p> <p><u>*Refer to March 21st, meeting package for pictures of the results</u></p> <p><u>Building Options:</u></p> <ul style="list-style-type: none"> • <u>Base Repair</u> (550 enrollment) • <u>Addition/ Renovation Building Options</u> (550 & 700 enrollment) <ul style="list-style-type: none"> ○ AR.1 (700 enrollment) – (3) votes ○ AR.2 (700 enrollment) – (21) votes • <u>New Construction Building Options</u> (550 & 700 enrollment) <ul style="list-style-type: none"> ○ NC.1 (700 enrollment)- (29) votes ○ NC.2 (700 enrollment)- (24) votes ○ NC.3 (700 enrollment)- (21) votes ○ NC.4 – (0) votes ○ NC.5- (0) votes 	Record

Discussion:

S. Meyer requested clarification on building option AR.1 vs AR.2 in terms of disruption to the students and minimizing modular or displacement of the students.

E. Moore both AR.1 & AR.2 will require the displacement of the students temporarily, either through modular classrooms by or building out an addition, keep in mind that building an addition will prolong the project. In either case, you're going to have to drive down the student population and then it's a matter of hopscotching around the building, so in this option, we would have to take advantage of the summer vacations to maximize productivity.

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C. McGown states that the executive committee has had a lengthy discussion regarding the building options, and we think that building options NC.1, NC.2, and NC.3 are basically the same with slight variations. AR.1 appears to be the least expensive AR.2 with a major renovation. One of our thoughts was to pick (1) of the new construction and pick both AR.1 and AR.2 which will give us a range of projects for further study.

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M. Varakis' response I don't disagree with you. I think the part that shouldn't get lost here is it makes no sense to go down the path of AR.1 and AR.2 if they don't really satisfy the optimal Educational Plan, which is what we're here for. This is not just a construction project, it's an education project.

C. Bazelmans refers to the building options AR.1 and AR.2, those building options did respectively score a 3 and 4, which indicates that it meets the space needs, but the adjacencies are not quite there, because certain spaces like the gym will stay in its current location. We wouldn't have provided these options if it was a total flop. There are pros and cons to consider in the building options.

M. Moran ask if across the street is an option for a new building. I think it would be the least disruptive for a new building.

E. Moore responded with the land is considered article 97 land which is open space. To change the status, you'll need a vote in the legislature.

	<p>M. Ward we're trying to figure that out. There was a vote in the legislature to transfer the property to the town.</p> <p>P. Duffy from a practical matter if this land is still under article 97. You're talking about a substantial delay to get back into the legislature or the process for the article 97 disposition.</p> <p>S. Meyer, I don't see why that site would be any more advantageous than the locations already suggested in the building options.</p> <p>T. Elmore to P. Duffy's point, when we were looking at the site, article 97 was a deterrent looking at that location.</p> <p>S. Meyer we are all in agreement that building options NC.1, NC.2, and NC.3 are essentially the same option. I think we are also in agreement to move forward with AR.1, AR.2, and NC.1, which will give us a good cost comparison between the options.</p>	
10.4	<p>School Building Committee Discussion and SBC Poll Vote for Preferred option</p> <p>C.McGown states that I think we have all come to a consensus from the previous discussion. We can move forward to the next agenda item.</p> <p>Discussion: None</p>	Record
10.5	<p>PBC and SBC Vote on top (3) building options for PDP submission.</p> <p>Top (3) building options PBC results:</p> <ul style="list-style-type: none"> o M.Ward: AR.1(700), AR.2(700), NC.2(700) o S. Meyer: AR.1(700), AR.2(700), NC.1(700) o C. Magliozzi: AR.1(700), AR.2(700), NC.1(700) o M.Moran AR.1(700), AR.2(700), NC.3(700) o C.McGown: AR.1(700), AR.2(700), NC.1(700) <p>Total Results: (5) AR.1, (5) AR.2, (3) NC.1, (1) NC.2, (1) NC.3 <u>*700 enrollment building options</u></p> <p>A motion was made by C. Magliozzi and seconded by S. Meyer to select building options AR.1 (700), AR.2(700), and NC.1(700) for the PDP submission.</p> <p>Discussion: None</p> <p>All in favor, unanimous vote, motion passes.</p>	Record

10.6	<p>Permanent Building Committee Vote to submit PDP to MSBA</p> <p>A motion was made by M. Moran and seconded by M. Ward to select building options AR.1 (700), AR.2(700), and NC.1(700) for further study in the next phase of the project and to have the OPM and Architect submit the PDP to the MSBA for their review and comments.</p> <p>Discussion: None</p> <p>All in favor, unanimous vote, motion passes.</p>	Record
10.5	<p>Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.</p> <p>Discussion: None.</p>	Record
10.6	<p>Public Comment:</p> <p>Discussion: None</p>	Record
10.7	<p>Next Meeting:</p> <ul style="list-style-type: none"> • SBC Meeting No .011- April 25th, 2023 – virtual meeting. 	Record
10.8	<p>Adjourn 7:39 PM A motion was made by C. Magliozzi and seconded by M. Moran to adjourn the meeting.</p> <p>Discussion: None.</p> <p>All in favor, the meeting is adjourned.</p>	Record

Sincerely,
 DORE + WHITTIER

Elias Grijalva
 Assistant Project Manager
 Cc: Attendees, File

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING SUB-COMMITTEE
MEETING AGENDA**



Meeting Date: April 25, 2023
Meeting Time: 6:30 PM
Project Name: Clinton Middle School
Project Number: 202000640305
Meeting Purpose: SBC Meeting No. 011
Meeting Location: ZOOM
Meeting Link: <https://us06web.zoom.us/j/81634122167?pwd=YmR3V3BsYkhiQVpjNFdKRUdyTDd3Zz09>
Meeting ID: 816 3412 2167
Passcode: 297844
Mobile: +13052241968,,81634122167#,,,,*297844# US

1. Call to Order & number of voting members present:
2. Previous Topics and Approval of March 21, 2023, Meeting Minutes:
3. Clinton Senior Center Award – Painting and Repairs
4. Invoices and Commitments
 - 4.1. D&W invoice #008, for the month of March, in the amount of \$15,000.00
 - 4.2. LPA|A Invoice #003, for the month of March, in the amount of \$39,646.00
5. PDP Submission Update – MSBA Comments
6. LPA|A Option Design Update
7. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.
8. Public Comment
9. Next Meetings
10. Adjourn:

**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE
MEETING MINUTES**

Project: Clinton Middle School
 Subject: School Building Committee Meeting
 Location: Zoom
 Distribution: Attendees, Project File

Project No: 202000640305
 Meeting Date: 04/25/2023
 Time: 6:30 PM
 Prepared By: E. Grijalva

Present	Name	Affiliation	Prese	Name	Affiliation
x	Michael Ward*	Town Administrator -PBC Member		Mike Burton	DWMP
	Sean Kerrigan	Selectman	x	Trip Elmore	DWMP
x	Brendon Bailey	School Committee Chair		Steve Brown	DWMP
x	Matthew Varakis	School Committee Vice-Chair	x	Elias Grijalva	DWMP
x	Steven Meyer*	Superintendent – PBC Member		Mike Cox	DWMP
	Brian Farragher	Director of Facilities	x	Rachel Rincon	DWMP
x	Chris McGown*	Chair of PBC, Head of DPW		Kathryn Crockett	LPAA
	Courtney Harter	CMS Principal	x	Peter Caruso	LPAA
x	Shane McCarthy	Teacher	x	Sean Brennan	LPAA
	Bill McGrail	Finance Committee Co-Chair	x	Christina Bazelmans	LPAA
x	Chris Magliozzi*	Vice-Chair of PBC	x	Eric Moore	LPAA
	Michael Moran*	PBC Member			
x	Brian Delory*	PBC Member			
	Timothy O’Toole*	PBC Member			
	Phil Duffy	Director of Community & Econ.			
	Kelly Turcotte	Special Education Parent Advisory			
	Laura Taylor	Parent-Teacher Association			
	Angelica Arroyo	English Learners Parent Advisor			

Item No.	Description	Action
11.1	<p>Call to Order: 6:37 PM meeting was called to order by PBC Chair C. McGown with 5 of 7 voting members in attendance.</p> <p>*PBC Member M. Ward joined @ 6:53 PM.</p>	Record
11.2	<p>Previous Topics & Approval of March 21, 2023, Meeting Minutes: A motion to approve the 03/21/2023 meeting minutes was submitted by S. Meyer and seconded by C. Magliozzi.</p> <p>Discussion: None. Roll Call Vote: S. Meyer (Y), C. Magliozzi (Y), B. Delory (Y), C. McGown (Y) Abstentions: None</p> <p>All in favor, motion passes, March 21, 2023, meetings are certified as approved.</p>	Record
11.3	<p>Clinton Senior Center Award – Painting Repairs</p> <p>C.McGown shares that Fox Painting was the low bidder for the Clinton Senior Center and received positive recommendations from engineers and previous Clinton town hall projects.</p> <p>A motion was made by S. Meyer and seconded by B. Delory to approve Fox Painting’s proposal of <u>\$210,000.00</u>.</p> <p>Discussion: None. Roll Call Vote: S. Meyer (Y), C. Magliozzi (Y), B. Delory (Y), C. McGown (Y) Abstentions: None</p> <p>Motion passes to approve Fox Painting Proposal.</p>	Record
11.4	<p>Invoices and Commitments</p> <p>Invoice 1: DWMP March Invoice No. 008, in the amount of <u>\$15,000.00</u></p> <p>A motion was made by B. Delory and seconded by C. Magliozzi for the approval of DWMP Invoice No. 008</p> <p>Discussion: None. Roll Call Vote M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown Abstentions: None</p> <p>Motion passes to approve DWMP Invoice No. 008 for payment.</p>	Record

<p>Invoice 2: LPA A March Invoice No. 003, in the amount of <u>\$39,646.00</u></p> <p>A motion was made by S. Meyer and seconded by C. Magliozzi for the approval of LPA A Invoice No. 003</p> <p>Discussion: None. Roll Call Vote M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown Abstentions: None</p> <p>Motion passes to approve LPA A Invoice No. 003 for payment.</p>	
<p>DWMP Amendment No.001: DWMP Fee Cost Estimate, in the amount of <u>\$6,600.00</u></p> <p>A motion was made by C. Magliozzi and seconded by B. Delory for the approval of DWMP Amendment No.001 PSR Estimate.</p> <p>Discussion: None. Roll Call Vote M. Ward (Y), S. Meyer (Y), C. Magliozzi (Y), M. Moran(Y), C. McGown Abstentions: None</p> <p>Motion passes to approve DWMP Amendment No.001.</p>	
<p>Budget Revision Request</p> <p>T. Elmore briefly explains the funds being transferred.</p> <ul style="list-style-type: none"> • Moving funds from Class Code 0003-0000 -Environmental& Site to Class Code 0001-0000- OPM Feasibility in the amount of \$30,000.00 <ul style="list-style-type: none"> ○ <u>0003-0000 - Class Code Remaining Balance: \$61,860.00</u> • Moving funds from Class Code 0004-0000-Other to class code 0001-0000- OPM Feasibility in the amount of \$60,600.00 <ul style="list-style-type: none"> ○ <u>0004-0000 – Class Code Remaining Balance: \$38,432.32</u> • <u>Conclusion:</u> Transferring \$90,600.00 from two different class codes to the 0001-0000 OPM feasibility. <p>Discussion: None</p>	
<p>11.5 PDP Submission Update</p> <p>T. Elmore informs the SBC & PBC that we received comments from the MSBA on the PDP submission on April 18, 2023, and we must respond within 14 Days. Our plan is to respond to the MSBA by May 1st.</p> <p>Discussion: None</p>	<p>Record</p>

11.6	<p>LPA A Option Design Update</p> <p>S. Brennan recaps the MSBA process and updates the SBC/PBC where we stand today on the project.</p> <ul style="list-style-type: none">• Module 3 Feasibility Study:<ul style="list-style-type: none">○ Preliminary Design Program – submitted 03.28.2023○ Preferred Schematic Report – upcoming submission 06.28.2023 <p>P. Caruso shares that LPA A held a sustainability workshop with representatives from the town, OPM, and LPA A consultants to discuss the sustainability goals for this project.</p> <p>Sustainability Workshop</p> <p><u>Site & Location</u></p> <ul style="list-style-type: none">• Alternative transportation methods• Siting of the building• Access to open space• Opportunities for health and wellness• Exterior lighting• Landscape – native and drought-tolerant plants• Rainwater management – low-impact development <p><u>Energy Conservation Measures</u></p> <ul style="list-style-type: none">• HVAC System• All electric options• Building Envelope• Lighting design and target improvement beyond code• Domestic hot water system and plumbing fixtures• Process loads• Passive strategies• Renewables <p><u>Water Use</u></p> <ul style="list-style-type: none">• Outdoor Potable Water use reduction• Rainwater capture/reuse• Efficient Water Fixtures – Waster sense labeled.• Water metering prerequisite/data sharing and water sub-metering credit• Bottle Fillers• Commercial Kitchen – process water reduction <p><u>Indoor Environmental Quality</u></p> <ul style="list-style-type: none">• Air Quality• Visual Comfort• Thermal Comfort• Acoustic Comfort• Green Cleaning <p><u>LEED and NE-CHPS Comparison</u></p> <ul style="list-style-type: none">• Pros/Cons of each	Record
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Discussion:

B. Delory asks if we have to file for LEED standards.

T. Elmore explains that we must file to get two reimbursement incentive points from the MSBA. We're shooting for LEED SILVER.

C. Maglioizzi states I'm assuming we need to get those incentive points to get our maximum reimbursement from the MSBA for this project.

T. Elmore confirms that we do and states to achieve LEED Silver we need to score 50 points.

Option Design Update

Addition/Renovation -AR.1 (700 Enrollment) - 147,000GSE

- Adding a large addition on the east side of the 1st-floor building
- Adding a small addition to the northwest side of the 1st-floor building
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Corridors will have skylights for natural light.
- Classroom – any interconnecting wall will be blown out; spaces are 10% under according to MSBA requirements for this enrollment.
- Traffic – Parent drops off in the back; Bus drops off in front of the building.
- Modular classrooms are required for swing space.

Addition/Renovation - AR.1 (550 Enrollment) - 134,500 GSE

- Adding a small addition to the northwest side of the 1st-floor building
- Adding a small Addition on the East side of the floor building
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Traffic – Parent drops off in the back; Bus drops off in front of the building.
- Modular classrooms are required as swing space.
- Corridors will have skylights for natural light.

Addition/Renovation - AR.2 (700 Enrollment) – 167,000 GSE

- Adding a large addition at the northwest side of the 1st & 2nd floors
- Adding a large addition at the southeast side of the 1st & 2nd floors
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are required for swing space.

Addition/Renovation- AR.2 (550 Enrollment) – 153,000 GSE

- Adding a large addition at the northwest side of the 1st & 2nd floors
- Adding a large addition at the southeast side of the 1st only

- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are required for swing space.

New Construction - NC-1 (700 Enrollment) – 150,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Three Story Building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building, where the car park will be relocated.

New Construction - NC-1 (550 Enrollment) – 134,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Two-story building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building where the car park will be relocated.

New Construction - NC-1R (700 Enrollment) 147,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Two-story building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building.

New Construction - NC-1R Hybrid (550 Enrollment) 134,000 GSF

- Located to the east of the existing middle school on the current softball and baseball fields.
- Two-story building
- Modulars will not be needed.
- The existing building will be demoed after the completion of the new building.

Discussion:

S. Brennan recommends building options NC-1 (700 enrollment) and NC-1 (550 enrollment) floorplans to carry forward into the remainder of the PSR.

M. Ward agrees that a two-story building makes more sense than a three-story one, financially.

C. Magliozi states the recommended options are cheaper, but we have no economic feedback about these options. We don't know any numbers.

T. Elmore explains that we did have some numbers running for the PDP, the numbers that are out for schools right now are somewhere in the range of \$1,000 a square foot. When we first looked at the PDP, option NC1 was coming in around 153,000 GSF and now we're at 147,000 GSF. You're talking 6,000 GSF, that's almost 6 million dollars. And that's all on the district because you're going to, you're going to cap out the MSBA reimbursement because of their restrictions. And so, that would be all districts, you know, funding.

C.McGown states I think that's why we have the Add/Reno options in there but the add/reno options might or might not be less expensive, depending on, the MSBA reimbursements for the classroom space and stuff like that and the disruption of the people but that's where I think we'll see if there are differences in costs that are substantial.

T. Elmore states that the plan is to get these floorplans further defined and then get them to the estimators by Mid-May and by the beginning of June, we" have estimates back and I take that information and build a spreadsheet that captures all project cost, then I take a stab at trying to figure out what is going to be deemed reimbursable and not reimbursable. This is where the bad news comes in and suddenly, the 75% reimbursement realistically comes back to under 50%. So, the idea would be that we would have numbers at the beginning of June, and we'd call another remote meeting where we could review the numbers and what local share impact is likely to be prior to the public meeting and all boards meeting on June 14th because we will have numbers for that meeting.

M. Varakis asks how much of a runway you're going to give for people to digest this information, because if you're running up to me at the beginning of June, and then you hit us with two or three sets of numbers that this board can evaluate on. What's the percentage of Add/Reno versus New Construction? I mean, they're going to need more than like six days to digest this and then bring it public.

T. Elmore states that the current tracking timeline has us trying to get on the August 30 board of directors meeting where the MSBA bless, going into schematic design. Now if we miss the August meeting, we are potentially impacting the project for six months.

C.McGown states it all depends really on how compelling and accurate the numbers are because if you start getting into stuff and there's a lot of questions, we're getting back to maps runway concept, you know in the delay. The biggest difference in cost here is not the difference between two similarly sized buildings, it's going to be the difference in a renovation and the non-reimbursable costs being clearly spelled. So, one versus the other and the disruption somehow quantified both monetarily and emotionally disruption.

T. Elmore states It always is a challenge when you're talking about the disruption, and you're talking about the length of time the renovation is going to take. The new building just shows the nature of the building and the hopscotching effect that you would have in a renovation is just going to elongate a time. There will be quite a bit of disruption. And for a long time, like three years. That's a hard thing to quantify in money.

11.5	Other Topics not Reasonably Anticipated 48 hours prior to the Meeting. Discussion: None.	Record
11.6	Public Comment: Discussion: None	Record
11.7	Next Meeting: <ul style="list-style-type: none"> • SBC Meeting No. 013 – June 6th, 2023 – Cost numbers to be made public. • Public Community Meeting – June 14th, 2023 – Community public presentation • SBC Meeting No. 014 - June 21st, 2023 – Vote on preferred solution 	Record
11.8	Adjourn: 7:36 PM A motion was made by B. Delory and seconded by C. Magliozi to adjourn the meeting. Discussion: None. All in favor, the meeting is adjourned.	Record

Sincerely,

DORE + WHITTIER

Elias Grijalva

Assistant Project Manager

Cc: Attendees, File

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

PERMANENT BUILDING COMMITTEE SCHOOL BUILDING SUB-COMMITTEE MEETING AGENDA



Meeting Date: June 6, 2023
Meeting Time: 6:30 PM
Project Name: Clinton Middle School
Project Number: 202000640305
Meeting Purpose: SBC Meeting No. 012
Meeting Location: ZOOM
Meeting Link: <https://us06web.zoom.us/j/82847334425?pwd=ZGVobIE2UUR3czdOOVJmNnFrbWlvdz09>
Meeting ID: 828 4733 4425
Passcode: 724146
Mobile: +6469313860,,82847334425#,,,,*724146# US

1. Call to Order & number of voting members present:
2. Previous Topics and Approval of April 25th, 2023, Meeting Minutes:
3. Invoices and Commitments
 - 3.1. DWMP invoice #009, for the month of April, in the amount of \$15,000.00
 - 3.2. DWMP invoice #010, for the month of May, in the amount of \$15,000.00
 - 3.3. LPA|A Invoice #004, for the month of April, in the amount of \$31,250.00
 - 3.4. LPA|A Invoice #005, for the month of May, in the amount of \$31,250.00
 - 3.5. LPA|A Amendment # 002, for the month of May, in the amount of \$28,600.00
4. LPA|A Option Design Update
5. PSR Cost Estimates
6. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.
7. Public Comment
8. Next Meetings
9. Adjourn:



**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE
MEETING MINUTES**

Project: Clinton Middle School
Subject: School Building Committee Meeting
Location: ZOOM
Distribution: Attendees, Project File

Project No: 202000640305
Meeting Date: 06/06/2023
Time: 6:30 PM
Prepared By: E. Grijalva

Present

<u>Name</u>	<u>Affiliation</u>
Michael Ward*	Town Administrator -PBC Member
Brendon Bailey	School Committee Chair
Matthew Varakis	School Committee Vice-Chair
Steven Meyer*	Superintendent – PBC Member
Brian Farragher	Director of Facilities
Chris McGown*	Chair of PBC, Head of DPW
Courtney Harter	CMS Principal
Chris Magliozzi*	Vice-Chair of PBC
Michael Moran*	PBC Member
Brian Delory*	PBC Member
Kelly Turcotte	Special Education Parent Advisory Council
Laura Taylor	Parent-Teacher Association
Trip Elmore	DWMP
Elias Grijalva	DWMP
Peter Caruso	LPA A
Sean Brennan	LPA A
Eric Moore	LPA A

*PBC Voting Members

Item No.	Description	Action
12.1	<p>Call to Order: 6:34 PM meeting was called to order by PBC Chair C. McGown with 6 of 7 voting members in attendance.</p>	Record
12.2	<p>Previous Topics & Approval of April 25, 2023, Meeting Minutes: A motion to approve the 04/25/2023 meeting minutes was submitted by S. Meyer and seconded by M. Ward.</p> <p>Discussion: None. Roll Call Vote: M. Ward, (Y) S. Meyer (Y), C. Magliozzi (Y), M. Moran (Y) B. Delory (Y), C. McGown (Y) Abstentions: None</p> <p>All in favor, motion passes, April 25, 2023, meetings are certified as approved.</p>	Record
12.3	<p>Invoices and Commitments</p> <p>Invoice 1: DWMP April Invoice No. 009, in the amount of <u>\$15,000.00</u></p> <p>A motion was made by C. Magliozzi and seconded by B. Delory for the approval of DWMP Invoice No. 009</p> <p>Discussion: None. Roll Call Vote: M. Ward, (Y) S. Meyer (Y), C. Magliozzi (Y), M. Moran (Y) B. Delory (Y), C. McGown (Y) Abstentions: None</p> <p>Motion passes to approve DWMP Invoice No. 009 for payment.</p> <hr/> <p>Invoice 2: DWMP May Invoice No. 010, in the amount of <u>\$15,000.00</u>.</p> <p>A motion was made by C. Magliozzi and seconded by B. Delory for the approval of DWMP Invoice No. 010</p> <p>Discussion: None. Roll Call Vote: M. Ward, (Y) S. Meyer (Y), C. Magliozzi (Y), M. Moran (Y) B. Delory (Y), C. McGown (Y) Abstentions: None</p> <p>Motion passes to approve DWMP Invoice No. 010 for payment.</p>	Record

Invoice 3: LPA|A April Invoice No. 004, in the amount of \$31,250.00

A motion was made by M. Moran and seconded by C. Magliozzi for the approval of LPA|A Invoice No. 004

Discussion: None.

Roll Call Vote: M. Ward, (Y) S. Meyer (Y), C. Magliozzi (Y), M. Moran (Y) B. Delory (Y), C. McGown (Y)

Abstentions: None

Motion passes to approve LPA|A Invoice No. 004 for payment.

Invoice 4: LPA|A May Invoice No. 005, in the amount of \$31,250.00

A motion was made by M. Ward and seconded by C. Magliozzi for the approval of LPA|A Invoice No. 005

Discussion: None.

Roll Call Vote: M. Ward, (Y) S. Meyer (Y), C. Magliozzi (Y), M. Moran (Y) B. Delory (Y), O'Toole (Y), C. McGown (Y)

Abstentions: None

Motion passes to approve LPA|A Invoice No. 005 for payment.

Amendment 2: LPA|A Amendment No.002 for Land Surveying Services, in the amount of \$28,600.00

A motion was made by C. Magliozzi and seconded by M. Moran for the approval of LPA|A Amendment No. 002

Discussion:

M. Ward asks if this is a full-scale survey.

T. Elmore replies it is not. To conserve funds, we did not survey the entire site. We just did portions of the site that would be affected by the building options as presented.

M. Ward asks if any of our previous work was helpful.

T. Elmore, it's always helpful but we need to shoot grades around the site, including the slab edge as well as some of the perimeter.

Roll Call Vote: M. Ward, (Y) S. Meyer (Y), C. Magliozzi (Y), M. Moran (Y) B. Delory (Y), C. McGown (Y)

Abstentions: None

Motion passes to approve LPA|A Amendment. 002.

12.4	<p>LPA A Option Design Update</p> <p>LPA A recaps each building option, including a new hybrid option AR1.5 which shares the best attributes of building options AR1 and AR2.</p> <p><u>Base Repair</u></p> <ul style="list-style-type: none">• This option does not meet the educational program; does not address deficiencies; MSBA will not support it.• Replacing failing equipment, new finishes but no new spaces.• Thermal envelope – exterior insulation needed.• Modular classes will be needed.<ul style="list-style-type: none">◦ If this option is chosen, then the town will have full responsibility for the cost. <p><u>Space Summary Template</u></p> <ul style="list-style-type: none">• Grades 5-8 (550 Enrollment)<ul style="list-style-type: none">◦ Changed from <u>133,000</u> SQF to <u>119,500</u> SQF• Grades 4-8 (700 Enrollment)<ul style="list-style-type: none">◦ Changed from <u>150,000</u> SQF to <u>136,000</u> SQF <p><u>Addition/Renovation AR.1- 700 Enrollment- 145,500 SQF</u></p> <ul style="list-style-type: none">• Adding a large addition on the east side of the 1st-floor building<ul style="list-style-type: none">◦ Main Administration/ Guidance/ Medical spaces• Adding a small addition to the northwest side of the 1st-floor building<ul style="list-style-type: none">◦ 4th-grade spaces• Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.• Corridors will have skylights for natural light.• Gymnasium and cafeteria SQF will remain the same• Classroom – any interconnecting wall will be blown out; spaces are 10% under according to MSBA requirements for this enrollment.• Traffic – Parent drops off in the back; Bus drops off in front of the building.• Modular classrooms are required for swing space. <p><u>Addition/Renovation AR.1 - 550 Enrollment- 134,000 SQF</u></p> <ul style="list-style-type: none">• Adding a small addition to the northwest side of the 1st-floor building<ul style="list-style-type: none">◦ Main Administration / Guidance / Medical spaces• Adding a small Addition on the east side of the floor building<ul style="list-style-type: none">◦ Executive Functioning & OT/PT spaces• Gymnasium and cafeteria SQF will remain the same• Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.• Traffic – Parent drops off in the back; Bus drops off in front of the building.• Modular classrooms are required as swing space.• Corridors will have skylights for natural light.	Record
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Addition/Renovation AR.2 (700 Enrollment- 156,000 SQF

- Adding a large addition at the northwest side of the 1st & 2nd floors
 - 7th & 8th grade spaces in 1st & 2nd floors
 - Admin/ Guidance / Medical spaces – 1st floor only
- Adding a large addition at the southeast side of the 1st & 2nd floors
 - 4th-grade spaces
- Removing the media center to create a large interior courtyard to allow daylight to access the interior spaces.
- Gymnasium and cafeteria SQF will remain the same.
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are not needed. Using one of the additions as a swing space

Addition/Renovation AR.2 (550 Enrollment- 141,000 SQF

- Adding a large addition at the northwest side of the 1st & 2nd floors
 - 7th & 8th grade spaces – 1st and 2nd floors
 - Admin/ Guidance / Medical spaces – 1st floor only
- Adding a large addition at the southeast side of the 1st floor only
 - 5th-grade spaces
- Removing the media center to create a large interior courtyard to allow daylight to access the interior spaces.
- Gymnasium and cafeteria SQF will remain the same.
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are not needed. Using one of the additions as a swing space

Addition/Renovation AR.1.5 (700 Enrollment- 150,000 SQF

- Adding a large addition at the southeast side of the 1st & 2nd floors
 - 7th & 8th grade spaces
- Corridors will have skylights for natural light.
- 2-story media center
- Gymnasium and cafeteria SQF will remain the same.
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are not needed. Using the addition as a swing space

Addition/Renovation AR.1.5 (550 Enrollment- 143,500 SQF

- Adding a large addition at the northwest side of the 1st & 2nd floors
 - 7th & 8th grade spaces
- (2) story existing Admin/ Guidance / Medical; Eliminate the second floor
- Corridors will have skylights for natural light.
- 2-story media center
- Gymnasium and cafeteria SQF will remain the same.
- Complete Reno – New windows, exterior walls, MEP system, roof finishes, furnishing, and equipment.
- Modular classrooms are not needed. Using the addition as a swing space

New Construction NC.1 (700 Enrollment- 136,000 SQF: (550 Enrollment- 119,500 SQF)

- Located to the east of the existing middle school on the current softball and baseball fields.
- Two Story Building
- Modularity will not be needed.
- Energy Efficient & Cost Effective
- The existing building will be demoed after the completion of the new building, where the car park will be relocated.

Evaluation Criteria	BR	AR-1		AR-2		AR1.5		NC-1	
	-	550	700	550	700	550	700	550	700
Educational Program Fulfillment	1	2	3	4	4	3	3	5	5
Space Summary	1	3	3	2	1	1	2	5	5
Site & Facility Goals & Objective	4	4	4	4	4	4	4	4	4
Energy Efficient & Utilities	4	4	4	3	3	4	4	4	4
Construction Phasing Impact	2	2	2	3	3	3	3	4	4
Estimated Local Share	1	5	4	3	2	5	5	3	3

Discussion: None

12.5

PSR Cost Estimates

Record

MSBA Market Trends

T. Elmore shares where we stand right now in this market from the standpoint of the MSBA, which has been tracking project cost since their inception, Over the last three years, as we all know there has been steep escalation hitting the market, and right now, one of the more applicable comparable projects has just recently put their project scope and budget in with cost data and they're looking at roughly \$742 a square foot construction cost. They're about eight months ahead of us.

We're starting to really look at something that's potentially in the \$750 to \$800 per square foot for construction costs and that in relation to the project costs really composes about 70% - 75% of what a project costs. Soft costs escalation and contingency make up the other 25% - 30%. Right now, the trendline is going over \$800 per square foot and approaching higher numbers. than that for years ahead.

A similar project – 8+ months ahead of the Clinton Middle School Project

- Whitman- Hanson Whitman Middle School
 - Construction Cost//sf' \$742.00
 - GMP/ GC Date: 02/25
 - Project Phase: PSR
 - PS & B Approval: 10/25/2023

Base Repair

T. Elmore explains the impact of not moving forward with the add/reno or New Construction options. For the base repair, we’re essentially looking at about \$1,000 a square foot for building repairs when you add it all in together, and without any support from the state, it’s all local share. The community will be responsible for this 100%, in the span of 5 to 10 years.

The next way to look at it is what's going on with the building right now. There are a couple of items that I'd point to for example roofing and HVAC basically being downgraded in the assumption that this project would take place, and in the lack of this project taking place, those adjustments would need to be fixed, and streamlined to maintain the building's use on a day-to-day basis.

There's one other factor here that would come into play, the minute you hit 30% of the value of the building with repair costs then you trigger code-mandated updates to the building that includes things like fire protection, accessibility, and hazmat. You'd likely be taking down your ceilings to install these things, and it wouldn't make sense not to upgrade things like electrical, and plumbing. You could trigger what could be a very costly exercise very quickly, by just maintaining this building.

Base Repair

- Total Project Cost Range: **\$122 to 134**
- MSBA Reimbursement Range: **N/A**
- Potential Local Share Range: **\$122 to \$134**
- Project Duration: **5 -10 years**
- Disturbance to the learning environment: **Very High over time**

Scope of Work	Estimated Construction Cost
Roofing	4.9M +/-
Exterior Walls	6.9M +/-
Exterior Doors/ Windows	2.0M +/-
Fire Protection	1.7M +/-
Accessibility	1.1M +/-
Interior Floor Finishes	2.1M +/-
Interior Ceilings	1.6M +/-
Hazardous Material Abatement	2.2M +/-
HVAC	18.4M +/-
Plumbing	3.8M +/-
Electrical	13.1 +/-

T. Elmore explains the total on this slide adds up to a little under \$58 Million. This total is in today's dollars, it does not include escalation, OPM cost, Designer Cost, no contingencies, and swing space if needed.

Rough Order of Magnitude Comparison Pricing of Building Options (In Millions):

- MSBA \$/Sq.Ft. Reimbursement Cap: **\$393.00**
- Higher reimbursement Rate in Add/Reno Options

C.McGown asks if that number is locked for us.

T. Elmore response this number will be locked at Schematic Design submission. If that reimbursable rate goes up between now and June, you will have the benefit.

AR1 @ 550 - 134,0000 SQF

- Total Project Cost Range: **\$128 to \$141**
- MSBA Reimbursement Range: **\$55 to \$60**
- Potential Local Share Range: **\$73 to \$81**
- Project Duration: **4 years**
- Disturbance to the learning environment: **Very High**

AR1 @ 700 – 145,500 SQF

- Total Project Cost Range: **\$137 to \$151**
- MSBA Reimbursement Range: **\$58 to \$65**
- Potential Local Share Range: **\$78 to \$86**
- Project Duration: **4 years**
- Disturbance to the learning environment: **Very High**

AR1.5 @ 550 – 143,500 SQF

- Total Project Cost Range: **\$132 to \$153**
- MSBA Reimbursement Range: **\$58 to \$64**
- Potential Local Share Range: **\$77 to \$82**
- Project Duration: **4 years**
- Disturbance to the learning environment: **High**

AR1.5 @ 700 – 150,000 SQF

- Total Project Cost Range: **\$134 to \$148**
- MSBA Reimbursement Range: **\$60 to \$66**
- Potential Local Share Range: **\$74 to \$81**
- Project Duration: **4 years**
- Disturbance to the learning environment: **High**

AR2 @ 550-141,000 SQF

- Total Project Cost Range: **\$138 to \$153**
- MSBA Reimbursement Range: **\$58 to \$64**
- Potential Local Share Range: **\$81 to \$89**
- Project Duration: **4 years**
- Disturbance to the learning environment: **High**

AR2 @ 700- 156,000 SQF

- Total Project Cost Range: **\$148 to \$164**
- MSBA Reimbursement Range: **\$63 to \$69**
- Potential Local Share Range: **\$86 to \$95**
- Project Duration: **4 years**
- Disturbance to the learning environment: **High**

	<p><u>NC1 @ 550-119,500 SQF</u></p> <ul style="list-style-type: none"> • Total Project Cost Range: \$126 to \$139 • MSBA Reimbursement Range: \$58 to \$64 • Potential Local Share Range: \$81 to \$89 • Project Duration: 3 years • Disturbance to the learning environment: Low <p><u>NC @ 700- 136,000 SQF</u></p> <ul style="list-style-type: none"> • Total Project Cost Range: \$135 to \$149 • MSBA Reimbursement Range: \$52 to \$57 • Potential Local Share Range: \$83 to \$92 • Project Duration: 3 years • Disturbance to the learning environment: Low <p>Discussion:</p> <p>C.McGown asks if these estimates are available.</p> <p>T. Elmore replies, yes, they are. I will have Elias send a link with both estimates.</p>	
12.6	<p>Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.</p> <p>Discussion:</p> <p>S. Meyer shares that he attended the Clinton Chamber of Commerce meeting and he talked to a rep that indicated there is a bill that has some language regarding access to vocational schools and a potential MSBA reimbursement increase. I don't know what the outcome will be, but I do know that there is a little bit of conversation right now.</p>	Record
12.7	<p>Public Comment:</p> <p>Discussion: None</p>	Record
12.8	<p>Next Meeting:</p> <ul style="list-style-type: none"> • Public Community Meeting – June 14th, 2023 – Community public presentation • SBC Meeting No. 014 - June 21st, 2023 – Vote on preferred solution 	Record
12.9	<p>Adjourn: 8:33 PM A motion was made by C. Magliozzi and seconded by M. Moran to adjourn the meeting.</p> <p>Discussion: None.</p> <p>All in favor, the meeting is adjourned.</p>	Record

Sincerely,
DORE + WHITTIER
 Elias Grijalva
 Assistant Project Manager
 Cc: Attendees, File

Project: Clinton Middle School
Meeting: School Building Committee
Meeting No. 012 - 06/06/2023
Page: 10

The above is my summation of our meeting. Please contact me for incorporation into these minutes if you have any additions and/or corrections.

PERMANENT BUILDING COMMITTEE SCHOOL BUILDING SUB-COMMITTEE MEETING AGENDA



Meeting Date: June 20, 2023
Meeting Time: 6:30 PM
Project Name: Clinton Middle School
Project Number: 202000640305
Meeting Purpose: SBC Meeting No. 013
Meeting Location: Clinton Middle School - Media Center

1. Call to Order & number of voting members present:
2. Previous Topics and Approval of June 6th, 2023, Meeting Minutes:
3. Invoices and Commitments for approval
 - 3.1. Central Mass Signal, LLC June invoice, in the amount of \$29,687.51
4. Public All-Boards Meeting Update
5. SBC/PBC Discussion and PBC vote for the preferred option.
6. Permanent Building Committee Vote to submit PSR to MSBA
7. Local Actions Letter Approval Letter
8. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting.
9. Public Comment
10. Next Meetings
11. Adjourn:



**PERMANENT BUILDING COMMITTEE
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE
MEETING MINUTES**

Project: Clinton Middle School
Subject: School Building Committee Meeting
Location: Clinton Middle School
Distribution: Attendees, Project File

Project No: 202000640305
Meeting Date: 06/20/2023
Time: 6:30 PM
Prepared By: E. Grijalva

Present

Name	Affiliation
Michael Ward*	Town Administrator -PBC Member
Brendon Bailey	School Committee Chair
Steven Meyer*	Superintendent – PBC Member
Brian Farragher	Director of Facilities
Chris McGown*	Chair of PBC, Head of DPW
Chris Magliozzi*	Vice-Chair of PBC
Michael Moran*	PBC Member
Brian Delorey*	PBC Member
Phil Duffy	Director of Community & Econ. Dev.
Trip Elmore	DWMP
Elias Grijalva	DWMP
Peter Caruso	LPAA
Sean Brennan	LPAA
Eric	LPAA

*PBC Voting Members

Description

Action

13.1	<p>Call to Order: 6:36 PM meeting was called to order by PBC Chair C. McGown with 6 of 7 voting members in attendance.</p>	Record																																																
13.2	<p>Previous Topics & Approval of June 6, 2023, Meeting Minutes: A motion to approve the 06/06/2023 meeting minutes was submitted by S. Meyer and seconded by B. Delorey.</p> <p>Discussion: None. Abstentions: None</p> <p>All in favor, motion passes, June 6, 2023, meetings are certified as approved.</p>	Record																																																
13.3	<p>Invoices and Commitments</p> <p>Invoice 1: Central Mass Signal, LLC June Invoice, in the amount of \$29,687.51</p> <p>A motion was made by C. Magliozzi and seconded by M. Moran for the approval of the Central Mass Signal June Invoice.</p> <p>Discussion: None. Abstentions: None</p> <p>All in favor, motion passes to approve Central Mass Signal June Invoice for payment.</p>	Record																																																
13.4	<p>Public All Boards Meeting Update</p> <p>T. Elmore briefly shares a few pictures from the All-Boards Public meeting that took place on June 14, 2023 and shares the estimated local share cost ranges for each building option, which is represented in the chart below.</p> <table border="1"> <thead> <tr> <th>Evaluation Criteria</th> <th>BR</th> <th>AR-1</th> <th>AR-2</th> <th>AR-1.5</th> <th>NC-1</th> </tr> </thead> <tbody> <tr> <td>Enrollment</td> <td>-</td> <td>700</td> <td>700</td> <td>700</td> <td>700</td> </tr> <tr> <td>Educational Program Fulfillment</td> <td>1</td> <td>3</td> <td>4</td> <td>3</td> <td>5</td> </tr> <tr> <td>Space Summary</td> <td>1</td> <td>3</td> <td>1</td> <td>2</td> <td>5</td> </tr> <tr> <td>Site & Facility Goals & Objective</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> <tr> <td>Energy Efficient & Utilities</td> <td>4</td> <td>4</td> <td>3</td> <td>4</td> <td>4</td> </tr> <tr> <td>Construction Phasing Impact</td> <td>5-10 YRS</td> <td>4 YRS</td> <td>4 YRS</td> <td>4 YRS</td> <td>3 YRS</td> </tr> <tr> <td>Estimated Local Share</td> <td>\$113 - \$125M</td> <td>\$78- \$86M</td> <td>\$86- \$95M</td> <td>\$74 - \$81M</td> <td>\$83- \$92M</td> </tr> </tbody> </table> <p>Discussion: None</p>	Evaluation Criteria	BR	AR-1	AR-2	AR-1.5	NC-1	Enrollment	-	700	700	700	700	Educational Program Fulfillment	1	3	4	3	5	Space Summary	1	3	1	2	5	Site & Facility Goals & Objective	4	4	4	4	4	Energy Efficient & Utilities	4	4	3	4	4	Construction Phasing Impact	5-10 YRS	4 YRS	4 YRS	4 YRS	3 YRS	Estimated Local Share	\$113 - \$125M	\$78- \$86M	\$86- \$95M	\$74 - \$81M	\$83- \$92M	Record
Evaluation Criteria	BR	AR-1	AR-2	AR-1.5	NC-1																																													
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Estimated Local Share	\$113 - \$125M	\$78- \$86M	\$86- \$95M	\$74 - \$81M	\$83- \$92M																																													
13.5	<p>SBC/PBC Recap and Discussion</p>	Record																																																

T. Elmore briefly recaps each 700-enrollment building option as a refresher for discussion and before voting proceeds.

- AR.1(700) Mainly Renovation – 145,500 SQFTT
 - Total Project Cost Range: **\$137 to \$151**
 - MSBA Reimbursement Range: **\$58 to \$65**
 - Potential Local Share Range: **\$78 to \$86**
 - Project Duration: **4 years**
 - Disturbance to the learning environment: **Very High**

- AR.2(700) Addition/Renovation – 156,000 SQFTT
 - Total Project Cost Range: **\$148 to \$164**
 - MSBA Reimbursement Range: **\$63 to \$69**
 - Potential Local Share Range: **\$86 to \$95**
 - Project Duration: **4 years**
 - Disturbance to the learning environment: **High**
 -

- AR.1.5(700) Addition/Renovation– 150,000 SQFT
 - Total Project Cost Range: **\$134 to \$148**
 - MSBA Reimbursement Range: **\$60 to \$66**
 - Potential Local Share Range: **\$74 to \$81**
 - Project Duration: **4 years**
 - Disturbance to the learning environment: **High**

- NC.1(700) New Construction – 136,000 SQFT
 - Total Project Cost Range: **\$135 to \$149**
 - MSBA Reimbursement Range: **\$52 to \$57**
 - Potential Local Share Range: **\$83 to \$92**
 - Project Duration: **3 years**
 - Disturbance to the learning environment: **Low**

Discussion:

C. McGown shares that his two top options are AR1.5 & NC1.

C. Magliozzi agrees and states that one option satisfies the educational process. Our school committee and our school department have both said we have an educational problem and a programmatic problem, and you know doing the Base Repair doesn't solve it. Again, see what solves the problem the best and disrupts our children the least. I have a hard time essentially sentencing children for four years of the renovation project.

S. Meyer states that you can't overlook the disruption to students.

P. Duffy asks what the differences between AR1.5 and NC.1, in terms of fulfilling the educational program.

E. Moore explains in any of the reno options, we're constrained by the existing spaces such as the existing cafeteria and gymnasium. We can't move those spaces around. One of the things we talked about was having an area to come in and having that community use of the spaces and having a central area to access both of those. You can't do that when they are on opposite sides of the building. Also, since AR1.5 uses existing spaces, the rooms are not always going to be the right size for what you need and they're not always going to have the right relationship with each other.

S. Brennan additionally the other thing that was part of the educational program was to have a nice separation between the upper and lower school. AR1.5 doesn't quite accomplish that. However, in the new construction option, we have a building that is split.

T. Elmore states a renovation project versus new construction has very different risks associated with it. There are unknowns that you hit in a renovation project. When you're in the demo phase and you're trying to figure out how to replumb these first-floor areas. You're going to cut out most of these hallway slabs and do you influence any of the structural members underneath? All I'm trying to do here is point out the facts, that there will be unknowns and more risk. So, it's just a factor whereas new construction, you're doing it in sequence, do things in the proper order, and you're not going to impact what's in the ground.

P. Duffy asks if you have done soil testing.

T. Elmore explains that we have structural soil testing data from the last project, which saved the project money.

M. Moran asks what the next steps are.

T. Elmore replies that after you pick the option, we'll be moving forward into Schematic Design (SD), which refines the plans better.

M. Moran asks if there will there be any differences in operating costs in NC1 vs AR1.5.

E. Moore you get better insulation value in building option NC-1 versus AR1.5.

PBC vote for the preferred option.

A motion to submit option **NC1- 700 Enrollment**, as the PBC recommended building option for the PSR submission was made by C. Magliozzi, 2nd by B. Delorey.

Discussion: None

All in favor, motion passes to approve NC1-700 enrollment as the preferred option.

13.6	<p>Permanent Building Committee Vote to submit PSR to MSBA A motion to submit the Preferred Schematic Report to the MSBA was made by C. Magliozzi ,2nd by B. Delorey.</p> <table border="1"> <thead> <tr> <th></th> <th>Call Vote</th> <th>Yes</th> <th>No</th> <th>Abstain</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Michael Ward</td> <td>x</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Steve Meyer</td> <td>x</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>Chris Magliozzi</td> <td>x</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>Michael Moran</td> <td>x</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>Brian Delory</td> <td>x</td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>Timothy O' Toole</td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>Chris McGown</td> <td>x</td> <td></td> <td></td> </tr> </tbody> </table> <p><u>Vote on the motion:</u> Those FOR 6 Those AGAINST _____; ABSTAIN _____</p> <p>Motion: <u>Passes</u></p> <p>(An official copy will be provided for the PSR submission)</p> <p>Discussion: None</p>		Call Vote	Yes	No	Abstain	1	Michael Ward	x			2	Steve Meyer	x			3	Chris Magliozzi	x			4	Michael Moran	x			5	Brian Delory	x			6	Timothy O' Toole				7	Chris McGown	x			Record
	Call Vote	Yes	No	Abstain																																						
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5	Brian Delory	x																																								
6	Timothy O' Toole																																									
7	Chris McGown	x																																								
13.7	<p>Local Actions Letter Approval Letter T. Elmore explains that part of the PSR submission is to put together a local action letter which is standard MSBA language on your letterhead that just states that we've had these open public meetings and that they have been posted. No voting needed. Discussion: None</p>	Record																																								
13.8	<p>Other Topics not Reasonably Anticipated 48 hours prior to the Meeting. Discussion: None.</p>	Record																																								
13.9	<p>Public Comment: Discussion: None</p>	Record																																								
13.10	<p>Next Meeting:</p> <ul style="list-style-type: none"> <li>• <u>07.18.2023</u> - CMS Building Committee Virtual ZOOM Meeting No.014 @ 6:30 PM 	Record																																								
13.11	<p>Adjourn: 7:39 PM A motion was made by S. Meyer and seconded by B. Delorey to adjourn the meeting. Discussion: None. All in favor, the meeting is adjourned.</p>	Record																																								

Sincerely,
DORE + WHITTIER
 Elias Grijalva
 Assistant Project Manager
 Cc: Attendees, File

Project: Clinton Middle School
Meeting: School Building Committee
Meeting No. 013 – 06/20/2023
Page: 6

The above is my summation of our meeting. Please contact me for incorporation into these minutes if you have any additions and/or corrections.