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3.3.6 Appendix

3.3.6 Appendix

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A. Transportation - Fleet Electrification Policy

Per the PDP comments, we have included the Town of Lexington's implemented transportation policies such as increased ridership, reduction in carbon emissions, and road congestion. The Town of Lexington has robust plans and policies in place that cover the importance of these topics. Included below are direct links to the Towns Plans and Policy's for additional information.

[Lexington's Comprehensive Plan](#): This overarching plan for the town emphasizes getting around through ways other than by car in Section 7 on Transportation & Circulation.

[Complete Streets Policy](#): Our Complete Streets Policy adopted in 2016 outlining how we will accommodate all road users and modes in our network.

[Lexington's Climate Action & Resilience Plan](#): This has specific targets found on p. 22 to reduce SOV use and goals to increase public transit ridership, prioritize high-capacity vehicles on roadways, to develop Transportation Demand Management (TDM) plans at schools (among others) and to expand safe options for walking, biking, rolling.

[Lexington's Open Space & Recreation Plan](#): This also has a Connectivity & Transportation section noting a goal to enhance connectivity between open space and recreation areas and develop intermodal transportation opportunities throughout Lexington (p. 124).

[Lexington's Vision Zero Plan](#): The purpose of this is to reduce fatalities and injuries. This has a focus on making streets safer for all user and decreasing travel speeds, expand bike & ped network, reduce cut through traffic, expand and support Safe Routes to School activities, reduce vehicle miles traveled, etc.

[Lexington's Bicycle & Pedestrian Plan](#): Created to outline priorities for ped & bike improvements to create attractive alternatives to car travel.

MOTOR VEHICLE IDLING ON SCHOOL GROUNDS

<https://z2policy.ctspublish.com/masc/browse/lexingtonset/lexington/EEAJ>

STUDENT TRANSPORTATION POLICIES

<https://z2policy.ctspublish.com/masc/browse/lexingtonset/lexington/EEA>

TRAFFIC SAFETY AND MITIGATION

<https://z2policy.ctspublish.com/masc/browse/lexingtonset/lexington/EEAC>

SCHOOL BUS SAFETY PROGRAM

<https://z2policy.ctspublish.com/masc/browse/lexingtonset/lexington/EEAE>

STUDENT CONDUCT ON SCHOOL BUSES

<https://z2policy.ctspublish.com/masc/browse/lexingtonset/lexington/EEAEC>

STUDENT TRANSPORTATION IN PRIVATE VEHICLES

<https://z2policy.ctspublish.com/masc/browse/lexingtonset/lexington/EEAG>

Attached are the Town District Management (TDM) Policy of 1998 which is still in effect and has the purpose of reducing automobile usage.

Lexington's Town Management District Plan (TMO)

Not directly relevant to Lexington High School as it is not in a transportation management overlay area, but the TMOs are intended to reduce SOVs and encourage other modes of travel. The Hartwell TMOD is the only TMO with a plan and you will note it states to create a policy and regulatory framework that **reflects the Town's desire to reduce SOVs and emissions and improve mobility and accessibility of all users and to mitigate traffic and speeds.** It notes the overabundance of parking that then encourages people to drive. This notes a goal of reducing the drive-alone mode share for commuters to be 10% less than the latest 5-year American Community Survey. Again, Hartwell is the only area with this specific plan, but it of course relates to all the other plans which I have outlined that call upon us to reduce traffic/SOVs.

Lexington has three Transportation Demand Overlay Districts – Hartwell Avenue, South Lexington, and the Marrett Street Forbes Road area. These Transportation Demand Management (TMOD) are intended to help facilitate multi-modal transportation network and improve traffic management. Each district is supposed to have a plan to govern the districts regulations. We have adopted a Plan for Hartwell Avenue but the other two have not been developed yet.

TMO-1 Hartwell Area; [District Plan](#)

TMO-2 Forbes Marrett;

TMO-3 South Lexington

We are also at the 25% design stage for the Bedford Street/Hartwell Avenue Complete Streets Transportation Project: <https://www.lexingtonma.gov/407/Bedford-Hartwell-Complete-Streets-Transp>



TOWN OF LEXINGTON

FLEET ELECTRIFICATION POLICY

August 23, 2021 (amended 5/20/2024)

POLICY STATEMENT

To support the Town of Lexington's Climate Action & Resilience Plan objectives, the Select Board hereby adopts this fleet electrification policy to transition its vehicle fleet to zero emission vehicles.

PURPOSE

The Town shall establish and maintain a comprehensive inventory of all classes of vehicles owned, operated, or leased by the Town of Lexington and or on behalf of the Town of Lexington. The Town shall establish objectives for emission reductions from those vehicles and an integrated plan and timeline with objectives for transitioning each class of vehicles to zero emission vehicles, prioritizing zero emissions vehicles, monitoring progress against those objectives, and reporting the progress against those objectives on an annual basis.

The objectives of this policy are to:

- Reduce air pollution and greenhouse gas emissions from the Town's vehicles
- Increase the use of electric vehicles in the Town fleet
- Increase the average fuel economy of each vehicle
- Optimize the fleet size and minimize vehicle size, weight, and other factors affecting fuel use when appropriate
- Minimize vehicle miles traveled (VMT)
- Reduce total cost of ownership over the lifetime of the vehicle
- Reduce vehicle noise
- Maximize the use of grant funding and incentives to convert and purchase electric and emissions-reduction technology for the Town fleet and EV infrastructure.

APPLICABILITY

This Fleet Electrification Policy applies to all divisions and departments of the Town of Lexington.

GUIDELINES

The Town will establish a Vehicle Electrification Transition Plan with the following elements:

1. Fleet Inventory:

The Town will maintain and annually update a comprehensive vehicle inventory for ALL vehicles owned, leased, operated by the Town or on behalf of the Town and a plan for transitioning those vehicles to battery-electric vehicles (BEV) or plug-in electric vehicles (PHEV) vehicles.

As required by the DOER Green Communities Program, the Town will maintain an inventory of all Town (Municipal and School Department) owned vehicles.

This inventory will include the following information: model, make, model year, month and year purchased, VIN, drive system, weight class, miles per gallon, annual miles driven, total fuel consumption, department, vehicle function.

2. Electric-first procurement

Vehicle procurement should be prioritized as follows:

1. BEV
2. PHEV
3. Hybrid-electric vehicle or other alternative fuel vehicle
4. Standard vehicle (most fuel-efficient vehicle for that class, drivetrain, and purpose)

The fleet policy is electric-first, meaning that electric vehicles (EVs) shall be prioritized when the Town purchases or leases motor vehicles for its municipal operations. Beginning in FY22, all light-duty passenger vehicles purchased or leased are required to be BEVs.

Departments may request an exemption from the BEV replacement. Departments requesting an exemption must explain why a BEV is not feasible for their intended use, and must still follow the above priority order for vehicle procurement. All exemptions shall require approval by the Town Manager after a recommendation is made by the Sustainability & Resilience Officer.

3. Classification and Transition Objectives:

For each vehicle class defined by the Commonwealth's MOR-EV program, the Town shall establish targets for the transition of vehicles in that class to a zero emissions option every three-years.

The classifications may include: passenger vehicles, passenger vans, cargo vans, police cruisers, ambulances, fire trucks, public works vehicles, school buses and other categories of vehicles that are appropriate to effectively capture all the vehicles in the inventory.

Staff shall assess the suitability of electric vehicle options for each vehicle class, with respect to availability, range and load requirements and, any emergency response requirements, to

determine practicability. When developing the transition plan, Staff shall evaluate emissions reductions, Total Life Cycle Cost as defined in the Sustainable Action Plan, including acquisition, operations, maintenance, emission fees, electric vehicle charging infrastructure, available grants, etc. The Town will develop a standardized calculation for determining life cycle costs for different classes of vehicles.

The transition plan will prioritize replacing vehicles at the end of their expected useful life.

Where the Town contracts vehicle services, the Town will provide a preference for contracts and seek out companies for competitive bidding that offer the use of electric and/or fuel-efficient vehicles.

4. Purchase, lease or contracting of standard vehicles

If the transition plan identifies that an EV is not commercially available or not suitable for a particular class of vehicles when replacement of a vehicle in that classification is required, a standard vehicle may be purchased.

If purchasing a standard vehicle, the purchase should prioritize the most fuel-efficient vehicle available for that class, drivetrain, and purpose and consider fuel-reduction and emissions-reduction technology, such as diesel particle filters, selective catalytic reduction systems, exhaust gas recirculation, NOx absorbers, oxidation catalysts, anti-idling devices, etc.

Where opportunities exist, particularly if grants and new technologies are or become available, the Town should pilot electric options for heavy-duty vehicles.

5. Evaluation of fleet and vehicle size

The Town will procure vehicles and equipment of minimum size according to assessed needs. Specifically, the Town will ensure that purchase plans require vehicle class and model of the smallest size and weight appropriate for each vehicle's tasks. All positions requiring vehicle use shall be evaluated as to the required vehicle class size necessary to conduct the job.

The Town will evaluate ways to reduce its fleet size.

Departments will also investigate whether vehicles can be shared between departments. When retiring a vehicle from the fleet, the Town will evaluate whether replacement is necessary.

6. Electric vehicle charging

Where possible, efforts will be made to install charging equipment at locations convenient for vehicle users to minimize operational inefficiencies. However, flexibility may be required of vehicle operators and Town staff to adjust procedures to accommodate charging locations.

7. Funding

The initial purchase price of policy-compliant vehicles and equipment may be more expensive than standard vehicles in the initial years, while operating costs over the life of the

vehicle will be lower. Departments should estimate upfront investment required for vehicle purchases and budget accordingly in capital budget requests. The Town shall evaluate existing capital requests for vehicles and evaluate opportunities to fund additional upfront costs. The Town shall take advantage of grant funding to offset the upfront costs of electric vehicles and charging apparatus.

8. Monitoring and Reporting:

Progress against the transition objectives for each vehicle class will be monitored and reported to the Select Board on an annual basis. As part of this report, staff will identify the best date commercially available technology options for each vehicle class and provide recommendations for adjustments to the objectives for each vehicle class.

9. Vehicle operation and maintenance

Where applicable, the Town will use available resources to build awareness and educate its employees regarding responsible vehicle operation as detailed below.

- Anti-Idling
 - Vehicle idling produces both excessive waste of fuel and air pollution. As a part of this policy the Town hereby recognizes the importance of enforcing the existing Anti-Idling Law, as allowed by M.G.L. Chapter 90 Section 16A. Additionally, Town staff should reduce idling as much as possible in vehicle operations. The Town will also incorporate anti-idling education into other public health and sustainability forums.
- Reinforce operator awareness
 - The Town and its employees will encourage energy-saving driving habits (i.e. awareness of sudden acceleration or sudden stopping), and paying attention to the need for regular preventative maintenance of vehicles.
- Reduce Vehicle Miles Travelled (VMTs)
 - The Town will reinforce employee awareness of vehicle miles travelled during work hours as well as for commuting, and will encourage alternate travel practices such as carpools, vanpools, bicycling, public transit and walking.
- Vehicle maintenance
 - A well-maintained vehicle will optimize fuel use and reduce air pollution. Preventative maintenance that ensures optimal vehicle operation shall be performed regularly for each vehicle.
 - Vehicles will be inspected regularly and prior to extended use to ensure correct tire pressure, oil and coolant levels, and to identify possible signs of other fluid leaks.
 - The Town will dispose of hazardous materials such as waste oil, lubricants, antifreeze, and batteries safely through environmentally-responsible practices and in accordance with all applicable state and federal regulations.

Questions/ Enforcement

The Sustainability & Resilience Officer shall be responsible for administering this Policy. This Policy shall be enforced by the Town Manager and or their designee.

B. MSBA PDP Comments and Responses



Re: MSBA/Lexington - Lexington High School: Preliminary Design Program Review Comments

From Christina Dell Angelo <cdellangelo@DoreandWhittier.com>

Date Fri 9/13/2024 8:38 AM

To Sarah Przybylowicz <Sarah.Przybylowicz@massschoolbuildings.org>; James Malloy <jmalloy@lexingtonma.gov>

Cc Hackett, Julie <jhackett@lexingtonma.org>; Sara Calvino <sjorge@lexingtonma.org>; Joe Pato <jpato@lexingtonma.gov>; Michael Cronin <mcronin@lexingtonma.gov>; Sara Cuthbertson <scuthbertson@lexingtonma.org>; Mike Burton <mburton@DoreandWhittier.com>; Jacob Greco <jgreco@doreandwhittier.com>; Finnegan, Lorraine <lfinnegan@smma.com>; Rice, Matt <mrice@smma.com>; Veatriki Dagkalakou <Veatriki.Dagkalakou@massschoolbuildings.org>; Christina Forde <Christina.Forde@MassSchoolBuildings.org>; Elena Seiti <Elena.Seiti@MassSchoolBuildings.org>; Matt Donovan <Matt.Donovan@MassSchoolBuildings.org>; Jacob Greco <jgreco@doreandwhittier.com>; Krafian, Anoush <anoush@smma.com>

1 attachment (665 KB)

20240913 Lexington High School PDP Review Comments Response-Final.pdf;

Good Morning Sarah,

Please see attached the Lexington High School PDP review comments response.

Including in the link below are the corresponding documents outlined in the responses.

Let us know if you have any questions and have a great weekend!

Thank you,
Christina

https://drive.google.com/drive/folders/1Z-9qENAK8bnxq9ltDzjISZOD-zw3619R?usp=drive_link

From: Sarah Przybylowicz <Sarah.Przybylowicz@massschoolbuildings.org>

Sent: Tuesday, August 20, 2024 9:55 AM

To: James Malloy <jmalloy@lexingtonma.gov>

Cc: Hackett, Julie <jhackett@lexingtonma.org>; Sara Calvino <sjorge@lexingtonma.org>; Joe Pato <jpato@lexingtonma.gov>; Michael Cronin <mcronin@lexingtonma.gov>; Sara Cuthbertson <scuthbertson@lexingtonma.org>; Mike Burton <mburton@DoreandWhittier.com>; Christina Dell Angelo <cdellangelo@DoreandWhittier.com>; Jacob Greco <jgreco@doreandwhittier.com>; Finnegan, Lorraine <lfinnegan@smma.com>; Rice, Matt (mrice@smma.com) <mrice@smma.com>; Veatriki Dagkalakou <Veatriki.Dagkalakou@massschoolbuildings.org>; Christina Forde <Christina.Forde@MassSchoolBuildings.org>; Elena Seiti <Elena.Seiti@MassSchoolBuildings.org>; Matt Donovan <Matt.Donovan@MassSchoolBuildings.org>

Subject: MSBA/Lexington - Lexington High School: Preliminary Design Program Review Comments

Good morning, Mr. Malloy:

Attached, please find the MSBA Preliminary Design Program review comments (in both PDF and Word formats) for the Lexington High School project in the Town of Lexington (the “District”). Comments must be addressed by the District within 14 days of receipt of this email.

Additionally, in order to assist with the preparation of the District’s Preferred Schematic Report (the “PSR”), please note the following must be included as part of the PSR:

- As indicated in the attached review comments, please submit one (1) redlined copy, which includes District updates and design responses, as well as one (1) clean copy of the updated Educational Program; and,
- As part of the PSR submission, the District must also complete a budget statement. The overall goal of the budget statement for the Preferred Schematic is to document the total change in operational costs that the District expects as a result of the proposed project. To assist in documenting this change, the MSBA has developed the attached Excel template, which includes two tabs, one for expenditures and one for revenues. Please provide the completed budget statement in Excel format.
- Finally, as part of the 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 (no more than 15 slides) with the PSR. For your reference, the guidance memo for preparing an FAS presentation can be found on the MSBA website using the following link: [Facilities Assessment Subcommittee \(FAS\) Guidance Memorandum](#)

If you have any questions or comments, please do not hesitate to contact me or Veatriki Dagkalakou.

Thank you,

Sarah Przybylowicz | Program Manager
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, MA 02109
617-960-3009 (Direct Line)

ATTACHMENT A

MODULE 3 – PRELIMINARY DESIGN PROGRAM REVIEW COMMENTS

District: Town of Lexington

School: Lexington High School

Owner's Project Manager: Dore and Whitter Management Partners, LLC

Designer Firm: Symmes Maini & McKee Associates, Inc.

Submittal Due Date: June 4, 2024

Submittal Received Date: May 31, 2024

Review Date: May 31, 2024 – August 14, 2024

Reviewed by: J. Caron, V. Dagkalakou, C. Forde, C. Alles

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"/>
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"/>

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.

3.1.1 INTRODUCTION

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	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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Updated Project Schedule	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

4) The information provided in this submittal indicates the estimated total project cost for this project could range from \$300-665 million (high school building only), exclusive of MSBA reimbursement. For reference, the OPM Request for Services indicated an estimated total project cost range of \$100-500 million, and the Designer Request for Services indicated an estimated construction cost range of \$80-400 million. In response to these review comments, describe this variation and provide information that indicates that the District has discussed and acknowledged the increase in estimated costs. Also, please indicate how the District and design team intend to maintain the District's project budget through schematic design.

RESPONSE:

The differences between the figures used in the OPM document vs the Designer document is due to Project Costs being referenced in the OPM document and Construction Costs being referenced in the Designer document. We do acknowledge that the total project cost range being estimated at this time is slightly elevated at \$300 to 665 million. The increases in the figures being used at this time (PDP Submission) are the results of the Town benefiting from the experience and expertise of the OPM and Designer and the actual development of the educational program. These costs have been discussed at many of the public meetings that have been held to date and understood by all. The overall budget will continue to be refined until such time as the Community is asked to support the Project Funding agreement. Once finalized and voted the town will follow established cost control practices to maintain the budget.

Additionally, the information provided indicates the Town is examining how additional Town needs (Central Office, a renovated or new field house, and a natatorium) may be built in conjunction with the school building project. The information provided also indicates that a renovated or new field house and a natatorium would be put before the Town as a separate warrant article next fall, if they become part of the project.

Please note that if the District decides to further develop options that include a new field house and/or natatorium after the MSBA has communicated current policies to the Project Team and the District, the following guidance regarding Districts participating in MSBA's grant program considering Natatoriums (pools) and Field houses as a component of their buildings must be adhered to:

- **New construction options:** Natatoriums (pools) and Fieldhouses cannot be included or incorporated in the scope of work and/or associated budget for projects seeking MSBA grants. If a District chooses to include a Natatorium (pool) and/or a new Fieldhouse as a component of their school buildings in a new construction scenario: Procurement, design, and construction associated with this work must be separate from the MSBA project (scope and budget). Further, this work cannot be combined or 'bundled' in any contracts or bidding documents associated with the MSBA project, either as base scope or as a construction alternate. Please acknowledge.

RESPONSE: Acknowledged.

- **Renovation options:** For facilities that have existing fieldhouses and the District's preferred option includes renovation of these existing spaces, the MSBA may consider it acceptable to incorporate scope associated with renovating this component as part of the MSBA project. However, all costs associated with design, construction or fit-out for this work will be considered ineligible for reimbursement and will be 100% borne by the District. Please acknowledge.

RESPONSE: Acknowledged.

Furthermore, the information provided indicates that a new natatorium may be included in the project. In response to these review comments please provide additional information that describes the location, adjacencies and add a dashed line of the natatorium in the floor plans.

RESPONSE: See attached Presentation (20240815_LHS Project Summit) that has been presented to the SBC and Town Boards regarding possible locations for the Natatorium (and field house). At the time of PDP submission, no official floor plans have been developed for the natatorium as the Town is discussing if this site can accommodate this need. For planning and budgeting purposes SMMA has used our most recent Natatorium floor plan (East Longmeadow High School). If this program becomes a requirement, project specific plans will be developed.

5) The Project Directory provided does not include information regarding the MSBA staff assigned to the Lexington High School project. Please note that Veatriki Dagkalakou is the assigned MSBA project manager and Sarah Przybylowicz is the assigned project coordinator for the Lexington High School project. Please acknowledge and update the Project Directory in future submittals.

RESPONSE: Updated project directory is included and attached.

6) The schedule provided indicates 15 days for MSBA's review period for Design Development ("DD") and 60% and 90% Construction Documents. As part of the PSR submittal, please include 21 calendar days for MSBA's review period for Design Development ("DD") and 60% and 90% Construction Document ("CD") submissions. And include 14 calendar days for the project team to respond to MSBA's review comments and incorporate those responses into the project documents prior to the next submission or finalizing project documents to make available to bidders. Please note and acknowledge the minimum duration between each MSBA design submission (DD, 60% CD, and 90% CD) is 35 calendar days.

RESPONSE: The OPM's schedule is based off of a 5-day work week. A 5-day work week equals 7 calendar days; therefore, we have already assumed 21 calendar days in the project schedule.

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; 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	Grade and School Configuration Policies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Class Size Policies	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) English Language Arts/Literacy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Mathematics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Science	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Social Studies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g) World Languages	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Professional Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Pre-kindergarten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Kindergarten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Lunch Programs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Technology Instruction Policies and Program Requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Media Center/Library	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Visual Arts Programs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Performing Arts Programs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Physical Education Programs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Special Education Programs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Vocation and Technology Programs				
	a) Non-Chapter 74 Programming	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b) Chapter 74 Programming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Transportation Policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Functional and Spatial Relationships	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Security and Visual Access Requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Typical Day and Week in the Life of a Student	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

There were two parts of the educational program information provided in this PDP submittal: 3.1.2 educational program narratives from page 41 to page 65, and the appendix B. Lexington High School Educational Plan. It is hard to identify which document should be the design guidelines for the proposed space summary. Additionally, some of the design considerations stated in appendix B, the District's educational plan does not appear to be incorporated in the proposed space summary and it is not clear if all the design considerations were considered. MSBA encourages the District to review closely with the design team and revise the educational program and proposed space summary for clarification. Please note and acknowledge that the educational program is the foundation of design and influences the concepts.

RESPONSE:

To clarify, the Educational Plan included in the Appendix was created by Lexington Public Schools (LPS). The narratives included in 3.1.2 Educational Program from page 41 to page 65 are extracts from the Ed Plan reformatted by SMMA into the categories matching the Feasibility Study guidelines to inform the Space Summary requirements for the High School.

The Educational Plan created by LPS is the foundational document by which the Summary of Spaces, Massing Studies, adjacencies and overall design has been developed. This plan was developed prior to the Design Team being hired and adjusted as required once the educational programming meetings were conducted. It should be noted that some of the discussions within the LPS Educational Plan are desires and were determined to be beyond the needs for additional physical space.

As discussed in the Education Plan, a new or renovated LHS will reorganize space adjacencies and pedagogy to become a truly Interdisciplinary and Project Based Learning environment. Academic departments will continue to exist but without immediate geographic adjacencies. Some Education Plan language developed with the assistance of departmental leaders may not yet fully comprehend these larger goals and included territorial language.

Educational Programming Meetings were held with the majority of the LHS staff between December 2023 and January 2024. These minutes were reviewed by the attendees and minor corrections were required. The school and district leadership recognize that some requested “dedicated spaces” may not be realistic (nor meet MSBA space Guidelines). Many collaborative and guest lecture activities will occur in shared spaces such as Large Group Instruction spaces; learning commons and break-out spaces.

Following the programming meetings, the Designer created the first draft of the Space Summary. LPS Leadership, the Designer and OPM walked through every line of the Space Summary with the LHS Department Heads on February 16, 2024, to review the outcome of the programming meetings, analysis of the Master Schedule and Curriculum offerings and how that aligned or deviated from the LPS Educational Plan. Some adjustments and additional feedback were made to the Space summary from that meeting.

The Space Summary that was included in the PDP submission reflected all those conversations and decisions on space requirements.

In response to these review comments, please resubmit an updated educational program that clearly describes the critical desired features and identify and coordinate these spaces in the proposed space summary. Please see [MSBA's Module 3 – Feasibility Study Educational Program Requirement](#) for reference.

RESPONSE: See Attached LPS Revised Educational Plan. There are minor changes to the Space Summary. See revised Space Summary attached.

In response to these review comments address the comments below. Additionally, 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.

RESPONSE: Acknowledged, LPS and the Design Team will submit an updated Educational Program with the PSR (in addition to the revised version attached to these comments).

4e) The information provided on page 63 of the District's educational program notes that currently there are (23) classrooms and (15) wet labs and there is a need to add (3) additional Environmental Earth Science ("EES") labs, (2) additional wet labs for biology and (2) additional wet labs for chemistry. However, the space summary provided listed (22) existing science labs and proposing (22) new science labs. In response to these review comments, please verify if the number of science labs that would be required meets the District's current and future needs of educational program.

RESPONSE:

Revisions will be made to the Education Plan, removing specific space requirements. The space requirements were developed from the Curriculum-to-Space Workbook and reviewed with the Science Department leadership.

Additionally, in response to these review comments, please review the following:

- Describe if the District has considered utilizing micro-quantities of chemical for laboratory investigation for chemistry curriculum. The utilization of micro-quantities versus macro- quantities of chemical could result in changes in facilities needs for size and type of equipment and chemical and dimensions and configurations for storage.*

RESPONSE:

Yes, LHS is implementing a green chemistry and a micro chemistry curriculum in both biology and chemistry, where applicable, and we have reduced our chemical waste by 75% in two years. We will still need a chemical storage room and appropriate chemical storage cabinets.

- Describe if the District has provided an option for full blackout capability for the proposed science lab/ classrooms.*

RESPONSE: The district does not anticipate the need for full blackout capability, during design solar glare analysis and daylighting models will help inform where blackout shades may be required.

- Please review the MSBA guidelines for science spaces that support laboratory and lecture/ discussion in lab/ classroom facility for different sciences with minimal structural changes.*

RESPONSE: All science labs will be designed to meet the MSBA "Science Laboratories and STE Learning Spaces Guidelines".

- Please provide additional information that describes if the science faculty is considering a new or revised science sequence that begins with foundational sciences with the least number of variables to more complex sciences with multiple variables that are difficult to identify and control. For example, begin with physical sciences followed by chemistry before biological and earth sciences. Traditionally, physics was implemented in senior year due to the need for higher level mathematics such as calculus. However, fundamental physical science allows for more experimentation, data collection and analysis that is more accessible to students due to the ease of fewer variables and promotes students' interests in algebra, robotics and engineering.

RESPONSE: Yes, as part of contract negotiations and a district goal of redefining success, all our graduation requirements and course sequences are under review, with science being a particular point of emphasis. Environmental or Earth Science is likely going to be a required course of study at LHS based on a belief in its practical and ethical importance in our current age and society. Whether it happens as a capstone course or first course of study in the future is being reviewed. Whether we integrate courses in a more interdisciplinary approach is being explored (ex, Bio/Chem or Environmental Science/Chem), and which AP courses are taught as first, or second-pass courses are also being reviewed (e.g., Bio/Chem or Environmental Science/Chem), and which AP courses are taught as any changes reflected in our program of studies are unlikely until the 27-28 school year. What we do know is that the current interdisciplinary adjacencies built into our massing models will be able to support the model we come to through consensus and that our physical needs relative to the most intensive science discipline, chemistry, will remain unchanged.

Lastly, the information provided in the Lexington High School ("LHS") Physical Grounds and Plant states: "Outdoor tables, a pavilion, and a space for students and staff so they can enjoy the fresh air and not feel like they are locked inside."

In response to these review comments, please provide additional information describing if the District has considered designing the outdoor spaces to be fully accessible to all students and faculty with specialized support if necessary.

RESPONSE: The outdoor program will be programmed with LPS through a collaboration among the LPS, LHS and the Design Team during Schematic Design. It will likely include some combination of the following: outdoor dining space near the Dining Commons, outdoor classrooms adjacent to the building, rooftop learning environments if the design allows. Options being explored in the current PDP phase present different outdoor opportunities.

4c,4f) Based on the information provided for the 9th Grade Humanities Program, the ideal 9th Grade Humanities classrooms could be opened into one large collaborative space for instruction, activities, or speakers and the rooms could be broken into smaller spaces or regular singular class spaces.

In response to these review comments, provide an example of activities that will occur in this collaborative space and additional information on how the collaborative space will be designed from two regular singular classroom spaces.

RESPONSE: The current intent is not to identify the 9th-grade grade area of the school. Operable walls will be used in many academic areas of the school, providing the ability for collaborative learning and activities along with lightweight, movable furniture to provide

flexibility and collaboration space. In addition, the two Large Group Instruction (LGI) spaces will be available for collaborative activities and speaker uses.

Additionally, the information provided about the co-taught English Language Learner (“ELL”) classes in grades 10-12 notes that the growing number of students with ELL needs will require more ELL staff in classrooms and the break-out spaces. However, the break-out spaces are not clearly identified in the proposed space summary. In response to these review comments, please confirm if the proposed break-out spaces meet the needs of the District’s educational program.

RESPONSE: *ELL support is handled in multiple ways, co-taught with other subjects that can happen within a subject classroom or with an adjacent classroom via an operable wall and pullover or push-in with staff. It is assumed that some degree of breakout can be in the context of the “spaces in between” as part of the net to gross space.*

The information provided in Business, Personal Finance and Economics Course states: “Some other schools have spaces for student credit unions, banking services and an ATM that would benefit our courses as well as students and faculty.”

In response to these review comments, please describe if the District is considering including any types of financial services into the project.

RESPONSE:

The Space Summary does include two Business Technology Labs that can provide a variety of activities in courses in Business, Personal Finance and Economics. At this moment, a dedicated space for solely the use of a bank or a credit union is not required.

The information provided in the alternative class/teaching spaces design consideration states the following:

- “Dedicated spaces for Socratics/discussions with Harkness tables (could be reserved by teachers ahead of time)”
- “ADA-compliant Project Based Learning (“PBL”) spaces that students can access within 5 minutes.
- “Acting/ Performance space for English specific performances and a place to take classes when using acting techniques to teach content.”
- “Access to an event space that has capacity to connect 500+ devices to school Wi-Fi.”
- “Craft Room”
- “2 film-screening rooms to be booked”.

However, it is not clear if the design considerations mentioned above are included in the proposed space summary. In response to these comments, please provide the following:

- *Please verify if the proposed space summary includes the spaces listed above and coordinate/ update the educational program and space summary for clarification.*
- *Describe the anticipated adjacencies, the scheduling and utilization of the proposed areas and how these spaces will be supervised and staffed.*

RESPONSE:

Revisions will be made to the Education Plan, removing specific space requirements. The space requirements were developed from the Curriculum-to-Space worksheets and reviewed with the English department leadership.

The building will be fully ADA and MAAB-compliant and spaces will be flexibly designed and furnished to allow for differentiated instructional models and delivery.

Acting / Performing courses will be taught in the Black Box theater. See the Curriculum-to-Space Workbook.

Alternative pedagogies can take advantage of the (2) Large Group Instruction (LGI) spaces

Craft work is anticipated to take place in the Maker Space and Carpentry Technology Lab.

Additionally, the information provided in the design consideration for Debate Building states the following:

- “Soundproofed classroom for at least 35 students.”
- “Four (4) soundproofed practice spaces that each fit at minimum five (5); preferably eight to ten (8-10) people around one table”.
- “Debate Office needs locking filing cabinet, phone, computer monitor, printer/copier and bookshelf”.

However, it is not clear if the design considerations mentioned above are included in the proposed space summary. In response to these comments, please provide the following:

- *Please verify if the proposed space summary includes the spaces listed above and coordinate/ update the educational program and space summary for clarification.*
- *Describe the anticipated adjacencies, the scheduling and utilization of the proposed areas and how these spaces will be supervised and staffed.*

RESPONSE: Revisions will be made to the Education Plan, removing specific space requirements. The space requirements were developed from the Curriculum-to-Space Workbook and reviewed with the English Department leadership.

The information provided in the design considerations in other important spaces states the following:

“Daycare options on campus, proximity of child development classes to the daycare, space to accommodate high school student assistants in addition to small children and daycare teachers.”

Additionally, the information provided in the Psychology and Child Development Courses notes that there is an interest in extending offerings in this area to include an introductory teaching course which would require additional staffing. The District hopes that an on-site daycare or preschool could lend itself to learning opportunities and field study work for our students in this strand.

However, it is not clear that the daycare option is considered and included in the proposed space summary. In response to these comments, please provide the following:

- *Please verify if the daycare option is considered and coordinate/update the educational program and space summary accordingly for clarification.*
- *If yes, please provide additional information about the scheduling for high school students to participate in the daycare program and how this program will be monitored and staffed.*

RESPONSE:

Although it was considered, there is no intent to bring small children onto this campus, so there is no daycare option. LHS offers child development courses as an adjunct of the study of psychology. We are attempting to building connections between the existing preschool (Lexington Children's Place) and the high school that will allow for students interested in career pathways in early childhood education to receive practical experience in the field and to provide community service by modeling learning for very young people. The challenges involved are in bridging the 3/4 mile gap between the two campuses with transportation, not related to any physical location at a new or renovated LHS.

Furthermore, in response to these review comments, please review and provide the following regarding the Honors courses:

- *Describe the requirements for students to participate in Honors classes.*
- *Describe if the District has provided alternative ways for students who do not meet the requirements to petition to be admitted or present alternative means for qualifications.*

RESPONSE:

Honors and AP options in ELA and Social Studies are open enrollment, although some courses suggest that they should not be taken without the nonbinding recommendation of the current year's teacher. Mathematics has some honors and AP courses that are open enrollment once the requisite sequential math courses have been studied, for instance, AP Statistics and Contemporary Applied Mathematics. Other AP and Honors courses in mathematics require a teacher recommendation and certain levels of mastery in prior courses, but an appeals process and committee are available, and students are often placed in those courses without the current teacher's recommendation.

Honors and AP Science courses require a teacher recommendation, and an appeals process and committee exist. The same is true of World Languages. AP Performing and Visual Arts classes are available upon completion of pre-requisite coursework. A process exists in the spring wherein teachers note stretch placements of students who are on the cusp of a proximal zone of development, and whom the teacher believes could benefit from the challenge. Additional academic support is often scheduled for those students, and this stretch process explicitly gives a refresher on, additional academic support is scheduled for those students, and this stretch process explicitly gives a refresher in how bias can historically creep into such decisions. LHS has one of the highest rates in the state of students taking honors and AP courses and tests, and a major goal is to assure enrollment in these courses is not in any way predictable based on demographics.

The information provided on page 45 of the District's Educational program notes the journalism classes. In response to these review comments, please review and provide the following:

- *Describe whether the District has considered teaching writing succinct articles that enable shortening the time for readers to read.*
- *Describe whether the District has considered teaching using multiple credible sources for fact check.*

RESPONSE:

Lastly, in response to these review comments, please describe whether the District has considered a full black-out capability for some classrooms.

RESPONSE: *The district does not anticipate the need for full blackout capability in classrooms. Today's technology does not require this, and much care is taken when designing the exterior fenestration to determine the solar impacts and the use of exterior shading devices as needed.*

4g) *The information provided states:*

"In the World Language Department, we currently offer 7 different languages and have 18 classrooms shared by 24 teachers, with more teachers joining our program in the near future as the "4 vs. 5 phase-in plan" move forward."

In response to these review comments, please provide additional information of "4 vs. 5 phase-in plans" and how this will impact the number of classrooms needed for the World Language Department.

RESPONSE:

The School Committee and Superintendent established a goal to address inequitable teaching assignments caused by a failed override in 2016 through a phased-in process. Teachers in some disciplines were teaching three, four, or five classes and earning the same compensation. We successfully addressed this problem in 2023 through a phased-in approach over two years, creating an equitable teaching load of four classes. Now, what constitutes a teacher's full load and active teaching time is being made consistent across the school. Teachers of core academic classes will teach four classes and between 100 and 105 students. Except the Science department, for the complex reasons mentioned in an answer above, we have achieved consistent caseloads across the school in the 24-25 school year. One impetus for this work is to have more consistent schedules across the school that will support relationship-building, and more project based and interdisciplinary learning opportunities in a physical school space with the resources for those approaches.

Additionally, the information provided in the design considerations for world language states the following:

- *"A room for 40-50 for guest speakers, virtual speakers, invited dignitaries and guests (exchanges) to engage students in intercultural communication."*
- *"A room for up to 3 classes of students to come together for interpersonal speaking, a movement-based lesson, or other interdisciplinary project."*
- *"A testing space where each student has private space to think and work."*
- *"A mini auditorium for showing language films at the Blue and Gold Film Festival."*

However, it is not clear if the design considerations mentioned above are included in the proposed space summary. In response to these review comments, please verify if the District's education program design consideration for the world language were included in the proposed space summary and provide additional information describing which proposed spaces will be used for the activities mentioned above.

RESPONSE:

It is anticipated that the design considerations for World Languages stated above will be accommodated in either of the two Large Group Instruction (LGI) spaces or Black box theater.

Additionally for testing, the school will include the LGI's; small group seminar rooms, quiet rooms, the Media Center. No dedicated testing rooms are proposed.

Many of these requests are based on the current school facilities and a new or renovated high school would provide multiple locations and opportunities for these events – Dining Commons, Large Group Instruction rooms, Gymnasium, Auditorium, and the Media Center.

4h) The information provided in the Lexington, Arlington, Burlington, Bedford, Belmont Collaborative (“LABBB” Collaborative) program on page 31 of the District’s educational program states: “Transition services should be considered, and students should have authentic environment to work and learn, such as a coffee shop that they can run and manage. Later in this report, we discuss the relocation of our current Print Shop as well as the addition of a bank that we create within our high school near LABBB, so partnerships and work opportunities.”

In response to these review comments, please clarify if the District is considering including the transition services into LABBB program and provide additional information on how this transition services will be scheduled, monitored and staffed, and confirm if the proposed spaces such as coffee shop and bank meet the needs of the proposed transition services program.

Additionally, the information provided in the Metropolitan Council for Educational Opportunity (‘METCO’) design considerations on page 32 of the District’s educational program notes that the METCO suite should include at least (1) conference room and (1) medium-sized room for small group gatherings and performances of approximately 40-50 people and a second office space that will be used as a therapeutic quiet space. However, these proposed spaces are not clearly identified in the proposed space summary. In response to these review comments, please verify if these design considerations are incorporated into the proposed space summary and confirm the proposed space for METCO meets the District’s educational program.

RESPONSE:

LABBB has a well-developed Transition Services Program, providing services to students from approximately 63 cities and towns across Massachusetts. LABBB has a Transition Department, and each year, an annual Disability Transition-to-Adult Services Fair is hosted by LABBB and alumni LABBB parents. The resource fair includes an overview of services for older students who transition from school.

The Print Shop takes on the title of the Graphics Communication Lab in the Space Summary. The programmed café/bakery/snack shop will provide opportunities for transition students.

The METCO (Metropolitan Council for Educational Opportunity) program is a 60-year program intended to help with desegregation of communities. The current facilities that house the program include a classroom and activity space. It is planned to include an operable wall between the two spaces to accommodate larger groups. The LGI is also available for larger groups. The conference is planned to be shared with the Administration room.

Furthermore, the information provided in the schoolwide programming and support on page 77 of the District’s educational program states:

“Two person pods that can be pre-booked by students or staff for phone calls or meetings or private conservations.”

In response to these review comments, please provide additional information about the anticipated adjacencies, the scheduling and utilization of the proposed two person pods and how they will be supervised.

RESPONSE:

It is anticipated that two-student pods will be part of the Media Center and will be programmed further during schematic design.

Staff private call space will be included in the teacher's workrooms distributed throughout the school.

Additionally, there are 10 phone booths programmed to be distributed throughout the school (these are listed under Administration).

Moreover, the information provided in the design consideration for Alpha Program, notes a minimum of (3) three offices attached to the classroom for the academic coordinator and the social worker and a swing space for student meetings with outside providers. However, the District is proposing (2) Learning Place for Healing Adolescents ("ALPHA") offices in the proposed space summary. In response to these review comments, please confirm if the proposed number of ALPHA offices meets the need of District's educational program.

RESPONSE:

We have reviewed the space allocation with SMMA, and it does meet our needs with an academic space, two offices and a swing space. This seems to be an issue of semantics more than anything else and what the "swing space" is called. In addition to the two offices and a classroom, we need a waiting space outside of the offices, which has been accounted for in the summary.

Also, the information provided in the College & Career Center design consideration narratives states:

- *"If the College & Career Center is separate from the Counseling Suite, it should include 1-2 offices or small meeting rooms that can be closed off for presentations, meeting, etc."*
- *"Potential after-school dual enrollment course space"*

In response to these review comments, please provide additional information regarding the layout of the College & Career Center in relation to the Counseling Suite and confirm that the proposed square footage of the College & Career Center meets the needs of District's educational program. Additionally, please provide additional information about the after-school dual enrollment course and how this space will be monitored and staffed for after-school program.

RESPONSE:

The location of the College and Career Center has not yet been determined but is likely to be part of the counseling suite or in a space highly proximate to the counseling suite. Small group rooms and small seminar rooms are available for meetings, during and after school.

The information provided in the design consideration for school wide testing narrative notes a large space for Lexington High School ("LHS") largest Advanced Placement exams and small testing spaces. However, these proposed spaces are not clearly identified in the proposed space summary. In response to these review comments, please provide additional information about which of the proposed spaces will be used for the large AP exams and the small testing spaces and identify them in an updated space summary.

RESPONSE: Advanced Placement exams happen in May, and while desired, dedicated spaces are not required. The school administration will arrange for use of (SE) small group rooms and

phone booths for small testing and use of Large Group Instruction (LGI) spaces and the Media Center for large AP exams. Flexible furniture will allow for the required separation of students.

Lastly, the information noted Lexington Public Schools offers a comprehensive English Language Education program for grades pre-K through 12. In response to these review comments, please provide the following:

- *Describe whether the native-language singing and story-telling will be included for the youngest learners in the English Language Learners (ELL) instruction.*
- *Describe whether the upper- grade ELL students are scheduled to participate in world language classes of their native language.*
- *Describe if the District provides a program that supports students achieving the Seal of Biliteracy.*

RESPONSE:

ELL support is not required in pre-K, but LPS provides these services. Native language singing and storytelling is a natural part of the curriculum for our youngest learners, including ELL.

Students enrolled in English as a Second Language I (8810) will not be scheduled for an ELA course. ESL I (8810) will count as English Language Arts credit towards LHS graduation requirements. After ELL students have completed ESL I (8810), they should be enrolled in grade-level ELA courses with their peers.

English as a Second Language II, III and IV (8820, 8830 and 8840) will count towards World Language credit. Should ELL students wish to study additional World Languages, they may opt to do so, schedule permitting. ELL students are encouraged to discuss their World Language options with their counselors, weighing any/all post-secondary goals and impacts.

The chart below seeks to simplify the progression for ELL students and counselors:

ESL Course (Enrolled)	Credit	Enrolled in ELA Course?
ESL I, 8810	English Language Arts 4 Credits	No
ESL II, 8820	World Language, 4 Credits	Yes, Grade level
ESL III, 8830	World Language, 4 Credits	Yes, Grade level
ESL IV, 8840	World Language, 4 Credits	Yes, Grade level

A seal of biliteracy program is currently under development at LHS and is being overseen as part of the English Language Learners program.

4i) There are a few discrepancies in the information provided in the School Health Services design consideration narrative and the proposed space summary. In response to these review comments, please review and respond the following:

- The design considerations narrative notes, (2) large exam/treatment rooms. However, the District is proposing (8) 100 nsf Examination Room/Resting (cot room). Please verify if the proposed examination rooms meet the needs of the District's current and future educational program and coordinate the information accordingly.
- A medication room, (1) office for the Director of School Health Services, and a private consultation room described in the design considerations narrative, however these spaces do not appear to be clearly identified in the proposed space summary. Please verify if these spaces are included in the space summary and coordinate the information accordingly.

RESPONSE:

The space identified in the Space Summary satisfies the needs of the school health services. The "Interview Room" (5) is where private examinations/consultations will take place. There is a need for 8 resting/cot areas. Student medications will be stored in double locked cabinets in the Nurse's office. The nurse will have the discretion to administer the medication in a variety of spaces including: the office, general suite space or an exam room.

5) Based on the information provided, it appears that only the Math Department has teacher planning spaces with a dedicated desk for all teachers in the department. In response to these review comments, please provide additional information describing whether there are other existing teacher planning spaces for other departments, the existing scheduled planning times and how they support curriculum delivery.

RESPONSE:

Both the English and Math Departments have teacher planning spaces currently. The intent is for all teacher planning rooms to be interdisciplinary and distributed throughout the building. The space summary includes 10 teacher planning rooms.

10) In response to these review comments, please provide the following:

- *Describe if the District has determined that all students have internet access at home and provided for those families don't have internet access at home.*
- *Confirm if all students can participate in hybrid learning from home.*

RESPONSE:

LPS provides Kajeet devices for families without the means to secure broadband Internet access at home. Additionally, the District refers families to low-cost options and programs provided by Internet service providers. We deploy 1-1 Chromebook devices, and we work to assure that they can be used appropriately for homework and extensions of learning outside the bell-to-bell schedule.

11) In response to these review comments, please review and provide the following:

- *Describe the current Media Center/ Library programming and how it is delivered (central location or distributed).*
- *Describe the current staffing of the Media Center/ Library (e.g., professionals, paraprofessionals, IT specialists, volunteers, etc.)*
- *Describe the current hours, scheduling of use during school and non-school hours for group and individual use.*

- *Describe the proposed changes and associated rationale or provide a statement that no changes are proposed.*
- *Provide additional information about the types of educational activities anticipated for a Media Center/ Library over the course of a typical school day.*

RESPONSE:

The Media Center will likely be centralized. An additional programming discussion will occur with Media Center staff and school administration in the next design phase. Library staffing consists of two full-time, licensed school librarians and three library support staff. The library is open to students without a class throughout the day and additionally the librarians have a classroom off the library that they use to teach research skills and media literacy to students in classes where the subject teacher has assigned a project or paper that demands those skills. Also, this is the first year where our program of studies has included an elective that allows students to research and explore a topic of their choice, often stemming from family history or areas of history they explored in earlier classes but wish to delve into more deeply.

Additionally, Please review MSBA's "[Review and Recommendations of Best Practices for K-12 STEM Learning Spaces](#)" report for STEM spaces requirements.

RESPONSE: Acknowledged and reviewed.

12) *The information provided in the Art and Design narrative states the following:*

- *"Photography classroom with an adjoining film darkroom and film developing room (3 spaces total)."*
- *"The film photography space should feature ample workstations complete with sinks and safelights, as well as designated storage and drying areas for film negatives and prints."*
- *"A dedicated space with professional-grade lighting and customized backdrop options"*
- *"LHS would benefit from a permanent raku kiln to be installed in an appropriate outdoor space on campus, near the ceramic's studio."*
- *"Outdoor location for raku kiln, covered and fenced, in a lockable space. Direct access from the ceramics room to raku space outside."*
- *"The makerspace will have adequate venting for 3D printers, large-scale 2D printers, laser cutters, and traditional media like spray booths, printing press tables as well as giant tables that can be used as collaborative workspace"*

In response to these review comments, please describe how the District and project team will engage with Art and Design educators throughout the design process for specifying the type and size of the workspace, storage, display areas and equipment. Furthermore, please verify if these spaces listed above are included in the proposed space summary and coordinate the information accordingly.

RESPONSE:

The identified photography classroom and adjacent darkroom (in the Space Summary) will be sufficient to meet the activities described for the course(s). Film loading will use glove bags that can take place within the classroom while developing will take place in the darkroom. A raku kiln will be appropriately located adjacent to the building once a schematic design is developed.

In the Schematic design phase, the design team will meet with the Art and Design Department educators to understand the details of what will be needed in terms of equipment, adjacencies, storage, and display to adequately meet the needs of the teachers and students. This process will include the Maker Space for its specific equipment requirements

Furthermore, please provide additional information on how the proposed outdoor raku kiln will be monitored and the overall utilization, staffing and scheduling of this proposed outdoor raku kiln space.

RESPONSE:

At this stage, the “preferred” design has not been selected. Locations for Art rooms vary between options, some at grade and others on elevated floors. The raku kiln will likely follow the art rooms with rooftop outdoor classrooms. This style of kiln has been used on several field trips and is currently offered at nearby Arlington High School, outside, at grade.

Additionally, in response to these review comments, please describe if the District has considered including interdisciplinary courses for art students to learn from financial considerations such as materials, equipment, workspace as well as monetary valuation and copyright protection of their artworks.

RESPONSE:

These topics are covered formally in our AP Studio Art courses and in several courses in the digital arts such as Video Game Design or Graphic Design Studio. LHS has used the pop-up store model in conjunction with art classes, with collected monies going back to buying items for the program.

Please review and acknowledge the following:

- *Please note and acknowledge to include safe, secure and appropriately ventilated storage for art courses materials that are toxic and hazardous materials in particular for ceramics.*
- *Please note that eyewash stations are required to be flushed at least every two weeks. If the eyewash stations are connected to sink faucets, the stations will be flushed when the faucet is used.*
- *Please note that any fully enclosed space should have a proper indication to show if the room is occupied via a window or an exterior signal light.*

RESPONSE:

- *Storage, secure or otherwise, and adequate ventilation as required based upon the program of materials, will be included in the project design.*
- *Eyewash station selection type and Operation and Maintenance will be reviewed with the Facilities Department during the Schematic Design Phase.*
- *Would you please clarify what type of “fully enclosed space” is an area of concern? For example, Classrooms typically will include a sidelight, Gymnasiums have glazed entrance doors, but Auditoriums do not typically include a glazed entry, nor a records room or mail room.*

13) The information provided in the performing art narrative states: “Many of the instruments have a value well above \$10,000 so secure space is necessary. The instrument/equipment storage lockers need to be large enough to hold our biggest pieces of equipment.”

In response to these review comments, please describe how the District and project team will engage with the Music educators throughout the design process for specifying the type and size of the storage and equipment. Additionally, please provide additional information on how the instrument storage will be monitored.

RESPONSE:

In the Schematic Design phase, the Design Team will meet with the Music Department educators to understand the details of what will be needed in terms of instrument storage (both school and transient), room equipment, and adjacencies storage to adequately meet the needs of the teachers and students.

Furthermore, the information provided in the design considerations for Performing Arts states the following:

- *“It would be extremely beneficial to have a Performing (and Visual) Arts Center as a standalone but attached structure accessible to the rest of the school, that can be closed off from other areas of the school as needed especially when it is being used for performances after school hours and for third party and community rentals.”*
- *“Four (4) appropriately sized dedicated large ensemble rehearsal and performance spaces”*
- *“Two (2) music classroom spaces to support music technology, recording and audio engineering as well as Musical Instrument Digital Interface (“MIDI”) and Digital Audio Workstation (“DAW”) integrated workstations with full sized keyboards.”*
- *“At least (10) soundproof practices rooms located near Band, Orchestra, Jazz and Chorus rooms.”*
- *“Dance rehearsal space to expand opportunities for dance/creative movement curriculum (space could be a swing space for community dance/yoga classes)”*

However, the District is proposing (1) 500 nsf Ensemble, (1) 1,200 nsf Music Classroom/ Musical Instrument Digital Interface (“MIDI”) Lab and (4) 75 nsf Music Practice (small) in the proposed space summary. The dance rehearsal space was not included in the space summary provided. In response to these review comments, please verify if the proposed space summary meets the needs of the District’s educational program and coordinate the educational program and space summary accordingly. Additionally, please describe how the Performing and Visual Art Center will be monitored after school hours and for third party and community rentals.

RESPONSE:

Revisions will be made to the Education Plan, removing specific space requirements. The space requirements were developed from the Curriculum-to-Space Workbook and reviewed with the Music Department leadership.

Performing and Visual Arts will be integral to the building design, not separated into a separate building.

Dance rehearsal is anticipated to be held in one of the alt PE spaces.

Lastly, in response to these review comments, please review the following:

- *Describe if the District has provided access for students in orchestral programs that are not able to afford to own or rent instruments.*

- *Describe if the District has considered half to two-thirds of the proposed 1000-seat auditorium to support multiple performances and possibly multiple casts, which supports having students perform more times after having spent a lot of time and efforts learning the script or part. Additionally, lighting, sound and stage crew parts would also benefit from a more intimate setting and multiple performances.*

RESPONSE:

Yes, LPS has a K-12 program for subsidizing or fully covering the cost of instrument rental and school instruments available for lending over a year or semester.

As the current existing auditorium seats 1000 people, the District is interested in pursuing an auditorium that provides the same number of seats. Given the robust Performing Arts program, the large number of participating students, and the high degree of community engagement, the larger audience capacity is desired by the school. The District also anticipates that small performances will have the option of using the black box teaching space, which also allows for performances to occur simultaneously.

14) The information provided in the design considerations for the Physical Education & Wellness states the following:

- *“A main gymnasium which could host varsity after-school games and a second gymnasium which could simultaneously host sub-varsity games with limited spectator facilities.”*
- *“At least two (2) dedicated yoga/dance studio class spaces, with secure storage for yoga equipment, appropriate sprung floor, mirrors.”*
- *“Two (2) all-purpose studio rooms for CPR, Athletic Training, presentations, alternate class space for special PE projects.”*
- *“Four (4) Health Education classrooms that allow for innovative, interactive and flexible activities student participation.”*

However, the yoga/dance studio was not identified in the proposed space summary. There is (1) 2,000 nsf Multi-Purpose Studio, and (2) 850 nsf Health Education classrooms listed in the proposed summary. In response to these review comments, please verify if the proposed space summary meets the needs of the District’s educational program and coordinate the educational program and space summary accordingly.

RESPONSE:

Revisions will be made to the Education Plan, removing specific space requirements. The space requirements were developed from the Curriculum-to-Space Workbook and reviewed with the Physical Education and Wellness Department leadership.

Furthermore, the information provided in the design consideration on page 61 of District’s educational program states the following:

- *“Multiple two (2) gymnasias/ multi-purpose spaces for the expansive PE offerings (e.g., fencing, volleyball, yoga and rollerblading).”*
- *“Gymnasium #1 would double as the venue for all the after-school sports events (basketball, volleyball games, etc.) with bleachers to facilitate spectators.”*
- *“Gymnasium #2 would not require the same sizing or footprint, as it would only require minimal spectator accommodations similar to the Hastings and Estabrook gymnasias.”*

Based on the proposed space summary, the District is proposing (1) 18,000 nsf Gymnasium. In response to these review comments, please clarify the intent of the two gymnasiums that were described in the design considerations and identify which space will be used as Gymnasium #1 and Gymnasium #2. In addition, please provide additional information describing how the Gymnasium #1 will be monitored for after-school sports events.

RESPONSE:

The Physical Education Department identified two gyms before it understood that an 18,000-sf gym was possible. The Space Summary adequately describes the school's needs. The Space Summary adequately describes the needs of the school.

Additionally, in response to these review comments, please describe if the District has considered including a spring floor for dance and gymnastics space.

RESPONSE:

The type of flooring will be reviewed with teachers and staff during the detailed Schematic Design programming discussions.

15) The information provided in the design considerations for special education states the following:

- “Approximately six (6) small offices for student evaluation.”
- The narrative for the Therapeutic Learning Program (TLP) notes for at least (2) small offices, (2) small study spaces and a small conference room.
- “Dedicated spaces for students in the Developmental Learning Program (DLP), including two (2) classroom spaces that fit at least (8) students in each room, allowing for students with physical disabilities to easily navigate their surroundings.”
- “Five (5) private speech therapy offices, with one provider per office to provide therapy and private student check-ins.”
- “A garden/farm space”.
- “Dedicated spaces for students in Intensive Learning Program II for small group courses, including four (4) classroom spaces designated for core subject areas, including English, history, mathematics and science.”

However, there are some discrepancies between the proposed space summary and the design consideration provided in the District’s educational program. For example, there is (1) proposed Developmental Learning Program (“DLP”) classroom listed in the proposed space summary, which is (1) classroom below the design consideration from the District’s design consideration. In response to these review comments, please review the spaces listed above and verify if all the spaces that were mentioned in the design considerations were included in the proposed space summary and coordinate all documents accordingly.

RESPONSE:

On February 15, 2024, a detailed space-by-space meeting was held with the District, the Design and OPM team and the Special Education Director and team members. Each line item of the proposed space summary was thoroughly reviewed and discussed. The space summary submitted with the PDP reflects the decisions and requirements for this Department.

It is important to note that in intensive needs programs, a swing of 2-5 students can create or obviate the need for additional spaces in any given year and that it has been the practice to re-

allocate Special Education space within the department based on fluctuations in specific program's enrollment and only to seek additional space if all programs have increased beyond capacity in a given year.

Small group rooms will be sufficient for student evaluations.

Some students in Intensive Learning Program II are mainstreamed and will not require dedicated classrooms.

If the District is proposing a garden/ farm space, please include additional information that describes the activities that are considered in the proposed garden/ farm space and how these spaces will be scheduled, monitored and staffed. The MSBA encourages the District to include facilities and maintenance personnel responsible for the future care and maintenance of these spaces in an effort to fully understand the time, care and resources required to maintain the intended features. Please acknowledge.

RESPONSE:

The programming of outdoor spaces will occur following the selection of a preferred option / Schematic Design.

15a) Information regarding the existing and the proposed Non-Chapter 74 Programs was not provided with the submittal. In response to these review comments, please provide information for the following proposed Technology/ Engineering spaces: Makerspace, Audio/ Visual Classroom/ Lab, Fabrication Lab, Digital Design/ Technology Lab, Digital Design Lab, Business Lab, Engineering/ Robotics Lab, Graphic Communications Lab, Digital Art Lab and Carpentry Lab, that are listed in the proposed space summary.

RESPONSE: *See Curriculum-to-Space Workbook and Section 3.1.3 for information on the labs.*

17) The information provided notes that potential changes of the transportation policies are currently under discussion, which includes how to increase ridership, how to reduce carbon emissions, and road congestion. As part of the PSR submittals, please provide additional information if there are any changes to the current transportation policies.

RESPONSE: *Acknowledged and will include in the PSR if any decisions are implemented by that time.*

19) The date of the most recent Medical Emergency Response Plan that was submitted to the DESE was not provided in the submittal. In response to these comments, provide the date.

RESPONSE:

The most recent Medical Emergency Response Plan that was submitted to DESE is from June 5, 2024. Said plan is available here:

<https://docs.google.com/document/d/1cmKnDv9APJDThXHaR5DSR8kYwpA9FLrGQ6qPynkZJ5g/edit>

Additionally, please confirm that the first responding emergency representatives will be consulted in the planning process and associated requirements will be incorporated into the Preferred Schematic.

RESPONSE:

SMMA met with first responders during PDP to understand their concerns. SMMA will meet with that group at each stage of design to understand specific requirements.

Additional Comments:

In response to these review comments, please review and respond to the following:

- *The information provided in additional specialty spaces for consideration notes the following:*
 - *“The rock room is where LHS students go to relax and unwind.” However, there is no rock room listed in the proposed space summary. In response to these review comments, please provide additional information about the rock room and verify the needs of the space and update the space summary if necessary.*
 - *There was a discussion about the benefit of adding into the high school a new daycare, Tech Hub, the Print Shop and a new Family Welcome Center for students’ learning opportunities. However, there was no proposed space for daycare and the Print Shop in the provided space summary. In response to these review comments, please verify if the proposed space summary meets the needs of the District’s educational program.*

RESPONSE:

There will be no daycare within the school.

Rock room activities will be within the wellness spaces (listed under Health and PE).

The Tech Hub comprises Technology labs that are centrally located or located near one another.

Print Shop is named the digital Graphic Communications Lab.

A Family Welcome Center is included with the Central Offices space. Please refer to 3.1.3: Initial Space Summary – Proposed Space Summary: New Construction School with Central Offices, under the “Other” category.

- *The information provided notes the District’s design vision of sustainable, resiliency and Net Zero/Net positive. In response to these review comments, please provide the following:*
 - *Describe if the District has considered adapting climate heat and humidity control throughout the facility for the proposed project.*
 - *Describe whether the District has considered consulting other MSBA Net Zero design High school projects and learning from their experience and expertise.*

RESPONSE:

Climate heat and humidity control: The HVAC system design will consider potential updates to the outdoor design temperature criterion and AHUs and DOAS Units will include full reheat for humidity control. In addition, the building will include a well-insulated building enclosure with an air infiltration goal not to exceed 0.15 cfm/SF @ 75 PA (our completed and measured NZE schools have measured at 0.06-0.09 cfm/SF @ 75 PA, outperforming the goal).

Other MSBA Net Zero projects: SMMA has 3 Net Zero school projects, 1 completed K-8, and 2 in construction (1 Middle School and 1 Elementary School) from which we are gaining valuable expertise. In addition, the Town’s Sustainable Lexington Committee has members with

significant expertise in this area; however, we would be delighted to add to that knowledge base. Our Design Team would be happy to reach out to their counterparts in the industry.

- *In response to these review comments, please describe if the District has considered not using the “College Prep” naming for course titles to encourage all students to take all advanced courses especially for students who do not plan or have financial barriers to attend college following High School graduation. For example, encouraging all students that science courses are for fundamental science concepts and skills that apply to everyday life and are not limited to students who intend to pursue careers in science. Many special spaces were called in the design considerations throughout the District’s Educational program. In response to these review comments, please provide additional information that describes if the District has considered providing spaces that can be utilized for multiple functions in lieu of a single function in each space.*

RESPONSE:

Acknowledged. The high school has added a new concurrent enrollment option and level for many courses for students who want rigorous coursework but do not wish to take an AP course. We have created an Honors for All system in ELA and continue to break down barriers to rigorous coursework across demographics through a stretch placement process described in earlier responses.

Multi-function spaces include multi-class team teaching; testing, art shows; individual and small group learning; project work, robotics competitions; peer to peer learning; tutoring; and others.

- *Large group instruction (LGI)*
- *Small group seminar*
- *Small group*
- *Dining Commons*
- *Phone booths*
- *Auditorium*
- *Alternative PE spaces*

No further review comments for this section.

3.1.3 INITIAL SPACE SUMMARY

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	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 summary for new construction option with central offices and offers the following:

- **Core Academic** – The overall proposed square footage for this category exceeds the MSBA guidelines by 1,090 net square feet (“nsf”). Based on the information provided, the following spaces have been proposed in order for the District to deliver its educational program:

Core Academic Spaces	Design Enrollment : Grades 9-12 for 2,395 students		
	Proposed No. Rooms	MSBA Guidelines No. Rooms	Variance
General Classrooms	76	81	-5
Health Classroom	2	0	+2
Teacher Planning	10	81	-71
Small Group Seminar	5	5	0
Science Classroom/ Lab	22	21	+1
Prep Room	11	21	-10
Central Chemical Storage Room	1	1	0
Collaborative Work Area	1	0	+1
Academic Resource	3	0	+3
Language Lab/ EL	1	0	+1
Lecture Hall/ Large Group Instruction	2	0	+2

General Response: SMMA conducted an extensive review and analysis of the curriculum offerings in the context of the LHS Master Schedule, 2023/24 student population, and the proposed design population. See attached Curriculum-to-Space Workbook.

This process identifies the number of academic spaces needed for each area of study (e.g., ELA, Social Studies, Science). This allows the Summary of Spaces to be tailored to Lexington's needs.

Lexington High School has 395 course offerings across 12 disciplines. This is significantly more than the average high school in Massachusetts.

The District is proposing the following spaces:

- **General Classrooms** – The District is proposing (76) 850 nsf General Classrooms totaling 64,600 nsf, which is (5) classrooms and 8,300 nsf below MSBA guidelines.

Please note that 825 nsf is the minimum size for a high school general classroom and should any classroom in a new construction scenario be reduced to below 825 nsf during subsequent phases of design, the District will be required to adjust the design as necessary to meet this minimum criteria. Please acknowledge.

RESPONSE: SMMA has revised the Summary of Spaces to reflect the incorporation of Health Classrooms into the General Classrooms number for a total of 78 General Education Classrooms. These classrooms are scheduled throughout the day for numerous General Education needs, including Health; therefore, it did not need to be broken out separately.

We acknowledge that 825 nsf is the minimum area for the high school classroom and that the District will be required to adjust the design as necessary to meet this minimum criterion if the classroom areas are reduced to below 825 nsf.

- **Health Classroom** – The District is proposing (2) 850 nsf Health Classrooms totaling 1,700 nsf, which exceeds MSBA guidelines. In response to these review comments, provide the following:

- *Describe the anticipated scheduling, staffing, and overall utilization of these spaces.*
- *Relocate the Health Classrooms to the ‘Other’ category and provide an updated Space Summary.*
- *As part of the District’s PSR submittal, the District must fully describe the function, intended utilization, and scheduling of these spaces.*

RESPONSE: Health classrooms are General Education rooms. SMMA has revised the Summary of Spaces to reflect the incorporation of Health Classrooms into the General Classrooms number, for a total of 78 General Education Classrooms.

- **Teacher Planning** – The District is proposing (10) 810 nsf Teacher Planning spaces totaling 8,100 nsf, which meets MSBA guidelines. In response to these review comments, provide information that describes the proposed location and adjacencies of the (10) Teacher Planning areas.

RESPONSE: Please refer to the “Program Adjacency - Whole Building” bubble diagram, in section 3.1.2 (page 30 of the pdf document) of the PDP Report for proposed adjacencies.

- **Small Group Seminar** – The District is proposing (5) 425 nsf Small Group Seminar spaces totaling 2,125 nsf, which is below MSBA guidelines by 375 nsf.
- **Science Classroom/ Lab** – The District is proposing (22) 1,440 nsf Science Classrooms/ Labs totaling 31,680 nsf, which exceeds MSBA guidelines by (1) 1,440 nsf Science Classroom. Please note, prior to the MSBA accepting this variation to the guidelines, the District should provide a narrative that describes the need for an additional Science Classroom / Lab exceeding the MSBA guidelines.

RESPONSE:

The proposed square footage for the Small Group Seminar rooms and Science Classrooms/ Labs in the Summary of Spaces supports the LHS curriculum and analysis of the Master Schedule of Courses. The rooms are half-sized classrooms.

Please refer to the Curriculum-to-Space Workbook which demonstrates the need for 22 science labs based upon the curriculum offerings.

- **Prep Room** – The District is proposing (11) 400 nsf Prep Room associated with the proposed Science Classrooms/ Labs totaling 4,400 nsf, which exceeds MSBA guidelines by (1) 200 nsf Prep Room. Please note, prior to the MSBA accepting this variation to the guidelines, the District should provide a narrative that describes the need for an additional Prep Room associated with the Science Classrooms / Labs exceeding the MSBA guidelines.

RESPONSE:

The proposed square footage for the Science Prep Rooms is determined by the number of Science Classrooms/Labs. The quantity of the Science Classrooms/Labs listed in the Summary of Spaces supports the LHS curriculum and analysis of the Master Schedule of Courses. Please refer to the Curriculum-to-Space Workbook for more information. We anticipate that the science labs will be paired and will share Prep Rooms (i.e., 2 Science Classrooms/Labs to every 1 Prep Room).

- **Central Chemical Storage Room** – The District is proposing (1) 200 nsf Central Chemical Storage Room, which meets MSBA guidelines. No further preliminary comments.
- **Collaborative Work Area** – The District is proposing (1) 300 nsf Collaborative Work Area totaling 300 nsf, which exceeds MSBA guidelines. In response to these review comments, provide additional information that describes the anticipated scheduling, staffing, and overall utilization of this space.

RESPONSE:

The Collaborative Work Area is part of the Academic Support/Intervention space, where peer-to-peer tutoring and collaborative group work can take place, outside of the Academic Support classrooms. The space is staffed by the Academic Support teachers and Academic Support is scheduled in the Master Schedule.

- **Academic Resource** – The District is proposing (3) 425 nsf Academic Resource spaces totaling 1,275 nsf, which exceeds MSBA guidelines. In response to these review comments, provide additional information that describes the anticipated scheduling, staffing, and overall utilization of these spaces.

RESPONSE:

Academic Resource classrooms are where Academic Support/Intervention is provided to students in the content areas of Humanities, Math, and Science. The spaces are staffed by the Academic Support teachers and Academic Support is scheduled in the Master Schedule.

- **Language Lab/ English Language Learner Classroom (“ELL”)** – The District is proposing (1) 850 nsf Language Lab/ ELL, which exceeds MSBA guidelines. In response to these review comments, provide additional information that describes the anticipated adjacencies, scheduling, staffing, and overall utilization of this space.

RESPONSE:

LPS has determined that a dedicated Language Lab is beneficial in supporting language development of English Learners, as well as learners of World Languages (non-English language). The Language

Lab would be in the Core Academic wings and should be considered equivalent to any Gen Ed classroom. Please refer to the “Program Adjacency - Whole Building” bubble diagram, in section 3.1.2 (page 30 of the pdf document) of the PDP Report for more information on proposed adjacencies. The EL classes are scheduled in the Master Schedule, and during non-scheduled periods, World Language teachers can sign out for the Language Lab on an as-need basis.

- **Lecture Hall/ Large Group Instruction** – The District is proposing (2) 2,000 nsf Lecture Hall/ Large Group Instruction spaces totaling 4,000 nsf, which exceeds MSBA guidelines. In response to these review comments, please provide additional information for the following:
 - Further describe the anticipated scheduling and utilization of the proposed area, how these spaces will be supervised and staffed.
 - Provide examples of activities that will occur in these spaces that cannot be delivered within an appropriately sized and fit-out General Classroom.
 - Describe the benefits of providing this learning outside of the General Classrooms rather than within the proposed General Classrooms.
 - Describe why the proposed use could not be supported in the proposed auditorium.

RESPONSE:

The Large Group Instruction (LGI) rooms are flexible spaces intended to accommodate a wide range of activities and instructional formats and designed to house more students than a typical classroom (about 100 students). They are not intended to be master scheduled for courses or staffed by any educator. Rather, they will be signed out as needed by the school staff, and classes will use the rooms for the signed-out time.

The educators and District have identified the following as some examples of such activities that are anticipated to occur in the LGIs: guest lectures, student presentations, group discussions or debates, film viewings, performances, demonstrations, collaborative/ large group projects, professional development of staff, as well as testing and exam space.

The large student enrollment at LHS necessitates two Large Group Instruction spaces, which help promote differentiated types of learning.

- **Special Education** – The overall proposed square footage for this category exceeds the MSBA guidelines by 11,865 nsf. In response to these review comments, please relocate the following space to the ‘Administration and Guidance’ category.
 - (1) 250 nsf Reception/Waiting,
 - (1) 150 nsf Supervisor of Special Education office,
 - (4) 120 nsf Evaluation Team Supervisor (“ETS”) Office spaces, totaling 480 nsf,
 - (1) 100 nsf Copy Room,
 - (1) 80 nsf Records Room,
 - (1) 400 nsf Conference Room, and
 - (1) 250 nsf Conference Room

RESPONSE:

The above-listed spaces are specific to the delivery of Special Education and are not administrative space. LHS has a large Special Education student population and an in-house LABBB Collaborative program, providing an out-of-district placement for residents and students from 63 cities and towns across Massachusetts.

Additionally, the information provided indicates that the District is a member of the “LABBB Collaborative” (Lexington, Arlington, Burlington, Bedford, Belmont and Watertown).

Additionally, the LABBB program at LHS serves students with intensive specialized needs and a Life Skills program, in addition to opportunities with the Transition Readiness Activities in the Community (TRAC) and other vocational work.

In response to these review comments, please review and confirm whether the following spaces are exclusive to the use of the Special Education Program and the LABBB program:

- (1) 120 nsf Medical Suite Toilet, Nurse’s Office / Waiting Room,
- (1) 100 nsf Interview Room, and
- (2) 120 nsf Examination / Resting, totaling 240 nsf

RESPONSE:

The LABBB Collaborative is a separate program from LHS and the LHS Special Education program. The LABBB Collaborative serves medically fragile students and requires its own dedicated medical staff and suite.

Furthermore, in response to these review comments, review and confirm whether the following spaces are exclusive to the use of the Special Education Program and the LABBB program: (1) 120 nsf Counselor office,

- (1) 150 nsf Conference – Small,
- (1) 200 nsf Conference – Medium,
- (1) 120 nsf Program Coordinator Office,
- (1) 300 nsf LABBB Main Office / Administration / Waiting
- (1) 180 nsf Transition Department Office,
- (1) 150 nsf LABBB Program Director, and
- (1) 200 nsf Staff Room

RESPONSE:

The LABBB Collaborative is a separate program from LHS and the LHS Special Education program. The LABBB Collaborative serves medically fragile students, and they operate separately from Lexington High School, requiring space for its own dedicated program staff.

Moreover, relocate the proposed 1,200 nsf Adaptive Physical Education Space to the ‘Health and Physical Education’ category and provide anticipated scheduling and utilization for review.

RESPONSE: *The Adaptive Physical Education Space is dedicated to the LABBB Collaborative as many LABBB students have intensive medical needs. This is not a Physical Education space for LHS students.*

Please note and acknowledge that the Special Education program is subject to approval by the Department of Elementary and Secondary Education (“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.

RESPONSE: *Acknowledged.*

- **Art & Music / Vocations & Technology** – *The overall proposed square footage for the combined categories is below the MSBA guidelines by 1,335 nsf. In response to these review comments, please review and respond the following regarding the Digital Design Lab:*

○ The District is proposing (1) 1,400 nsf Digital Design/ Technology lab, (3) 1,200 nsf Digital Design Lab and (1) 1,200 nsf Digital Art Lab. In response to these review comments, please provide additional information that clarifies difference between the Digital Design/ Technology lab, Digital Design Lab, and the Digital Art Lab.

RESPONSE: *Digital Design Labs will have equipment and software necessary for teaching Computer Science and other Technology/Coding curricula. The Digital Technology Lab also can be used for this type of curriculum, in addition to having larger specialty equipment (3D printers, large format printers). The Digital Art Lab will have computers and software necessary for teaching digital design courses, such as Video Game Design and Digital Imaging. Please refer to the Curriculum-to-Space Workbook for more information.*

○ The information provided within the Educational Program for Art and Design indicates consideration for providing (3) Digital Art Computer Labs. However, the proposed space summary does not clearly identify the (3) Digital Art Computer Labs. In response to these review comments, please provide clarification.

RESPONSE: *The Curriculum analysis indicates that (1) Digital Art computer lab and (1) larger Audio/Visual Technology Lab would be sufficient for the Digital Art curriculum. The Digital Design Technology Lab also would be available for use. Please refer to the Curriculum-to-Space Workbook for more information.*

○ Describe how the proposed square footage in the ‘Art and Music’ category meets the needs of the educational program and provide anticipated adjacencies, student utilization, and any other relevant information that supports the need for the additional space. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines.

RESPONSE: *The proposed square footage in the Art and Music category in the Summary of Spaces supports the LHS curriculum and analysis of the Master Schedule of Courses. The required credits for Art and Music at LHS (at 8 credits) exceeds the number of most other high schools. Therefore, the large number of students who participate in the Music program requires larger Music spaces like Band and Chorus. Please refer to the Curriculum-to-Space Workbook for more information.*

○ The information provided within the educational program for Art and Design considers proposing (2) Ceramics Studios, (5) Advanced Placement Art/ General Art Studios (one

of which is Sculpture-specific). However, the District is proposing (5) 1,200 nsf Art Classrooms. Please verify if the (2) Ceramics Studios are included in the proposed space summary as part of the General Art Studios.

RESPONSE: (2) 3D Art Rooms are provided as part of the (5) Art Rooms. Please refer to the Curriculum-to-Space Workbook for more information.

- The information provided within the educational program for Art and Design notes that the Makerspace will be open for use by Art & Design classes, clubs, and independent studies. Please provide additional information describing the anticipated scheduling and utilization of the proposed Makerspace and how this space will be supervised and staffed.

RESPONSE:

There will be two Makerspaces, in addition to the other Technology Labs that are indicated. Makerspaces are not master-scheduled by course and are signed-out by educators or students on an as-need basis. These spaces provide students with a non-general classroom space, outfitted with equipment and technology that provides students with creative and hands-on learning opportunities, helping to encourage student agency and promote differentiated types of learning.

- **Health & Physical Education** – The overall proposed square footage for this category exceeds the MSBA guidelines by 34,659 nsf including the following renovated spaces, totaling 31,021 nsf:
 - (1) 27,042 nsf Field House;
 - (1) 3,300 nsf Field House Physical Education Alternative; and
 - (1) 679 nsf Weight Room.

RESPONSE: SMMA provided a revised Space Summary on 07-11-2024 because the New Construction version inadvertently carried the existing Field House in the existing to remain columns. A corrected Space Summary is attached.

In response to these review comments, please review and provide additional information for the following:

- Refer to the attached memo regarding the MSBA's policy on physical education square footage in excess of the MSBA guidelines. The policy states: "The district may choose to build a gymnasium and related spaces in excess of MSBA guidelines, but in no event shall the gymnasium exceed 18,000 nsf. The MSBA will participate in a gymnasium of up to 12,000 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 foot ("gsf") in excess of the guidelines for these areas. Square footage in excess of the guidelines will be considered ineligible for reimbursement. Please acknowledge.

RESPONSE: Acknowledged. The Curriculum analysis indicates (5) Physical Education (PE) teaching stations are required to accommodate the LHS PE curriculum. In addition to the PE teaching stations, (3) Wellness Rooms are being proposed as LHS is committed to providing students with a nurturing environment which supports the whole student. By offering a safe space to students to manage stress, anxiety, or other emotional challenges, the school is fostering the mental well-being of students.

Please refer to Section 3.1.3 – Initial Space Summary, page 94, of the PDP Report, and the Curriculum to Space workbook for more information.

- *Provide additional layout information, and describe the anticipated adjacencies, the scheduling, utilization and the overall use of the gym area including the Gymnasium, Fitness Center, Multi-Purpose Studio and the renovated Field house and related spaces (Field House Adaptive Physical Education and Weight Room) areas to determine if the proposed project conforms with the MSBA’s maximum allowable gym size. In addition, the submittal indicates the physical education facility at Lexington High School includes an existing field house. The MSBA requests that the square footage for the field house and associated spaces be relocated to the ‘Other’ category of the space summary. Per 963 CMR 2.16(5), any work associated with renovating the existing space will be considered ineligible for reimbursement and costs associated with this work must be itemized in each cost estimate moving forward in the MSBA process. As previously communicated to the District and design team, and based on current practice, the MSBA would not support a project that includes a newly constructed swimming pool. Please acknowledge. The proposed design and space summary should be adjusted accordingly in advance of further development of new construction option. Please acknowledge.*

RESPONSE:

Please refer to Section 3.1.3 – Initial Space Summary, pages 94 and 98 of the PDP Report, and the Curriculum-to-Space Workbook for more information on the utilization and use of the PE spaces and description of the Field House options, which are not included in the LHS Summary of Spaces (revised version from 07.11.2024).

Please refer to the “Program Adjacency - Whole Building” bubble diagram, in section 3.1.2 – Educational Program of the PDP Report for more information on proposed adjacencies, as well as Section 3.1.6 – Preliminary Evaluations of Alternatives for potential siting and adjacencies of PE spaces.

The Town acknowledges that the MSBA does not support construction of a swimming pool.

The space summary has been adjusted to move the Field House to the “other” category and is attached to these responses.

- *Based on the information provided in 3.1.6 Preliminary Evaluation of Alternatives, the existing fieldhouse is 31,280 sf. In response to these review comments, please confirm the gross square footage of the existing field house and provide the existing fieldhouse gross square footage in the updated space summary for New Construction with Central Office option.*

RESPONSE:

The gross square footage of the existing field house is 34,000 gsf (31,280 nsf). The total GSF of the existing facility including the Field house is 352,000 gsf.

There is ongoing discussion as to whether to renovate the field house or to build a new one, and what size a new field house should be (1/11th mile track or a 200m track).

Please refer to Section 3.1.3 – Initial Space Summary, page 98, of the PDP Report for more information on the existing Field House, as well as descriptions of the Field House options, which are not included in the LHS Summary of Spaces (revised version from 07.11.2024).

- **Media Center** – The overall proposed square footage for this category is below the MSBA guidelines by 979 nsf. In response to these review comments, please verify if the proposed square footage meets the current and future needs of the District's program. Additionally, the District is proposing (3) 150 nsf Quiet Rooms, totaling 450 nsf. However, there is no narrative describing the quiet rooms in the District's proposed educational program. In response to these review comments, please provide additional information describing the anticipated adjacencies, the scheduling, and utilization of the proposed quiet rooms and how these spaces will be supervised and staffed.

RESPONSE: The proposed nsf for the Media Center adequately supports the school's Media Center needs. Quiet study rooms in the Media Center were desired by educators and students, to provide differentiated types of space for individualized focused work or small group work that can occur while other louder or collaborative activities are also happening.

- **Auditorium/Drama** – The overall proposed square footage for this category exceeds the MSBA guidelines by 5,900 nsf. Please acknowledge and refer to the attached memo regarding MSBA policies associated with auditorium and gymnasium spaces in excess of the guidelines. Additionally, please note that square footage in excess of the guidelines will be considered ineligible for reimbursement. Please acknowledge.

RESPONSE:

The Black Box (2,000 sf) is a required “classroom teaching space” for the six (6) Performing Arts courses, including: Public Speaking, Drama, Improvisation, and others. The physical requirement for movement with these activities necessitates a larger teaching space. Currently, all these courses are taught in a Black Box space at the existing LHS. Since this is a specific curriculum teaching space, if this space is not reimbursed, two additional core classrooms will need to be added.

We acknowledge that square footage in excess of the guidelines for the Auditorium is considered ineligible for reimbursement.

- **Dining & Food Service** – The overall proposed square footage for this category exceeds the MSBA guidelines by 1,652 nsf. 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 the MSBA guidelines will be considered ineligible for reimbursement.

RESPONSE: An enlarged and more efficient Scramble Servery (contrasted to the (2) serveries that are in the existing LHS) and expanded dishwashing areas (for washing reusable wares and cutlery, while moving away from single-use items) are included in the proposed square footage. A Bakery/Snack Shop/Café for vocational/training purposes for students with disabilities or students in need of additional support, including those in ALPHA and other counseling programs. The District acknowledges that serving students and staff during the Servery's off-hours is necessary.

- **Medical** – The overall proposed square footage for this category exceeds the MSBA guidelines by 290 nsf. 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 square footage exceeding the MSBA guidelines will be considered ineligible for reimbursement.

RESPONSE: Acknowledged.

The (5) Interview/Exam rooms are where private examinations/consultations will take place. Given the school's large enrollment, (8) resting/cot areas are required. Student medications will be stored in double locked cabinets in the Nurse's office. The nurse will have the discretion to administer the medication in a variety of spaces including: the office, general suite space or an exam room. The size of the school necessitates the quantity of rooms and areas listed.

- **Administration & Guidance** – *The overall proposed square footage for this category exceeds the MSBA guidelines by 9,706 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiency as the design is further developed. Please note that the MSBA will consider (1) 200 nsf School Resource Officer office eligible for reimbursement. However, please note and acknowledge the remaining 9,506 nsf exceeding the MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

RESPONSE: Acknowledged. There are several programs listed here that are part of the student support services. The ALPHA (A Learning Place for Healing Adolescents) counseling program (1,330 nsf) is a transition program for students returning from hospital stays and requires the classroom and support spaces as proposed in the Summary of Spaces. Please refer to Section 3.1.2 – Educational Program, pages 49 and 50 and Section 3.1.3 – Initial Space Summary, page 97, of the PDP Report for more information on program needs.

The METCO (Metropolitan Council for Educational Opportunity) program (1,720 nsf) is a decades-long program intended to help with desegregation of communities. The program requires the classrooms and support spaces as proposed in the Summary of Spaces. Please refer to Section 3.1.2 – Educational Program, page 49 for more information.

- **Custodial & Maintenance** – *The overall proposed square footage for this category exceeds the MSBA guidelines by 300 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies as the design is further developed. Please note and acknowledge square footage exceeding the MSBA guidelines will be considered ineligible for reimbursement.*

RESPONSE:

Acknowledged. With 15 custodial staff dedicated to LHS, a larger Custodian's Workshop (by 200 sf) was required. The Telecom Room at 300 nsf is slightly larger than their existing Telecom Room today.

***Other** – The District is proposing 15,920 nsf which exceeds the MSBA guidelines. The following spaces are proposed:*

- **School Store** – *The District is proposing (1) 400 nsf School Store which is in excess of the MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

RESPONSE: Acknowledged

- **Pop up Shop/ Gallery** – *The District is proposing (1) 200 nsf Pop up Shop/ Gallery space which is in excess of the MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

RESPONSE: Acknowledged

- **District Central Offices** – *The District is proposing 15,320 nsf associated with District Central Office spaces which is in excess of the MSBA guidelines. Please note that*

square footage associated with District Central Office space and exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.

RESPONSE: Lexington Public Schools acknowledges that the District Central Office space exceeds MSBA guidelines will be considered ineligible for reimbursement. LPS plans to use this as future expansion space for classrooms, should student enrollment exceed the amount of space initially constructed.

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.

No further review comments for this section.

3.1.4 EVALUATION OF EXISTING CONDITIONS

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	Confirmation of legal title to the property.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Determination that the property is available for development.	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

3) The information provided states: “The project plans to file a Project Notification Form (“PNF”) to Massachusetts Historic Commission before the next MSBA submission and will provide an update.”

As part of the District’s PSR submittal, please include the PNF submission date into the project schedule. Please note MHC approval is required prior to construction bids. Additionally, 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. Please acknowledge.

RESPONSE: Acknowledged. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

4) The information provided states: “Approximately 36.8 acres of the campus are protected under Article 97. Any development within the protected area of the site will require notification to the Public Land Preservation Act (“PLPA”) and formal land swap through approved state legislation”.

Please note that future versions of the project schedule should include dates of anticipated approvals and key steps to gaining full ownership, control, and exclusive use of the proposed site(s). Please Refer to Project Advisory 45 on MSBA’s website for additional information related to MSBA requirement for land use.

Please also note that if the District’s Preferred Solution requires Article 97, the MSBA’s Board authorization to enter a Project Funding Agreement will be conditioned upon the District confirming/demonstrating that all site requirements, including full ownership, control, and exclusive use, have been met prior to executing a Project Funding Agreement. Please acknowledge.

RESPONSE: Acknowledged.

Additionally, the information provided states the following:

- “The environmental impact of project alternatives will be reviewed with respect Massachusetts Environmental Policy Act (MEPA) thresholds.”
- “Existing wetland resources have been identified on the site. Any direct impacts to or work in their associated buffer zone will require review and approval by Lexington Conservation Commission”.
- “There is an existing underground culvert that bisects the site, known as Vine Brook Culvert, carrying discharge from the wetlands and the stormwater runoff through the site”.

As part of the District’s PSR submittal, please provide the following:

- Analysis performed by the design team intended to determine the outcome associated with the requirements of a MEPA review and a workplan and timeline associated with a MEPA review and approval.

RESPONSE: Acknowledged. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

- Also, please note that if MEPA review and approval is required for the proposed project, the MSBA Board’s authorization to enter a Project Scope and Budget Agreement

(“PSBA”) and a Project Funding Agreement (“PFA”) will be conditioned upon the District fulfilling the applicable MEPA requirements associated with the MEPA review.

RESPONSE: Acknowledged.

- The requirements associated with MSBA Project Advisory #88 which is referenced below in the ‘Additional Comments’ section.

RESPONSE: Acknowledged.

7) The information provided in the O'Reilly, Tabbot & Okum's geotechnical report states the following:

- “The building should be designed to control groundwater and surface water infiltration. The high groundwater table and poor drainage should be a consideration in the design of pavements”
- “Depending on the depth of anticipated excavations, dewatering may be achieved by sumps and pumps (shallow excavations) or larger well point systems (if significant dewatering is necessary)”.
- “Underdrains and perimeter drains are recommended to be incorporated in the new structure, adjacent to the beneath new pavements, and beneath playing fields.”

As part of the PSR submittal, please provide additional information that describes/demonstrates how the District will incorporate the groundwater control due to the high groundwater table associated with the existing site. Additionally, please note and acknowledge 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.

RESPONSE: Acknowledged. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

8) The information provided in the O'Reilly, Tabbot & Okum's geotechnical report states the following:

- “We anticipate that some soil may need to be removed from the Site during redevelopment. Additional chemical testing will be needed if soils will be disposed or transported off-site. Soil management should be included in final development and estimated costs.”
- “Design phase explorations will be necessary. The number and scope of additional explorations will depend upon design phasing and the final location and slab elevation of any new building, as well as location of ancillary structures, proposed parking areas and utilities.”

As part of the District's PSR submittal, please incorporate the timeline associated with review and approval into the project schedule. Please note and acknowledge 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.

RESPONSE: Acknowledged. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

9) The information provided in the Phase I ESA report states the following:

- “The subject Property currently features a 4,000-gallon diesel fiberglass UST which supplies the emergency generator.”
- “A 15,000-gallon steel fuel oil UST located in the vicinity of the science building failed a tank tightness test in November and December 1990. This constitutes a REC per the ASTM standard.”
- “Records indicate two tank tightness tests performed on a 15,000-gallon UST in 1900, both of which failed. Record of soil data in vicinity of the USTs were not identified during this ESA. As such, REC was identified during the assessment per the ASTM Standard.”
- A Phase II Limited Subsurface Investigation is required to be conducted including the installation of monitoring wells, and comprehensive soil, sediment, and groundwater analysis.

As part of the District’s PSR submittal, please provide an anticipated timeline associated with Phase II subsurface investigation and any additional findings from Phase II subsurface investigation when available. Note that all costs associated with abatement of contaminated soil from any source, and abatement of fuel storage tank must be itemized in the cost estimates in subsequent submittals and will be considered ineligible for MSBA reimbursement. Please acknowledge.

RESPONSE: Acknowledged. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

Additionally, please note and acknowledge 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.

RESPONSE: Acknowledged.

10) The information provided notes that a few locations of Asbestos Containing Materials (“ACM”) and presumed locations of Polychlorinated Bipheyls (“PCB”) were found at the existing buildings.

The project team should be aware of the current policies associated with MSBA’s participation in the abatement and removal of hazardous materials. In response to these review comments, please note and acknowledge that all costs associated with the removal of asbestos containing floor materials and ceiling tiles are considered ineligible for reimbursement.

RESPONSE: Acknowledged.

11) The information provided notes that the previous existing building or site reports, studies, and drawings are not included as part of this submission but are available upon request. In response to these review comments, please provide a description of the drawings that the District shared with the Design team and how these assisted the Design team with developing the preliminary project planning.

RESPONSE: A list of previous existing building and/or site reports, studies, and drawings was included in section 3.1.4.O. in the Preliminary Design Program. These previous drawings, studies and reports greatly assisted the design team in reviewing the existing building and site conditions and what improvements have been made over the years at the facility.

No further review comments for this section.

3.1.5 SITE DEVELOPMENT REQUIREMENTS

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	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) The information provided states the following:

- *“An exploration into the use of an interior quad will offer an outdoor space exclusively for students and staff, fostering a connection with the natural environment.”*
- *“A proposed parking space quantity has not been determined but will need to balance the typical use of the school with more intense uses like theater performances, athletic events and other community events.”*
- *“Due to the presence of several wetland resources on the site, the project will be subject to the Wetland Protection Act and the Town of Lexington’s Wetland Protection Code.”*
- *“A portion of the site is protected parkland in accordance with Article 97 of the Massachusetts Constitution. If temporary work is required within the protected parkland, further review would be required to determine regulatory implications”.*
- *“Further discussion with Lexington Police and Fire regarding the emergency access will be required to determine minimum widths, materials, and locations around the new school building”.*
- *“The site design will provide circulation and access to the gymnasium and performance spaces within the building that will be available for community use and maximize utilization of the facility”.*

In response to these review comments, please review the following:

- *As the project further develops, please include information that describes the process including those involved in the decision making process associated with incorporating site improvement components such as landscape features, trees, plantings, irrigation, rain garden, etc. The MSBA encourages the District to include facilities and maintenance personnel responsible for the future care and maintenance of the proposed site components in an effort to fully understand the time, care and resources required to maintain the intended site features. Please acknowledge.*

RESPONSE: Acknowledged. SMMA has assembled four (4) Focus Groups with members from the Town’s Committees and Boards, as well as Plant and Facilities to ensure there is a broad discussion around the topics of Site, Safety and Security, Exterior and Interior Design, Educational Planning and Programming, and MEP Systems and Sustainability. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

- Provide a timeline associated with the needed permits, filings and reviews for wetland protection and protected parkland subject to Article 97.

RESPONSE: Please see attached schedule for Article 97 review and approval.

- Provide additional information that demonstrates how the proposed gymnasium and performance spaces will be scheduled, monitored and secured after typical school hours.

RESPONSE: These spaces are booked through a software product called School Dude as part of the Town of Lexington's reservation system for all shared facilities. School groups have the right of first refusal and school events are supervised by adult coaches, club leaders, school administration and MIAA officials. Outside groups are required to provide their own adult supervision, and the primarily, cost-free lessor of these spaces is the Town Recreation Department. Members of the Facilities crew lock these spaces when not in use.

As part of the District's PSR submittal, provide site sections(s) that illustrate how the Preferred Schematic sits on the site and how the proposed location impacts access and circulation. Please acknowledge.

RESPONSE: Acknowledged. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

2) In response to these review comments please provide diagram(s) and a narrative that describes how a physically challenged individual currently accesses the existing building.

RESPONSE: A narrative was provided in Section 3.1.4.H (page 168) that addresses site accessibility. A diagram showing accessible routes and associated non-compliances is attached with the additional requested information.

In the subsequent PSR submittal, provide site plans in 11"x 17" format that clearly identify the following features for the site of the Preferred Schematic:

- *Structures and fences;*
- *Site access and circulation;*
- *Parking and paving;*
- *Accessibility requirements;*
- *Easements;*
- *Wetlands and/or flood restrictions;*
- *Emergency vehicle access;*
- *Safety and security requirements;*
- *Utilities and drainage; and*
- *Site orientation and other location considerations.*

No further review comments for this section.

RESPONSE: Acknowledged. The requested information will be included as part of the forthcoming Preferred Schematic Report (PSR) submission.

3.1.6 PRELIMINARY EVALUATION OF ALTERNATIVES

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	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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Construction of new building and the evaluation of potential locations	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

As part of the Preliminary Evaluation of Alternatives, the District explored the following (19) options at the existing Lexington High School site all of which include a design enrollment of 2,395 students in grades 9-12. Please note the (5) options denoted with an asterisk () are the options the District intends to further evaluate as part of its PSR submittal:*

RESPONSE: In general, it appears there was confusion about how the options represented the ability for the Town of Lexington to maintain, expand or build a new field house adjacent to any proposed Renovation or New Construction of the school.

The language in the PDP submittal states: a field house “could” be included.

The SBC, Design Team and OPM have been very clear at all public meetings that these options and costs do not include the Field House or a swimming pool, but we have tried to demonstrate, “where and how” these programs could be accommodated and how much these additional programs would cost the tax payers above and beyond the high school project.

- *Option A.1: Code Upgrade / Base Repair of the existing 352,000 sf building with an estimated project cost of \$300 million.*
- *Option B.1*: Addition/ renovation (2-4 floors phased-in-place renovation and new addition) which proposes to renovate 87,973 sf of the existing school building, proposes 352,843 sf of new construction, and includes renovation of the existing fieldhouse with an estimated project cost of \$ 635 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- *Option B.2: Addition/ renovation (2-4 floors addition and renovation on athletic fields) which proposes to renovate 87,973 gsf of the existing school building, proposes 355,563 gsf of new construction, and includes a renovation of 31,280 sf existing field house with an estimated project cost of \$595 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- *Option B.3: Addition/ renovation (4 floors phased-in-place renovation and addition) which proposes to renovate 71,394 gsf of the existing building, proposes 369,422 gsf of new construction, plus new construction of a 36,000 gsf field house; with an estimated project cost of \$665 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- *Option C.1a: New Construction (3 Floors on Athletic Fields) for 2,395 students grades 9-12 at the existing athletic fields plus the renovation of the existing 31,280 sq.ft field house; with an estimated project cost of \$610 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- *Option C.1b: New Construction (4 Floors on Athletic Fields) for 2,395 students grades 9-12 at the existing athletic fields plus the renovation of the existing 31,280 sq.ft field house; with an estimated project cost of \$600 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- *Option C.1c: New Construction (5 Floors on Athletic Fields) for 2,395 students grades 9-12 at the existing athletic fields plus the renovation of the existing 31,280 sq.ft field house; with an estimated project cost of \$600 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- ***Option C.1d*:*** *New Construction (4 Floors on Athletic Fields and minimized wetland impact) for 2,395 students grade 9-12 at the existing athletic fields and the renovation of the existing 31,280 sq.ft field house; with an estimated project cost of \$625 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- *Option C.2a: New Construction (3 Floors on Athletic Fields) for 2,395 students grade 9-12 at the existing athletic fields and the 48,000 gsf renovation and addition of the existing field house; with an estimated project cost of \$610 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.2b*:** New Construction (4 Floors on Athletic Fields) for 2,395 students grade 9-12 at the existing athletic fields and the 48,000 gsf renovation and addition of the existing field house; with an estimated project cost of \$600 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.3a:** New Construction (3 Floors on Athletic Fields) for 2,395 students grade 9-12 at the existing athletic fields and the 48,000 gsf renovation and addition of the existing field house; with an estimated project cost of \$605 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.4a:** New Construction (3 Floors on Athletic Fields e) for 2,395 students grade 9-12 at the existing athletic fields and the renovation of the existing 31,280 sq.ft field house; with an estimated project cost of \$615 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.4b:** New Construction (4 Floors on Athletic Fields) for 2,395 students grade 9-12 at the existing athletic field and the renovation of the existing 31,280 sq.ft field house; with an estimated project cost of \$605 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.4c:** New Construction (4 Floors on Athletic Fields and reduced wetland impact) for 2,395 students grade 9-12 at the existing athletic fields and the renovation of the existing 31,280 sq.ft field house; with an estimated project cost of \$630 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.5a:** New Construction (4 Floors on Athletic Fields) for 2,395 students grade 9-12 at the existing athletic fields and at the footprint of the existing field house plus a new construction 36,000 gsf field house; with an estimated project cost of \$600 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.5b*:** New Construction (4 Floors on Athletic Fields and reduced wetland impact) for 2,395 students grade 9-12 at the existing athletic fields and at the footprint of the existing field house plus a new construction 36,000 gsf field house; with an estimated project cost of \$620 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- **Option C.6:** New Construction (4 Floors with multi phases and reduced wetland and Article 97 impact) for 2,395 students grade 9-12 at the existing athletic field and a new construction 36,000 gsf field house; with an estimated project cost of \$615 million.

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- *Option D.1: New Construction (4 Floors on Athletic Fields with multiple phases e) for 2,395 students grade 9-12 at the existing athletics fields adjacent to Worthen Road and the footprint of the existing field house plus a new construction 72,000 gsf field house; with an estimated project cost of \$610 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

- ***Option D.2****: *New Construction (4 Floors phased-in-place with reduced wetland and Article 97 impact) for 2,395 students grade 9-12 at the footprint of the existing building plus the renovation of the existing 31,280 gsf existing field house; with an estimated project cost of \$621.3 million.*

RESPONSE: This option does not include renovation of the existing Field House, or the costs associated with it.

As part of the District's PSR submittal please provide the following information:

- *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 and ensure that further detail is provided in the subsequent phases of the project that clearly describes and illustrates the separation, safety provisions, and possible construction laydown areas that will be applied during construction on the occupied site. Please acknowledge.*

RESPONSE: Acknowledged; they will be included in the PSR submittal.

- *Continue to use the same naming convention of options. Please acknowledge.*

RESPONSE: Acknowledged.

- *For all options and sites that are not selected by the District, provide detailed narratives that describe why options and sites were eliminated from further consideration.*

RESPONSE: Acknowledged, this will be included in the PSR submittal.

4) In response to these review comments, please note and acknowledge that the Base Repair Option is required to be carried forward as part of the District's Final Evaluation of Alternatives in the PSR submittal for cost comparison purposes.

RESPONSE: Acknowledged.

5) The information provided doesn't indicate the proposed new construction gross square footage provided for Construction Alternative B.3 Addition/ Renovation. In response to these review comments, please provide the proposed new construction gross square footage for option B.3. Additionally, the Option B.3 notes the construction of a new 36,000 gsf Field House could be carried with this option. Please note and acknowledge that the procurement, design and construction associated with the proposed new construction of Field House must be separate from the MSBA project (scope and budget). This work cannot be combined/ bundled in any contracts or bidding documents associated with the MSBA project, either as base scope or alternate.

RESPONSE: *The Gross Square footage for Options B.3 is 560,740 gsf. Acknowledged on the Field House and see above for clarification on this subject.*

Additionally, the HVAC narrative for the addition/renovation notes the heating and cooling systems will be based on ground source geothermal system utilizing vertical boreholes. However, there is no additional information describing the proposed location for the geothermal well field. In response to these review comments, please identify if the location of the geothermal well field for the addition/ renovation options will require any Wetland/ Article 97 review or approval.

RESPONSE: *The wellfield is currently estimated to be between 3.5 and 5.0 acres (depending on the depth of the wells 500-800 ft) and may be located within the southern portions of the site where the current school parking exists, areas north of the school where the current ball fields exist, or within wetland buffer zones. The Project Team has consulted with the town's legal team on temporary Article 97 impacts, and it is our understanding that temporary impacts do not require a Land Swap or Article 97 review as the land above the wells will be restored to its prior condition once installed. If geothermal wells are located within the wetland buffer zones, this work will be included in a Notice of Intent, filed with Lexington Conservation Commission during the design phase.*

Lastly, the structured building for parking is shown in Option B.3 on page 598 of the submittal. However, there is no narrative provided regarding the proposed structured parking for this option. In response to these review comments, please provide additional information regarding the proposed square footage and construction cost of the structured parking and whether this is an enclosed parking structure.

RESPONSE: *The parking structure shown on Option B.3 is approximately 57,600 square feet, with two (2) levels, and an open structure (not enclosed). Cost estimates included in the PDP ranged from \$21,500,000-\$22,500,000 for the parking structure.*

6) *In response to these review comments, please provide the following:*

- *The information provided noted Option C.1b and Option C.1c's estimated total project cost for \$600 million. However, Option C.1b is for 4 floors new construction and Option C.1c is for 5 floors new construction. Please confirm the estimated total project cost is accurate for both Option C.1b and Option C.1c.*

RESPONSE: *For the purpose of the PDP submission there was some rounding associated with the total project costs. OPM's PDP tracking sheet lists C1.b at \$599M, and C.1c at \$598M.*

- *The narrative provided on page 607 of the submittal regarding Construction Alternative C.4 New Building listed three alternate options as Alt C.1a- 3 Stories, Alt C.1b 4 Stories, Alt C.1c- 4 Stories, minimized wetland impact. Please review if this information is applicable to Option C.4 and update the naming convention for each alternate option for clarification.*

RESPONSE: *There was a typo on page 607, as the reference is to Alts C.4a, C.4b and C.4c. The description of Alts has been updated.*

- *The information provided on page 582 of the submittal notes Option C.5a as 4 floors on Fields. However, the narrative on page 607 for Construction Alternative C.5 notes the Alt C.5a as 3 stories. Please review and verify the proposed number of floors for Alt C.5a.*

RESPONSE: Alt C.5a is a 3-4 story scheme. Information on pages 582 and 607 has been updated.

Additionally, the information provided states: “An Article 97 land swap will be required for the new building alternatives that encroach upon the existing protected parkland. The impact parkland will be relocated on the campus so there is no loss of area or programs.”

In response to these review comments, identify the local steps to be taken to address the Article 97 land swap. Please ensure that future versions of the project schedule will include these dates and those of anticipated approvals.

RESPONSE: See attached Article 97 timeline schedule. A Town Meeting article would be required and must be approved by a 2/3s vote to move this land swap forward to the Legislature.

Option C.1d, Option C.4c and Option C6 appear to include a structured parking on their site plan diagram on page 606 and page 607 of the submittal. However, there is no structured parking narrative provided for these options. In response to these review comments, please provide additional information regarding the proposed square footage and construction cost of the structured parking and whether this is an enclosed parking structure.

RESPONSE: The parking structure shown on Option C.1d, Option C.4c, and Option C6 is approximately 57,600 square feet, two (2) levels, and an open structure (not enclosed). Cost estimates included in the PDP ranged from \$21,500,000-\$22,500,000 for the parking structure.

In the Preferred Schematic Report (PSR) submission, the Design Team will confirm the parking program, study where parking can be provided, whether at grade or in a structure, and provide associated costs for each alternative relative to parking.

Lastly, the HVAC narrative for the new construction options states: “The geothermal field for the new construction options would likely need to be located where the existing school is. Therefore, the system installation would occur after construction of the new school and demolition of the existing school. A temporary installation would be required to support the systems within the school. This would entail the use of a boiler and cooling tower (or chiller.)”

In response to these review comments, please provide additional information about what type of temporary HVAC system will be provided for the new construction while installing the geothermal field at the existing school site and include an associated timeline with geothermal installation into project schedule.

RESPONSE: The current design approaches no longer rely on placement of the geothermal field in location of the existing school, so the referenced temporary solution will be omitted from the system narrative. If there is some construction scheduling impact that becomes a factor, we would propose the following for a temporary system: a rental boiler(s) and rental air-cooled chiller(s), each of which would be piped to the base building ground source pumping system with temporary piping to provide loop temperature control by virtue of mixing either hot water from the boiler(s) or chilled water from the chiller(s) to maintain loop temperature to the building depending on the seasonal requirement.

Please note that in accordance with the MSBA guidelines associated with Modules 3 and 4, potential options for New Construction, Renovation, and Addition/renovation must be explored and evaluated. For new construction options, information associated with Fieldhouses may be included in the District's PDP and PSR submittals and should be limited to identifying potential

and/or future locations and preliminary design pricing cost estimates. All work beyond completion of the District's PSR submittal shall be under a separate contract and procurement from that of the MSBA school project.

RESPONSE: It is our understanding that other Districts have carried Pools and Field Houses through the end of Schematic Design. Further, it is our understanding that if a District chooses to move forward after Schematic Design, it will require separate ballot votes and separate Project Teams. We would like to speak with the MSBA Project Management Team to further discuss this topic.

No further review comments for this section.

3.1.7 LOCAL ACTIONS AND APPROVAL

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	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.*

RESPONSE: A certified copy of the meeting minutes was sent to the MSBA on July 1, 2024, for the attention of Janet Caron and Sarah Przybylowicz. Confirmed delivery on July 2, 2024.

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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

- 1) *The provided “Required Form of Vote to Submit an SOI” of the Statement of Interest is blank. In response to these review comments, provide a complete copy of the District’s SOI that includes the “Required Form of Vote to Submit” filled out and signed.*

RESPONSE: The Project Team spoke with Project Manager Veatriki Dagkalakou regarding this and stated that since the Statement of Interest is signed and fully executed, there is no need for additional signatures now. The executed Statement of Interest is included as backup to comments.

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.*
- MSBA would like to inform you of MSBA’s recent Project Advisory #88, posted on July 1, 2024, and linked [here](#) which describes changes to the MSBA submittal documents relating to required state site approvals and site resiliency including a MEPA guideline checklist. We ask you to review this Project Advisory and forward any questions you may have about these requirements to your MSBA Project Coordinator. These documents will assist your client and the MSBA to understand your project’s status relating to the various required state site approvals and any design considerations pertaining to resiliency for your selected project site.*

We ask that all members of your design team use the information indicated in Project Advisory #88 for your project, including the following updated MSBA documents:

- Module 3 Feasibility Study Guidelines*
- Module 4 Schematic Design Guidelines*
- Module 6 (Design Development, 60%, and 90% Construction Documents)*

Incomplete submittals or submittals not reviewed by the OPM will not be accepted. This includes the information described in Project Advisory #88.

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 \$359,547 for the Lexington High School Roof Replacement Project #201101550505G completed in October 2011 and a total MSBA payment of \$22,388,553 for the Lexington High School renovation of an existing school building Project #W19994035 completed in September 2002.

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.

End

C. PSR Cost Estimates

Lexington High School School Lexington, MA

October 9, 2024

PSR ESTIMATE GRAND SUMMARY

	GSF	TOTAL
A.1 BASE REPAIR	352,000	\$231,768,061
RENOVATION & ADDITION:		
OPTION B.1 QUAD	440,816	\$508,457,930
OPTION B.4	440,816	\$505,214,287
NEW CONSTRUCTION:		
OPTION C.1d -Branch	440,816	\$480,112,421
OPTION C.2b - Braid	440,816	\$484,017,020
OPTION C.5b - Broom	440,816	\$479,480,566
OPTION D.2 - Phased in Place	440,816	\$521,450,374
BREAKOUT COST:		
OPT E CENTRAL OFFICE	20,700	\$17,426,965
OPT #1 F.1 FIELD HOUSE	36,000	\$29,665,692
OPT #2 F.2 FIELD HOUSE	72,000	\$55,701,328
OPT #3 FH3 ADD/RENOVATE FIELD HOUSE	48,000	\$32,540,753
OPT #4 FH.4 FIELD HOUSE	60,000	\$46,872,083
OPT G.0 RENOVATE FIELD HOUSE LONG TERM	34,000	\$21,811,305
OPT G.2 RENOVATE FIELD HOUSE 5-10 YR	34,000	\$2,008,250
OPT H.1 POOL	16,400	\$21,811,305
MASS TIMBER - SCOPE A (ALL STRUCT.)		\$26,884,351
MASS TIMBER - SCOPE B (HYBRID)		\$20,812,111
MASS TIMBER - SCOPE C (GYM/CAFÉ/MEDIA)		\$1,055,600

ALTERNATES:

NO.1 - IN LIEU OF GROUND SOURCE HEAT PUMP SYSTEM SUBSTITUE AN AIR SOURCE HEAT PUMP SYSTEM	(\$16,015,476)
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NOTES AND ESTIMATE COMMENTS:

*NOTE - THERE ARE NO CALCULABLE PREMIUMS ASSOCIATED WITH THE RADIAL GEOMETRIES ON THE BRANCH, BLOOM AND BRAID OPTIONS.

*NOTE - THE ABOVE COST ARE BASED UPON HISTORICAL CONSTRUCTION COSTS AND ARE OFFERED FOR ANALYSIS OF THE RESPECTIVE DELTA BETWEEN OPTIONS

*NOTE - THE ABOVE COST ARE NOT INTENDED TO ESTABLISH THE OWNERS CONSTRUCTION BUDGET

PSR
Lexington High School School
Lexington, MA

9-Oct-24

Designer: SMMA

A.1 BASE REPAIR

	GSF		COST PER S.F.	TOTAL
RENOVATION	352,000	GSF	\$404.59	\$142,414,600
HAZARDOUS WASTE REMOVAL		ALLOW		\$2,074,140
SITEWORK				\$7,000,000
TOTAL DIRECT COST				\$151,488,740
CM CHPTR 149a				
ESCALATION (mid point of schedule)		8.4%		\$12,725,054
CM CONTINGENCY		3%		\$4,926,414
DESIGN CONTINGENCY		15%		\$24,632,069
GENERAL CONDITIONS	48	MOS	\$350,000	\$16,800,000
GENERAL REQUIREMENTS/PHASING		4.0%		\$8,422,891
BUILDING PERMIT	waived	waived		
P&P BOND & GL INSURANCE		2.75%		\$6,022,367
FEE		3%		\$6,750,526
TOTAL CONSTRUCTION COST				\$231,768,061
COST PER SF				\$658.43

PSR
Lexington High School School
Lexington, MA

9-Oct-24

Designer: SMMA

OPTION B.1

	GSF		COST PER S.F.	TOTAL
ADDITION & RENOVATION	440,816	GSF	\$637.67	\$281,096,272
HAZARDOUS MAT'L & SOILS				\$4,100,000
DEMOLITION	264,027	GSF	\$10.50	\$2,772,284
SITEWORK				\$33,331,196
TOTAL DIRECT COST				\$321,299,752
CM CHPTR 149a				
ESCALATION (mid point of schedule)		12.9%		\$41,447,668
CM CONTINGENCY		3%		\$10,882,423
DESIGN CONTINGENCY		15%		\$54,412,113
GENERAL CONDITIONS	72	MOS	\$350,000	\$25,200,000
GENERAL REQUIREMENTS/PHASING		6.0%		\$27,194,517
BUILDING PERMIT	waived	waived		
P&P BOND & GL INSURANCE		2.75%		\$13,212,003
FEE		3%		\$14,809,454
TOTAL CONSTRUCTION COST COST PER SF				\$508,457,930
				\$1,153.45

PSR
Lexington High School School
Lexington, MA

9-Oct-24

Designer: SMMA

OPTION B.4

	GSF		COST PER S.F.	TOTAL
ADDITION & RENOVATION	440,816	GSF	\$628.67	\$277,129,548
HAZARDOUS MAT'L & SOILS				\$4,100,000
DEMOLITION	264,027	GSF	\$10.50	\$2,772,284
SITEWORK				\$32,674,218
TOTAL DIRECT COST				\$316,676,049
CM CHPTR 149a				-----
ESCALATION (mid point of schedule)		13.4%		\$42,434,591
CM CONTINGENCY		3%		\$10,773,319
DESIGN CONTINGENCY		15%		\$53,866,596
GENERAL CONDITIONS	76	MOS	\$350,000	\$26,600,000
GENERAL REQUIREMENTS/PHASING		6.0%		\$27,021,033
BUILDING PERMIT	waived	waived		
P&P BOND & GL INSURANCE		2.75%		\$13,127,719
FEE		3%		\$14,714,979
TOTAL CONSTRUCTION COST COST PER SF				\$505,214,287
				\$1,146.09

PSR
Lexington High School School
Lexington, MA

9-Oct-24

Designer: SMMA

OPTION C.1d

	GSF		COST PER S.F.	TOTAL
NEW CONSTRUCTION	440,816	GSF	\$636.11	\$280,407,364
HAZARDOUS MAT'L & SOILS				\$4,100,000
DEMOLITION	352,000	GSF	\$10.50	\$3,696,000
SITEWORK				\$36,359,383
TOTAL DIRECT COST				\$324,562,747
CM CHPTR 149a				
ESCALATION (mid point of schedule)		10.25%		\$33,267,682
CM CONTINGENCY		3%		\$10,734,913
DESIGN CONTINGENCY		15%		\$53,674,564
GENERAL CONDITIONS	52	MOS	\$350,000	\$18,200,000
GENERAL REQUIREMENTS		3.0%		\$13,213,197
BUILDING PERMIT	waived	waived		
P&P BOND & GL INSURANCE		2.75%		\$12,475,460
FEE		3%		\$13,983,857
TOTAL CONSTRUCTION COST COST PER SF				\$480,112,421
				\$1,089.14

PSR
Lexington High School School
Lexington, MA

9-Oct-24

Designer: SMMA

OPTION C.2b

	GSF		COST PER S.F.	TOTAL
NEW CONSTRUCTION	440,816	GSF	\$641.50	\$282,784,476
HAZARDOUS MAT'L & SOILS				\$4,100,000
DEMOLITION	352,000	GSF	\$10.50	\$3,696,000
SITEWORK				\$36,735,609
TOTAL DIRECT COST				\$327,316,085
CM CHPTR 149a				-----
ESCALATION (mid point of schedule)		10.25%		\$33,549,899
CM CONTINGENCY		3%		\$10,825,980
DESIGN CONTINGENCY		15%		\$54,129,898
GENERAL CONDITIONS	52	MOS	\$350,000	\$18,200,000
GENERAL REQUIREMENTS		3.0%		\$13,320,656
BUILDING PERMIT	waived	waived		
P&P BOND & GL INSURANCE		2.75%		\$12,576,919
FEE		3%		\$14,097,583
TOTAL CONSTRUCTION COST COST PER SF				\$484,017,020
				\$1,098.00

PSR
Lexington High School School
Lexington, MA

9-Oct-24

Designer: SMMA

OPTION C.5b

	GSF		COST PER S.F.	TOTAL
NEW CONSTRUCTION	440,816	GSF	\$635.80	\$280,272,182
HAZARDOUS MAT'L & SOILS				\$4,100,000
DEMOLITION	352,000	GSF	\$10.50	\$3,696,000
SITEWORK				\$36,049,012
TOTAL DIRECT COST				\$324,117,194
CM CHPTR 149a				
ESCALATION (mid point of schedule)		10.25%		\$33,222,012
CM CONTINGENCY		3%		\$10,720,176
DESIGN CONTINGENCY		15%		\$53,600,881
GENERAL CONDITIONS	52	MOS	\$350,000	\$18,200,000
GENERAL REQUIREMENTS		3.0%		\$13,195,808
BUILDING PERMIT	waived	waived		
P&P BOND & GL INSURANCE		2.75%		\$12,459,042
FEE		3%		\$13,965,453
TOTAL CONSTRUCTION COST COST PER SF				\$479,480,566
				\$1,087.71

PSR
Lexington High School School
Lexington, MA

9-Oct-24

Designer: SMMA

OPTION D.2

	GSF		COST PER S.F.	TOTAL
NEW CONSTRUCTION	440,816	GSF	\$637.70	\$281,109,124
HAZARDOUS MAT'L & SOILS				\$4,100,000
DEMOLITION - PHASED	352,000	GSF	\$15.00	\$5,280,000
SITEWORK				\$35,044,339
TOTAL DIRECT COST				\$325,533,463
CM CHPTR 149a				-----
ESCALATION (mid point of schedule)		13.90%		\$45,249,151
CM CONTINGENCY		3%		\$11,123,478
DESIGN CONTINGENCY		15%		\$55,617,392
GENERAL CONDITIONS	78	MOS	\$350,000	\$27,300,000
GENERAL REQUIREMENTS/PHASING		6.0%		\$27,889,409
BUILDING PERMIT	waived	waived		
P&P BOND & GL INSURANCE		2.75%		\$13,549,605
FEE		3%		\$15,187,875
TOTAL CONSTRUCTION COST COST PER SF				\$521,450,374
				\$1,182.92

PROJECT: Lexington High School School
 LOCATION: Lexington, MA
 CLIENT: SMMA
 DATE: 09-Oct-24

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



OPT B.1 RENO/ADD ESTIMATE TOTAL	OPT B.4 RENO/ADD ESTIMATE TOTAL
\$12,419,650	\$12,377,724
\$0	\$0
\$3,577,013	\$3,725,762
\$0	\$0
\$0	\$0
\$12,912,022	\$11,156,563
\$9,411,998	\$8,807,248
\$22,060,650	\$19,639,242
\$10,259,745	\$9,084,743
\$455,600	\$455,600
\$8,269,243	\$8,893,667
\$249,250	\$249,250
\$19,261,782	\$20,859,982
\$4,781,804	\$4,781,804
\$6,258,011	\$6,206,450
\$1,368,000	\$1,368,000
\$386,400	\$386,400
\$7,493,872	\$7,493,872
\$6,612,240	\$6,612,240
\$6,612,240	\$6,612,240

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

	OPT B.1 RENO/ADD ESTIMATE TOTAL	OPT B.4 RENO/ADD ESTIMATE TOTAL
	\$1,110,000	\$1,110,000
	\$14,491,572	\$14,491,572
	\$63,340,619	\$63,340,619
	\$4,007,140	\$4,007,140
	\$23,193,894	\$20,825,102
	\$8,309,382	\$8,309,382
	\$10,210,912	\$10,210,912
	\$9,081,789	\$9,081,789
E10 - EQUIPMENT		
E1010 COMMERCIAL EQUIPMENT	\$2,500,000	\$2,500,000
E1090 OTHER EQUIPMENT	\$3,144,200	\$3,144,200
E20 - FURNISHINGS		
E 2010 FIXED FURNISHINGS	\$5,712,294	\$5,663,747
E2020 MOVABLE FURNISHINGS	\$0	\$0
F10 - SPECIAL CONSTRUCTION		
F1010 SPECIAL STRUCTURES	\$0	\$0
F1020 INTEGRATED CONSTRUCTION	\$0	\$0
F1030 SPECIAL CONSTRUCTION SYSTEMS	\$0	\$0
F1040 SPECIAL FACILITIES	\$0	\$0
F1050 SPECIAL CONTROLS & INSTRUMENTATION	\$0	\$0
F20 - SELECTIVE BUILDING DEMOLITION		
F2010 BUILDING ELEMENTS DEMOLITION	\$3,604,950	\$5,734,300
F2020 HAZARDOUS COMPONENTS ABATEMENT	\$0	\$0
BUILDING COST	\$281,096,272	\$277,129,548

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

SITEWORK COST**TOTAL DIRECT COST**

OPT B.1 RENO/ADD ESTIMATE TOTAL	OPT B.4 RENO/ADD ESTIMATE TOTAL
\$723,650	\$723,650
\$2,369,125	\$2,369,125
\$3,281,333	\$3,281,333
\$0	\$0
\$4,128,210	\$3,520,292
\$0	\$0
\$2,182,831	\$2,512,585
\$5,189,562	\$5,189,562
\$7,270,273	\$7,251,299
\$711,000	\$711,000
\$310,000	\$310,000
\$4,101,312	\$3,810,222
\$0	\$0
\$0	\$0
\$0	\$0
\$0	\$0
\$1,657,000	\$1,588,250
\$1,406,900	\$1,406,900
<hr/> \$33,331,196	<hr/> \$32,674,218
<hr/> \$314,427,468	<hr/> \$309,803,766

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO			
			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	355	\$212,933	384	\$230,267		
Frost wall - 4 'x 20"	\$1,550.00	CY	789	\$1,222,395	853	\$1,321,901		
Interior Foundations	\$1,200.00	CY	75	\$90,000	75	\$90,000		
Column Footing	\$675.00	CY	2,876	\$1,941,559	2,522	\$1,702,204		
Elev Mat - 12"	\$650.00	CY	12	\$7,800	12	\$7,800		
Elev pit wall	\$1,100.00	CY	14	\$15,400	14	\$15,400		
Pilasters	\$1,200.00	CY	158	\$189,274	171	\$204,681		
Equipment pads	\$25,000.00	LS	1	\$25,000	1	\$25,000		
New One sided foundation at Existing	\$525.00	LF	1,387	\$728,175	2,186	\$1,147,650		
New Seismic foundation at renovation	\$5.00	GSF	86,570	\$432,850	140,980	\$704,900		
Foundation Premium at future expasnio	\$5.00	FTP			21,724	\$108,620		
<u>072100 INSULATION</u>								
4" Rigid ext. found. insul w/prot.bd	\$4.95	SF	18,324	\$90,704	22,560	\$111,672		
<u>071000 DAMPROOF., WATERPROOF. & CAULKING*</u>								
Foundation dampproofing	\$2.30	SF	18,324	\$42,145	22,560	\$51,888		
<u>310000 EARTHWORK</u>								
Foundation Excavation and Backfill	25.00	CY	12,784	\$319,598	11,208	\$280,198		
Excavate and Backfill existing perimete	95.00	CY	822	\$78,083	1,295	\$123,064		
Structural fill	58.00	CY	7,200	\$417,600	7,200	\$417,600		
<i>* note reduced structural fill at b.1</i>								

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Rigid Inclusions -new Mini plies at interior seismic found.	35.00 250,000.00	FTP LS	172,583 1	\$6,040,405 \$250,000	151,307 1	\$5,295,745 \$250,000
Under slab Drain	\$1.25	SF	172,583	\$215,729	151,307	\$189,134
Dewatering	\$100,000.00	LS	1	\$100,000	1	\$100,000
				\$12,419,650		\$12,377,724
				14mil		
A1030 SLAB ON GRADE						
<u>310000 EARTHWORK</u>						
12" Gravel base	\$55.00	CY	6,392	\$351,558	5,604	\$308,218
<u>033000 CAST IN PLACE CONCRETE</u>						
5" Slab on Grade: 4,000 psi, NW, (incl. placement)	\$310.00	CY	2,663	\$825,629	2,335	\$723,845
Welded wire fabric	\$2.68	SF	172,583	\$462,522	151,307	\$405,503
Control Joint	\$3.50	LF	11,506	\$40,269	10,087	\$35,305
Trowel Finish	\$2.50	SF	172,583	\$431,458	151,307	\$378,268
Slab Patching @ Sesmic floundation	\$35.00	SF	5,000	\$175,000	10,000	\$350,000
Underslab plumbing	\$35.00	SF	10,000	\$350,000	20,000	\$700,000
<u>072100 INSULATION</u>						
4" Rigid Slab Insul. - 100%	\$4.35	SF	172,583	\$750,736	151,307	\$658,185
<u>072616 BELOW GRADE VAPOR RETARDER</u>						
Stegro vapor barrier	\$1.10	SF	172,583	\$189,841	151,307	\$166,438
				\$3,577,013		\$3,725,762

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
TOTAL A10 FOUNDATIONS				\$15,996,663		\$16,103,485
B. SHELL						
B10 - SUPERSTRUCTURE						
B1010 FLOOR CONSTRUCTION						
<u>051200 STRUCTURAL STEEL</u>						
New Construction:						
Floor frame (13 lbs/sf)	\$5,450.00	TONS	1,181	\$6,435,412	965	\$5,261,640
Steel Connections - 10%	\$5,450.00	TONS	118	\$643,541	97	\$526,164
Lateral Brace - (1 lbs/sf)	\$5,450.00	TONS	91	\$495,032	74	\$404,742
Misc Steel - (1 lbs/sf)	\$5,450.00	TONS	83	\$451,497	73	\$399,619
Shear stud	\$5.50	EA	18,166	\$99,915	14,853	\$81,691
Future Expansion - Premium:						
Add steel (.5 lbs/sf)	\$5,350.00	TONS			10.86	\$58,112
Reframe/infill floor openings	\$2.50	GSF	86,570	\$216,425	140,980	\$352,450
Renovation Structural:						
Allow for seismic brace frame (1 lbs/sf)	\$8,000.00	TONS	43.285	\$346,280	70.49	\$563,920
<u>033000 CAST IN PLACE CONCRETE</u>						
3 1/4" LW Deck fill	\$12.75	SF	181,663	\$2,316,203	148,529	\$1,893,745
<u>053100 STEEL DECKING</u>						
3" x 18 Ga. comp deck	\$5.90	SF	181,663	\$1,071,812	148,529	\$876,321
<u>072100 INSULATION</u>						
Spray on fireproofing - beam & column	\$2.95	SF	181,663	\$535,906	148,529	\$438,161
Intumescent - allow	\$300,000.00	LS	1	\$300,000	1	\$300,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
				\$12,912,022		\$11,156,563
B1020 ROOF CONSTRUCTION						
<u>033000 CAST IN PLACE CONCRETE</u>						
6" NW Deck fill - rtu pad	\$9.00	SF	35,000	\$315,000	35,000	\$315,000
<u>051200 STRUCTURAL STEEL</u>						
New Construction:						
Roof frame (11 lbs/sf)	\$5,450.00	TONS	949.20650	\$5,173,175	832.18850	\$4,535,427
Steel Connections - 10%	\$5,450.00	TONS	94.92065	\$517,318	83.21885	\$453,543
Lateral Brace - (1 lbs/sf)	\$5,450.00	TONS	86.29150	\$470,289	75.65350	\$412,312
Misc Steel - (1 lbs/sf)	\$5,450.00	TONS	86.29150	\$470,289	75.65350	\$412,312
Addition Structure:						
Roof screen frame	inc. above					
Galv. RTU dunnage	inc. above					
Frame Canopies	inc. above					
Future Expansion - Premium:						
Add steel (2 lbs/sf)	\$5,350.00	TONS			21.72	\$116,223
3 1/4" LW Deck Fill	\$10.50	SF			21,724.00	\$228,102
Renovation Steel:						
Reinforce at New RTU's	\$1.00	GSF	86,570	\$86,570	140,980	\$140,980
Galv Roof Dunnage	\$1.00	GSF	86,570	\$86,570	140,980	\$140,980
<u>053100 STEEL DECKING</u>						
3" x 18 Ga roof deck - typ.	\$5.90	SF	154,583	\$912,040	133,307	\$786,511
3" x 18 Ga acoust. deck - gym/aux. gym	\$13.50	SF	18,000	\$243,000	18,000	\$243,000
1 1/2" x 20 Ga canopy roof deck	\$6.00	SF	500	\$3,000	500	\$3,000
<u>072100 INSULATION</u>						

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Spray on fireproofing - beam & colum	\$2.95	SF	154,583	\$456,020	133,307	\$393,256
Spray on fireproofing - 1 hr deck	\$2.45	SF	154,583	\$378,728	133,307	\$326,602
Intumescent - allow	\$300,000.00	LS	1	\$300,000	1	\$300,000
				\$9,411,998		\$8,807,248
TOTAL B10 SUPERSTRUCTURE				\$22,324,020		\$19,963,811

B20 - EXTERIOR ENCLOSURE

B2010 EXTERIOR WALLS

040001 MASONRY*

MOCK -UP	\$125,000.00	LS	1	\$125,000	1	\$125,000
Masonry Veneer:						
Granite Veneer - 2%	\$100.00	SF	2,485	\$248,531	2,200	\$219,974
Masonry Veneer - 60%	\$50.00	SF	74,559	\$3,727,958	65,992	\$3,299,603
Canopy col. -complete	\$8,500.00	EA	10	\$85,000	10	\$85,000
Stainless steel masonry flashing	\$29.00	LF	3,194	\$92,626	3,454	\$100,166
Architectural Precast:						
Precast Window Sill	\$68.00	LF	6,904	\$469,447	6,110	\$415,506
Misc. Trim and Accents	\$10.00	SF	74,559	\$745,592	65,992	\$659,921
CMU Exterior Wall:						
4" Int gym veneer	\$36.00	SF	19,375	\$697,500	8,910	\$320,760

054000 COLD FORMED METAL FRAMING

8" -12" x 18 Ga. stud @ typical wall	\$21.00	SF	124,265	\$2,609,570	109,987	\$2,309,722
1/2" Dens glass sheathing-ext. wall	\$4.50	SF	124,265	\$559,194	109,987	\$494,940
Soffit/eave framing - assume projected c	\$9.50	SF	7,985	\$75,858	8,635	\$82,033
3" Canopy ceiling framing	\$7.00	SF	1,500	\$10,500	1,500	\$10,500
1/2" Dens glass sheathing - eave/cornice	\$4.50	SF	7,985	\$35,933	8,635	\$38,858

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
1/2" Dens glass sheathing -canopy	\$4.50	SF	4,000	\$18,000	4,000	\$18,000
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>						
Misc. Ext Metals	\$0.50	SF	124,265	\$62,133	109,987	\$54,993
Structural thermal break	\$0.75	SF	124,265	\$93,199	109,987	\$82,490
<u>071326 AIR & VAPOR BARRIERS</u>						
Air & vapor barrier - wall	\$9.50	SF	124,265	\$1,180,520	109,987	\$1,044,874
Air & vapor barrier - cornice	\$9.50	SF	7,985	\$75,858	8,635	\$82,033
Air & vapor barrier - canopy	\$9.50	SF	4,000	\$38,000	4,000	\$38,000
<u>072100 INSULATION</u>						
Exterior Wall:						
Spray foam at perm openings	\$6.00	LF	34,518	\$207,109	30,552	\$183,311
8" Mineral wool Insul.	\$10.00	SF	124,265	\$1,242,653	109,987	\$1,099,868
3" Spray foam - stud cavity	\$4.65	SF	124,265	\$577,833	109,987	\$511,438
Bldg Cornice and CanopySoffit:						
8" Mineral wool Insul.	\$10.00	SF	7,985	\$79,850	8,635	\$86,350
3" Spray foam - stud cavity	\$4.65	SF	4,000	\$18,600	4,000	\$18,600
<u>071000 DAMPROOF., WATERPROOF. & CAULKING*</u>						
Exterior Sealants	\$2.00	SF	165,687	\$331,374	146,649	\$293,298
<u>074213 PERFORMED CLADDING</u>						
Wall Panel:						
Metal Panel - 18%	\$100.00	SF	22,368	\$2,236,775	19,798	\$1,979,762
Terra Cotta Panel - 20%	\$150.00	SF	24,853	\$3,727,958	21,997	\$3,299,603
Alum. 16 ga Panel :						
Canopy ceiling	\$45.00	SF	4,000	\$180,000	4,000	\$180,000
Roof Eave Cladding	\$100.00	SF	7,985	\$798,500	8,635	\$863,500
Roof Screen:						
Metal Panel Equipment Screen	\$65.00	SF	16,000	\$1,040,000	16,000	\$1,040,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
<u>092116 GYPSUM WALLBOARD</u>						
1 Lyr 5/8" gyp @ ext. wall	\$4.50	SF	124,265	\$559,194	109,987	\$494,940
<u>090007 PAINTING*</u>						
Exterior painting	\$0.22	SF	165,687	\$36,451	146,649	\$32,263
<u>101400 IDENTIFYING DEVICES (EXT. BLD MTD SIGNAGE)</u>						
24" Alum bldg mtd letter - allow	\$420.00	EA	57	\$23,940	57	\$23,940
Misc. Bldg mtd signage	\$50,000.00	LS	1	\$50,000	1	\$50,000
				\$22,060,650		\$19,639,242
<u>B2020 EXTERIOR WINDOWS</u>						
<u>061000 ROUGH CARPENTRY</u>						
P.T. - perim blocking	\$14.00	LF	34,518	\$483,254	30,552	\$427,726
<u>071326 AIR & VAPOR BARRIERS</u>						
Flex flashing - perim	\$10.00	LF	34,518	\$345,181	30,552	\$305,519
<u>071000 DAMPROOF., WATERPROOF. & CAULKING*</u>						
Window Caulking	\$12.75	LF	34,518	\$440,106	30,552	\$389,536
<u>080001 METAL WINDOWS*</u>						
TRP Glazing Exterior						
Alum Window - 50%	\$170.00	SF	20,711	\$3,520,849	18,331	\$3,116,291
Alum Curtainwall - 50%	\$225.00	SF	20,711	\$4,659,947	18,331	\$4,124,503
Security glazing - 15% of total	\$50.00	SF	6,213	\$310,663	5,499	\$274,967
Sun Shading:						

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Horizontal Window Sunscreen - 40%	\$225.00	SF/LF	2,071	\$465,995	1,833	\$412,450
<u>109000 MISCELLANEOUS SPECIALTIES</u>						
Alum louvers - allow	\$135.00	SF	250	\$33,750	250	\$33,750
				\$10,259,745		\$9,084,743
B2030 EXTERIOR DOORS						
<u>080001 METAL WINDOWS*</u>						
7' Alum. Doors (Incl. Hardware):						
Main Entry - dbl	\$20,000.00	EA	10	\$200,000	10	\$200,000
Side Egress- dbl	\$20,000.00	EA	8	\$160,000	8	\$160,000
Egress - sgl	\$10,000.00	EA	4	\$40,000	4	\$40,000
Auto opener - allow	\$9,000.00	PR	2	\$18,000	2	\$18,000
*Storefront at entries W /B 2020						
Security Glazing Premium	\$750.00	LVS	32	\$24,000	32	\$24,000
<u>081113 HOLLOW METALWORK</u>						
Insulated HM Doors and Frame:						
Custodial - dbl	\$3,000.00	EA	2	\$6,000	2	\$6,000
MEP - dbl	\$3,000.00	EA	2	\$6,000	2	\$6,000
<u>090007 PAINTING*</u>						
Paint HM Door & frame - dbl	\$400.00	EA	4	\$1,600	4	\$1,600
				\$455,600		\$455,600
TOTAL B20 - EXTERIOR ENCLOSURE				\$32,775,995		\$29,179,585

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO			
			QUANTITY	TOTAL	QUANTITY	TOTAL		
B30 - ROOFING								
B3010 ROOF COVERINGS								
<u>061000 ROUGH CARPENTRY</u>								
Roof Blocking - main bldg	\$1.45	SF	224,978	\$326,218	253,294	\$367,276		
Roof Blocking - canopy	\$1.20	SF	4,000	\$4,800	4,000	\$4,800		
<u>070002 ROOFING AND FLASHING*</u>								
PVC roof - canopy	\$28.00	SF	4,000	\$112,000	4,000	\$112,000		
PVC roof w/ 10" rigid insul	\$31.00	SF	224,978	\$6,974,318	253,294	\$7,852,114		
Outdoor Terrace - Premium	\$75.00	SF	4,661	\$349,575				
Roof walkway pad (2'x2')	\$8.50	SF	11,249	\$95,616	12,665	\$107,650		
Alum. Trim :								
Perimeter wall Coping	\$45.00	LF	3,194	\$143,730	3,454	\$155,430		
Base Flashing	\$34.00	LF	1,118	\$38,009	1,209	\$41,103		
Misc. flashing	\$1.00	SF	224,978	\$224,978	253,294	\$253,294		
				\$8,269,243		\$8,893,667		
B3020 ROOF OPENINGS								
<u>077200 ROOF ACCESSORIES</u>								
Roof hatch	\$4,250.00	EA	1	\$4,250	1	\$4,250		
Stage smoke hatch	\$15,000.00	EA	3	\$45,000	3	\$45,000		
OSHA Rail	\$200.00	LF	500	\$100,000	500	\$100,000		
Skylights	\$100,000.00	EA	1	\$100,000	1	\$100,000		
				\$249,250		\$249,250		
TOTAL B30 ROOFING				\$8,518,493		\$9,142,917		

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO			
			QUANTITY	TOTAL	QUANTITY	TOTAL		
C. INTERIORS								
C10 - INTERIOR CONSTRUCTION								
C1010 PARTITIONS								
<u>040001 MASONRY*</u>								
8" CMU Elev Shaft	\$43.50	SF	5,280	\$229,680	5,280	\$229,680		
4" Int gym veneer	\$36.00	SF	25,000	\$900,000	35,000	\$1,260,000		
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>								
Masonry - Clip and lintels	\$1.50	SF	30,280	\$45,420	40,280	\$60,420		
<u>061000 ROUGH CARPENTRY</u>								
Interior blocking	\$1.00	GSF	440,816	\$440,816	440,816	\$440,816		
Misc. rough carpentry	\$1.00	GSF	440,816	\$440,816	440,816	\$440,816		
Clean Saftey and Laborer	\$4.00	GSF	440,816	\$1,763,264	440,816	\$1,763,264		
<u>072100 INSULATION</u>								
Firestopping	\$0.85	GSF	440,816	\$374,694	440,816	\$374,694		
<u>081113 HOLLOW METALWORK</u>								
Interior H.M Windows, Sidelites and Transoms (INC. GLAZING):								
Door window/sidelight & transom	\$2.00	SF	440,816	\$881,632	440,816	\$881,632		
<u>083323 SPECIAL DOORS</u>								
Access panels	\$0.25	GSF	440,816	\$110,204	440,816	\$110,204		
<u>080001 METAL WINDOWS*</u>								
Interior Aluminum Storefront:								
Vestibule and Entries	\$88.00	SF	5,000	\$440,000	5,000	\$440,000		
Administration area	\$88.00	SF	1,500	\$132,000	15,400	\$1,355,200		
General Building Area	\$0.50	GSF	440,816	\$220,408	440,816	\$220,408		

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Security glazing - premium	\$50.00	SF	5,000	\$250,000	5,000	\$250,000
<u>092116 GYPSUM WALLBOARD</u>						
Drywall Partitions:						
GWB assemblies	\$28.00	GSF	440,816	\$12,342,848	440,816	\$12,342,848
Operable Partition:						
Glazed operable wall 8'x 15' (30 ea)	\$150.00	SF	3,600	\$540,000	3,600	\$540,000
Elec Op Folding Partition	\$150,000.00	LS	1	\$150,000	1	\$150,000
				\$19,261,782		\$20,859,982
 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	440,816	\$2,865,304	440,816	\$2,865,304
Electronic lock door hardware	\$1,500.00	EA	800	\$1,200,000	800	\$1,200,000
<u>080001 METAL WINDOWS*</u>						
Aluminum (Frame, Door, Glass, Glazing and Hdw):						
Vest - dbl	\$16,500.00	PR	10	\$165,000	10	\$165,000
Main office -sgl	\$4,000.00	EA	2	\$8,000	2	\$8,000
<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
Fire Shutters	\$150,000.00	LS	1	\$150,000	1	\$150,000
Security Gate and Grill	\$24,000.00	EA	16	\$384,000	16	\$384,000
				\$4,781,804		\$4,781,804

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO			
			QUANTITY	TOTAL	QUANTITY	TOTAL		
C1030 FITTINGS								
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>								
Misc. metals	\$2.00	GSF	440,816	\$881,632	440,816	\$881,632		
Auditorium Railings	\$100,000.00	LS	1	\$100,000	1	\$100,000		
Floor Opening Railings	\$450.00	LF	1,000	\$450,000	1,000	\$450,000		
<u>062000 FINISH CARPENTRY</u>								
Utility & closet shelving	\$25,000.00	LS	1	\$25,000	1	\$25,000		
Typ. window sill/apron (nic cw-gym)	\$65.00	LF	6,904	\$448,736	6,110	\$397,174		
Stage Proscenium and Aud. Trim	\$150,000.00	LS	1	\$150,000	1	\$150,000		
Misc. wood trim	\$2.00	GSF	440,816	\$881,632	440,816	\$881,632		
Media Center Built-in	\$75,000.00	LS	1	\$75,000	1	\$75,000		
<u>Custom Casework:</u>								
Admin casework	\$35,000.00	LS	1	\$35,000	1	\$35,000		
Circulation desk	\$25,000.00	LS	1	\$25,000	1	\$25,000		
<u>102113 COMPARTMENTS & CUBICLES</u>								
Solid Plastic Toilet Partitions:								
Std. partition	\$1,385.00	EA	45	\$62,325	45	\$62,325		
HC partition	\$1,590.00	EA	20	\$31,800	20	\$31,800		
<u>102813 TOILET & BATH ACCESSORIES</u>								
Building Toilet Accessories	\$0.92	GSF	440,816	\$405,551	440,816	\$405,551		
<u>*Excludes classroom accessories</u>								
<u>101100 MARKERBOARDS & TACKBOARDS</u>								
Marker board tackboard	\$1.35	GSF	440,816	\$595,102	440,816	\$595,102		
Glass Display Case	\$1,000.00	LF	100	\$100,000	100	\$100,000		
<u>109000 MISCELLANEOUS SPECIALTIES</u>								

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Student Lockers	\$450.00	EA	2,315	\$1,041,750	2,315	\$1,041,750
PE/Team Lockers	\$400.00	EA	500	\$200,000	500	\$200,000
Kitchen staff locker(12"wx15" D x 6'h)	\$350.00	EA	20	\$7,000	20	\$7,000
Custodian staff(12"wx15" D x 6'h)	\$350.00	EA	5	\$1,750	5	\$1,750
Wall & corner guards - allow	\$5,000.00	LS	1	\$5,000	1	\$5,000
Fire extinguisher and cab - allow	\$550.00	EA	50	\$27,500	50	\$27,500
Cubicle curtain track w/ curtain - health	\$1,500.00	EA	2	\$3,000	2	\$3,000
Misc. specialties	\$0.50	GSF	440,816	\$220,408	440,816	\$220,408
<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	440,816	\$176,326	440,816	\$176,326
Environmental graphics	\$300,000.00	LS	1	\$300,000	1	\$300,000
				-----		-----
				\$6,258,011		\$6,206,450
TOTAL C10 - INTERIOR CONSTRUCTION				\$30,301,597		\$31,848,236
C20 - STAIRS						
C2010 STAIR CONSTRUCTION						
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>						
Metal Pan Stair w/Rails:						
Egress corridor stair	\$55,000.00	FLT	14	\$770,000	14	\$770,000
Learning/Community Stair	\$250,000.00	FLT	2	\$500,000	2	\$500,000
Upgrade existng Stair railings	\$12,500.00	FLT	4	\$50,000	4	\$50,000
<u>033000 CAST IN PLACE CONCRETE</u>						
Conc stair pan fill - full flt	\$3,000.00	FLTS	16	\$48,000	16	\$48,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
				\$1,368,000		\$1,368,000
C2020 STAIR FINISHES						
<u>062000 FINISH CARPENTRY</u>						
Learning/Community Stair	\$100,000.00	FLT	2	\$200,000	2	\$200,000
<u>090005 RESILIENT FLOORING*</u>						
Rubber treads and risers	\$4,800.00	FLTS	18	\$86,400	18	\$86,400
<u>090007 PAINTING*</u>						
Paint stair & rails - full flt	\$5,000.00	FLTS	20	\$100,000	20	\$100,000
				\$386,400		\$386,400
TOTAL C20 - STAIRS				\$1,754,400		\$1,754,400
C30 - INTERIOR FINISHES						
C3010 WALL FINISHES						
Wall Finish	\$17.00	GSF	440,816	\$7,493,872	440,816	\$7,493,872
				\$7,493,872		\$7,493,872
C3020 FLOOR FINISHES						
Floor Finish	\$15.00	GSF	440,816	\$6,612,240	440,816	\$6,612,240
				-----		-----

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
				\$6,612,240		\$6,612,240
C3030 CEILING FINISHES						
Ceiling Finish	\$15.00	GSF	440,816	\$6,612,240	440,816	\$6,612,240
				\$6,612,240		\$6,612,240
TOTAL C30 - INTERIOR FINISHES				\$20,718,352		\$20,718,352
D. SERVICES						
D10 - CONVEYING						
D1010 ELEVATORS & LIFTS						
<u>140001 ELEVATORS*</u>						
Traction 5,000 lbs Passenger Elev	\$90,000.00	STOP	12	\$1,080,000	12	\$1,080,000
Elevator Metals	\$10,000.00	LS	3	\$30,000	3	\$30,000
				\$1,110,000		\$1,110,000
TOTAL D10 - CONVEYING				\$1,110,000		\$1,110,000
D20 - PLUMBING						
D2010 PLUMBING						
ASHP Water heater	\$500,000.00	LS	2	\$1,000,000	2	\$1,000,000
HW Storage tanks - 500 Gal	\$20,000.00	EA	3	\$60,000	3	\$60,000
Elec 108 kw Eelc HW heater	\$35,000.00	EA	2	\$70,000	2	\$70,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
HW Storage tanks - 150 Gal	\$7,500.00	EA	1	\$7,500	1	\$7,500
Roof Drainage	\$3.50	FTP	440,816	\$1,542,856	440,816	\$1,542,856
Stormwater ejectors	\$150,000.00	LS	1	\$150,000	1	\$150,000
Fixtures & Rough-in	\$22.50	GSF	440,816	\$9,918,360	440,816	\$9,918,360
Kitchen Connections	\$200,000.00	LS	1	\$200,000	1	\$200,000
Test, Permit, BIM, Misc.	\$3.50	GSF	440,816	\$1,542,856	440,816	\$1,542,856
				\$14,491,572		\$14,491,572
TOTAL D20 - PLUMBING			\$32.87	\$14,491,572	\$32.87	\$14,491,572
D30 - HVAC						
D3010 HVAC						
Geo Wells - 800' depth @ 350 EA	\$70.00	VLF	280,000	\$19,600,000	280,000	\$19,600,000
6" Well casing - 220' ea	\$34.00	VLF	77,000	\$2,618,000	77,000	\$2,618,000
Valve Vault	\$65,000.00	EA	10	\$650,000	10	\$650,000
Heat Generation						
Plate and Frame Heat Exchanger	\$60,000.00	EA	3	\$180,000	3	\$180,000
Back up Elec Boiler	\$100,000.00	EA	2	\$200,000	2	\$200,000
HW Pump and trim	\$25,000.00	LS	1	\$25,000	1	\$25,000
Base Mtd Sec. HWP w/ VFD	\$30,000.00	EA	10	\$300,000	10	\$300,000
Glycol Feed System	\$250,000.00	LS	1	\$250,000	1	\$250,000
Piping valve and trim	\$350,000.00	LS	1	\$350,000	1	\$350,000
HW/CW Distribution:						
Fan coil heat pump	\$4.00	GSF	440,816	\$1,763,264	440,816	\$1,763,264
Mechanical HW/CW Piping	\$9.00	GSF	440,816	\$3,967,344	440,816	\$3,967,344
Misc. HW Devices	\$2.50	GSF	91,000	\$227,500	91,000	\$227,500
Air Equipment:						
AHU Units - Large Spaces	\$38.00	CFM	170,000	\$6,460,000	170,000	\$6,460,000
DOAS Units - Classroom	\$38.00	CFM	125,000	\$4,750,000	125,000	\$4,750,000
MAU 4,500 CFM	\$30.00	CFM	4,500	\$135,000	4,500	\$135,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Freeze Protection	\$2,000.00	EA	10	\$20,000	10	\$20,000
Curbs	\$5,500.00	EA	10	\$55,000	10	\$55,000
Merv Filter	\$2,500.00	EA	20	\$50,000	20	\$50,000
Sound Attenuation	\$0.85	CFM	295,000	\$250,750	295,000	\$250,750
Pipe Valve and Fitting Connections	\$6,500.00	EA	10	\$65,000	10	\$65,000
Grilles registers and dampers	\$1.50	GSF	440,816	\$661,224	440,816	\$661,224
Ductwork	\$20.00	LBS	440,816	\$8,816,320	440,816	\$8,816,320
CV/VAV exhaust	\$975.00	EA	400	\$390,000	400	\$390,000
Kitchen Exhaust Ductwork	\$250,000.00	LS	1	\$250,000	1	\$250,000
Duct Insul	\$6.50	SF	352,653	\$2,292,243	352,653	\$2,292,243
Exhaust Fan	\$5,000.00	EA	35	\$175,000	35	\$175,000
Split AC	\$20,000.00	EA	25	\$500,000	25	\$500,000
Temp Control (Demand CO2)	\$12.00	GSF	440,816	\$5,289,792	440,816	\$5,289,792
Seismic and Vibration	\$0.85	GSF	440,816	\$374,694	440,816	\$374,694
Rigging	\$250,000.00	LS	1	\$250,000	1	\$250,000
BIM/ Commission coordination	\$2.50	GSF	440,816	\$1,102,040	440,816	\$1,102,040
HVAC Supervision	\$3.00	GSF	440,816	\$1,322,448	440,816	\$1,322,448
				\$63,340,619		\$63,340,619
TOTAL D30 - HVAC			\$143.69	\$63,340,619	\$143.69	\$63,340,619
D40 - FIRE PROTECTION						
D4010 SPRINKLERS						
<u>210001 FIRE SUPPRESSION*</u>						
Sprinkler system - wet	\$8.75	GSF	440,816	\$3,857,140	440,816	\$3,857,140
Fire Pump	\$150,000.00	LS	1	\$150,000	1	\$150,000
				\$4,007,140		\$4,007,140

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
TOTAL D40 - FIRE PROTECTION			\$9.09	\$4,007,140	\$9.09	\$4,007,140
D50 - ELECTRICAL						
D5010 ELECTRICAL SERVICE & DISTRIBUTION						
<u>260001 ELECTRICAL*</u>						
(2) 4,000 amp MDP and Elec. Panel and 1,250 KW Emergency Generator	\$13.00	GSF	440,816	\$5,730,608	440,816	\$5,730,608
Digital Metering	\$850,000.00	LS	1	\$850,000	1	\$850,000
	\$5,000.00	EA	75	\$375,000	75	\$375,000
PV SYSTEMS :						
5,000 amp PV MDP	\$550,000.00	LS	1	\$550,000	1	\$550,000
PV Site Canopy/Panel - \$5.00/ per watt	\$60.00	SF	93,060	\$5,583,600	93,060	\$5,583,600
PV Low Roof Panels - \$4.50/ per watt	\$54.00	SF	33,808	\$1,825,632	27,703	\$1,495,962
PV High Roof Panels - \$4.50/ per watt	\$54.00	SF	84,251	\$4,549,554	69,258	\$3,739,932
PV Integrated Bldg element	\$200.00	SF	0	\$0	0	\$0
Vertical Solar Equipment	\$250.00	SF	4,918	\$1,229,500	0	\$0
Battery Storage	\$2,500,000.00	LS	1	\$2,500,000	1	\$2,500,000
				\$23,193,894		\$20,825,102
D5020 LIGHTING & BRANCH WIRING						
<u>260001 ELECTRICAL*</u>						
Lighting	\$16.00	GSF	440,816	\$7,053,056	440,816	\$7,053,056
Lighting Control (inc device oc)	\$2.85	GSF	440,816	\$1,256,326	440,816	\$1,256,326
				\$8,309,382		\$8,309,382

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO			
			QUANTITY	TOTAL	QUANTITY	TOTAL		
D5030 COMMUNICATION & SECURITY								
<u>260001 ELECTRICAL*</u>								
CCTV	\$6.00	GSF	440,816	\$2,644,896	440,816	\$2,644,896		
Access control	\$4.00	GSF	440,816	\$1,763,264	440,816	\$1,763,264		
Video entry system	\$45,000.00	LS	1	\$45,000	1	\$45,000		
Digital Signage	\$4,000.00	EA	10	\$40,000	10	\$40,000		
Tele/data cabling, racks and switches	\$9.50	GSF	440,816	\$4,187,752	440,816	\$4,187,752		
Classroom AV rough-in only	\$1,500.00	EA	225	\$337,500	225	\$337,500		
Speech Reinforcement	\$3,300.00	EA	225	\$742,500	225	\$742,500		
Aud Lighting and Diming	\$250,000.00	LS	1	\$250,000	1	\$250,000		
Aud Sound System	\$200,000.00	LS	1	\$200,000	1	\$200,000		
				-----		-----		
				\$10,210,912		\$10,210,912		
D5090 OTHER ELECTRICAL SYSTEMS								
<u>260001 ELECTRICAL*</u>								
Rath 2way call	\$15,000.00	EA	8	\$120,000	8	\$120,000		
Fire Alarm	\$4.80	GSF	440,816	\$2,115,917	440,816	\$2,115,917		
Devices	\$3.25	GSF	440,816	\$1,432,652	440,816	\$1,432,652		
Clocks and PA	\$1.20	GSF	440,816	\$528,979	440,816	\$528,979		
Gym/Café Sound System	\$1.00	GSF	440,816	\$440,816	440,816	\$440,816		
Lighting Protection	\$0.78	GSF	440,816	\$343,836	440,816	\$343,836		
Kitchen/Mechanical Wiring	\$3.50	GSF	440,816	\$1,542,856	440,816	\$1,542,856		
Bi-Direction Antenna	\$0.80	GSF	440,816	\$352,653	440,816	\$352,653		
Test Permit and Misc.	\$5.00	GSF	440,816	\$2,204,080	440,816	\$2,204,080		
By others:								
Telephone system								
Classroom projectors								
				-----		-----		
				\$9,081,789		\$9,081,789		

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
TOTAL D50 - ELECTRICAL			\$115.23	\$50,795,977	\$109.86	\$48,427,185
E. EQUIPMENT & FURNISHINGS						
E10 - EQUIPMENT						
E1010 COMMERCIAL EQUIPMENT						
<u>114000 FOOD SERVICE EQUIPMENT</u>						
Kitchen equipment - new	\$2,500,000.00	LS	1	\$2,500,000	1	\$2,500,000
				\$2,500,000		\$2,500,000
E1090 OTHER EQUIPMENT						
<u>113100 APPLIANCES</u>						
Staff kitchen refrigerator	\$1,000.00	EA	16	\$16,000	16	\$16,000
Staff kitchen microwave	\$500.00	EA	7	\$3,500	7	\$3,500
Medical office refrigerator w/ice	\$1,000.00	EA	2	\$2,000	2	\$2,000
Adult living classroom	\$30,000.00	LS	1	\$30,000	1	\$30,000
<u>116600 ATHLETIC & SPORTS EQUIPMENT</u>						
Basketball backstops - electric	\$9,500.00	EA	6	\$57,000	6	\$57,000
Wall padding - 6'	\$15.00	SF	1,000	\$15,000	1,000	\$15,000
Roll up curtain (2 EA)	\$36.00	SF	5,800	\$208,800	5,800	\$208,800
Volley ball court equip.	\$700.00	EA	2	\$1,400	2	\$1,400
Scoreboard and shot clock	\$24,000.00	EA	3	\$72,000	3	\$72,000
Bleachers	\$250,000.00	LS	1	\$250,000	1	\$250,000
Misc. Gym Equipment	\$50,000.00	LS	1	\$50,000	1	\$50,000
<u>115213 PROJECTION SCREENS</u>						
Projection screen - various areas	\$20,000.00	EA	8	\$160,000	8	\$160,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
<u>116143 THEATRICAL EQUIPMENT</u>						
Auditorium :						
Stage Rigging and Drapes	\$1,200,000.00	LS	1	\$1,200,000	1	\$1,200,000
Auditorium Seating	\$375.00	EA	1,000	\$375,000	1,000	\$375,000
<u>119000 MISC. EQUIPMENT</u>						
Green House	\$150,000.00	LS	1	\$150,000	1	\$150,000
Loading dock leveler and equipment	\$100,000.00	LS	1	\$100,000	1	\$100,000
Science Lab Equipment	\$450,000.00	LS	1	\$450,000	1	\$450,000
Kiln	\$3,500.00	EA	1	\$3,500	1	\$3,500
				\$3,144,200		\$3,144,200
TOTAL E10 - EQUIPMENT				\$5,644,200		\$5,644,200
E20 - FURNISHINGS						
E 2010 FIXED FURNISHINGS						
<u>129000 MISC. FURNISHINGS</u>						
Meco shade - manual	\$7.50	SF	41,422	\$310,663	36,662	\$274,967
Premium for Eelc op shade - 10%	\$27.00	SF	4,142	\$111,839	3,666	\$98,988
<u>123553 CLASSROOM CASEWORK</u>						
Casework	\$12.00	GSF	440,816	\$5,289,792	440,816	\$5,289,792
				\$5,712,294		\$5,663,747
E2020 MOVABLE FURNISHINGS						

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
				\$0		\$0
TOTAL E20 - FURNISHINGS				\$5,712,294		\$5,663,747
F20 - SELECTIVE BUILDING DEMOLITION						
F2010 BUILDING ELEMENTS DEMOLITION						
Demolish existing building	SEE SUMMARY PAGE					
Selective Demolition:						
Interior/Exterior gut down to structure	\$35.00	GSF	86,570	\$3,029,950	140,980	\$4,934,300
Temporary shoring	\$350,000.00	LS	1	\$350,000	1	\$350,000
Remove slab at seismic foundation	\$15.00	SF	5,000	\$75,000	10,000	\$150,000
Remove Slab at new plumbing	\$15.00	SF	10,000	\$150,000	20,000	\$300,000
				\$3,604,950		\$5,734,300
F2020 HAZARDOUS COMPONENTS ABATEMENT						
Hazardous Waste Allowance	SEE SUMMARY PAGE					
				\$0		\$0
TOTAL F20 - SELECTIVE BUILDING DEMOLITION				\$3,604,950		\$5,734,300
G. BUILDING SITEWORK						
G10 - SITE PREPARATION						
G1010 SITE CLEARING						
<u>311000 SITE PREPARATION & CLEARING</u>						

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Construction fence	12.50	LF	7,500	\$93,750	7,500	\$93,750
Construction entrance pad	11.00	SF	2,500	\$27,500	2,500	\$27,500
Construction gates	1,200.00	EA	2	\$2,400	2	\$2,400
Clear and Grub	15,000.00	ACRES	8	\$120,000	8	\$120,000
Protect stockpile	50,000.00	LS	1	\$50,000	1	\$50,000
Protect tree	30,000.00	LS	1	\$30,000	1	\$30,000
General Site Prep	0.20	SF	2,000,000	\$400,000	2,000,000	\$400,000
				\$723,650		\$723,650
G1020 SITE DEMOLITION & RELOCATIONS						
Erosion control	10.00	LF	7,200	\$72,000	7,200	\$72,000
Inlet Protection	110.00	EA	100	\$11,000	100	\$11,000
Erosion Control Maintance	50,000.00	LS	1	\$50,000	1	\$50,000
Sawcut bit pavement	6.50	LF	250	\$1,625	250	\$1,625
Remove bit pavement	1.20	SF	250,000	\$300,000	250,000	\$300,000
Remove concrete pavement	1.50	SF	50,000	\$75,000	50,000	\$75,000
Remove paved walkway	1.15	SF	30,000	\$34,500	30,000	\$34,500
Remove Field stand and pressbox	100,000.00	LS	1	\$100,000	1	\$100,000
Remove Utilities	250,000.00	LS	1	\$250,000	1	\$250,000
Misc. Site Removal	0.20	SF	2,000,000	\$400,000	2,000,000	\$400,000
Temporary Measures:						
Temp Sediment basin	100,000.00	LS	1	\$100,000	1	\$100,000
Temporary Parking and Access	350,000.00	LS	1	\$350,000	1	\$350,000
Snow removal	125,000.00	LS	1	\$125,000	1	\$125,000
Phasing logistics	500,000.00	LS	1	\$500,000	1	\$500,000
				\$2,369,125		\$2,369,125
G1030 SITE EARTHWORK						
<u>310000 EARTHWORK</u>						
Top Soil:						

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Strip and Stack 9" Top Soil	8.50	CY	27,778	\$236,111	27,778	\$236,111
Load and haul spoil	8.50	CY	27,778	\$236,111	27,778	\$236,111
Soil disposal	18.00	TON	47,222	\$850,000	47,222	\$850,000
Site Grading to sub grade:						
Site Grading	1.85	SY	222,222	\$411,111	222,222	\$411,111
Site Fill - Import	30.00	CY	4,100	\$123,000	4,100	\$123,000
Ledge Removal	85.00	CY	5,000	\$425,000	5,000	\$425,000
General Site Ground Improvements	0.50	SF	2,000,000	\$1,000,000	2,000,000	\$1,000,000
				\$3,281,333		\$3,281,333
TOTAL G10 - SITE PREPARATION				\$6,374,108		\$6,374,108
G20 - SITE IMPROVEMENTS						
G2010 ROADWAYS						
<u>321000 PAVING AND CURBING</u>						
Site Drive and Parking - 80% :						
4" STD Bituminous - drive	\$5.10	SF	269,936	\$1,376,674	231,706	\$1,181,699
12" Gravel base @ 4" STD Bit	\$60.00	CY	9,998	\$599,858	8,582	\$514,901
Geotec fabric	\$1.05	SF	269,936	\$283,433	231,706	\$243,291
Bit Porous Pavement - 20% :						
4" Bit Porous Pavement	\$5.60	SF	67,484	\$377,910	57,926	\$324,388
4" Pavement choker	\$55.00	CY	825	\$45,364	708	\$38,939
12" sand filter	\$55.00	CY	2,499	\$137,467	2,145	\$117,998
3" gravel filter course	\$60.00	CY	625	\$37,491	536	\$32,181
9" washed stone reservoir course	\$65.00	CY	1,875	\$121,846	1,609	\$104,589
Geotec fabric	\$1.05	SF	67,484	\$70,858	57,926	\$60,823
Site Curbings:						
Granite Curbing - Straight/Rad/Trans.	\$52.50	LF	17,373	\$912,083	14,297	\$750,593

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Misc.						
Parking/traffic signage	\$0.10	SF	337,420	\$33,742	289,632	\$28,963
Pavement line painting & markings	\$0.20	SF	337,420	\$67,484	289,632	\$57,926
Vehicular Traffic gate	\$32,000.00	EA	2	\$64,000	2	\$64,000
*excludes pedestrian and traffic control lights		NIC				
				\$4,128,210		\$3,520,292
G2030 PEDESTRIAN PAVING						
<u>321000 PAVING AND CURBING</u>						
Plaza area assumes 75,000 sf each option						
Plaza Concrete - 80%	\$12.00	SF	60,000	\$720,000	60,000	\$720,000
Plaza Unit Pavers - 20%	\$40.00	SF	15,000	\$600,000	15,000	\$600,000
Geotec fabric	\$1.05	SF	75,000	\$78,750	75,000	\$78,750
8" Gravel sub base	\$62.00	CY	1,852	\$114,803	1,852	\$114,803
Typ. 4" Concrete Walk	\$11.00	SF	45,968	\$505,648	70,249	\$772,739
Geotec fabric	\$1.05	SF	45,968	\$48,266	70,249	\$73,761
8" Gravel sub base	\$62.00	CY	1,135	\$70,364	1,734	\$107,531
HC Accessible Paver and curb cut	\$1,500.00	EA	30	\$45,000	30	\$45,000
*excludes town sidewalk, colored and exposed agg. concrete walks						
				\$2,182,831		\$2,512,585
G2040 SITE DEVELOPMENT						
<u>323000 SITE IMPROVEMENTS</u>						
Toilet Concession Building	\$700.00	GSF	1,000	\$700,000	1,000	\$700,000
Grandstands:						
6" Concrete Bleacher Pad	12.00	SF	8,653	\$103,836	8,653	\$103,836

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
12" Gravel sub base	48.00	CY	320	\$15,360	320	\$15,360
Alum bleacher (1,000 EA)	300.00	SF	2,500	\$750,000	2,500	\$750,000
Press Box w/ lift	125,000.00	LS	1	\$125,000	1	\$125,000
8" Concrete Bleacher Pad	15.00	SF	3,000	\$45,000	3,000	\$45,000
12" Gravel sub base	48.00	CY	85	\$4,080	85	\$4,080
Softball & Little league Field (2 ea) :						
Infield mix & base -complete	\$8.00	SF	16,600	\$132,800	16,600	\$132,800
Home plate and rubber	\$2,500.00	LOC	2	\$5,000	2	\$5,000
Dugout Bench	\$3,500.00	EA	4	\$14,000	4	\$14,000
Chain link Backstop	\$35,000.00	EA	2	\$70,000	2	\$70,000
Side CL Fence - 6'	\$105.00	LF	500	\$52,500	500	\$52,500
CL Gate - sgl	\$4,000.00	EA	4	\$16,000	4	\$16,000
Scoreboard	\$35,000.00	EA	2	\$70,000	2	\$70,000
Baseball Field (2 ea) :						
Infield mix & base -complete	\$8.00	SF	24,000	\$192,000	24,000	\$192,000
Home plate and rubber	\$2,500.00	LOC	2	\$5,000	2	\$5,000
Dugout Bench	\$3,500.00	EA	4	\$14,000	4	\$14,000
Chain link Backstop	\$45,000.00	EA	2	\$90,000	2	\$90,000
Side CL Fence - 6'	\$105.00	LF	800	\$84,000	800	\$84,000
CL Gate - sgl	\$4,000.00	EA	4	\$16,000	4	\$16,000
Scoreboard	\$35,000.00	EA	2	\$70,000	2	\$70,000
Site Improvements:						
Trash/Recycle Receptacle	\$3,500.00	EA	10	\$35,000	10	\$35,000
Bicycle rack	\$975.00	EA	20	\$19,500	20	\$19,500
Picnic table & bench	\$7,500.00	EA	4	\$30,000	4	\$30,000
Ped security bollard	\$2,500.00	EA	50	\$125,000	50	\$125,000
Raised Garden bed (4'x8' x1'H)	\$2,600.00	EA	6	\$15,600	6	\$15,600
ADA Raised Garden bed (4'x4' x 2' H)	\$1,850.00	EA	3	\$5,550	3	\$5,550
6' stl bench -backed w/ arms	\$4,500.00	EA	20	\$90,000	20	\$90,000
8' Granite slab bench	\$6,000.00	EA	25	\$150,000	25	\$150,000
Soccer Field:						
Soccer goal	\$4,000.00	EA	2	\$8,000	2	\$8,000
Safety netting		NIC				
Screen wall at Transformer	\$75,000.00	LS	1	\$75,000	1	\$75,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Mech Yard -Allow:						
Decorative Gravel surface	\$6.00	SF	100	\$600	100	\$600
8" Gravel base	\$55.00	CY	2	\$136	2	\$136
Metal Utility Bollard	\$1,325.00	EA	8	\$10,600	8	\$10,600
6' Alum Utility Screen	\$150.00	LF	100	\$15,000	100	\$15,000
Fencing-Allow:						
Fencing - allow	\$500,000.00	LS	1	\$500,000	1	\$500,000
Site sign	\$35,000.00	EA	1	\$35,000	1	\$35,000
Dumpster enclosure		NIC				
Masonry veneer @ site wall		NIC				
Misc. site improvements	\$1,500,000.00	LS	1	\$1,500,000	1	\$1,500,000
				\$5,189,562		\$5,189,562
G2050 LANDSCAPING						
<u>329000 PLANTING</u>						
Shrub bed	\$10.00	SF	15,000	\$150,000	15,000	\$150,000
Planting Allowance	\$0.75	SF	2,000,000	\$1,500,000	2,000,000	\$1,500,000
Planting maintenance	\$75,000.00	LS	1	\$75,000	1	\$75,000
Athletic Fields:						
Sod	\$1.25	SF	376,225	\$470,281	376,225	\$470,281
12" Draiange Layer	\$55.00	CY	13,934	\$766,384	13,934	\$766,384
Filter Fabric	\$1.05	SF	376,225	\$395,036	376,225	\$395,036
Field Under drain	\$0.80	SF	376,225	\$300,980	376,225	\$300,980
Rain Garden	\$32.00	SF	15,000	\$480,000	15,000	\$480,000
Hydroseed - typ lawn	\$0.50	SF	869,000	\$434,500	859,600	\$429,800
Loam:						
12" Planting Bed - import	\$88.00	CY	556	\$48,889	556	\$48,889
2" Mulch	\$62.00	CY	94	\$5,856	94	\$5,856

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Loam Amended soil:						
6" Typ Athletic Field - import	\$82.00	CY	6,967	\$571,305	6,967	\$571,305
6" Typ Lawn - import	\$82.00	CY	16,093	\$1,319,593	15,919	\$1,305,319
Irrigation System:						
Athletic Fields	\$2.00	SF	376,225	\$752,450	376,225	\$752,450
Lawn	N/A					
Plant bed	N/A					
				\$7,270,273		\$7,251,299
TOTAL G20 - SITE IMPROVEMENTS				\$18,770,877		\$18,473,738
G30 - SITE MECHANICAL UTILITIES						
G3010 WATER SUPPLY						
330000 UTILITIES						
Street Connection	\$3,000.00	LOC	2	\$6,000	2	\$6,000
Temp St pavement cut & patch	\$1,000.00	LOC	2	\$2,000	2	\$2,000
12" Main	\$145.00	LF	4,000	\$580,000	4,000	\$580,000
8" Domestic	\$124.00	LF	125	\$15,500	125	\$15,500
12" Gate valve	\$6,500.00	EA	4	\$26,000	4	\$26,000
8" Gate valve	\$3,600.00	EA	4	\$14,400	4	\$14,400
6" Fire Service	\$97.00	LF	250	\$24,250	250	\$24,250
6" Gate valve dom	\$3,000.00	EA	4	\$12,000	4	\$12,000
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	\$3,500.00	EA	2	\$7,000	2	\$7,000
Test, sanitize, thrust block , misc.	\$10,000.00	LS	1	\$10,000	1	\$10,000
				\$711,000		\$711,000
G3020 SANITARY SEWER						

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO			
			QUANTITY	TOTAL	QUANTITY	TOTAL		
330000 UTILITIES								
Street Connection	\$30,000.00	LOC	1	\$30,000	1	\$30,000		
Temp St pavement cut & patch	\$10,000.00	LOC	1	\$10,000	1	\$10,000		
8" PVC San Main	\$110.00	LF	1,500	\$165,000	1,500	\$165,000		
Site manhole	\$5,000.00	EA	3	\$15,000	3	\$15,000		
Ext Grease Trap - 6,000 gal	\$45,000.00	EA	2	\$90,000	2	\$90,000		
Int Grease interceptor		W / plumbing		\$310,000		\$310,000		
G3030 STORM SEWER								
330000 UTILITIES								
Drainage System @ Pavement	\$6.50	SF	458,388	\$2,979,522	434,881	\$2,826,727		
Building footprint	\$6.50	FTP	172,583	\$1,121,790	151,307	\$983,496		
				\$4,101,312		\$3,810,222		
G3060 FUEL DISTRIBUTION								
		TBD		\$0		\$0		
TOTAL G30 - SITE MECHANICAL UTILITIES				\$5,122,312		\$4,831,222		
G40 - SITE ELECTRICAL UTILITIES								
G4010 ELECTRICAL DISTRIBUTION								
<u>330000 UTILITIES</u>								

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Primary 15 kva Service, Equipment and Feed Site Electric by owner						
Duct banks:						
Pole dressing	\$3,500.00	LS	2	\$7,000	2	\$7,000
Primary duct bank	\$125.00	LF	1,500	\$187,500	950	\$118,750
Secondary duct bank and conductor	\$250.00	LF	150	\$37,500	150	\$37,500
Tele data duct bank	\$125.00	LF	1,400	\$175,000	1,400	\$175,000
EV Station feed	\$35.00	LF	2,500	\$87,500	2,500	\$87,500
PV Canopy feed	\$35.00	LF	1,000	\$35,000	1,000	\$35,000
Transformer pad and grounding	\$25,000.00	EA	1	\$25,000	1	\$25,000
Generator pad and grounding	\$25,000.00	EA	1	\$25,000	1	\$25,000
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						
EV Station:						
NEMA Cab, 400 amp panel	\$35,000.00	EA	1	\$35,000	1	\$35,000
EV Station feed	\$35.00	LF	2,500	\$87,500	2,500	\$87,500
EV SGL Charging station	\$15,000.00	EA	20	\$300,000	20	\$300,000
Future EV (120 Stations):						
Primary Feed - allow	\$250.00	LF	1,000	\$250,000	1,000	\$250,000
EV Station Branch Feed 50	\$28.00	LF	5,000	\$140,000	5,000	\$140,000
EV Station PVC only 70	\$12.50	LF	7,000	\$87,500	7,000	\$87,500
Handholes and misc.	\$550.00	EA	150	\$82,500	150	\$82,500
Site Security	\$50,000.00	LS	1	\$50,000	1	\$50,000
				\$1,657,000		\$1,588,250
G4020 SITE LIGHTING						
<u>260001 ELECTRICAL*</u>						
Lighting Fixtures:						
Parking Fixtures	\$4,000.00	EA	35	\$140,000	35	\$140,000

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LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - New Construction - PSR

DESCRIPTION	UNIT COST	UNIT	OPT B.1 ADD/RENO		OPT B.4 ADD/RENO	
			QUANTITY	TOTAL	QUANTITY	TOTAL
Pedestrian Bollard Fixture(G2050)	\$3,500.00	EA	30	\$105,000	30	\$105,000
Flagpole light(G2050)	\$1,150.00	EA	1	\$1,150	1	\$1,150
1"c Light feed	\$14.00	LF	5,000	\$70,000	5,000	\$70,000
Specialty Lighting	\$25,000.00	LS	1	\$25,000	1	\$25,000
New Site Lighting:						
Sports Field lightng	\$120,000.00	EA	8	\$960,000	8	\$960,000
Light pole feeder trench	\$14.50	LF	5,000	\$72,500	5,000	\$72,500
Light pole base	\$950.00	EA	35	\$33,250	35	\$33,250
*Excludes traffic lights						
*Excludes sports field lighting						
				\$1,406,900		\$1,406,900
TOTAL G40 - SITE ELECTRICAL UTILITIES				\$3,063,900		\$2,995,150

PROJECT: Lexington High School School
 LOCATION: Lexington, MA
 CLIENT: SMMA
 DATE: 09-Oct-24

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



OPT C1.d NEW ESTIMATE TOTAL	OPT C.2b NEW ESTIMATE TOTAL	OPT C.5b NEW ESTIMATE TOTAL	OPT D.2 NEW ESTIMATE TOTAL
\$12,420,710	\$12,151,791	\$12,627,648	\$11,544,242
\$0	\$0	\$0	\$0
\$2,998,377	\$2,977,421	\$3,059,617	\$2,765,845
\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0
\$18,065,698	\$18,059,945	\$17,840,576	\$18,874,886
\$9,088,050	\$9,029,129	\$9,260,239	\$8,434,249
\$21,803,368	\$18,315,246	\$21,631,168	\$20,641,833
\$10,166,920	\$8,323,134	\$10,075,514	\$9,481,163
\$455,600	\$455,600	\$455,600	\$455,600
\$6,956,470	\$9,138,399	\$7,223,319	\$6,208,053
\$249,250	\$249,250	\$249,250	\$249,250
\$19,261,782	\$20,484,982	\$19,261,782	\$19,149,282
\$4,781,804	\$4,781,804	\$4,781,804	\$4,781,804
\$6,253,938	\$6,173,029	\$6,249,927	\$5,923,846
\$1,434,000	\$1,434,000	\$1,434,000	\$1,434,000
\$366,800	\$366,800	\$366,800	\$366,800
\$7,493,872	\$7,493,872	\$7,493,872	\$7,493,872
\$6,612,240	\$6,612,240	\$6,612,240	\$6,612,240
\$6,612,240	\$6,612,240	\$6,612,240	\$6,612,240

Lexington High School - New Construction - PSR

10/9/24

	OPT C1.d NEW ESTIMATE TOTAL	OPT C.2b NEW ESTIMATE TOTAL	OPT C.5b NEW ESTIMATE TOTAL	OPT D.2 NEW ESTIMATE TOTAL
D. SERVICES				
D10 - CONVEYING				
D1010 ELEVATORS & LIFTS	\$1,110,000	\$1,110,000	\$1,110,000	\$1,110,000
D20 - PLUMBING				
D2010 PLUMBING	\$14,491,572	\$14,491,572	\$14,491,572	\$14,491,572
D30 - HVAC				
D3010 HVAC	\$63,340,619	\$63,340,619	\$63,340,619	\$63,340,619
D40 - FIRE PROTECTION				
D4010 SPRINKLERS	\$4,007,140	\$4,007,140	\$4,007,140	\$4,007,140
D50 - ELECTRICAL				
D5010 ELECTRICAL SERVICE & DISTRIBUTION	\$23,482,174	\$28,297,702	\$23,136,290	\$28,204,182
D5020 LIGHTING & BRANCH WIRING	\$8,309,382	\$8,309,382	\$8,309,382	\$8,309,382
D5030 COMMUNICATION & SECURITY	\$10,210,912	\$10,210,912	\$10,210,912	\$10,210,912
D5090 OTHER ELECTRICAL SYSTEMS	\$9,081,789	\$9,081,789	\$9,081,789	\$9,081,789
E. EQUIPMENT & FURNISHINGS				
E10 - EQUIPMENT				
E1010 COMMERCIAL EQUIPMENT	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
E1090 OTHER EQUIPMENT	\$3,144,200	\$3,144,200	\$3,144,200	\$3,144,200
E20 - FURNISHINGS				
E2010 FIXED FURNISHINGS	\$5,708,459	\$5,632,280	\$5,704,682	\$5,680,126
E2020 MOVABLE FURNISHINGS	\$0	\$0	\$0	\$0
F. SPECIAL CONSTRUCTION & DEMOLITION				
F10 - SPECIAL CONSTRUCTION				
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
F20 - SELECTIVE BUILDING DEMOLITION				
F2010 BUILDING ELEMENTS DEMOLITION	\$0	\$0	\$0	\$0
F2020 HAZARDOUS COMPONENTS ABATEMENT	\$0	\$0	\$0	\$0
BUILDING COST	\$280,407,364	\$282,784,476	\$280,272,182	\$281,109,124

G. BUILDING SITWORK**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

SITWORK COST**TOTAL DIRECT COST**

	OPT C1.d NEW ESTIMATE TOTAL	OPT C.2b NEW ESTIMATE TOTAL	OPT C.5b NEW ESTIMATE TOTAL	OPT D.2 NEW ESTIMATE TOTAL
G1010 SITE CLEARING	\$723,650	\$723,650	\$723,650	\$782,400
G1020 SITE DEMOLITION & RELOCATIONS	\$2,119,125	\$2,119,125	\$2,119,125	\$2,392,125
G1030 SITE EARTHWORK	\$5,178,333	\$5,178,333	\$5,178,333	\$4,488,333
G1040 HAZARDOUS WASTE REMEDIATION	\$0	\$0	\$0	\$0
G2010 ROADWAYS	\$4,787,194	\$5,231,375	\$4,141,834	\$4,274,660
G2020 PARKING LOTS	\$0	\$0	\$0	\$0
G2030 PEDESTRIAN PAVING	\$2,463,423	\$2,357,262	\$2,542,625	\$2,315,379
G2040 SITE DEVELOPMENT	\$5,189,562	\$5,189,562	\$5,189,562	\$5,189,562
G2050 LANDSCAPING	\$7,234,489	\$7,186,862	\$7,855,225	\$7,368,260
G3010 WATER SUPPLY	\$711,000	\$711,000	\$711,000	\$711,000
G3020 SANITARY SEWER	\$310,000	\$310,000	\$310,000	\$310,000
G3030 STORM SEWER	\$4,572,458	\$4,727,041	\$4,207,509	\$4,211,220
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	\$1,663,250	\$1,594,500	\$1,663,250	\$1,594,500
G4020 SITE LIGHTING	\$1,406,900	\$1,406,900	\$1,406,900	\$1,406,900
SITWORK COST	\$36,359,383	\$36,735,609	\$36,049,012	\$35,044,339
TOTAL DIRECT COST	\$316,766,747	\$319,520,085	\$316,321,194	\$316,153,463

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW			
			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	337	\$202,067	296	\$177,867	335	\$201,000	325	\$194,867		
Frost wall - 4' x 20"	\$1,550.00	CY	748	\$1,160,012	659	\$1,021,086	744	\$1,153,889	722	\$1,118,679		
Interior Foundations	\$1,200.00	CY	75	\$90,000	75	\$90,000	75	\$90,000	75	\$90,000		
Column Footing	\$675.00	CY	2,826	\$1,907,438	2,806	\$1,894,106	2,884	\$1,946,396	2,607	\$1,759,511		
Elev Mat - 12"	\$650.00	CY	12	\$7,800	12	\$7,800	12	\$7,800	12	\$7,800		
Elev pit wall	\$1,100.00	CY	14	\$15,400	14	\$15,400	14	\$15,400	14	\$15,400		
Pilasters	\$1,200.00	CY	150	\$179,615	132	\$158,104	149	\$178,667	144	\$173,215		
Equipment pads	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000		
<u>072100 INSULATION</u>												
4" Rigid ext. found. insul w/prot.bd	\$4.95	SF	12,124	\$60,014	10,672	\$52,826	12,060	\$59,697	11,692	\$57,875		
<u>071000 DAMPROOF., WATERPROOF. & CAULKING*</u>												
Foundation dampproofing	\$2.30	SF	12,124	\$27,885	10,672	\$24,546	12,060	\$27,738	11,692	\$26,892		
<u>310000 EARTHWORK</u>												
Foundation Excavation and Backfill	25.00	CY	12,559	\$313,981	12,471	\$311,787	12,816	\$320,394	11,585	\$289,631		
Structural fill -6' (exisitng to proposed)	58.00	CY	37,678	\$2,185,311	37,414	\$2,170,038	38,447	\$2,229,945	34,756	\$2,015,835		
Rigid Inclusions	35.00	FTP	169,550	\$5,934,250	168,365	\$5,892,775	173,013	\$6,055,455	156,401	\$5,474,035		
Under slab Drain	\$1.25	SF	169,550	\$211,938	168,365	\$210,456	173,013	\$216,266	156,401	\$195,501		
Dewatering	\$100,000.00	LS	1	\$100,000	1	\$100,000	1	\$100,000	1	\$100,000		
				\$12,420,710		\$12,151,791		\$12,627,648		\$11,544,242		
A1030 SLAB ON GRADE												

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
<u>310000 EARTHWORK</u>										
12" Gravel base	\$55.00	CY	6,280	\$345,380	6,236	\$342,966	6,408	\$352,434	5,793	\$318,595
<u>033000 CAST IN PLACE CONCRETE</u>										
5" Slab on Grade: 4,000 psi, NW, (incl. placement)	\$310.00	CY	2,617	\$811,119	2,598	\$805,450	2,670	\$827,686	2,414	\$748,215
Welded wire fabric	\$2.68	SF	169,550	\$454,394	168,365	\$451,218	173,013	\$463,675	156,401	\$419,155
Control Joint	\$3.50	LF	11,303	\$39,562	11,224	\$39,285	11,534	\$40,370	10,427	\$36,494
Trowel Finish	\$2.50	SF	169,550	\$423,875	168,365	\$420,913	173,013	\$432,533	156,401	\$391,003
<u>072100 INSULATION</u>										
4" Rigid Slab Insul. - 100%	\$4.35	SF	169,550	\$737,543	168,365	\$732,388	173,013	\$752,607	156,401	\$680,344
<u>072616 BELOW GRADE VAPOR RETARDER</u>										
Stegro vapor barrier	\$1.10	SF	169,550	\$186,505	168,365	\$185,202	173,013	\$190,314	156,401	\$172,041
				\$2,998,377		\$2,977,421		\$3,059,617		\$2,765,845
TOTAL A10 FOUNDATIONS				\$15,419,087		\$15,129,212		\$15,687,265		\$14,310.087
<u>B. SHELL</u>										
<u>B10 - SUPERSTRUCTURE</u>										
<u>B1010 FLOOR CONSTRUCTION</u>										
<u>051200 STRUCTURAL STEEL</u>										
New Construction:										
Floor frame (13 lbs/sf)	\$5,450.00	TONS	1,763	\$9,609,598	1,771	\$9,651,577	1,741	\$9,486,921	1,849	\$10,075,401
Steel Connections - 10%	\$5,450.00	TONS	176	\$960,960	177	\$965,158	174	\$948,692	185	\$1,007,540
Lateral Brace - (1 lbs/sf)	\$5,450.00	TONS	136	\$739,200	136	\$742,429	134	\$729,763	142	\$775,031
Misc Steel - (1 lbs/sf)	\$5,450.00	TONS	82	\$447,399	67	\$365,992	81	\$443,363	77	\$417,121
Shear stud	\$5.50	EA	27,127	\$149,196	27,245	\$149,848	26,780	\$147,292	28,442	\$156,428
<u>033000 CAST IN PLACE CONCRETE</u>										
3 1/4" LW Deck fill	\$12.75	SF	271,266	\$3,458,642	272,451	\$3,473,750	267,803	\$3,414,488	284,415	\$3,626,291
<u>053100 STEEL DECKING</u>										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
3" x 18 Ga. comp deck	\$5.90	SF	271,266	\$1,600,469	272,451	\$1,607,461	267,803	\$1,580,038	284,415	\$1,678,049
<u>072100 INSULATION</u>										
Spray on fireproofing - beam & colum Intumescent - allow	\$2.95 \$300,000.00	SF LS	271,266 1	\$800,235 \$300,000	272,451 1	\$803,730 \$300,000	267,803 1	\$790,019 \$300,000	284,415 1	\$839,024 \$300,000
				\$18,065,698		\$18,059,945		\$17,840,576		\$18,874,886
B1020 ROOF CONSTRUCTION										
<u>033000 CAST IN PLACE CONCRETE</u>										
6" NW Deck fill - rtu pad	\$9.00	SF	35,000	\$315,000	35,000	\$315,000	35,000	\$315,000	35,000	\$315,000
<u>051200 STRUCTURAL STEEL</u>										
New Construction:										
Roof frame (11 lbs/sf)	\$5,450.00	TONS	933	\$5,082,261	926	\$5,046,741	952	\$5,186,065	860	\$4,688,120
Steel Connections - 10%	\$5,450.00	TONS	93	\$508,226	93	\$504,674	95	\$518,606	86	\$468,812
Lateral Brace - (1 lbs/sf)	\$5,450.00	TONS	85	\$462,024	84	\$458,795	87	\$471,460	78	\$426,193
Misc Steel - (1 lbs/sf)	\$5,450.00	TONS	85	\$462,024	84	\$458,795	87	\$471,460	78	\$426,193
Roof screen frame	inc. above									
Galv. RTU dunnage	inc. above									
Frame Canopies	inc. above									
<u>053100 STEEL DECKING</u>										
3" x 18 Ga roof deck - typ.	\$5.90	SF	151,550	\$894,145	150,365	\$887,154	155,013	\$914,577	138,401	\$816,566
3" x 18 Ga acoust. deck - gym/aux. gyn	\$13.50	SF	18,000	\$243,000	18,000	\$243,000	18,000	\$243,000	18,000	\$243,000
1 1/2" x 20 Ga canopy roof deck	\$6.00	SF	500	\$3,000	500	\$3,000	500	\$3,000	500	\$3,000
<u>072100 INSULATION</u>										
Spray on fireproofing - beam & colum	\$2.95	SF	151,550	\$447,073	150,365	\$443,577	155,013	\$457,288	138,401	\$408,283
Spray on fireproofing - 1 hr deck	\$2.45	SF	151,550	\$371,298	150,365	\$368,394	155,013	\$379,782	138,401	\$339,082
Intumescent - allow	\$300,000.00	LS	1	\$300,000	1	\$300,000	1	\$300,000	1	\$300,000
				\$9,088,050		\$9,029,129		\$9,260,239		\$8,434,249
TOTAL B10 SUPERSTRUCTURE				\$27,153,748		\$27,089,074		\$27,100,815		\$27,309,135

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
B20 - EXTERIOR ENCLOSURE										
B2010 EXTERIOR WALLS										
<u>040001 MASONRY*</u>										
MOCK -UP	\$125,000.00	LS	1	\$125,000	1	\$125,000	1	\$125,000	1	\$125,000
Masonry Veneer:										
Granite Veneer - 2%	\$100.00	SF	2,463	\$246,275	2,015	\$201,464	2,441	\$244,053	2,296	\$229,608
Masonry Veneer - 60%	\$50.00	SF	73,882	\$3,694,118	60,439	\$3,021,953	73,216	\$3,660,795	68,882	\$3,444,120
Canopy col. -complete	\$8,500.00	EA	10	\$85,000	10	\$85,000	10	\$85,000	10	\$85,000
Stainless steel masonry flashing	\$29.00	LF	3,031	\$87,899	2,668	\$77,372	3,015	\$87,435	2,923	\$84,767
Architectural Precast:										
Precast Window Sill	\$68.00	LF	6,841	\$465,185	5,596	\$380,542	6,779	\$460,989	6,378	\$433,704
Misc. Trim and Accents	\$10.00	SF	73,882	\$738,824	60,439	\$604,391	73,216	\$732,159	68,882	\$688,824
CMU Exterior Wall:										
4" Int gym veneer	\$36.00	SF	18,500	\$666,000	18,500	\$666,000	18,500	\$666,000	22,000	\$792,000
<u>054000 COLD FORMED METAL FRAMING</u>										
8" -12" x 18 Ga. stud @ typical wall	\$21.00	SF	123,137	\$2,585,882	100,732	\$2,115,367	122,027	\$2,562,557	114,804	\$2,410,884
1/2" Dens glass sheathing-ext. wall	\$4.50	SF	123,137	\$554,118	100,732	\$453,293	122,027	\$549,119	114,804	\$516,618
Soffit/eave framing - assume projected c	\$9.50	SF	7,578	\$71,986	6,670	\$63,365	7,538	\$71,606	7,308	\$69,421
3" Canopy ceiling framing	\$7.00	SF	1,500	\$10,500	1,500	\$10,500	1,500	\$10,500	1,500	\$10,500
1/2" Dens glass sheathing - eave/cornice	\$4.50	SF	7,578	\$34,099	6,670	\$30,015	7,538	\$33,919	7,308	\$32,884
1/2" Dens glass sheathing -canopy	\$4.50	SF	4,000	\$18,000	4,000	\$18,000	4,000	\$18,000	4,000	\$18,000
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Misc. Ext Metals	\$0.50	SF	123,137	\$61,569	100,732	\$50,366	122,027	\$61,013	114,804	\$57,402
Structural thermal break	\$0.75	SF	123,137	\$92,353	100,732	\$75,549	122,027	\$91,520	114,804	\$86,103
<u>071326 AIR & VAPOR BARRIERS</u>										
Air & vapor barrier - wall	\$9.50	SF	123,137	\$1,169,804	100,732	\$956,952	122,027	\$1,159,252	114,804	\$1,090,638
Air & vapor barrier - cornice	\$9.50	SF	7,578	\$71,986	6,670	\$63,365	7,538	\$71,606	7,308	\$69,421
Air & vapor barrier - canopy	\$9.50	SF	4,000	\$38,000	4,000	\$38,000	4,000	\$38,000	4,000	\$38,000
<u>072100 INSULATION</u>										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Exterior Wall:										
Spray foam at perm openings	\$6.00	LF	34,205	\$205,229	27,981	\$167,886	33,896	\$203,378	31,890	\$191,340
8" Mineral wool Insul.	\$10.00	SF	123,137	\$1,231,373	100,732	\$1,007,318	122,027	\$1,220,265	114,804	\$1,148,040
3" Spray foam - stud cavity	\$4.65	SF	123,137	\$572,588	100,732	\$468,403	122,027	\$567,423	114,804	\$533,839
Bldg Cornice and Canopy Soffit:										
8" Mineral wool Insul.	\$10.00	SF	7,578	\$75,775	6,670	\$66,700	7,538	\$75,375	7,308	\$73,075
3" Spray foam - stud cavity	\$4.65	SF	4,500	\$20,925	4,500	\$20,925	4,500	\$20,925	4,500	\$20,925
<u>071000 DAMPROOF., WATERPROOF. & CAULKING*</u>										
Exterior Sealants	\$2.00	SF	164,183	\$328,366	134,309	\$268,618	162,702	\$325,404	153,072	\$306,144
<u>074213 PERFORMED CLADDING</u>										
Wall Panel:										
Metal Panel - 18%	\$100.00	SF	22,165	\$2,216,471	18,132	\$1,813,172	21,965	\$2,196,477	20,665	\$2,066,472
Terra Cotta Panel - 20%	\$150.00	SF	24,627	\$3,694,118	20,146	\$3,021,953	24,405	\$3,660,795	22,961	\$3,444,120
Alum. 16 ga Panel :										
Canopy ceiling	\$45.00	SF	4,000	\$180,000	4,000	\$180,000	4,000	\$180,000	4,000	\$180,000
Roof Eave Cladding	\$100.00	SF	7,578	\$757,750	6,670	\$667,000	7,538	\$753,750	7,308	\$730,750
Roof Screen:										
Metal Panel Equipment Screen	\$65.00	SF	16,000	\$1,040,000	16,000	\$1,040,000	16,000	\$1,040,000	16,000	\$1,040,000
<u>092116 GYPSUM WALLBOARD</u>										
1 Lyr 5/8" gyp @ ext. wall	\$4.50	SF	123,137	\$554,118	100,732	\$453,293	122,027	\$549,119	114,804	\$516,618
<u>090007 PAINTING*</u>										
Exterior painting	\$0.22	SF	164,183	\$36,120	134,309	\$29,548	162,702	\$35,794	153,072	\$33,676
<u>101400 IDENTIFYING DEVICES (EXT. BLD MTD SIGNAGE)</u>										
24" Alum bldg mtd letter - allow	\$420.00	EA	57	\$23,940	57	\$23,940	57	\$23,940	57	\$23,940
Misc. Bldg mtd signage	\$50,000.00	LS	1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000
				\$21,803,368		\$18,315,246		\$21,631,168		\$20,641,833
B2020 EXTERIOR WINDOWS										
<u>061000 ROUGH CARPENTRY</u>										
P.T. - perim blocking	\$14.00	LF	34,205	\$478,867	27,981	\$391,735	33,896	\$474,548	31,890	\$446,460

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
<u>071326 AIR & VAPOR BARRIERS</u>										
Flex flashing - perim	\$10.00	LF	34,205	\$342,048	27,981	\$279,810	33,896	\$338,963	31,890	\$318,900
<u>071000 DAMPROOF., WATERPROOF. & CAULKING*</u>										
Window Caulking	\$12.75	LF	34,205	\$436,111	27,981	\$356,758	33,896	\$432,177	31,890	\$406,598
<u>080001 METAL WINDOWS*</u>										
TRP Glazing Exterior										
Alum Window - 50%	\$170.00	SF	20,523	\$3,488,889	16,789	\$2,854,066	20,338	\$3,457,418	19,134	\$3,252,780
Alum Curtainwall - 50%	\$225.00	SF	20,523	\$4,617,647	16,789	\$3,777,441	20,338	\$4,575,994	19,134	\$4,305,150
Security glazing - 15% of total	\$50.00	SF	6,157	\$307,843	5,037	\$251,829	6,101	\$305,066	5,740	\$287,010
Sun Shading:										
Horizontal Window Sunscreen - 40%	\$225.00	LF	2,052	\$461,765	1,679	\$377,744	2,034	\$457,599	1,913	\$430,515
<u>109000 MISCELLANEOUS SPECIALTIES</u>										
Alum louvers - allow	\$135.00	SF	250	\$33,750	250	\$33,750	250	\$33,750	250	\$33,750
				\$10,166,920		\$8,323,134		\$10,075,514		\$9,481,163
<u>B2030 EXTERIOR DOORS</u>										
<u>080001 METAL WINDOWS*</u>										
7' Alum. Doors (Incl. Hardware):										
Main Entry - dbl	\$20,000.00	EA	10	\$200,000	10	\$200,000	10	\$200,000	10	\$200,000
Side Egress- dbl	\$20,000.00	EA	8	\$160,000	8	\$160,000	8	\$160,000	8	\$160,000
Egress - sgl	\$10,000.00	EA	4	\$40,000	4	\$40,000	4	\$40,000	4	\$40,000
Auto opener - allow	\$9,000.00	PR	2	\$18,000	2	\$18,000	2	\$18,000	2	\$18,000
*Storefront at entries W / B 2020										
Security Glazing Premium	\$750.00	LVS	32	\$24,000	32	\$24,000	32	\$24,000	32	\$24,000
<u>081113 HOLLOW METALWORK</u>										
Insulated HM Doors and Frame:										
Custodial - dbl	\$3,000.00	EA	2	\$6,000	2	\$6,000	2	\$6,000	2	\$6,000
MEP - dbl	\$3,000.00	EA	2	\$6,000	2	\$6,000	2	\$6,000	2	\$6,000
<u>090007 PAINTING*</u>										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW									
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL								
Paint HM Door & frame - dbl	\$400.00	EA	4	\$1,600	4	\$1,600	4	\$1,600	4	\$1,600								
				\$455,600		\$455,600		\$455,600		\$455,600								
TOTAL B20 - EXTERIOR ENCLOSURE			\$32,425.887		\$27,093.979		\$32,162.282		\$30,578.595									
B30 - ROOFING																		
B3010 ROOF COVERINGS																		
<u>061000 ROUGH CARPENTRY</u>																		
Roof Blocking - main bldg	\$1.45	SF	169,550	\$245,848	168,365	\$244,129	173,013	\$250,869	156,401	\$226,781								
Roof Blocking - canopy	\$1.20	SF	4,000	\$4,800	4,000	\$4,800	4,000	\$4,800	4,000	\$4,800								
<u>070002 ROOFING AND FLASHING*</u>																		
PVC roof - canopy	\$28.00	SF	4,000	\$112,000	4,000	\$112,000	4,000	\$112,000	4,000	\$112,000								
PVC roof w/ 10" rigid insul	\$31.00	SF	169,550	\$5,256,050	168,365	\$5,219,315	173,013	\$5,363,403	156,401	\$4,848,431								
Outdoor Terrace - Premium	\$75.00	SF	12,316	\$923,700	42,219	\$3,166,425	14,322	\$1,074,150	8,358	\$626,850								
Roof walkway pad (2'x2')	\$8.50	SF	8,478	\$72,059	8,418	\$71,555	8,651	\$73,531	7,820	\$66,470								
Alum. Trim :																		
Perimeter wall Coping	\$45.00	LF	3,031	\$136,395	2,668	\$120,060	3,015	\$135,675	2,923	\$131,535								
Base Flashing	\$34.00	LF	1,061	\$36,069	934	\$31,749	1,055	\$35,879	1,023	\$34,784								
Misc. flashing	\$1.00	SF	169,550	\$169,550	168,365	\$168,365	173,013	\$173,013	156,401	\$156,401								
				\$6,956,470		\$9,138,399		\$7,223,319		\$6,208,053								
B3020 ROOF OPENINGS																		
<u>077200 ROOF ACCESSORIES</u>																		
Roof hatch	\$4,250.00	EA	1	\$4,250	1	\$4,250	1	\$4,250	1	\$4,250								
Stage smoke hatch	\$15,000.00	EA	3	\$45,000	3	\$45,000	3	\$45,000	3	\$45,000								
OSHA Rail	\$200.00	LF	500	\$100,000	500	\$100,000	500	\$100,000	500	\$100,000								
Skylights	\$100,000.00	EA	1	\$100,000	1	\$100,000	1	\$100,000	1	\$100,000								
				\$249,250		\$249,250		\$249,250		\$249,250								

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW										
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL									
TOTAL B30 ROOFING			\$7,205,720		\$9,387,649		\$7,472,569		\$6,457,303										
C. INTERIORS																			
C10 - INTERIOR CONSTRUCTION																			
C1010 PARTITIONS																			
<u>040001 MASONRY*</u>																			
8" CMU Elev Shaft	\$43.50	SF	5,280	\$229,680	5,280	\$229,680	5,280	\$229,680	5,280	\$229,680									
4" Int gym veneer	\$36.00	SF	25,000	\$900,000	25,000	\$900,000	25,000	\$900,000	22,000	\$792,000									
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>																			
Masonry - Clip and lintels	\$1.50	SF	30,280	\$45,420	30,280	\$45,420	30,280	\$45,420	27,280	\$40,920									
<u>061000 ROUGH CARPENTRY</u>																			
Interior blocking	\$1.00	GSF	440,816	\$440,816	440,816	\$440,816	440,816	\$440,816	440,816	\$440,816									
Misc. rough carpentry	\$1.00	GSF	440,816	\$440,816	440,816	\$440,816	440,816	\$440,816	440,816	\$440,816									
Clean Saftey and Laborer	\$4.00	GSF	440,816	\$1,763,264	440,816	\$1,763,264	440,816	\$1,763,264	440,816	\$1,763,264									
<u>072100 INSULATION</u>																			
Firestopping	\$0.85	GSF	440,816	\$374,694	440,816	\$374,694	440,816	\$374,694	440,816	\$374,694									
<u>081113 HOLLOW METALWORK</u>																			
Interior H.M Windows, Sidelites and Transoms (INC. GLAZING):																			
Door window/sidelight & transom	\$2.00	SF	440,816	\$881,632	440,816	\$881,632	440,816	\$881,632	440,816	\$881,632									
<u>083323 SPECIAL DOORS</u>																			
Access panels	\$0.25	GSF	440,816	\$110,204	440,816	\$110,204	440,816	\$110,204	440,816	\$110,204									
<u>080001 METAL WINDOWS*</u>																			
Interior Aluminum Storefront:																			
Vestibule and Entries	\$88.00	SF	5,000	\$440,000	5,000	\$440,000	5,000	\$440,000	5,000	\$440,000									
Administration area	\$88.00	SF	1,500	\$132,000	15,400	\$1,355,200	1,500	\$132,000	1,500	\$132,000									
General Building Area	\$0.50	GSF	440,816	\$220,408	440,816	\$220,408	440,816	\$220,408	440,816	\$220,408									
Security glazing - premium	\$50.00	SF	5,000	\$250,000	5,000	\$250,000	5,000	\$250,000	5,000	\$250,000									
<u>092116 GYPSUM WALLBOARD</u>																			

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Drywall Partitions: GWB assemblies	\$28.00	GSF	440,816	\$12,342,848	440,816	\$12,342,848	440,816	\$12,342,848	440,816	\$12,342,848
Operable Partition: Glazed operable wall 8'x 15' (3a ea) Elec Op Folding Partition	\$150.00 \$150,000.00	SF LS	3,600 1	\$540,000 \$150,000	3,600 1	\$540,000 \$150,000	3,600 1	\$540,000 \$150,000	3,600 1	\$540,000 \$150,000
				\$19,261,782		\$20,484,982		\$19,261,782		\$19,149,282
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 Electronic lock door hardware	\$6.50 \$1,500.00	GSF EA	440,816 800	\$2,865,304 \$1,200,000	440,816 800	\$2,865,304 \$1,200,000	440,816 800	\$2,865,304 \$1,200,000	440,816 800	\$2,865,304 \$1,200,000
<u>080001 METAL WINDOWS*</u>										
Aluminum (Frame, Door, Glass, Glazing and Hdw): Vest - dbl Main office -sgl	\$16,500.00 \$4,000.00	PR EA	10 2	\$165,000 \$8,000	10 2	\$165,000 \$8,000	10 2	\$165,000 \$8,000	10 2	\$165,000 \$8,000
<u>083323 SPECIAL DOORS</u>										
Dish drop window Kitchen OH grille Fire Shutters Security Gate and Grill	\$5,000.00 \$4,500.00 \$150,000.00 \$24,000.00	EA EA LS EA	1 1 1 16	\$5,000 \$4,500 \$150,000 \$384,000	1 1 1 16	\$5,000 \$4,500 \$150,000 \$384,000	1 1 1 16	\$5,000 \$4,500 \$150,000 \$384,000	1 1 1 16	\$5,000 \$4,500 \$150,000 \$384,000
				\$4,781,804		\$4,781,804		\$4,781,804		\$4,781,804
C1030 FITTINGS										
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Misc. metals Auditorium Railings Floor Opening Railins	\$2.00 \$100,000.00 \$450.00	GSF LS LF	440,816 1 1,000	\$881,632 \$100,000 \$450,000	440,816 1 1,000	\$881,632 \$100,000 \$450,000	440,816 1 1,000	\$881,632 \$100,000 \$450,000	440,816 1 1,000	\$881,632 \$100,000 \$450,000
<u>062000 FINISH CARPENTRY</u>										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Utility & closet shelving	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Typ. window sill/apron (nic cw-gym)	\$65.00	LF	6,841	\$444,662	5,596	\$363,754	6,779	\$440,651	6,378	\$414,570
Stage Proscenium and Aud. Trim	\$150,000.00	LS	1	\$150,000	1	\$150,000	1	\$150,000	1	\$150,000
Misc. wood trim	\$2.00	GSF	440,816	\$881,632	440,816	\$881,632	440,816	\$881,632	440,816	\$881,632
Media Center Built-in	\$75,000.00	LS	1	\$75,000	1	\$75,000	1	\$75,000	1	\$75,000
Custom Casework:										
Admin casework	\$35,000.00	LS	1	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
Circulation desk	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
<u>102113 COMPARTMENTS & CUBICLES</u>										
Solid Plastic Toilet Partitions:										
Std. partition	\$1,385.00	EA	45	\$62,325	45	\$62,325	45	\$62,325	45	\$62,325
HC partition	\$1,590.00	EA	20	\$31,800	20	\$31,800	20	\$31,800	20	\$31,800
<u>102813 TOILET & BATH ACCESSORIES</u>										
Building Toilet Accessories	\$0.92	GSF	440,816	\$405,551	440,816	\$405,551	440,816	\$405,551	440,816	\$405,551
*Excludes classroom accessories										
<u>101100 MARKERBOARDS & TACKBOARDS</u>										
Marker board tackboard	\$1.35	GSF	440,816	\$595,102	440,816	\$595,102	440,816	\$595,102	440,816	\$595,102
Glass Display Case	\$1,000.00	LF	100	\$100,000	100	\$100,000	100	\$100,000	100	\$100,000
<u>109000 MISCELLANEOUS SPECIALTIES</u>										
Student Lockers	\$450.00	EA	2,315	\$1,041,750	2,315	\$1,041,750	2,315	\$1,041,750	2,315	\$1,041,750
PE/Team Lockers	\$400.00	EA	500	\$200,000	500	\$200,000	500	\$200,000	500	\$200,000
Kitchen staff locker(12"wx15" D x 6'h)	\$350.00	EA	20	\$7,000	20	\$7,000	20	\$7,000	20	\$7,000
Custodian staff(12"wx15" D x 6'h)	\$350.00	EA	5	\$1,750	5	\$1,750	5	\$1,750	5	\$1,750
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	50	\$27,500	50	\$27,500	50	\$27,500	50	\$27,500
Cubicle curtain track w/ curtain - health	\$1,500.00	EA	2	\$3,000	2	\$3,000	2	\$3,000	2	\$3,000
Misc. specialties	\$0.50	GSF	440,816	\$220,408	440,816	\$220,408	440,816	\$220,408	440,816	\$220,408
<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	440,816	\$176,326	440,816	\$176,326	440,816	\$176,326	440,816	\$176,326
Environmental graphics	\$300,000.00	LS	1	\$300,000	1	\$300,000	1	\$300,000	1	\$300,000

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
				\$6,253,938		\$6,173,029		\$6,249,927		\$5,923,846
TOTAL C10 - INTERIOR CONSTRUCTION				\$30,297,524		\$31,439,815		\$30,293,513		\$29,854,931
C20 - STAIRS										
C2010 STAIR CONSTRUCTION										
<u>050001 MISCELLANEOUS & ORNAMENTAL IRON*</u>										
Metal Pan Stair w/Rails: Egress corridor stair Learning/Community Stair	\$55,000.00 \$250,000.00	FLT FLT	16 2	\$880,000 \$500,000	16 2	\$880,000 \$500,000	16 2	\$880,000 \$500,000	16 2	\$880,000 \$500,000
<u>033000 CAST IN PLACE CONCRETE</u>										
Conc stair pan fill - full flt	\$3,000.00	FLTS	18	\$54,000	18	\$54,000	18	\$54,000	18	\$54,000
				\$1,434,000		\$1,434,000		\$1,434,000		\$1,434,000
C2020 STAIR FINISHES										
<u>062000 FINISH CARPENTRY</u>										
Learning/Community Stair	\$100,000.00	FLT	2	\$200,000	2	\$200,000	2	\$200,000	2	\$200,000
<u>090005 RESILIENT FLOORING*</u>										
Rubber treads and risers	\$4,800.00	FLTS	16	\$76,800	16	\$76,800	16	\$76,800	16	\$76,800
<u>090007 PAINTING*</u>										
Paint stair & rails - full flt	\$5,000.00	FLTS	18	\$90,000	18	\$90,000	18	\$90,000	18	\$90,000
				\$366,800		\$366,800		\$366,800		\$366,800
TOTAL C20 - STAIRS				\$1,800,800		\$1,800,800		\$1,800,800		\$1,800,800
C30 - INTERIOR FINISHES										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
C3010 WALL FINISHES										
Wall Finish	\$17.00	GSF	440,816	\$7,493,872	440,816	\$7,493,872	440,816	\$7,493,872	440,816	\$7,493,872
				\$7,493,872		\$7,493,872		\$7,493,872		\$7,493,872
C3020 FLOOR FINISHES										
Floor Finish	\$15.00	GSF	440,816	\$6,612,240	440,816	\$6,612,240	440,816	\$6,612,240	440,816	\$6,612,240
				\$6,612,240		\$6,612,240		\$6,612,240		\$6,612,240
C3030 CEILING FINISHES										
Ceiling Finish	\$15.00	GSF	440,816	\$6,612,240	440,816	\$6,612,240	440,816	\$6,612,240	440,816	\$6,612,240
				\$6,612,240		\$6,612,240		\$6,612,240		\$6,612,240
TOTAL C30 - INTERIOR FINISHES				\$20,718,352		\$20,718,352		\$20,718,352		\$20,718,352
<u>D. SERVICES</u>										
D10 - CONVEYING										
D1010 ELEVATORS & LIFTS										
<u>140001 ELEVATORS*</u>										
Traction 5,000 lbs Passenger Elev	\$90,000.00	STOP	12	\$1,080,000	12	\$1,080,000	12	\$1,080,000	12	\$1,080,000
Elevator Metals	\$10,000.00	LS	3	\$30,000	3	\$30,000	3	\$30,000	3	\$30,000
				\$1,110,000		\$1,110,000		\$1,110,000		\$1,110,000
TOTAL D10 - CONVEYING				\$1,110,000		\$1,110,000		\$1,110,000		\$1,110,000
D20 - PLUMBING										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
D2010 PLUMBING										
ASHP Water heater	\$500,000.00	LS	2	\$1,000,000	2	\$1,000,000	2	\$1,000,000	2	\$1,000,000
HW Storage tanks - 500 Gal	\$20,000.00	EA	3	\$60,000	3	\$60,000	3	\$60,000	3	\$60,000
Elec 108 kw Eelc HW heater	\$35,000.00	EA	2	\$70,000	2	\$70,000	2	\$70,000	2	\$70,000
HW Storage tanks - 150 Gal	\$7,500.00	EA	1	\$7,500	1	\$7,500	1	\$7,500	1	\$7,500
Roof Drainage	\$3.50	FTP	440,816	\$1,542,856	440,816	\$1,542,856	440,816	\$1,542,856	440,816	\$1,542,856
Stormwater ejectors	\$150,000.00	LS	1	\$150,000	1	\$150,000	1	\$150,000	1	\$150,000
Fixtures & Rough-in	\$22.50	GSF	440,816	\$9,918,360	440,816	\$9,918,360	440,816	\$9,918,360	440,816	\$9,918,360
Kitchen Connections	\$200,000.00	LS	1	\$200,000	1	\$200,000	1	\$200,000	1	\$200,000
Test, Permit, BIM, Misc.	\$3.50	GSF	440,816	\$1,542,856	440,816	\$1,542,856	440,816	\$1,542,856	440,816	\$1,542,856
				\$14,491,572		\$14,491,572		\$14,491,572		\$14,491,572
TOTAL D20 - PLUMBING			\$32.87	\$14,491,572	\$32.87	\$14,491,572	\$32.87	\$14,491,572	\$32.87	\$14,491,572
D30 - HVAC										
D3010 HVAC										
Geo Wells - 800' depth @ 350 EA	\$70.00	VLF	280,000	\$19,600,000	280,000	\$19,600,000	280,000	\$19,600,000	280,000	\$19,600,000
6" Well casing - 220' ea	\$34.00	VLF	77,000	\$2,618,000	77,000	\$2,618,000	77,000	\$2,618,000	77,000	\$2,618,000
Valve Vault	\$65,000.00	EA	10	\$650,000	10	\$650,000	10	\$650,000	10	\$650,000
Geothermal System										
Plate and FrameHeat Exchanger	\$60,000.00	EA	3	\$180,000	3	\$180,000	3	\$180,000	3	\$180,000
Back up Elec Boiler	\$100,000.00	EA	2	\$200,000	2	\$200,000	2	\$200,000	2	\$200,000
HW Pump and trim	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Base Mtd Sec. HWP w/ VFD	\$30,000.00	EA	10	\$300,000	10	\$300,000	10	\$300,000	10	\$300,000
Glycol Feed System	\$250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000
Piping valve and trim	\$350,000.00	LS	1	\$350,000	1	\$350,000	1	\$350,000	1	\$350,000
HW/CW Distribution:										
Fan coil heat pump	\$4.00	GSF	440,816	\$1,763,264	440,816	\$1,763,264	440,816	\$1,763,264	440,816	\$1,763,264
Mechanical HW/CW Piping	\$9.00	GSF	440,816	\$3,967,344	440,816	\$3,967,344	440,816	\$3,967,344	440,816	\$3,967,344
Misc. HW Devices	\$2.50	GSF	91,000	\$227,500	91,000	\$227,500	91,000	\$227,500	91,000	\$227,500
Air Equipment:										
AHU Units - Large Spaces	\$38.00	CFM	170,000	\$6,460,000	170,000	\$6,460,000	170,000	\$6,460,000	170,000	\$6,460,000
DOAS Units - Classroom	\$38.00	CFM	125,000	\$4,750,000	125,000	\$4,750,000	125,000	\$4,750,000	125,000	\$4,750,000
MAU 4,500 CFM	\$30.00	CFM	4,500	\$135,000	4,500	\$135,000	4,500	\$135,000	4,500	\$135,000
Freeze Protection	\$2,000.00	EA	10	\$20,000	10	\$20,000	10	\$20,000	10	\$20,000

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Curbs	\$5,500.00	EA	10	\$55,000	10	\$55,000	10	\$55,000	10	\$55,000
Merv Filter	\$2,500.00	EA	20	\$50,000	20	\$50,000	20	\$50,000	20	\$50,000
Sound Attenuation	\$0.85	CFM	295,000	\$250,750	295,000	\$250,750	295,000	\$250,750	295,000	\$250,750
Pipe Valve and Fitting Connections	\$6,500.00	EA	10	\$65,000	10	\$65,000	10	\$65,000	10	\$65,000
Grilles registers and dampers	\$1.50	GSF	440,816	\$661,224	440,816	\$661,224	440,816	\$661,224	440,816	\$661,224
Ductwork	\$20.00	LBS	440,816	\$8,816,320	440,816	\$8,816,320	440,816	\$8,816,320	440,816	\$8,816,320
CV/VAV exhaust	\$975.00	EA	400	\$390,000	400	\$390,000	400	\$390,000	400	\$390,000
Kitchen Exhaust Ductwork	\$250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000
Duct Insul	\$6.50	SF	352,653	\$2,292,243	352,653	\$2,292,243	352,653	\$2,292,243	352,653	\$2,292,243
Exhaust Fan	\$5,000.00	EA	35	\$175,000	35	\$175,000	35	\$175,000	35	\$175,000
Split AC	\$20,000.00	EA	25	\$500,000	25	\$500,000	25	\$500,000	25	\$500,000
Temp Control (Demand CO2)	\$12.00	GSF	440,816	\$5,289,792	440,816	\$5,289,792	440,816	\$5,289,792	440,816	\$5,289,792
Seismic and Vibration	\$0.85	GSF	440,816	\$374,694	440,816	\$374,694	440,816	\$374,694	440,816	\$374,694
Rigging	\$250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000
BIM/ Commission coordination	\$2.50	GSF	440,816	\$1,102,040	440,816	\$1,102,040	440,816	\$1,102,040	440,816	\$1,102,040
HVAC Supervision	\$3.00	GSF	440,816	\$1,322,448	440,816	\$1,322,448	440,816	\$1,322,448	440,816	\$1,322,448
				\$63,340,619		\$63,340,619		\$63,340,619		\$63,340,619
TOTAL D30 - HVAC			\$143.69	\$63,340,619	\$143.69	\$63,340,619	\$143.69	\$63,340,619	\$143.69	\$63,340,619
D40 - FIRE PROTECTION										
D4010 SPRINKLERS										
<u>210001 FIRE SUPPRESSION*</u>										
Sprinkler system - wet	\$8.75	GSF	440,816	\$3,857,140	440,816	\$3,857,140	440,816	\$3,857,140	440,816	\$3,857,140
Fire Pump	\$150,000.00	LS	1	\$150,000	1	\$150,000	1	\$150,000	1	\$150,000
				\$4,007,140		\$4,007,140		\$4,007,140		\$4,007,140
TOTAL D40 - FIRE PROTECTION			\$9.09	\$4,007,140	\$9.09	\$4,007,140	\$9.09	\$4,007,140	\$9.09	\$4,007,140
D50 - ELECTRICAL										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW			
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL		
D5010 ELECTRICAL SERVICE & DISTRIBUTION												
<u>260001 ELECTRICAL*</u>												
(2) 4,000 amp MDP and Elec. Panel and 1,250 KW Emergency Generator	\$13.00 \$850,000.00	GSF LS	440,816 1	\$5,730,608 \$850,000	440,816 1	\$5,730,608 \$850,000	440,816 1	\$5,730,608 \$850,000	440,816 1	\$5,730,608 \$850,000		
Digital Metering	\$5,000.00	EA	75	\$375,000	75	\$375,000	75	\$375,000	75	\$375,000		
PV SYSTEMS :												
5,000 amp PV MDP	\$550,000.00	LS	1	\$550,000	1	\$550,000	1	\$550,000	1	\$550,000		
PV Site Canopy/Panel - \$5.00/per watt	\$60.00	SF	93,060	\$5,583,600	102,250	\$6,135,000	102,250	\$6,135,000	91,715	\$5,502,900		
PV Low Roof Panels - \$4.50/ per watt	\$54.00	SF	33,808	\$1,825,632	27,703	\$1,495,962	31,738	\$1,713,852	29,609	\$1,598,886		
PV High Roof Panels - \$4.50/ per watt	\$54.00	SF	84,521	\$4,564,134	69,258	\$3,739,932	79,345	\$4,284,630	74,022	\$3,997,188		
PV Integrated Bldg element	\$200.00	SF	3,758	\$751,600	17,303	\$3,460,600	2,493	\$498,600	17,749	\$3,549,800		
Vertical Solar Equipment	\$200.00	SF	3,758	\$751,600	10,000	\$2,000,000	2,493	\$498,600	10,000	\$2,000,000		
Canopy Shade Awning	\$200.00	SF			7,303	\$1,460,600			7,749	\$1,549,800		
Battery Storage	\$2,500,000.00	LS	1	\$2,500,000	1	\$2,500,000	1	\$2,500,000	1	\$2,500,000		
				\$23,482,174		\$28,297,702		\$23,136,290		\$28,204,182		
D5020 LIGHTING & BRANCH WIRING												
<u>260001 ELECTRICAL*</u>												
Lighting	\$16.00	GSF	440,816	\$7,053,056	440,816	\$7,053,056	440,816	\$7,053,056	440,816	\$7,053,056		
Lighting Control (inc device oc)	\$2.85	GSF	440,816	\$1,256,326	440,816	\$1,256,326	440,816	\$1,256,326	440,816	\$1,256,326		
				\$8,309,382		\$8,309,382		\$8,309,382		\$8,309,382		
D5030 COMMUNICATION & SECURITY												
<u>260001 ELECTRICAL*</u>												
CCTV	\$6.00	GSF	440,816	\$2,644,896	440,816	\$2,644,896	440,816	\$2,644,896	440,816	\$2,644,896		
Access control	\$4.00	GSF	440,816	\$1,763,264	440,816	\$1,763,264	440,816	\$1,763,264	440,816	\$1,763,264		
Video entry system	\$45,000.00	LS	1	\$45,000	1	\$45,000	1	\$45,000	1	\$45,000		
Digital Signage	\$4,000.00	EA	10	\$40,000	10	\$40,000	10	\$40,000	10	\$40,000		
Tele/data cabling, racks and switches	\$9.50	GSF	440,816	\$4,187,752	440,816	\$4,187,752	440,816	\$4,187,752	440,816	\$4,187,752		
Classroom AV rough-in only	\$1,500.00	EA	225	\$337,500	225	\$337,500	225	\$337,500	225	\$337,500		
Speech Reinforcement	\$3,300.00	EA	225	\$742,500	225	\$742,500	225	\$742,500	225	\$742,500		
Aud Lighting and Diming	\$250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000		

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Aud Sound System	\$200,000.00	LS	1	\$200,000	1	\$200,000	1	\$200,000	1	\$200,000
				\$10,210,912		\$10,210,912		\$10,210,912		\$10,210,912
D5090 OTHER ELECTRICAL SYSTEMS										
<u>260001 ELECTRICAL*</u>										
Rath 2way call	\$15,000.00	EA	8	\$120,000	8	\$120,000	8	\$120,000	8	\$120,000
Fire Alarm	\$4.80	GSF	440,816	\$2,115,917	440,816	\$2,115,917	440,816	\$2,115,917	440,816	\$2,115,917
Devices	\$3.25	GSF	440,816	\$1,432,652	440,816	\$1,432,652	440,816	\$1,432,652	440,816	\$1,432,652
Clocks and PA	\$1.20	GSF	440,816	\$528,979	440,816	\$528,979	440,816	\$528,979	440,816	\$528,979
Gym/Café Sound System	\$1.00	GSF	440,816	\$440,816	440,816	\$440,816	440,816	\$440,816	440,816	\$440,816
Lighting Protection	\$0.78	GSF	440,816	\$343,836	440,816	\$343,836	440,816	\$343,836	440,816	\$343,836
Kitchen/Mechanical Wiring	\$3.50	GSF	440,816	\$1,542,856	440,816	\$1,542,856	440,816	\$1,542,856	440,816	\$1,542,856
Bi-Direction Antenna	\$0.80	GSF	440,816	\$352,653	440,816	\$352,653	440,816	\$352,653	440,816	\$352,653
Test Permit and Misc.	\$5.00	GSF	440,816	\$2,204,080	440,816	\$2,204,080	440,816	\$2,204,080	440,816	\$2,204,080
By others:										
Telephone system										
Classroom projectors										
				\$9,081,789		\$9,081,789		\$9,081,789		\$9,081,789
TOTAL D50 - ELECTRICAL			\$115.89	\$51,084,257	\$126.81	\$55,899,785	\$115.10	\$50,738,373	\$126.60	\$55,806,265
<u>E. EQUIPMENT & FURNISHINGS</u>										
E10 - EQUIPMENT										
E1010 COMMERCIAL EQUIPMENT										
<u>114000 FOOD SERVICE EQUIPMENT</u>										
Kitchen equipment - new	\$2,500,000.00	LS	1	\$2,500,000	1	\$2,500,000	1	\$2,500,000	1	\$2,500,000
				\$2,500,000		\$2,500,000		\$2,500,000		\$2,500,000
E1090 OTHER EQUIPMENT										
<u>113100 APPLIANCES</u>										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Staff kitchen refrigerator	\$1,000.00	EA	16	\$16,000	16	\$16,000	16	\$16,000	16	\$16,000
Staff kitchen microwave	\$500.00	EA	7	\$3,500	7	\$3,500	7	\$3,500	7	\$3,500
Medical office refrigerator w/ice	\$1,000.00	EA	2	\$2,000	2	\$2,000	2	\$2,000	2	\$2,000
Adult living classroom	\$30,000.00	LS	1	\$30,000	1	\$30,000	1	\$30,000	1	\$30,000
<u>116600 ATHLETIC & SPORTS EQUIPMENT</u>										
Basketball backstops - electric	\$9,500.00	EA	6	\$57,000	6	\$57,000	6	\$57,000	6	\$57,000
Wall padding - 6'	\$15.00	SF	1,000	\$15,000	1,000	\$15,000	1,000	\$15,000	1,000	\$15,000
Roll up curtain (2 EA)	\$36.00	SF	5,800	\$208,800	5,800	\$208,800	5,800	\$208,800	5,800	\$208,800
Volley ball court equip.	\$700.00	EA	2	\$1,400	2	\$1,400	2	\$1,400	2	\$1,400
Scoreboard and shot clock	\$24,000.00	EA	3	\$72,000	3	\$72,000	3	\$72,000	3	\$72,000
Bleachers	\$250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000
Misc. Gym Equipment	\$50,000.00	LS	1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000
<u>115213 PROJECTION SCREENS</u>										
Projection screen - various areas	\$20,000.00	EA	8	\$160,000	8	\$160,000	8	\$160,000	8	\$160,000
<u>116143 THEATRICAL EQUIPMENT</u>										
Auditorium :										
Stage Rigging and Drapes	\$1,200,000.00	LS	1	\$1,200,000	1	\$1,200,000	1	\$1,200,000	1	\$1,200,000
Auditorium Seating	\$375.00	EA	1,000	\$375,000	1,000	\$375,000	1,000	\$375,000	1,000	\$375,000
<u>119000 MISC. EQUIPMENT</u>										
Green House	\$150,000.00	LS	1	\$150,000	1	\$150,000	1	\$150,000	1	\$150,000
Loading dock leveler and equipment	\$100,000.00	LS	1	\$100,000	1	\$100,000	1	\$100,000	1	\$100,000
Science Lab Equipment	\$450,000.00	LS	1	\$450,000	1	\$450,000	1	\$450,000	1	\$450,000
Kiln	\$3,500.00	EA	1	\$3,500	1	\$3,500	1	\$3,500	1	\$3,500
				-----		-----		-----		-----
				\$3,144,200		\$3,144,200		\$3,144,200		\$3,144,200
TOTAL E10 - EQUIPMENT				\$5,644,200		\$5,644,200		\$5,644,200		\$5,644,200
<u>E20 - FURNISHINGS</u>										
E 2010 FIXED FURNISHINGS										
<u>129000 MISC. FURNISHINGS</u>										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Meco shade - manual	\$7.50	SF	41,046	\$307,843	33,577	\$251,829	40,676	\$305,066	38,268	\$287,010
Premium for Eelc op shade - 10%	\$27.00	SF	4,105	\$110,824	3,358	\$90,659	4,068	\$109,824	3,827	\$103,324
<u>123553 CLASSROOM CASEWORK</u>										
Casework	\$12.00	GSF	440,816	\$5,289,792	440,816	\$5,289,792	440,816	\$5,289,792	440,816	\$5,289,792
				\$5,708,459		\$5,632,280		\$5,704,682		\$5,680,126
E2020 MOVABLE FURNISHINGS										
				\$0		\$0		\$0		\$0
TOTAL E20 - FURNISHINGS				\$5,708,459		\$5,632,280		\$5,704,682		\$5,680,126
F20 - SELECTIVE BUILDING DEMOLITION										
F2010 BUILDING ELEMENTS DEMOLITION										
Demolish existing building	SEE SUMMARY PAGE			\$0		\$0		\$0		\$0
F2020 HAZARDOUS COMPONENTS ABATEMENT										
Hazardous Waste Allowance	SEE SUMMARY PAGE			\$0		\$0		\$0		\$0
TOTAL F20 - SELECTIVE BUILDING DEMOLITION				\$0		\$0		\$0		\$0
G. BUILDING SITEWORK										
G10 - SITE PREPARATION										
G1010 SITE CLEARING										
311000 SITE PREPARATION & CLEARING										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Construction fence	12.50	LF	7,500	\$93,750	7,500	\$93,750	7,500	\$93,750	10,000	\$125,000
Construction entrance pad	11.00	SF	2,500	\$27,500	2,500	\$27,500	2,500	\$27,500	5,000	\$55,000
Construction gates	1,200.00	EA	2	\$2,400	2	\$2,400	2	\$2,400	2	\$2,400
Clear and Grub	15,000.00	ACRES	8	\$120,000	8	\$120,000	8	\$120,000	8	\$120,000
Protect stockpile	50,000.00	LS	1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000
Protect tree	30,000.00	LS	1	\$30,000	1	\$30,000	1	\$30,000	1	\$30,000
General Site Prep	0.20	SF	2,000,000	\$400,000	2,000,000	\$400,000	2,000,000	\$400,000	2,000,000	\$400,000
				\$723,650		\$723,650		\$723,650		\$782,400
G1020 SITE DEMOLITION & RELOCATIONS										
Erosion control	10.00	LF	7,200	\$72,000	7,200	\$72,000	7,200	\$72,000	9,500	\$95,000
Inlet Protection	110.00	EA	100	\$11,000	100	\$11,000	100	\$11,000	100	\$11,000
Erosion Control Maintance	50,000.00	LS	1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000
Sawcut bit pavement	6.50	LF	250	\$1,625	250	\$1,625	250	\$1,625	250	\$1,625
Remove bit pavement	1.20	SF	250,000	\$300,000	250,000	\$300,000	250,000	\$300,000	250,000	\$300,000
Remove concrete pavement	1.50	SF	50,000	\$75,000	50,000	\$75,000	50,000	\$75,000	50,000	\$75,000
Remove paved walkway	1.15	SF	30,000	\$34,500	30,000	\$34,500	30,000	\$34,500	30,000	\$34,500
Remove Field stand and pressbox	100,000.00	LS	1	\$100,000	1	\$100,000	1	\$100,000	1	\$100,000
Remove Utilities	250,000.00	LS	1	\$250,000	1	\$250,000	1	\$250,000	1	\$250,000
Misc. Site Removal	0.20	SF	2,000,000	\$400,000	2,000,000	\$400,000	2,000,000	\$400,000	2,000,000	\$400,000
				\$2,119,125		\$2,119,125		\$2,119,125		\$2,392,125
G1030 SITE EARTHWORK										
<u>310000 EARTHWORK</u>										
Top Soil:										
Strip and Stack 9" Top Soil	8.50	CY	27,778	\$236,111	27,778	\$236,111	27,778	\$236,111	27,778	\$236,111
Load and haul spoil	8.50	CY	27,778	\$236,111	27,778	\$236,111	27,778	\$236,111	27,778	\$236,111
Soil disposal	18.00	TON	47,222	\$850,000	47,222	\$850,000	47,222	\$850,000	47,222	\$850,000
Site Grading to sub grade:										
Site Grading	2.30	SY	222,222	\$511,111	222,222	\$511,111	222,222	\$511,111	222,222	\$511,111
Site Fill - Import	30.00	CY	64,000	\$1,920,000	64,000	\$1,920,000	64,000	\$1,920,000	41,000	\$1,230,000

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Ledge Removal	85.00	CY	5,000	\$425,000	5,000	\$425,000	5,000	\$0	5,000	\$0
General Site Ground Improvements	0.50	SF	2,000,000	\$1,000,000	2,000,000	\$1,000,000	2,000,000	\$1,000,000	2,000,000	\$1,000,000
				\$5,178,333		\$5,178,333		\$5,178,333		\$4,488,333
TOTAL G10 - SITE PREPARATION				\$8,021,108		\$8,021,108		\$8,021,108		\$7,662,858
G20 - SITE IMPROVEMENTS										
G2010 ROADWAYS										
<u>321000 PAVING AND CURBING</u>										
Site Drive and Parking - 80% :										
4" STD Bituminous - drive	\$5.10	SF	313,821	\$1,600,486	340,048	\$1,734,245	261,468	\$1,333,487	288,601	\$1,471,864
12" Gravel base @ 4" STD Bit	\$60.00	CY	11,623	\$697,380	12,594	\$755,662	9,684	\$581,040	10,689	\$641,335
Geotec fabric	\$1.05	SF	313,821	\$329,512	340,048	\$357,050	261,468	\$274,541	288,601	\$303,031
Bit Porous Pavement - 20% :										
4" Bit Porous Pavement	\$5.60	SF	78,455	\$439,349	85,012	\$476,067	65,367	\$366,055	72,150	\$404,041
4" Pavement choker	\$55.00	CY	959	\$52,739	1,039	\$57,147	799	\$43,941	882	\$48,501
12" sand filter	\$55.00	CY	2,906	\$159,816	3,149	\$173,173	2,421	\$133,155	2,672	\$146,973
3" gravel filter course	\$60.00	CY	726	\$43,586	787	\$47,229	605	\$36,315	668	\$40,083
9" washed stone reservoir course	\$65.00	CY	2,179	\$141,655	2,361	\$153,494	1,816	\$118,024	2,004	\$130,271
Geotec fabric	\$1.05	SF	78,455	\$82,378	85,012	\$89,263	65,367	\$68,635	72,150	\$75,758
Site Curbing:										
Granite Curbing - Straight/Rad/Trans.	\$52.50	LF	20,164	\$1,058,610	22,791	\$1,196,528	19,516	\$1,024,590	16,011	\$840,578
Misc.										
Parking/traffic signage	\$0.10	SF	392,276	\$39,228	425,060	\$42,506	326,835	\$32,684	360,751	\$36,075
Pavement line painting & markings	\$0.20	SF	392,276	\$78,455	425,060	\$85,012	326,835	\$65,367	360,751	\$72,150
Vehicular Traffic gate	\$32,000.00	EA	2	\$64,000	2	\$64,000	2	\$64,000	2	\$64,000
*excludes pedestrian and traffic control lights		NIC								
				\$4,787,194		\$5,231,375		\$4,141,834		\$4,274,660
G2030 PEDESTRIAN PAVING										
<u>321000 PAVING AND CURBING</u>										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Plaza area assumes 75,000 sf each option										
Plaza Concrete - 80%	\$12.00	SF	60,000	\$720,000	60,000	\$720,000	60,000	\$720,000	60,000	\$720,000
Plaza Unit Pavers - 20%	\$40.00	SF	15,000	\$600,000	15,000	\$600,000	15,000	\$600,000	15,000	\$600,000
Geotec fabric	\$1.05	SF	75,000	\$78,750	75,000	\$78,750	75,000	\$78,750	75,000	\$78,750
8" Gravel sub base	\$62.00	CY	1,852	\$114,803	1,852	\$114,803	1,852	\$114,803	1,852	\$114,803
Typ. 4" Concrete Walk	\$11.00	SF	66,629	\$732,919	58,812	\$646,932	72,461	\$797,071	55,728	\$613,008
Geotec fabric	\$1.05	SF	66,629	\$69,960	58,812	\$61,753	72,461	\$76,084	55,728	\$58,514
8" Gravel sub base	\$62.00	CY	1,645	\$101,990	1,452	\$90,024	1,789	\$110,917	1,376	\$85,303
HC Accessible Paver and curb cut	\$1,500.00	EA	30	\$45,000	30	\$45,000	30	\$45,000	30	\$45,000
*excludes town sidewalk, colored and exposed agg. concrete walks				\$2,463,423		\$2,357,262		\$2,542,625		\$2,315,379
G2040 SITE DEVELOPMENT										
323000 SITE IMPROVEMENTS										
Toilet Concession Building	\$700.00	GSF	1,000	\$700,000	1,000	\$700,000	1,000	\$700,000	1,000	\$700,000
Grandstands:										
6" Concrete Bleacher Pad	12.00	SF	8,653	\$103,836	8,653	\$103,836	8,653	\$103,836	8,653	\$103,836
12" Gravel sub base	48.00	CY	320	\$15,360	320	\$15,360	320	\$15,360	320	\$15,360
Alum bleacher (1,000 EA)	300.00	SF	2,500	\$750,000	2,500	\$750,000	2,500	\$750,000	2,500	\$750,000
Press Box w/ lift	125,000.00	LS	1	\$125,000	1	\$125,000	1	\$125,000	1	\$125,000
8" Concrete Bleacher Pad	15.00	SF	3,000	\$45,000	3,000	\$45,000	3,000	\$45,000	3,000	\$45,000
12" Gravel sub base	48.00	CY	85	\$4,080	85	\$4,080	85	\$4,080	85	\$4,080
Softball & Little league Field (2 ea) :										
Infield mix & base -complete	\$8.00	SF	16,600	\$132,800	16,600	\$132,800	16,600	\$132,800	16,600	\$132,800
Home plate and rubber	\$2,500.00	LOC	2	\$5,000	2	\$5,000	2	\$5,000	2	\$5,000
Dugout Bench	\$3,500.00	EA	4	\$14,000	4	\$14,000	4	\$14,000	4	\$14,000
Chain link Backstop	\$35,000.00	EA	2	\$70,000	2	\$70,000	2	\$70,000	2	\$70,000
Side CL Fence - 6'	\$105.00	LF	500	\$52,500	500	\$52,500	500	\$52,500	500	\$52,500
CL Gate - sgl	\$4,000.00	EA	4	\$16,000	4	\$16,000	4	\$16,000	4	\$16,000
Scoreboard	\$35,000.00	EA	2	\$70,000	2	\$70,000	2	\$70,000	2	\$70,000
BaseballBall Field (2 ea) :										
Infield mix & base -complete	\$8.00	SF	24,000	\$192,000	24,000	\$192,000	24,000	\$192,000	24,000	\$192,000
Home plate and rubber	\$2,500.00	LOC	2	\$5,000	2	\$5,000	2	\$5,000	2	\$5,000
Dugout Bench	\$3,500.00	EA	4	\$14,000	4	\$14,000	4	\$14,000	4	\$14,000
Chain link Backstop	\$45,000.00	EA	2	\$90,000	2	\$90,000	2	\$90,000	2	\$90,000
Side CL Fence - 6'	\$105.00	LF	800	\$84,000	800	\$84,000	800	\$84,000	800	\$84,000

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
CL Gate - sgl	\$4,000.00	EA	4	\$16,000	4	\$16,000	4	\$16,000	4	\$16,000
Scoreboard	\$35,000.00	EA	2	\$70,000	2	\$70,000	2	\$70,000	2	\$70,000
Site Improvements:										
Trash/Recycle Receptacle	\$3,500.00	EA	10	\$35,000	10	\$35,000	10	\$35,000	10	\$35,000
Bicycle rack	\$975.00	EA	20	\$19,500	20	\$19,500	20	\$19,500	20	\$19,500
Picnic table & bench	\$7,500.00	EA	4	\$30,000	4	\$30,000	4	\$30,000	4	\$30,000
Ped security bollard	\$2,500.00	EA	50	\$125,000	50	\$125,000	50	\$125,000	50	\$125,000
Raised Garden bed (4'x8' x1'H)	\$2,600.00	EA	6	\$15,600	6	\$15,600	6	\$15,600	6	\$15,600
ADA Raised Garden bed (4'x4' x 2' H)	\$1,850.00	EA	3	\$5,550	3	\$5,550	3	\$5,550	3	\$5,550
6' stl bench -backed w/ arms	\$4,500.00	EA	20	\$90,000	20	\$90,000	20	\$90,000	20	\$90,000
8' Granite slab bench	\$6,000.00	EA	25	\$150,000	25	\$150,000	25	\$150,000	25	\$150,000
Soccer Field:										
Soccer goal	\$4,000.00	EA	2	\$8,000	2	\$8,000	2	\$8,000	2	\$8,000
Safety netting		NIC								
Screen wall at Transformer	\$75,000.00	LS	1	\$75,000	1	\$75,000	1	\$75,000	1	\$75,000
Mech Yard -Allow:										
Decorative Gravel surface	\$6.00	SF	100	\$600	100	\$600	100	\$600	100	\$600
8" Gravel base	\$55.00	CY	2	\$136	2	\$136	2	\$136	2	\$136
Metal Utility Bollard	\$1,325.00	EA	8	\$10,600	8	\$10,600	8	\$10,600	8	\$10,600
6' Alum Utility Screen	\$150.00	LF	100	\$15,000	100	\$15,000	100	\$15,000	100	\$15,000
Fencing-Allow:										
Fencing - allow	\$500,000.00	LS	1	\$500,000	1	\$500,000	1	\$500,000	1	\$500,000
Site sign	\$35,000.00	EA	1	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
Dumpster enclosure		NIC								
Masonry veneer @ site wall		NIC								
Misc. site improvements	\$1,500,000.00	LS	1	\$1,500,000	1	\$1,500,000	1	\$1,500,000	1	\$1,500,000
				\$5,189,562		\$5,189,562		\$5,189,562		\$5,189,562
G2050 LANDSCAPING										
<u>329000 PLANTING</u>										
Shrub bed	\$10.00	SF	15,000	\$150,000	15,000	\$150,000	15,000	\$150,000	15,000	\$150,000
Planting Allowance	\$0.75	SF	2,000,000	\$1,500,000	2,000,000	\$1,500,000	2,000,000	\$1,500,000	2,000,000	\$1,500,000
Planting maintenance	\$75,000.00	LS	1	\$75,000	1	\$75,000	1	\$75,000	1	\$75,000
Athletic Fields:										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Sod	\$1.25	SF	376,225	\$470,281	376,225	\$470,281	452,769	\$565,961	376,225	\$470,281
12" Draiange Layer	\$55.00	CY	13,934	\$766,384	13,934	\$766,384	16,769	\$922,307	13,934	\$766,384
Filter Fabric	\$1.05	SF	376,225	\$395,036	376,225	\$395,036	452,769	\$475,407	376,225	\$395,036
Field Under drain	\$0.80	SF	376,225	\$300,980	376,225	\$300,980	452,769	\$362,215	376,225	\$300,980
Rain Garden	\$32.00	SF	15,000	\$480,000	15,000	\$480,000	15,000	\$480,000	15,000	\$480,000
Hydroseed - typ lawn	\$0.50	SF	851,272	\$425,636	827,677	\$413,839	830,566	\$415,283	917,544	\$458,772
Loam:										
12" Planting Bed - import	\$88.00	CY	556	\$48,889	556	\$48,889	556	\$48,889	556	\$48,889
2" Mulch	\$62.00	CY	94	\$5,856	94	\$5,856	94	\$5,856	94	\$5,856
Loam Amended soil:										
6" Typ Athletic Field - import	\$82.00	CY	6,967	\$571,305	6,967	\$571,305	8,385	\$687,538	6,967	\$571,305
6" Typ Lawn - import	\$82.00	CY	15,764	\$1,292,672	15,327	\$1,256,843	15,381	\$1,261,230	16,992	\$1,393,308
Irrigation System:										
Athletic Fields	\$2.00	SF	376,225	\$752,450	376,225	\$752,450	452,769	\$905,538	376,225	\$752,450
Lawn	N/A									
Plant bed	N/A									
				\$7,234,489		\$7,186,862		\$7,855,225		\$7,368,260
TOTAL G20 - SITE IMPROVEMENTS				\$19,674,668		\$19,965,061		\$19,729,246		\$19,147,861
G30 - SITE MECHANICAL UTILITIES										
G3010 WATER SUPPLY										
330000 UTILITIES										
Street Connection	\$3,000.00	LOC	2	\$6,000	2	\$6,000	2	\$6,000	2	\$6,000
Temp St pavement cut & patch	\$1,000.00	LOC	2	\$2,000	2	\$2,000	2	\$2,000	2	\$2,000
12" Main	\$145.00	LF	4,000	\$580,000	4,000	\$580,000	4,000	\$580,000	4,000	\$580,000
8" Domestic	\$124.00	LF	125	\$15,500	125	\$15,500	125	\$15,500	125	\$15,500
12" Gate valve	\$6,500.00	EA	4	\$26,000	4	\$26,000	4	\$26,000	4	\$26,000
8" Gate valve	\$3,600.00	EA	4	\$14,400	4	\$14,400	4	\$14,400	4	\$14,400
6" Fire Service	\$97.00	LF	250	\$24,250	250	\$24,250	250	\$24,250	250	\$24,250
6" Gate valve dom	\$3,000.00	EA	4	\$12,000	4	\$12,000	4	\$12,000	4	\$12,000
Fire Hydrant	\$4,500.00	EA	2	\$9,000	2	\$9,000	2	\$9,000	2	\$9,000
6" Hydrant Service	\$97.00	LF	50	\$4,850	50	\$4,850	50	\$4,850	50	\$4,850
6" Gate valve hydrant	\$3,500.00	EA	2	\$7,000	2	\$7,000	2	\$7,000	2	\$7,000
Test, sanitize, thrust block , misc.	\$10,000.00	LS	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
				\$711,000		\$711,000		\$711,000		\$711,000
G3020 SANITARY SEWER										
330000 UTILITIES										
Street Connection	\$30,000.00	LOC	1	\$30,000	1	\$30,000	1	\$30,000	1	\$30,000
Temp St pavement cut & patch	\$10,000.00	LOC	1	\$10,000	1	\$10,000	1	\$10,000	1	\$10,000
8" PVC San Main	\$110.00	LF	1,500	\$165,000	1,500	\$165,000	1,500	\$165,000	1,500	\$165,000
Site manhole	\$5,000.00	EA	3	\$15,000	3	\$15,000	3	\$15,000	3	\$15,000
Ext Grease Trap - 6,000 gal	\$45,000.00	EA	2	\$90,000	2	\$90,000	2	\$90,000	2	\$90,000
Int Grease interceptor										
		W / plumbing								
				\$310,000		\$310,000		\$310,000		\$310,000
G3030 STORM SEWER										
330000 UTILITIES										
Drainage System @										
Pavement	\$6.50	SF	533,905	\$3,470,383	558,872	\$3,632,668	474,296	\$3,082,924	491,479	\$3,194,614
Building footprint	\$6.50	FTP	169,550	\$1,102,075	168,365	\$1,094,373	173,013	\$1,124,585	156,401	\$1,016,607
				\$4,572,458		\$4,727,041		\$4,207,509		\$4,211,220
G3060 FUEL DISTRIBUTION		TBD								
				\$0		\$0		\$0		\$0
TOTAL G30 - SITE MECHANICAL UTILITIES				\$5,593,458		\$5,748,041		\$5,228,509		\$5,232,220
G40 - SITE ELECTRICAL UTILITIES										
G4010 ELECTRICAL DISTRIBUTION										
<u>330000 UTILITIES</u>										
Primary 15 kva Service, Equipment and Feed										

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Site Electric		by owner	1		1		1		2	
Duct banks:										
Pole dressing	\$3,500.00	LS	2	\$7,000	2	\$7,000	2	\$7,000	2	\$7,000
Primary duct bank	\$125.00	LF	1,500	\$187,500	950	\$118,750	1,500	\$187,500	950	\$118,750
Secondary duct bank and conductor	\$250.00	LF	150	\$37,500	150	\$37,500	150	\$37,500	150	\$37,500
Tele data duct bank	\$125.00	LF	1,400	\$175,000	1,400	\$175,000	1,400	\$175,000	1,400	\$175,000
EV Station feed	\$35.00	LF	2,500	\$87,500	2,500	\$87,500	2,500	\$87,500	2,500	\$87,500
PV Canopy feed	\$35.00	LF	1,000	\$35,000	1,000	\$35,000	1,000	\$35,000	1,000	\$35,000
Transformer pad and grounding	\$25,000.00	EA	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
Generator pad and grounding	\$25,000.00	EA	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
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										
EV Station:										
NEMA Cab, 400 amp panel	\$35,000.00	EA	1	\$35,000	1	\$35,000	1	\$35,000	1	\$35,000
EV Station feed	\$35.00	LF	2,500	\$87,500	2,500	\$87,500	2,500	\$87,500	2,500	\$87,500
EV Charging station	\$15,000.00	EA	20	\$300,000	20	\$300,000	20	\$300,000	20	\$300,000
Future EV (125 Stations):										
Primary Feed - allow	\$250.00	LF	1,000	\$250,000	1,000	\$250,000	1,000	\$250,000	1,000	\$250,000
EV Station Branch Feed 50	\$28.00	LF	5,000	\$140,000	5,000	\$140,000	5,000	\$140,000	5,000	\$140,000
EV Station PVC only 75	\$12.50	LF	7,500	\$93,750	7,500	\$93,750	7,500	\$93,750	7,500	\$93,750
Handholes and misc.	\$550.00	EA	150	\$82,500	150	\$82,500	150	\$82,500	150	\$82,500
Site Security	\$50,000.00	LS	1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000
				\$1,663,250		\$1,594,500		\$1,663,250		\$1,594,500
G4020 SITE LIGHTING										
<u>260001 ELECTRICAL*</u>										
Lighting Fixtures:										
Parking Fixtures	\$4,000.00	EA	35	\$140,000	35	\$140,000	35	\$140,000	35	\$140,000
Pedestrian Bollard Fixture(G2050)	\$3,500.00	EA	30	\$105,000	30	\$105,000	30	\$105,000	30	\$105,000
Flagpole light(G2050)	\$1,150.00	EA	1	\$1,150	1	\$1,150	1	\$1,150	1	\$1,150
1"c Light feed	\$14.00	LF	5,000	\$70,000	5,000	\$70,000	5,000	\$70,000	5,000	\$70,000
Specialty Lighting	\$25,000.00	LS	1	\$25,000	1	\$25,000	1	\$25,000	1	\$25,000
New Site Lighting:										
Sports Field lighting	\$120,000.00	EA	8	\$960,000	8	\$960,000	8	\$960,000	8	\$960,000
Light pole feeder trench	\$14.50	LF	5,000	\$72,500	5,000	\$72,500	5,000	\$72,500	5,000	\$72,500
Light pole base	\$950.00	EA	35	\$33,250	35	\$33,250	35	\$33,250	35	\$33,250

DESCRIPTION	UNIT COST	UNIT	OPT C1.d NEW		OPT C.2b NEW		OPT C.5b NEW		OPT D.2 NEW	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
*Excludes traffic lights *Excludes sports field lighting				\$1,406,900		\$1,406,900		\$1,406,900		\$1,406,900
TOTAL G40 - SITE ELECTRICAL UTILITIES			\$3,070,150		\$3,001,400		\$3,070,150		\$3,001,400	

PROJECT: Lexington High School School
 LOCATION: Lexington, MA
 CLIENT: SMMA
 DATE: 09-Oct-24

SUMMARY
 No.: 18021

A. SUBSTRUCTURE

A10 - FOUNDATIONS
 A1010 STANDARD FOUNDATIONS
 A1020 SPECIAL FOUNDATIONS
 A1030 SLAB ON GRADE

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 CEILINGS

C20 - STAIRS
 C2010 STAIR CONSTRUCTION
 C2020 STAIR FINISHES

C30 - INTERIOR FINISHES
 C3010 WALL FINISHES
 C3020 FLOOR FINISHES
 C3030 CEILING FINISHES

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

		OPT F4 STANDALONE	OPT G.1	OPT G.0				
CENTRAL OFFICE	FIELD HOUSE	FIELD HOUSE	FH ADD/RENO	FIELD HOUSE	RENO FIELD HOUSE	RENO FIELD HS	POOL	
OPT E TOTAL	OPT #1 TOTAL	OPT #2 TOTAL	OPT #3 TOTAL	OPT #4 TOTAL	OPT G.0 TOTAL	OPT G.1 TOTAL	OPT H.1 TOTAL	
A1010 STANDARD FOUNDATIONS	\$527,850	\$1,008,000	\$2,016,000	\$460,000	\$1,680,000	\$68,000	\$0	\$836,400
A1020 SPECIAL FOUNDATIONS	\$362,250	\$1,260,000	\$2,520,000	\$490,000	\$2,100,000	\$0	\$0	\$574,000
A1030 SLAB ON GRADE	\$182,678	\$635,400	\$1,270,800	\$635,100	\$1,059,000	\$600,100	\$0	\$289,460
B1010 FLOOR CONSTRUCTION	\$645,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B1020 ROOF CONSTRUCTION	\$545,229	\$2,026,800	\$4,015,800	\$700,800	\$3,346,300	\$0	\$0	\$882,770
B2010 EXTERIOR WALLS	\$952,200	\$2,638,803	\$4,298,017	\$3,579,269	\$4,080,302	\$2,435,446	\$170,000	\$1,180,800
B2020 EXTERIOR WINDOWS	\$517,500	\$1,248,345	\$2,067,593	\$1,727,730	\$1,800,473	\$1,035,484	\$0	\$410,000
B2030 EXTERIOR DOORS	\$59,150	\$101,100	\$141,100	\$101,100	\$101,100	\$0	\$0	\$121,100
B3010 ROOF COVERINGS	\$434,700	\$1,512,000	\$3,024,000	\$2,016,000	\$2,520,000	\$1,428,000	\$0	\$688,800
B3020 ROOF OPENINGS	\$0	\$255,500	\$585,500	\$8,000	\$255,500	\$8,000	\$0	\$173,000
C1010 PARTITIONS	\$931,500	\$360,000	\$720,000	\$480,000	\$600,000	\$170,000	\$170,000	\$492,000
C1020 INTERIOR DOORS	\$41,400	\$72,000	\$144,000	\$96,000	\$120,000	\$0	\$0	\$65,600
C1030 CEILINGS	\$41,400	\$72,000	\$144,000	\$96,000	\$120,000	\$0	\$0	\$139,400
C2010 STAIR CONSTRUCTION	\$130,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C2020 STAIR FINISHES	\$12,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3010 WALL FINISHES	\$351,900	\$180,000	\$360,000	\$240,000	\$300,000	\$170,000	\$0	\$360,800
C3020 FLOOR FINISHES	\$310,500	\$990,000	\$1,980,000	\$1,320,000	\$1,650,000	\$935,000	\$0	\$451,000
C3030 CEILING FINISHES	\$310,500	\$180,000	\$360,000	\$240,000	\$300,000	\$170,000	\$0	\$82,000
D1010 ELEVATORS & LIFTS	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 PLUMBING	\$517,500	\$360,000	\$720,000	\$480,000	\$600,000	\$340,000	\$0	\$574,000
D3010 HVAC	\$2,799,500	\$3,735,000	\$7,535,000	\$5,045,000	\$6,290,000	\$3,625,000	\$0	\$2,779,000
D4010 SPRINKLERS	\$207,000	\$360,000	\$720,000	\$480,000	\$600,000	\$340,000	\$0	\$164,000
D5010 ELECTRICAL SERVICE & DISTRIBUTION	\$786,600	\$1,368,000	\$2,736,000	\$1,446,000	\$2,010,000	\$1,292,000	\$0	\$623,200
D5020 LIGHTING & BRANCH WIRING	\$369,495	\$432,000	\$864,000	\$576,000	\$720,000	\$408,000	\$0	\$196,800
D5030 COMMUNICATION & SECURITY	\$434,700	\$126,000	\$252,000	\$168,000	\$210,000	\$119,000	\$0	\$57,400
D5090 OTHER ELECTRICAL SYSTEMS	\$271,170	\$216,000	\$432,000	\$288,000	\$360,000	\$204,000	\$0	\$98,400

	CENTRAL OFFICE OPT E TOTAL	FIELD HOUSE OPT #1 TOTAL	FIELD HOUSE OPT #2 TOTAL	FH ADD/RENO OPT #3 TOTAL	FIELD HOUSE OPT #4 TOTAL	RENO FIELD HOUSE OPT G.0 TOTAL	RENO FIELD HS OPT G.1 TOTAL	POOL OPT H.1 TOTAL
Lexington High School - Break outs								
E. EQUIPMENT & FURNISHINGS								
E10 - EQUIPMENT								
E1010 COMMERCIAL EQUIPMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,750,000
E1090 OTHER EQUIPMENT	\$3,000	\$621,150	\$789,900	\$789,900	\$789,900	\$621,150	\$0	\$0
E20 - FURNISHINGS								
E 2010 FIXED FURNISHINGS	\$27,945	\$18,000	\$36,000	\$24,000	\$30,000	\$17,000	\$0	\$8,200
E2020 MOVABLE FURNISHINGS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F. SPECIAL CONSTRUCTION & DEMOLITION								
F10 - SPECIAL CONSTRUCTION								
F1010 SPECIAL STRUCTURES	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000	\$0
F1020 INTEGRATED CONSTRUCTION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F1030 SPECIAL CONSTRUCTION SYSTEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F1040 SPECIAL FACILITIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F1050 SPECIAL CONTROLS & INSTRUMENTATION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F20 - SELECTIVE BUILDING DEMOLITION								
F2010 BUILDING ELEMENTS DEMOLITION	\$0	\$408,000	\$408,000	\$680,000	\$408,000	\$680,000	\$170,000	\$0
F2020 HAZARDOUS COMPONENTS ABATEMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G. BUILDING SITEWORK								
G10 - SITE PREPARATION								
G1010 SITE CLEARING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G1020 SITE DEMOLITION & RELOCATIONS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G1030 SITE EARTHWORK	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G1040 HAZARDOUS WASTE REMEDIATION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G20 - SITE IMPROVEMENTS								
G2010 ROADWAYS	\$164,390	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2020 PARKING LOTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2030 PEDESTRIAN PAVING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 SITE DEVELOPMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2050 LANDSCAPING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G30 - SITE MECHANICAL UTILITIES								
G3010 WATER SUPPLY	\$0	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$0
G3020 SANITARY SEWER	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0
G3030 STORM SEWER	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0
G3040 HEATING DISTRIBUTION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G3050 COOLING DISTRIBUTION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G3060 FUEL DISTRIBUTION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G3090 OTHER SITE MECHANICAL UTILITIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G40 - SITE ELECTRICAL UTILITIES								
G4010 ELECTRICAL DISTRIBUTION	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0
G4020 SITE LIGHTING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4030 SITE COMMUNICATIONS & SECURITY	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4090 OTHER SITE ELECTRICAL UTILITIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL DIRECT COST	\$12,018,596	\$20,459,098	\$38,414,709	\$2,441,899	\$32,325,574	\$15,042,280	\$1,385,000	\$12,998,130
TOTAL GSF	20,700	36,000	72,000	72,000	60,000	34,000	34,000	16,400
COST PER SF	\$580.61	\$568.31	\$533.54	\$31.69	\$538.76	\$442.42	\$40.74	\$792.57

DESCRIPTION	UNIT COST	UNIT	CENTRAL OFFICE OPT E QUANTITY	FH OPT #1 NEW QUANTITY	FH OPT #1 NEW TOTAL	FH OPT #2 NEW QUANTITY	FH OPT #2 NEW TOTAL	FH OPT #3 ADD/RENO QUANTITY	FH OPT #3 ADD/RENO TOTAL	F.H OPT 4 NEW QUANTITY	F.H OPT 4 NEW TOTAL	FH OPT G RENO LONG TERM QUANTITY	FH OPT G RENO LONG TERM TOTAL	FH OPT G RENO SHORT TERM QUANTITY	FH OPT G RENO SHORT TERM TOTAL	POOL OPT H,I QUANTITY	POOL OPT H,I TOTAL	
A. SUBSTRUCTURE																		
A10 - FOUNDATIONS																		
A1010 STANDARD FOUNDATIONS																		
Foundation, Earthwork - bldg	\$51.00	GSF	10,350	\$527,850													16,400	836,400
Foundation, Earthwork - new field hou	\$28.00	GSF			36,000	\$1,008,000	72,000	\$2,016,000	14,000	\$392,000	60,000	\$1,680,000						
Allow for foundations repairs	\$2.00	GSF			\$527,850		\$1,008,000		34,000	\$68,000			34,000	68,000				
																0	836,400	
A1020 SPECIAL FOUNDATIONS																		
Soil Improvement Allowance:																		
Ground Improvement	\$35.00	FTP	10,350	\$362,250	36,000	\$1,260,000	72,000	\$2,520,000	14,000	\$490,000	60,000	\$2,100,000					16,400	574,000
																0	574,000	
A1030 SLAB ON GRADE																		
5" Slab, Gravel, insul	\$17.65	FTP	10,350	\$182,678	36,000	\$635,400	72,000	\$1,270,800	34,000	\$600,100	60,000	\$1,059,000					16,400	289,460
Slab patch at plumbing and structural	\$2.50	FTP			\$182,678		\$635,400		14,000	\$35,000						0	289,460	
																0		
TOTAL A10 FOUNDATIONS					\$1,072,778		\$2,903,400		\$5,806,800		\$1,585,100		\$4,839,000		668,100		0	1,699,860
B. SHELL																		
B10 - SUPERSTRUCTURE																		
B1010 FLOOR CONSTRUCTION																		
Typ. Floor frame (15 lbs / SF)	\$5,400.00	TONS	77.63	\$419,175														
3 1/4" LW Deck Fill	\$12.75	SF	10,350	\$131,963														
3" x 20 Ga Comp. deck	\$6.00	SF	10,350	\$62,100														
Fireproofing - beam & column	\$3.15	SF	10,350	\$32,603														
																0	0	
																0	0	
B1020 ROOF CONSTRUCTION																		
051200 STRUCTURAL STEEL																		
Classroom flat roof frame (15 lbs / SF)	\$5,450.00	TONS	78	\$423,056													107	\$80,970
FH flat roof frame (13 lbs / SF)	\$6,500.00	TONS			234	\$1,521,000	468	\$3,042,000	78	\$507,000	390	\$2,535,000						
Galv. RTU damage - allow	\$6,500.00	TONS	2	\$13,000	2	\$13,000	2	\$13,000	2	\$13,000	1	\$6,500				6	39,000	
Roof Screen Frame	\$6,200.00	TONS	2	\$12,400	4	\$24,800	4	\$24,800	4	\$24,800	4	\$24,800				8	49,600	
32" x 20 Ga roof deck	\$6.20	SF	10,350	\$64,170														
2" x 20 Ga Acoustical Roof Deck	\$13.00	SF	10,350	\$32,603	36,000	\$468,000	72,000	\$936,000	12,000	\$156,000	60,000	\$780,000					16,400	213,200
Fireproofing - beam & column	\$3.15	SF																
Reinforce existing structure	\$5.00	GSF																
																0	0	
																0	882,770	
TOTAL B10 SUPERSTRUCTURE					\$1,191,069		\$2,026,800		\$4,015,800		\$700,800		\$3,346,300		0		0	882,770
B20 - EXTERIOR ENCLOSURE																		
B2010 EXTERIOR WALLS																		
Exterior Wall Assembly - Central offic	\$46.00	GSF	20,700	\$952,200														
Exterior Wall Assembly - Pool	\$72.00	GSF															16,400	1,180,800
Exterior Wall Assembly - Repair only	\$5.00	GSF																
Masonry Veneer:																		
Granite Veneer - 2%	\$100.00	SF			313	\$31,320	519	\$51,930	434	\$43,380	452	\$45,210	260	25,965				
Masonry Veneer - 60%	\$50.00	SF			9,396	\$469,800	15,579	\$778,950	13,014	\$650,700	13,563	\$678,150	7,790	389,475				
Canopy col. -complete	\$8,500.00	EA			4	\$34,000	4	\$34,000	4	\$34,000	4	\$34,000	4	34,000				
Stainless steel masonry flashing	\$29.00	LF			696	\$20,184	1,154	\$33,466	964	\$27,956	1,004	\$29,116	577	16,733				
Premium for radial end construction	\$15.00	SF																
																12,983	194,738	

Lexington High School - Break outs												34,000 SF			34,000 SF			
10/9/24			36,000 new			72,000 sf new			34,000 SF			34,000 SF			34,000 SF			
DESCRIPTION	UNIT COST	UNIT	CENTRAL OFFICE OPT E QUANTITY	FH OPT #1 NEW QUANTITY	FH OPT #1 NEW TOTAL	FH OPT #2 NEW QUANTITY	FH OPT #2 NEW TOTAL	FH OPT #3 ADD/RENO QUANTITY	FH OPT #3 ADD/RENO TOTAL	F.H OPT 4 NEW QUANTITY	F.H OPT 4 NEW TOTAL	FH OPT G RENO LONG TERM QUANTITY	FH OPT G RENO LONG TERM TOTAL	FH OPT G RENO SHORT TERM QUANTITY	FH OPT G RENO SHORT TERM TOTAL	POOL OPT H,I QUANTITY	POOL OPT H,I TOTAL	
Architectural Precast: Precast Window Sill Misc. Trim and Accents	\$68.00 \$5.00	LF SF		696 9,396	\$47,328 \$46,980	1,154 15,579	\$78,472 \$77,895	964 13,014	\$65,552 \$65,070	1,005 13,563	\$68,317 \$67,815	577 7,790	39,236 38,948					
054000 COLD FORMED METAL FRAMING																		
8" x 18 Ga. stud @ typical wall 1/2" Dens glass sheathing-ext. wall Soffit/cave framing - assume projected 3" Canopy ceiling framing 1/2" Dens glass sheathing - cave/cornic 1/2" Dens glass sheathing - canopy	\$16.50 \$4.50 \$9.50 \$7.00 \$4.50 \$4.50	SF SF SF SF SF SF		15,660 15,660 1,740 1,000 1,740 1,000	\$258,390 \$70,470 \$16,530 \$7,000 \$7,830 \$4,500	25,965 25,965 2,885 1,000 2,885 1,000	\$428,423 \$116,843 \$27,408 \$7,000 \$12,983 \$4,500	21,690 21,690 2,410 1,000 2,410 1,000	\$357,885 \$97,605 \$22,895 \$7,000 \$10,845 \$4,500	22,605 22,605 2,510 1,000 2,510 1,000	\$372,983 \$101,723 \$23,845 \$7,000 \$11,295 \$4,500	12,983 12,983 1,443 1,000 1,443 1,000	214,211 58,421 13,704 7,000 6,491 4,500					
050001 MISCELLANEOUS & ORNAMENTAL IRON*																		
Misc. Ext Metals Structural thermal break	\$0.50 \$0.75	SF SF		15,660 15,660	\$7,830 \$11,745	25,965 25,965	\$12,983 \$19,474	21,690 21,690	\$10,845 \$16,268	22,605 22,605	\$11,303 \$16,954	12,983 12,983	6,491 9,737					
071326 AIR & VAPOR BARRIERS																		
Air & vapor barrier - wall Air & vapor barrier - cornice Air & vapor barrier - canopy	\$9.50 \$9.50 \$9.50	SF SF SF		15,660 1,740 1,000	\$148,770 \$16,530 \$9,500	25,965 2,885 1,000	\$246,668 \$27,408 \$9,500	21,690 2,410 1,000	\$206,055 \$22,895 \$9,500	22,605 2,510 1,000	\$214,748 \$23,845 \$9,500	12,983 1,443 1,000	123,334 13,704 9,500					
072100 INSULATION																		
Exterior Wall: Spray foam at perm openings 8" Mineral wool Insul. 3" Spray foam - stud cavity	\$6.00 \$10.00 \$4.65	LF SF SF		3,480 15,660 15,660	\$20,880 \$156,600 \$72,819	5,770 25,965 25,965	\$34,620 \$259,650 \$120,737	4,820 21,690 21,690	\$28,920 \$216,900 \$100,859	5,023 22,605 22,605	\$30,140 \$226,050 \$105,113	2,885 12,983 12,983	17,310 129,825 60,369					
Bldg Cornice and Canopy/Soffit: 8" Mineral wool Insul. 3" Spray foam - stud cavity	\$10.00 \$4.65	SF SF		1,740 1,740	\$17,400 \$8,091	2,885 2,885	\$28,850 \$13,415	2,410 2,410	\$24,100 \$11,207	2,510 2,510	\$25,100 \$11,672	1,443 1,443	14,425 6,708					
071000 DAMPROOF., WATERPROOF. & CAULKING*																		
Exterior Sealants	\$0.85	SF		15,660	\$13,311	25,965	\$22,070	21,690	\$18,437	22,605	\$19,214	12,983	11,035					
074213 PERFORMED CLADDING																		
Wall Panel: Metal Panel - 18% Terra Cotta Panel - 20%	\$100.00 \$150.00	SF SF		2,819 3,132	\$281,880 \$469,800	4,674 5,193	\$467,370 \$778,950	3,904 4,338	\$390,420 \$650,700	4,069 4,521	\$406,890 \$678,150	2,337 2,597	233,685 389,475					
Alum. 16 ga Panel : Canopy ceiling Roof Eave Cladding	\$45.00 \$100.00	SF SF		1,000 1,740	\$45,000 \$174,000	1,000 2,885	\$45,000 \$288,500	1,000 2,410	\$45,000 \$241,000	1,000 2,510	\$45,000 \$251,000	1,000 1,443	45,000 144,250					
Roof Screen: Metal Panel Equipment Screen	\$65.00	SF		1,200	\$78,000	2,000	\$130,000	1,200	\$78,000	1,500	\$97,500	1,500	97,500					
092116 GYPSUM WALLBOARD																		
1 Lyr 5/8" gyp @ ext. wall	\$4.50	SF		15,660	\$70,470	25,965	\$116,843	21,690	\$97,605	22,605	\$101,723	12,983	58,421					
090007 PAINTING*																		
Exterior painting	\$0.22	SF		15,660	\$3,445	25,965	\$5,712	21,690	\$4,772	22,605	\$4,973	12,983	2,856					
101400 IDENTIFYING DEVICES (EXT. BLD MTD SIGNAGE)																		
24" Alum bldg mtd letter - allow Misc. Bldg mtd signage	\$420.00 \$10,000.00	EA LS		20 1	\$8,400 \$10,000	20 1	\$8,400 \$10,000	20 1	\$8,400 \$10,000	20 1	\$8,400 \$10,000	20 1	8,400 10,000					
				952,200	\$2,638,803		\$4,298,017		\$3,579,269		\$4,080,302		2,435,446		170,000		1,180,800	
B2020 EXTERIOR WINDOWS																		
Window Systems - Central Office Window Systems - Pool	\$25.00 \$25.00	GSF GSF	20,700	\$517,500											16,400	410,000		
061000 ROUGH CARPENTRY																		
P.T. - perim blocking	\$14.00	LF		3,480	\$48,720	5,770	\$80,780	4,820	\$67,480	5,023	\$70,327	2,885	40,390					
071326 AIR & VAPOR BARRIERS																		
Flex flashing - perim	\$10.00	LF		3,480	\$34,800	5,770	\$57,700	4,820	\$48,200	5,023	\$50,233	2,885	28,850					
071000 DAMPROOF., WATERPROOF. & CAULKING*																		

Lexington High School - Break outs														
10/9/24														
36,000 new														
72,000 sf new														
DESCRIPTION	UNIT COST	UNIT	CENTRAL OFFICE OPT E QUANTITY	FH OPT #1 NEW TOTAL	FH OPT #2 NEW TOTAL	FH OPT #3 ADD/RENO TOTAL	F.H OPT 4 NEW TOTAL	FH OPT G RENO LONG TERM TOTAL	FH OPT G RENO SHORT TERM TOTAL	POOL OPT H,I QUANTITY	34,000 SF TOTAL	34,000 SF TOTAL		
Window Caulking	\$12.75	LF		3,480	\$44,370	5,770	\$73,568	4,820	\$61,455	5,023	\$64,048	2,885	36,784	
080001 METAL WINDOWS*														
TRP Glazing Exterior														
Alum Window - 50%	\$170.00	SF		2,610	\$443,700	4,328	\$735,675	3,615	\$614,550	3,768	\$640,475	2,164	367,838	
Alum Curtainwall - 50%	\$225.00	SF		2,610	\$587,250	4,328	\$973,688	3,615	\$813,375	3,768	\$847,688	2,164	486,844	
Security glazing - 15% of total	\$50.00	SF		783	\$39,150	1,298	\$64,913	1,085	\$54,225	1,130	\$56,513	649	32,456	
Sun Shading:														
Horizontal Window Sunscreen - 40%	\$225.00	LF		209	\$46,980	346	\$77,895	289	\$65,070	301	\$67,815	173	38,948	
109000 MISCELLANEOUS SPECIALTIES														
Alum louvers - allow	\$135.00	SF		25	\$3,375	25	\$3,375	25	\$3,375	25	\$3,375	25	3,375	
			\$517,500		\$1,248,345		\$2,067,593		\$1,727,730		\$1,800,473		1,035,484	
													410,000	
B2030 EXTERIOR DOORS														
080001 METAL WINDOWS*														
7" Alum. Doors (Incl. Hardware):														
Main Entry - dbl	\$20,000.00	EA		2	\$40,000	2	\$40,000	4	\$80,000	2	\$40,000	2	40,000	
Stair Entries - dbl	\$20,000.00	EA		1	\$10,000	2	\$20,000	2	\$20,000	2	\$20,000	2	20,000	
Misc. Alum Egress - sgl	\$10,000.00	EA				1	\$11,000	1	\$11,000	1	\$11,000	1	11,000	
Auto opener - allow	\$11,000.00	PR												
081113 HOLLOW METALWORK														
Insulated HM Doors and Frame:														
Receiving - dbl	\$3,500.00	EA	1	\$3,500	1	\$3,500	1	\$3,500	1	\$3,500	1	3,500	1	3,500
Elec/mech rm - sgl	\$1,350.00	EA	1	\$1,350	2	\$2,700	2	\$2,700	2	\$2,700	2	2,700	2	2,700
Elec/mech rm - dbl	\$3,500.00	EA	1	\$3,500	2	\$7,000	2	\$7,000	2	\$7,000	2	7,000	2	7,000
Gym - dbl	\$7,500.00	EA			2	\$15,000	2	\$15,000	2	\$15,000	2	15,000	2	15,000
090007 PAINTING*														
Paint HM Door & frame - sgl	\$200.00	EA	1	\$200	2	\$400	2	\$400	2	\$400	2	400	2	400
Paint HM Door & frame - dbl	\$300.00	EA	2	\$600	5	\$1,500	5	\$1,500	5	\$1,500	5	1,500	5	1,500
					\$59,150		\$101,100		\$141,100		\$101,100		101,100	
TOTAL B20 - EXTERIOR ENCLOSURE			\$1,528,850		\$3,988,248		\$6,506,709		\$5,408,099		\$5,981,874		3,572,030	
													170,000	
													1,711,900	
B30 - ROOFING														
B3010 ROOF COVERINGS														
Roofing and Flashing	\$42.00	SF	10,350	\$434,700	36,000	\$1,512,000	72,000	\$3,024,000	48,000	\$2,016,000	\$60,000	\$2,520,000	34,000	1,428,000
					\$434,700		\$1,512,000		\$3,024,000		\$2,016,000		\$2,520,000	
B3020 ROOF OPENINGS														
<u>077200 ROOF ACCESSORIES</u>														
Roof hatch	\$8,000.00	EA		1	\$8,000	1	\$8,000	1	\$8,000	1	\$8,000	1	8,000	
Smoke hatch	\$15,000.00	EA												
New Skylight	\$165.00	SF		1,500	\$247,500	3,500	\$577,500			1,500	\$247,500		1,000	165,000
*Mechanical equip screen is included with B1020 & B2010					\$0		\$255,500		\$585,500		\$8,000		8,000	
TOTAL B30 ROOFING			\$434,700		\$1,767,500		\$3,609,500		\$2,024,000		\$2,775,500		1,436,000	
													0	
													861,800	
C. INTERIORS														
C10 - INTERIOR CONSTRUCTION														
<u>C1010 PARTITIONS</u>														
Interior Partitions	\$45.00	GSF		20,700	\$931,500	36,000	\$360,000	72,000	\$720,000	48,000	\$480,000	\$60,000	\$600,000	
Interior Partitions - Field house	\$10.00	GSF												
Interior Partitions - Pool	\$30.00	GSF												
Misc. Interior Repairs	\$5.00	GSF												
					\$931,500		\$360,000		\$720,000		\$480,000		\$600,000	

Lexington High School - Break outs																	
10/9/24																	
36,000 new																	
72,000 sf new																	
DESCRIPTION	UNIT COST	UNIT	CENTRAL OFFICE OPT E QUANTITY	CENTRAL OFFICE OPT E TOTAL	FH OPT #1 NEW QUANTITY	FH OPT #1 NEW TOTAL	FH OPT #2 NEW QUANTITY	FH OPT #2 NEW TOTAL	FH OPT #3 ADD/RENO QUANTITY	FH OPT #3 ADD/RENO TOTAL	F.H OPT 4 NEW QUANTITY	F.H OPT 4 NEW TOTAL	34,000 SF QUANTITY	34,000 SF TOTAL	POOL OPT H,I QUANTITY	POOL OPT H,I TOTAL	
TOTAL C30 - INTERIOR FINISHES				\$972,900		\$1,350,000		\$2,700,000		\$1,800,000		\$2,250,000		1,275,000		0	893,800
D. SERVICES																	
D10 - CONVEYING																	
D1010 ELEVATORS & LIFTS																	
Passenger - Hydraulic	\$80,000.00	STOP	1	\$80,000													
				\$80,000		\$0		\$0		\$0		\$0		0		0	
TOTAL D10 - CONVEYING				\$80,000		\$0		\$0		\$0		\$0		0		0	
D20 - PLUMBING																	
D2010 PLUMBING FIXTURES																	
Plumbing - Pool	\$35.00	GSF															
Plumbing - Central Office	\$25.00	GSF															
Plumbing - Field House	\$10.00	GSF	20,700	\$517,500													
					36,000	\$360,000	72,000	\$720,000	48,000	\$480,000	60,000	\$600,000	34,000	340,000			
					\$517,500		\$360,000		\$720,000		\$480,000		\$600,000		340,000		574,000
TOTAL D20 - PLUMBING				\$517,500		\$360,000		\$720,000		\$480,000		\$600,000		340,000		0	574,000
D30 - HVAC																	
D3010 HVAC																	
HVAC - GEO THERMAL	\$85.00	GSF	20,700	\$1,759,500													
H& V Units w/ locker room cooling	\$55.00	GSF															
HVAC - pool	\$110.00	GSF															
Geothermal Wells - 800' depth	\$65,000.00	EA	16	\$1,040,000													
					27	\$1,755,000	55	\$3,575,000	37	\$2,405,000	46	\$2,990,000	27	1,755,000			
					\$2,799,500		\$3,735,000		\$7,535,000		\$5,045,000		\$6,290,000		3,625,000		2,779,000
TOTAL D30 - HVAC				\$2,799,500		\$3,735,000		\$7,535,000		\$5,045,000		\$6,290,000		3,625,000		0	2,779,000
D40 - FIRE PROTECTION																	
D4010 SPRINKLERS																	
210001 FIRE SUPPRESSION*																	
Sprinkler system - wet	\$10.00	GSF	20,700	\$207,000													
Fire Pump		n/a															
					\$207,000		\$360,000		\$720,000		\$480,000		\$600,000		340,000		164,000
TOTAL D40 - FIRE PROTECTION				\$207,000		\$360,000		\$720,000		\$480,000		\$600,000		340,000		0	164,000
D50 - ELECTRICAL																	
D5010 ELECTRICAL SERVICE & DISTRIBUTION																	
260001 ELECTRICAL*																	
Service Panel and Feeders	\$11.00	GSF	20,700	\$227,700													
PV SYSTEMS :																	
PV Low Roof Panels - \$4.50/ per watt	\$54.00	SF	10,350	\$558,900													
					\$786,600		\$1,368,000		\$2,736,000		\$1,446,000		\$2,010,000		1,292,000		623,200
D5020 LIGHTING & BRANCH WIRING																	
260001 ELECTRICAL*																	

Lexington High School - Break outs																		
10/9/24																		
36,000 new																		
72,000 sf new																		
DESCRIPTION	UNIT COST	UNIT	CENTRAL OFFICE OPT E QUANTITY	CENTRAL OFFICE OPT E TOTAL	FH OPT #1 NEW QUANTITY	FH OPT #1 NEW TOTAL	FH OPT #2 NEW QUANTITY	FH OPT #2 NEW TOTAL	FH OPT #3 ADD/RENO QUANTITY	FH OPT #3 ADD/RENO TOTAL	F.H OPT 4 NEW QUANTITY	F.H OPT 4 NEW TOTAL	FH OPT G RENO LONG TERM QUANTITY	FH OPT G RENO LONG TERM TOTAL	FH OPT G RENO SHORT TERM QUANTITY	FH OPT G RENO SHORT TERM TOTAL	POOL OPT H,I QUANTITY	POOL OPT H,I TOTAL
Lighting Lighting Control	\$15.00 \$2.85	GSF GSF	20,700 20,700	\$310,500 \$58,995														
Field House Lighting and controls	\$12.00	GSF			36,000	\$432,000	72,000	\$864,000	48,000	\$576,000	60,000	\$720,000	34,000	408,000	0	16,400	196,800	
					\$369,495													
D5030 COMMUNICATION & SECURITY																		
260001 ELECTRICAL*																		
Security Tele/data cabling, racks and switches	\$12.00 \$9.00 \$1.25	GSF GSF GSF	20,700 20,700	\$248,400 \$186,300														
Tele/comm Security - Field House	\$3.50	GSF			36,000	\$126,000	72,000	\$252,000	48,000	\$168,000	60,000	\$210,000	34,000	119,000	0	16,400	57,400	
					\$434,700													
D5090 OTHER ELECTRICAL SYSTEMS																		
260001 ELECTRICAL*																		
Fire Alarm	\$3.50	GSF	20,700	\$72,450														
Door Access	\$3.00	GSF	20,700	\$62,100														
Clocks and PA	\$1.75	GSF	20,700	\$36,225														
Gym/Café Sound System	\$0.75	GSF	20,700	\$15,525														
Lighting Protection	\$0.50	GSF	20,700	\$10,350														
Mechanical Wiring	\$2.00	GSF	20,700	\$41,400														
Misc. Electrical	\$1.00	GSF	20,700	\$20,700														
Bi-Direction Antenna	\$0.60	GSF	20,700	\$12,420														
Field House Misc. Systems	\$6.00	GSF			36,000	\$216,000	72,000	\$432,000	48,000	\$288,000	60,000	\$360,000	34,000	204,000	0	16,400	98,400	
					\$271,170													
TOTAL D50 - ELECTRICAL					\$1,861,965	\$2,142,000		\$4,284,000		\$2,478,000		\$3,300,000		2,023,000		0	975,800	
E. EQUIPMENT & FURNISHINGS																		
E10 - EQUIPMENT																		
E1010 COMMERCIAL EQUIPMENT																		
11900 POOL EQUIPMENT																		
Pool Package	\$1,750,000.00	LS			\$0		\$0		\$0		\$0		\$0		0		1	1,750,000
																		1,750,000
E1090 OTHER EQUIPMENT																		
113100 APPLIANCES																		
Staff kitchen refrigerator	\$1,000.00	EA	2	\$2,000														
Staff kitchen microwave	\$500.00	EA	2	\$1,000														
Medical office refrigerator w/ice	\$1,000.00	EA																
Adult living classroom	\$10,000.00	LS																
116600 ATHLETIC & SPORTS EQUIPMENT																		
Basketball backstops - electric	\$25,000.00	EA			6	\$150,000	6	\$150,000	6	\$150,000	6	\$150,000	6	150,000		0		0
Roll up curtain	\$3,500.00	SF			5,800	\$203,000	5,800	\$203,000	5,800	\$203,000	5,800	\$203,000	5,800	203,000		0		0
Volley ball court equip.	\$700.00	EA	2	\$1,400			2	\$1,400	2	\$1,400	2	\$1,400	2	1,400		0		0
Scoreboard and shot clock	\$24,000.00	EA			750	\$168,750	1,500	\$337,500	1,500	\$337,500	1,500	\$337,500	1,500	48,000		0		0
Bleachers	\$225.00	SEAT			1	\$50,000	1	\$50,000	1	\$50,000	1	\$50,000	1	168,750		0		0
Misc. Gym Equipment	\$50,000.00	LS																
TOTAL E10 - EQUIPMENT					\$3,000	\$621,150		\$789,900		\$789,900		\$789,900		621,150		0	1,750,000	
E20 - FURNISHINGS																		
E 2010 FIXED FURNISHINGS																		

Lexington High School - Break outs												
10/9/24												
36,000 new 72,000 sf new												
DESCRIPTION	UNIT COST	UNIT	CENTRAL OFFICE OPT E QUANTITY	CENTRAL OFFICE OPT E TOTAL	FH OPT #1 NEW QUANTITY	FH OPT #1 NEW TOTAL	FH OPT #2 NEW QUANTITY	FH OPT #2 NEW TOTAL	FH OPT #3 ADD/RENO QUANTITY	FH OPT #3 ADD/RENO TOTAL	F.H OPT 4 NEW QUANTITY	F.H OPT 4 NEW TOTAL
129000 MISC. FURNISHINGS												
Window Treatment	\$0.85	GSF	20,700	\$17,595								
123553 CLASSROOM CASEWORK												
Casework	\$0.50	GSF	20,700	\$10,350	36,000	\$18,000	72,000	\$36,000	48,000	\$24,000	60,000	\$30,000
				\$27,945		\$18,000		\$36,000		\$24,000		\$30,000
TOTAL E20 - FURNISHINGS				\$27,945		\$18,000		\$36,000		\$24,000		\$30,000
F. SPECIAL CONSTRUCTION & DEMOLITION												
F10 - SPECIAL CONSTRUCTION												
F1010 SPECIAL STRUCTURES												
Pre-Engineered Mech Addition	\$1,000.00	GSF										
TOTAL F10 - SPECIAL CONSTRUCTION				\$0		\$0		\$0		\$0		0
F20 - SELECTIVE BUILDING DEMOLITION												
F2010 BUILDING ELEMENTS DEMOLITION												
Demolish Field House	\$12.00	GSF										
Exterior/Interior Demo	\$20.00	GSF										
Minor Interior Demolition	\$5.00	GSF										
TOTAL F20 - SELECTIVE BUILDING DEMOLITION				\$0		\$408,000		\$408,000		\$680,000		\$408,000
G20 - SITE IMPROVEMENTS												
G2010 ROADWAYS												
321000 PAVING AND CURBING												
Site:												
Bituminous - Road and parking	\$5.12	SF	21,000	\$107,520								
12" Gravel base @ vehicular pave.	\$65.00	CY	778	\$50,570								
Granite Curbing - road/parking	\$52.00	LF										
Parking/traffic signage	\$0.10	SF	21,000	\$2,100								
Parking/line panting & markings	\$0.20	SF	21,000	\$4,200								
G30 - SITE MECHANICAL UTILITIES												
G3010 WATER SUPPLY												
330000 UTILITIES												
Water Service	\$75,000.00	LS			1	\$75,000	1	\$75,000	1	\$75,000	1	75,000
G3020 SANITARY SEWER												
330000 UTILITIES												

Lexington High School - Break outs			10/9/24		36,000 new		72,000 sf new				34,000 SF		34,000 SF					
DESCRIPTION	UNIT COST	UNIT	CENTRAL OFFICE OPT E		FH OPT #1 NEW		FH OPT #2 NEW		FH OPT #3 ADD/RENO		FH OPT 4 NEW		FH OPT G RENO LONG TERM		FH OPT G RENO SHORT TERM		POOL OPT H,I	
			QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL
Sanitary Service	\$50,000.00	LS			1	\$50,000			1	\$50,000			1	\$50,000			1	50,000
				-----	\$0	\$50,000				-----				-----				-----
G3030 STORM SEWER																		0
330000 UTILITIES																		
On site Storage System: Storm Drainage	\$100,000.00	LS			1	\$100,000			1	\$100,000			1	\$100,000			1	100,000
				-----	\$0	\$100,000				-----				-----				-----
TOTAL G30 - SITE MECHANICAL UTILITIES				\$0	\$225,000			\$225,000		\$225,000			\$225,000			225,000	225,000	0
G40 - SITE ELECTRICAL UTILITIES																		
G4010 ELECTRICAL DISTRIBUTION																		
330000 UTILITIES																		
Site Primary	\$50,000.00	LS			1	\$50,000			1	\$50,000			1	\$50,000			1	50,000
				-----	\$0	\$50,000				-----				-----				-----

PROJECT: Lexington High School School
 LOCATION: Lexington, MA
 CLIENT: SMMA
 DATE: 20-Aug-24

SUMMARY

No.: 18021

A. SUBSTRUCTURE

A10 - FOUNDATIONS

	CODE	UPGRADE	TOTAL
A1010 STANDARD FOUNDATIONS	\$704,000		
A1020 SPECIAL FOUNDATIONS	\$0		
A1030 SLAB ON GRADE	\$292,500		

B. SHELL

B10 - SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION	\$1,760,000
B1020 ROOF CONSTRUCTION	\$150,000

B20 - EXTERIOR ENCLOSURE

B2010 EXTERIOR WALLS	\$3,520,000
B2020 EXTERIOR WINDOWS	\$11,440,000
B2030 EXTERIOR DOORS	\$613,100

B30 - ROOFING

B3010 ROOF COVERINGS	\$8,460,000
B3020 ROOF OPENINGS	\$151,500

C. INTERIORS

C10 - INTERIOR CONSTRUCTION

C1010 PARTITIONS	\$1,760,000
C1020 INTERIOR DOORS	\$528,000
C1030 FITTINGS	\$880,000

C20 - STAIRS

C2010 STAIR CONSTRUCTION	\$250,000
C2020 STAIR FINISHES	\$70,000

C30 - INTERIOR FINISHES

C3010 WALL FINISHES	\$1,760,000
C3020 FLOOR FINISHES	\$5,280,000
C3030 CEILING FINISHES	\$5,280,000

D. SERVICES

D10 - CONVEYING

D1010 ELEVATORS & LIFTS	\$1,050,000
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D20 - PLUMBING

D2010 PLUMBING	\$11,360,000
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D30 - HVAC

D3010 HVAC	\$56,200,000
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D40 - FIRE PROTECTION

	CODE	UPGRADE	TOTAL
D1010 ELEVATORS & LIFTS	\$1,050,000		
D2010 PLUMBING	\$11,360,000		
D3010 HVAC	\$56,200,000		
D40 - FIRE PROTECTION			

D4010 SPRINKLERS

\$3,080,000

Lexington High School - Base Repair

	CODE UPGRADE TOTAL
D50 - ELECTRICAL	
D5010 ELECTRICAL SERVICE & DISTRIBUTION	\$4,722,000
D5020 LIGHTING & BRANCH WIRING	\$6,283,200
D5030 COMMUNICATION & SECURITY	\$7,832,000
D5090 OTHER ELECTRICAL SYSTEMS	\$5,297,600
E. EQUIPMENT & FURNISHINGS	
E10 - EQUIPMENT	
E1010 COMMERCIAL EQUIPMENT	\$2,500,000
E1090 OTHER EQUIPMENT	\$0
E20 - FURNISHINGS	
E 2010 FIXED FURNISHINGS	\$1,190,700
E2020 MOVABLE FURNISHINGS	\$0
F. SPECIAL CONSTRUCTION & DEMOLITION	
F10 - SPECIAL CONSTRUCTION	
F1010 SPECIAL STRUCTURES	\$0
F20 - SELECTIVE BUILDING DEMOLITION	
F2010 BUILDING ELEMENTS DEMOLITION	\$0
F2020 HAZARDOUS COMPONENTS ABATEMENT	\$0
G. BUILDING SITEWORK	
G10 - SITE PREPARATION	
G1010 SITE CLEARING	\$0
G1020 SITE DEMOLITION & RELOCATIONS	\$0
G1030 SITE EARTHWORK	\$0
G1040 HAZARDOUS WASTE REMEDIATION	\$0
G20 - SITE IMPROVEMENTS	
G2010 ROADWAYS	\$0
G2020 PARKING LOTS	\$0
G2030 PEDESTRIAN PAVING	\$0
G2040 SITE DEVELOPMENT	\$0
G2050 LANDSCAPING	\$0
G30 - SITE MECHANICAL UTILITIES	
G3010 WATER SUPPLY	\$0
G3020 SANITARY SEWER	\$0
G3030 STORM SEWER	\$0
G40 - SITE ELECTRICAL UTILITIES	
G4010 ELECTRICAL DISTRIBUTION	\$0
G4020 SITE LIGHTING	\$0
 TOTAL DIRECT COST	 \$142,414,600
TOTAL GSF	440,816

COST PER SF

 \$323.07

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR					
			QUANTITY	TOTAL				
A. SUBSTRUCTURE								
A10 - FOUNDATIONS								
A1010 STANDARD FOUNDATIONS								
Foundation, Earthwork	\$24.00	GSF						
Allow for repairs and seismic foundation	\$2.00	GSF	352,000	\$704,000				
				\$704,000				
A1020 SPECIAL FOUNDATIONS								
Soil Improvement Allowance:								
Ground Improvement	\$22.00	FTP						
				\$0				
A1030 SLAB ON GRADE								
5" Slab, Gravel, insulation	\$18.50	FTP						
Slab patch at plumbing and structural	\$2.50	FTP	117,000	\$292,500				
				\$292,500				
TOTAL A10 FOUNDATIONS				\$996,500				
B. SHELL								
B10 - SUPERSTRUCTURE								

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		
			QUANTITY	TOTAL	
B1010 FLOOR CONSTRUCTION					
Typ. Floor frame (15 lbs / SF)	\$5,400.00	TONS			
3 1/2" NW Deck Fill	\$11.00	SF			
1 1/2" x 20 Ga Comp. deck	\$6.00	SF			
Fireproofing - beam & column	\$3.15	SF			
Seismic Upgrade	\$5.00	GSF	352,000	\$1,760,000	
					\$1,760,000
B1020 ROOF CONSTRUCTION					
<u>051200 STRUCTURAL STEEL</u>					
Typ. flat roof frame (15 lbs / SF)	\$5,400.00	TONS			
Galv. RTU dunnage - allow	\$6,500.00	TONS			
Roof Screen Frame	\$6,200.00	TONS			
1 1/2" x 20 Ga roof deck	\$6.20	SF			
2" x 20 Ga Acoustical Roof Deck	\$13.00	SF			
Fireproofing - beam & column	\$3.15	SF			
Intumescent Paint - allow	\$500,000.00	LS			
Infill deck openings as necessary	\$150,000.00	LS	1	\$150,000	
					\$150,000
TOTAL B10 SUPERSTRUCTURE				\$1,910,000	
B20 - EXTERIOR ENCLOSURE					
B2010 EXTERIOR WALLS					
Exterior Wall Assembly	\$52.00	GSF			
Passive House Ext. Wall - Premium	\$7.50	GSF			
Replace/Replace existing bldg extero	\$30.00	GSF			

Prepared by: A. M. Fogarty & Associates, Inc.

LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
Repair Existing Exterior	\$10.00	GSF	352,000	\$3,520,000	
				\$3,520,000	
B2020 EXTERIOR WINDOWS					
Window Systems	\$30.00	GSF	352,000	\$10,560,000	
Passive House Window - Premium	\$2.50	GSF	352,000	\$880,000	
				\$11,440,000	
B2030 EXTERIOR DOORS					
<u>080001 METAL WINDOWS*</u>					
7' Alum. Doors (Incl. Hardware):					
Main Entry - dbl	\$20,000.00	EA	15	\$300,000	
Stair Entries - dbl	\$20,000.00	EA	10	\$200,000	
Misc . Alum Egress - sgl	\$10,000.00	EA	5	\$50,000	
Auto opener - allow	\$11,000.00	PR	3	\$33,000	
<u>081113 HOLLOW METALWORK</u>					
Insulated HM Doors and Frame:					
Receiving - dbl	\$3,500.00	EA	1	\$3,500	
Elec/mech rm - sgl	\$1,350.00	EA	2	\$2,700	
Elec/mech rm - dbl	\$3,500.00	EA	2	\$7,000	
Gym - dbl	\$7,500.00	EA	2	\$15,000	
<u>090007 PAINTING*</u>					
Paint HM Door & frame - sgl	\$200.00	EA	2	\$400	
Paint HM Door & frame - dbl	\$300.00	EA	5	\$1,500	
				\$613,100	

Prepared by: A. M. Fogarty & Associates, Inc.

LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
TOTAL B20 - EXTERIOR ENCLOSURE				\$15,573,100	
B30 - ROOFING					
B3010 ROOF COVERINGS					
Roofing and Flashing	\$36.00	SF	235,000	\$8,460,000	
Outdoor Terrace Premium	\$75.00	SF			
					\$8,460,000
B3020 ROOF OPENINGS					
<u>077200 ROOF ACCESSORIES</u>					
Roof hatch	\$8,000.00	EA	3	\$24,000	
Smoke hatch	\$15,000.00	EA	3	\$45,000	
New Skylight	\$165.00	SF	500	\$82,500	
*Mechanical equip screen is included with B1020 & B2010					
					\$151,500
TOTAL B30 ROOFING				\$8,611,500	
C. INTERIORS					
C10 - INTERIOR CONSTRUCTION					
C1010 PARTITIONS					
Interior Partitions	\$42.00	GSF			
Minor Repair and Rework	\$5.00	GSF	352,000	\$1,760,000	

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY	TOTAL	
				\$1,760,000	
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	\$7.75	GSF			
ADA Door and Hardware upgrade	\$1.50	GSF	352,000	\$528,000	
				\$528,000	
C1030 FITTINGS					
Fittings and Specialties	\$13.00	GSF			
Minor Fitting Replacement	\$2.50	GSF	352,000	\$880,000	
				\$880,000	
TOTAL C10 - INTERIOR CONSTRUCTION				\$3,168,000	
C20 - STAIRS					
C2010 STAIR CONSTRUCTION					
Learning Stair	\$200,000.00	LS			
Egress Stair	\$65,000.00	FLTS			
Stage Stair	\$5,500.00	FLTS			
Floor opening Railing	\$550.00	LF			
ADA Stair Upgrade	\$12,500.00	FLTS	20	\$250,000	

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
				\$250,000	
C2020 STAIR FINISHES					
Stage Stair	\$1,500.00	EA			
Learning stair	\$100,000.00	EA			
Rubber tread and riser finish	\$2,850.00	EA			
Paint Stair Structure	\$3,500.00	EA	20	\$70,000	

				\$70,000	
TOTAL C20 - STAIRS				\$320,000	
C30 - INTERIOR FINISHES					
C3010 WALL FINISHES					
Wall Finish	\$17.00	GSF			
Interior Painting - only	\$5.00	GSF	352,000	\$1,760,000	

				\$1,760,000	
C3020 FLOOR FINISHES					
Floor Finish	\$15.00	GSF	352,000	\$5,280,000	

				\$5,280,000	
C3030 CEILING FINISHES					
Ceiling Finish	\$15.00	GSF	352,000	\$5,280,000	

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
				\$5,280,000	
TOTAL C30 - INTERIOR FINISHES				\$12,320,000	
D. SERVICES					
D10 - CONVEYING					
D1010 ELEVATORS & LIFTS					
Repalce elevators in its entirity	\$125,000.00	STOP LS	6 1	\$750,000 \$300,000	
Elevator Upgrade	\$300,000.00				\$1,050,000
TOTAL D10 - CONVEYING				\$1,050,000	
D20 - PLUMBING					
D2010 PLUMBING FIXTURES					
Plumbing - New	\$30.00	GSF LS	352,000 1	\$10,560,000 \$800,000	
Air Source Heat Pump Water Heater	\$800,000.00				\$11,360,000
TOTAL D20 - PLUMBING				\$11,360,000	
D30 - HVAC					
D3010 HVAC					

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
HVAC - GEO THERMAL Geothermal Wells - 500' depth	\$100.00 \$37,500.00	GSF EA	352,000 560	\$35,200,000 \$21,000,000	
				-----	\$56,200,000
TOTAL D30 - HVAC				\$159.66	\$56,200,000
D40 - FIRE PROTECTION					
D4010 SPRINKLERS					
<u>210001 FIRE SUPPRESSION*</u>					
Sprinkler system - wet	\$8.75	GSF	352,000	\$3,080,000	
				-----	\$3,080,000
TOTAL D40 - FIRE PROTECTION					\$3,080,000
D50 - ELECTRICAL					
D5010 ELECTRICAL SERVICE & DISTRIBUTION					
<u>260001 ELECTRICAL*</u>					
Service Panel and Feeders 1,250 KW Emergency Generator	\$11.00 \$850,000.00	GSF LS	352,000 1	\$3,872,000 \$850,000	
PV SYSTEMS (assumes 12 w/sf): PV Site Canopy/Panel - \$4.50/per wat PV Roof Panels - \$3.00/ per watt Battery Storage	\$54.00 \$36.00 \$2,500,000.00	SF SF LS			-----

Prepared by: A. M. Fogarty & Associates, Inc.

LEXINGTON HIGH SCHOOL PSR RECON 10-2410/9/20244:12 PM

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
				\$4,722,000	
D5020 LIGHTING & BRANCH WIRING					
<u>260001 ELECTRICAL*</u>					
Lighting	\$15.00	GSF	352,000	\$5,280,000	
Lighting Control	\$2.85	GSF	352,000	\$1,003,200	
				\$6,283,200	
D5030 COMMUNICATION & SECURITY					
<u>260001 ELECTRICAL*</u>					
Security	\$12.00	GSF	352,000	\$4,224,000	
Tele/data cabling, racks and switches	\$9.00	GSF	352,000	\$3,168,000	
Speech Reinforcement	\$1.25	GSF	352,000	\$440,000	
				\$7,832,000	
D5090 OTHER ELECTRICAL SYSTEMS					
<u>260001 ELECTRICAL*</u>					
Fire Alarm	\$5.00	GSF	352,000	\$1,760,000	
Devices	\$3.45	GSF	352,000	\$1,214,400	
Clocks and PA	\$1.75	GSF	352,000	\$616,000	
Gym/Café Sound System	\$0.75	GSF	352,000	\$264,000	
Lighting Protection	\$0.50	GSF	352,000	\$176,000	
Mechanical Wiring	\$2.00	GSF	352,000	\$704,000	
Misc. Electrical	\$1.00	GSF	352,000	\$352,000	
Bi-Direction Antenna	\$0.60	GSF	352,000	\$211,200	
				\$5,297,600	

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
TOTAL D50 - ELECTRICAL			\$68.56	\$24,134.800	

E. EQUIPMENT & FURNISHINGS

E10 - EQUIPMENT

E1010 COMMERCIAL EQUIPMENT

114000 FOOD SERVICE EQUIPMENT

Kitchen equipment - new	\$2,500,000.00	LS	1	\$2,500,000	
					\$2,500,000

E1090 OTHER EQUIPMENT

113100 APPLIANCES

Staff kitchen refrigerator	\$1,000.00	EA
Staff kitchen microwave	\$500.00	EA
Medical office refrigerator w/ice	\$1,000.00	EA
Adult living classroom	\$10,000.00	LS

116600 ATHLETIC & SPORTS EQUIPMENT

Basketball backstops - electric	\$9,500.00	EA
Wall padding - 6'	\$15.00	SF
Roll up curtain	\$20.00	SF
Volley ball court equip.	\$700.00	EA
Scoreboard and shot clock	\$24,000.00	EA
Bleachers	\$250,000.00	LS
Misc. Gym Equipment	\$50,000.00	LS

115213 PROJECTION SCREENS

Projection screen - various areas	\$20,000.00	EA
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Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		
			QUANTITY	TOTAL	
<u>116143 THEATRICAL EQUIPMENT</u>					
Auditorium :					
Stage Rigging	\$300,000.00	LS			
Stage Drapes	\$75,000.00	LS			
Aud Lighting and Diming	\$250,000.00	LS			
Aud Sound System	\$200,000.00	LS			
<u>119000 MISC. EQUIPMENT</u>					
Science Lab Equipment	\$450,000.00	LS			
Kiln	\$3,500.00	EA			
				\$0	
TOTAL E10 - EQUIPMENT				\$2,500,000	
E20 - FURNISHINGS					
E 2010 FIXED FURNISHINGS					
<u>129000 MISC. FURNISHINGS</u>					
Window Treatment	\$0.85	GSF	352,000	\$299,200	
Auditorium Seating	\$375.00	EA	500	\$187,500	
<u>123553 CLASSROOM CASEWORK</u>					
Casework	\$12.00	GSF			
Minor Rework of existing	\$2.00	GSF	352,000	\$704,000	
				\$1,190,700	
TOTAL E20 - FURNISHINGS				\$1,190,700	

Lexington High School - Base Repair

DESCRIPTION	UNIT COST	UNIT	BASE REPAIR		TOTAL
			QUANTITY		
F20 - SELECTIVE BUILDING DEMOLITION					
F2020 HAZARDOUS COMPONENTS ABATEMENT					
Hazardous Waste Allowance		SEE SUMMARY PAGE			
F2030 SELECTIVE DEMOLITION					
BUILDING DEMOLITION		SEE SUMMARY PAGE			\$0
TOTAL F20 - SELECTIVE BUILDING DEMOLITION				\$0	

Lexington High School School

10/9/2024

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
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OPT E CENTRAL OFFICE (refer to back-up for detail)

CONSTRUCTION COST	1	LS	12,018,596	12,018,596
SUBTOTAL				12,018,596
MARK-UP		45 %		5,408,368
TOTAL				17,426,965

OPT#1 FIELD HOUSE

CONSTRUCTION COST	1	LS	20,459,098	20,459,098
SUBTOTAL				20,459,098
MARK-UP		45 %		9,206,594
TOTAL				29,665,692

OPT F.2 FIELD HOUSE

CONSTRUCTION COST	1	LS	38,414,709	38,414,709
SUBTOTAL				38,414,709
MARK-UP		45 %		17,286,619
TOTAL				55,701,328

OPT. F.3 ADDITION/RENOVATE FIELD HOUSE

CONSTRUCTION COST	1	LS	22,441,899	22,441,899
SUBTOTAL				22,441,899
MARK-UP		45 %		10,098,854
TOTAL				32,540,753

OPT FH.4 FIELD HOUSE - STAND ALONE

CONSTRUCTION COST	1	LS	32,325,574	32,325,574
SUBTOTAL				32,325,574
MARK-UP		45 %		14,546,508
TOTAL				46,872,083

Lexington High School School

10/9/2024

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
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OPT FH RENOVATE FIELD HOUSE - LONG TERM

CONSTRUCTION COST	1	LS	15,042,280	15,042,280
SUBTOTAL				-----
MARK-UP		45 %		15,042,280
TOTAL				6,769,026

				21,811,305

OPT FH RENOVATE FIELD HOUSE - 5-10 YR

CONSTRUCTION COST	1	LS	1,385,000	1,385,000
SUBTOTAL				-----
MARK-UP		45 %		1,385,000
TOTAL				623,250

				2,008,250

OPT H.1 POOL

CONSTRUCTION COST	1	LS	15,042,280	15,042,280
SUBTOTAL				-----
MARK-UP		45 %		15,042,280
TOTAL				6,769,026

				21,811,305

MASS TIMBER - SCOPE A (ALL STRUCT.)

Deduct:				
Credit steel floor and deck	-1	LS	27,153,748	-27,153,748
Add:				
CLT Frame	440,816	SF	65.00	28,653,040
3 ply deck	18,000	SF	24.50	441,000
5 ply deck	422,816	SF	28.00	11,838,848
Gypcrete topping w/ acoustical mat	396,816	SF	12.00	4,761,792
SUBTOTAL				-----
MARK-UP		45 %		18,540,932
TOTAL				8,343,419

				26,884,351

MASS TIMBER - SCOPE B (HYBRID)

Deduct:				
Credit steel floor and deck	-1	LS	27,153,748	-27,153,748

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
Add:				
CLT Frame	440,816	SF	50.00	22,040,800
3 ply deck	18,000	SF	24.50	441,000
5 ply deck	422,816	SF	28.00	11,838,848
Gypcrete topping w/ acoustical mat	396,816	SF	12.00	4,761,792
Steel Columns (2 lbs/sf)	441	TONS	5,500	2,424,488
SUBTOTAL				-----
MARK-UP		45 %		14,353,180
TOTAL				6,458,931

				20,812,111

MASS TIMBER - SCOPE C (GYM/CAFÉ/MEDIA)

Deduct:				
Credit steel floor and deck	-44,000	GSF	-61.60	2,710,348
Add:				
CLT Frame	44,000	SF	65.00	2,860,000
3 ply deck	18,000	SF	24.50	441,000
5 ply deck	26,000	SF	28.00	728,000
SUBTOTAL				-----
MARK-UP		45 %		728,000
TOTAL				327,600

				1,055,600

NO.1 - IN LIEU OF GROUND SOURCE HEAT PUMP SYSTEM
SUBSTITUTED AN AIR SOURCE HEAT PUMP SYSTEM

Deduct Ground Source System:				
Geo Wells - 800' depth @ 350 EA	-280,000	VLF	\$60.00	-16,800,000
6" Well casing - 200' ea	-70,000	VLF	\$34.00	-2,380,000
Valve Vault	-1	EA	\$175,000.00	-175,000
Geothermal System				
Plate and FrameHeat Exchanger	-3	EA	\$60,000.00	-180,000
Base Mtd Sec. HWP w/ VFD	-10	EA	\$30,000.00	-300,000
Glycol Feed System	-1	LS	\$250,000.00	-250,000
Piping valve and trim	-1	LS	\$350,000.00	-350,000
HW/CW Distribution:				
Fan coil heat pump	-440,816	GSF	\$4.00	-1,763,264
Mechanical HW/CW Piping	-440,816	GSF	\$9.00	-3,967,344
Glycol feed	-1	LS	\$200,000.00	-200,000
Misc. HW Devices	-91,000	GSF	\$2.50	-227,500
Air Equipment:				
DOAS Units - Large Spaces	-170,000	CFM	\$38.00	-6,460,000
DOAS Units - Classroom	-125,000	CFM	\$38.00	-4,750,000

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
MAU 4,500 CFM	-4,500	CFM	\$30.00	-135,000
Freeze Protection	-10	EA	\$2,000.00	-20,000
Curbs	-10	EA	\$5,500.00	-55,000
Merv Filter	-20	EA	\$2,500.00	-50,000
Sound Attenuation	-295,000	CFM	\$0.85	-250,750
Pipe Valve and Fitting Connections	-10	EA	\$6,500.00	-65,000
Grilles registers and dampers	-440,816	GSF	\$1.50	-661,224
Ductwork	-440,816	LBS	\$20.00	-8,816,320
CV/VAV exhaust	-400	EA	\$975.00	-390,000
Kitchen Exhaust Ductwork	-1	LS	\$250,000.00	-250,000
Duct Insul	-352,653	SF	\$6.50	-2,292,243
Exhaust Fan	-35	EA	\$5,000.00	-175,000
Split AC	-25	EA	\$20,000.00	-500,000
Temp Control (Demand CO2)	-440,816	GSF	\$12.00	-5,289,792
Seismic and Vibration	-440,816	GSF	\$0.85	-374,694
Rigging	-1	LS	\$250,000.00	-250,000
BIM/ Commission coordination	-440,816	GSF	\$2.50	-1,102,040
HVAC Supervision	-440,816	GSF	\$2.50	-1,102,040
Credit New field work	-500,000	LS	1.00	-500,000
Add:				
Add Air to Water System (4-Pipe)				
Air Source HP (Air to Water)	1,250	TONS	\$2,400.00	3,000,000
Plate and FrameHeat Exchanger	2	EA	\$30,000.00	60,000
Base Mtd Sec. HWP w/ VFD	8	EA	\$30,000.00	240,000
Glycol Feed System	1	LS	\$250,000.00	250,000
Piping valve and trim	1	LS	\$350,000.00	350,000
HW/CW Distribution:				
Fan coil heat pump	440,816	GSF	\$4.00	1,763,264
Mechanical HW/CW Piping	440,816	GSF	\$18.00	7,934,688
Glycol feed	1	LS	\$200,000.00	200,000
Misc. HW Devices	91,000	GSF	\$2.50	227,500
Air Equipment (Packaged)				
DOAS Units - Large Spaces	170,000	CFM	\$45.00	7,650,000
DOAS Units - Classroom	125,000	CFM	\$45.00	5,625,000
MAU 4,500 CFM	4,500	CFM	\$35.00	157,500
Freeze Protection	10	EA	\$2,000.00	20,000
Curbs	10	EA	\$5,500.00	55,000
Merv Filter	20	EA	\$2,500.00	50,000
Sound Attenuation	295,000	CFM	\$0.85	250,750
Grilles registers and dampers	440,816	GSF	\$1.50	661,224
Ductwork	440,816	LBS	\$20.00	8,816,320
CV/VAV exhaust	400	EA	\$975.00	390,000
Kitchen Exhaust Ductwork	1	LS	\$250,000.00	250,000
Duct Insul	352,653	SF	\$6.50	2,292,243
Exhaust Fan	35	EA	\$5,000.00	175,000
Split AC	25	EA	\$20,000.00	500,000
Temp Control (Demand CO2)	440,816	GSF	\$12.00	5,289,792

Lexington High School School

10/9/2024

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
Seismic and Vibration	440,816	GSF	\$0.85	374,694
Rigging	1	LS	\$250,000.00	250,000
BIM/ Commission coordination	440,816	GSF	\$2.50	1,102,040
HVAC Supervision	440,816	GSF	\$2.50	1,102,040
 SUBTOTAL				 -----
MARK-UP		45 %		-11,045,156
				-4,970,320
 TOTAL				 -----
				-16,015,476



PSR Options Cost Estimate

Lexington High School

Town of Lexington, MA

PM&C LLC
20 Downer Avenue, Suite 5
Hingham, MA 02043
(T) 781-740-8007
(F) 781-740-1012

Prepared for:

Dore + Whittier

October 7, 2024

PSR Options Cost 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 PSR 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 dated September 27th, 2024 prepared by SMMA and their design team.

This estimate includes all direct construction costs, Construction Managers fee 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
- Rock excavation other than allowances included in estimate
- 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. fixtures, furniture and equipment)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)

PSR Options Cost Estimate

PSR PRICING OPTIONS

MAIN CONSTRUCTION COST SUMMARY

	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION A.1 - Base Repair/Code Update	352,000	\$654.34	\$230,327,240
OPTION B.1 - Add/Reno Quad	440,816	\$1,106.74	\$487,869,855
OPTION B.4 - Add/Reno Figure Eight	440,816	\$1,104.68	\$486,961,319
OPTION C1d - New Construction Branch	440,816	\$1,088.53	\$479,840,661
OPTION C2b - New Construction Braid	440,816	\$1,075.37	\$474,042,161
OPTION C5b - New Construction Bloom	440,816	\$1,092.64	\$481,651,213
OPTION D.2 - New Construction Phased in Place	440,816	\$1,130.90	\$498,518,701
Breakout/Alternate Pricing (Includes all markups)			
F.1 New FH OPTION 1	36,000	\$854.49	\$30,761,771
F.2 New FH OPTION 2	72,000	\$788.95	\$56,804,589
G.1 Add/Reno FH OPTION 3	48,000	\$700.08	\$33,604,013
F.3 New FH OPTION 4	60,000	\$809.93	\$48,596,066
G.0 Renovate FH OPTION 5	34,000	\$644.65	\$21,918,092
G.2 Renovate FH OPTION 6	34,600	\$56.89	\$1,968,552
Central Office	20,700	\$957.09	\$19,811,723
Mass Timber Structure - OPTION A		ADD	\$12,227,320
Mass Timber Structure - OPTION B		ADD	\$9,107,490
Mass Timber Structure - OPTION C		ADD	\$2,212,000
HVAC ALTERNATE (ASHP) - Includes C2		DEDUCT	(\$16,058,560)
Softball Field Credit			

NOTE: It is our opinion that any cost premiums associated with the radial footprint options (Branch, Bloom + Braid) are de minimis and are not a cost factor in determining the relative costs between options.

NOTE: Mass Timber Options need to be vetted with manufacturers + installers which will require more design information; Pricing above needs verification

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION A.1 - Base Repair/Code Update				
CODE UPGRADES TO EXISTING SCHOOL		352,000	\$400.00	\$140,800,000
REMOVE HAZARDOUS MATERIALS ¹				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK - Allowance (code upgrades only)				\$7,000,000
SITEWORK - Premium Contaminated Soils				NIC
SUB-TOTAL	Jun-27	352,000	\$428.69	\$150,900,000
ESCALATION TO MID-POINT	8.40%			\$12,675,600
DESIGN AND PRICING CONTINGENCY	15.0%			\$24,536,340
SUB-TOTAL		352,000	\$534.41	\$188,111,940
GENERAL CONDITIONS	36	MTHS	\$350,000	\$12,600,000
GENERAL REQUIREMENTS	4.00%			\$7,524,478
PHASING	3.00%			\$5,643,358
BONDS	0.75%			\$1,410,840
INSURANCES	2.00%			\$3,762,239
PERMIT				Excl
SUB-TOTAL				\$219,052,855
CM FEE	3.0%			\$6,571,586
GMP CONTINGENCY	2.5%			\$4,702,799
MODULAR CLASSROOMS				Excluded
TOTAL OF ALL CONSTRUCTION		352,000	\$654.34	\$230,327,240

¹ Costs from CDW report

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION B.1 - Add/Reno Quad				
NEW ADDITION + RENOVATE EXISTING SCHOOL		440,816	\$614.59	\$270,921,598
DEMOLITION		234,150	\$12.00	\$2,809,800
REMOVE HAZARDOUS MATERIALS ¹				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$32,850,758
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$704.79	\$310,682,156
ESCALATION TO MID-POINT	12.90%			\$40,077,998
DESIGN AND PRICING CONTINGENCY	15.0%			\$52,614,023
SUB-TOTAL		440,816	\$915.06	\$403,374,177
GENERAL CONDITIONS	72	MTHS	\$350,000	\$25,200,000
GENERAL REQUIREMENTS	4.00%			\$16,134,967
PHASING	2.00%			\$8,067,484
BONDS	0.75%			\$3,025,306
INSURANCES	2.00%			\$8,067,484
PERMIT				Excl
SUB-TOTAL				\$463,869,418
CM FEE	3.0%			\$13,916,083
GMP CONTINGENCY	2.5%			\$10,084,354
MODULAR CLASSROOMS				Excluded
TOTAL OF ALL CONSTRUCTION		440,816	\$1,106.74	\$487,869,855

¹ Costs from CDW report



Lexington High School
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PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION B.4 - Add/Reno Figure Eight				
NEW ADDITION + RENOVATE EXISTING SCHOOL		440,816	\$605.91	\$267,095,672
DEMOLITION		179,740	\$12.00	\$2,156,880
REMOVE HAZARDOUS MATERIALS ¹				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK - Allowance				\$31,642,436
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$691.89	\$304,994,988
ESCALATION TO MID-POINT	13.40%			\$40,869,328
DESIGN AND PRICING CONTINGENCY	15.0%			\$51,879,647
SUB-TOTAL		440,816	\$902.29	\$397,743,963
GENERAL CONDITIONS	76	MTHS	\$350,000	\$26,600,000
GENERAL REQUIREMENTS	4.00%			\$15,909,759
PHASING	3.00%			\$11,932,319
BONDS	0.75%			\$2,983,080
INSURANCES	2.00%			\$7,954,879
PERMIT				Excl
SUB-TOTAL				\$463,124,000
CM FEE	3.0%			\$13,893,720
GMP CONTINGENCY	2.5%			\$9,943,599
MODULAR CLASSROOMS				NR
TOTAL OF ALL CONSTRUCTION		440,816	\$1,104.68	\$486,961,319

¹ Costs from CDW report



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PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C1d - New Construction Branch				
NEW CONSTRUCTION		440,816	\$618.26	\$272,538,563
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS ¹				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$35,966,651
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$716.43	\$315,812,414
ESCALATION TO MID-POINT	12.90%			\$40,739,801
DESIGN AND PRICING CONTINGENCY	15.0%			\$53,482,832
SUB-TOTAL		440,816	\$930.17	\$410,035,047
GENERAL CONDITIONS	52	MTHS	\$350,000	\$18,200,000
GENERAL REQUIREMENTS	4.00%			\$16,401,402
PHASING				NR
BONDS	0.75%			\$3,075,263
INSURANCES	2.00%			\$8,200,701
PERMIT				Excl
SUB-TOTAL				\$455,912,413
CM FEE	3.0%			\$13,677,372
GMP CONTINGENCY	2.5%			\$10,250,876
TOTAL OF ALL CONSTRUCTION		440,816	\$1,088.53	\$479,840,661

¹ Costs from CDW report



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PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C2b - New Construction Braid				
NEW CONSTRUCTION		440,816	\$607.65	\$267,861,954
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS ¹				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$36,671,757
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$707.42	\$311,840,911
ESCALATION TO MID-POINT	12.90%			\$40,227,478
DESIGN AND PRICING CONTINGENCY	15.0%			\$52,810,258
SUB-TOTAL		440,816	\$918.48	\$404,878,647
GENERAL CONDITIONS	52	MTHS	\$350,000	\$18,200,000
GENERAL REQUIREMENTS	4.00%			\$16,195,146
PHASING				NR
BONDS	0.75%			\$3,036,590
INSURANCES	2.00%			\$8,097,573
PERMIT				Excl
SUB-TOTAL				\$450,407,956
CM FEE	3.0%			\$13,512,239
GMP CONTINGENCY	2.5%			\$10,121,966
TOTAL OF ALL CONSTRUCTION		440,816	\$1,075.37	\$474,042,161

¹ Costs from CDW report

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C5b - New Construction Bloom				
NEW CONSTRUCTION		440,816	\$617.42	\$272,167,944
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS ¹				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$37,210,509
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$718.41	\$316,685,653
ESCALATION TO MID-POINT	12.90%			\$40,852,449
DESIGN AND PRICING CONTINGENCY	15.0%			\$53,630,715
SUB-TOTAL		440,816	\$932.74	\$411,168,817
GENERAL CONDITIONS	52	MTHS	\$360,000	\$18,720,000
GENERAL REQUIREMENTS	4.00%			\$16,446,753
PHASING				NR
BONDS	0.75%			\$3,083,766
INSURANCES	2.00%			\$8,223,376
PERMIT				Excl
SUB-TOTAL				\$457,642,712
CM FEE	3.0%			\$13,729,281
GMP CONTINGENCY	2.5%			\$10,279,220
TOTAL OF ALL CONSTRUCTION		440,816	\$1,092.64	\$481,651,213

¹ Costs from CDW report

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION D.2 - New Construction Phased in Place				
NEW CONSTRUCTION		440,816	\$610.64	\$269,179,151
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS ¹				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$33,799,050
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$703.89	\$310,285,401
ESCALATION TO MID-POINT	13.90%			\$43,129,671
DESIGN AND PRICING CONTINGENCY	15.0%			\$53,012,261
SUB-TOTAL		440,816	\$921.99	\$406,427,333
GENERAL CONDITIONS	78	MTHS	\$360,000	\$28,080,000
GENERAL REQUIREMENTS	4.00%			\$16,257,093
PHASING	3.00%			\$12,192,820
BONDS	0.75%			\$3,048,205
INSURANCES	2.00%			\$8,128,547
PERMIT				Excl
SUB-TOTAL				\$474,133,998
CM FEE	3.0%			\$14,224,020
GMP CONTINGENCY	2.5%			\$10,160,683
TOTAL OF ALL CONSTRUCTION		440,816	\$1,130.90	\$498,518,701

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
F.1 NEW FIELD HOUSE OPTION 1				
NEW CONSTRUCTION		36,000	\$455.68	\$16,404,658
PREMIUM FOR GEOTHERMAL				\$1,950,000
PREMIUM FOR PV				\$1,296,000
DEMOLITION		34,000	\$10.00	\$340,000
SITEWORK - Separate Utilities				\$250,000
SUB-TOTAL	Jun-28	36,000	\$562.24	\$20,240,658
ESCALATION TO MID-POINT	11.40%			\$2,307,435
DESIGN AND PRICING CONTINGENCY	15.0%			\$3,382,214
SUB-TOTAL		36,000	\$720.29	\$25,930,307
GENERAL CONDITIONS	6.00%			\$1,555,818
GENERAL REQUIREMENTS	4.00%			\$1,037,212
BONDS	0.75%			\$194,477
INSURANCES	2.00%			\$518,606
PERMIT				Excl
SUB-TOTAL				\$29,236,420
CM FEE	3.0%			\$877,093
GMP CONTINGENCY	2.5%			\$648,258
TOTAL OF ALL CONSTRUCTION		36,000	\$854.49	\$30,761,771

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
F.2 NEW FIELD HOUSE OPTION 2				
NEW CONSTRUCTION		72,000	\$420.75	\$30,294,335
PREMIUM FOR GEOTHERMAL				\$3,900,000
PREMIUM FOR PV				\$2,592,000
DEMOLITION		34,000	\$10.00	\$340,000
SITEWORK - Separate Utilities				\$250,000
SUB-TOTAL	Jun-28	72,000	\$519.12	\$37,376,335
ESCALATION TO MID-POINT	11.40%			\$4,260,902
DESIGN AND PRICING CONTINGENCY	15.0%			\$6,245,586
SUB-TOTAL		72,000	\$665.04	\$47,882,823
GENERAL CONDITIONS	6.00%			\$2,872,969
GENERAL REQUIREMENTS	4.00%			\$1,915,313
BONDS	0.75%			\$359,121
INSURANCES	2.00%			\$957,656
PERMIT				Excl
SUB-TOTAL				\$53,987,882
CM FEE	3.0%			\$1,619,636
GMP CONTINGENCY	2.5%			\$1,197,071
TOTAL OF ALL CONSTRUCTION		72,000	\$788.95	\$56,804,589

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
G.1 ADD/RENO FIELD HOUSE OPTION 3				
RENOVATION/ADDITION		48,000	\$365.27	\$17,532,798
PREMIUM FOR GEOTHERMAL				\$2,600,000
PREMIUM FOR PV				\$1,728,000
DEMOLITION				NR
SITEWORK - Separate Utilities				\$250,000
SUB-TOTAL	Jun-28	48,000	\$460.64	\$22,110,798
ESCALATION TO MID-POINT	11.40%			\$2,520,631
DESIGN AND PRICING CONTINGENCY	15.0%			\$3,694,714
SUB-TOTAL		48,000	\$590.13	\$28,326,143
GENERAL CONDITIONS	6.00%			\$1,699,569
GENERAL REQUIREMENTS	4.00%			\$1,133,046
BONDS	0.75%			\$212,446
INSURANCES	2.00%			\$566,523
PERMIT				Excl
SUB-TOTAL				\$31,937,727
CM FEE	3.0%			\$958,132
GMP CONTINGENCY	2.5%			\$708,154
TOTAL OF ALL CONSTRUCTION		48,000	\$700.08	\$33,604,013



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PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
F.3 NEW FIELD HOUSE OPTION 4				
NEW CONSTRUCTION		60,000	\$432.92	\$25,975,283
PREMIUM FOR GEOTHERMAL				\$3,250,000
PREMIUM FOR PV				\$2,160,000
DEMOLITION		34,000	\$10.00	\$340,000
SITEWORK - Separate Utilities				\$250,000
SUB-TOTAL	Jun-28	60,000	\$532.92	\$31,975,283
ESCALATION TO MID-POINT	11.40%			\$3,645,182
DESIGN AND PRICING CONTINGENCY	15.0%			\$5,343,070
SUB-TOTAL		60,000	\$682.73	\$40,963,535
GENERAL CONDITIONS	6.00%			\$2,457,812
GENERAL REQUIREMENTS	4.00%			\$1,638,541
BONDS	0.75%			\$307,227
INSURANCES	2.00%			\$819,271
PERMIT				Excl
SUB-TOTAL				\$46,186,386
CM FEE	3.0%			\$1,385,592
GMP CONTINGENCY	2.5%			\$1,024,088
TOTAL OF ALL CONSTRUCTION		60,000	\$809.93	\$48,596,066



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PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
G.o RENO FIELD HOUSE OPTION 5				
RENOVATION		34,000	\$326.65	\$11,106,019
PREMIUM FOR GEOTHERMAL				\$1,841,667
PREMIUM FOR PV				\$1,224,000
DEMOLITION				NR
SITEWORK - Separate Utilities				\$250,000
SUB-TOTAL	Jun-28	34,000	\$424.17	\$14,421,686
ESCALATION TO MID-POINT	11.40%			\$1,644,072
DESIGN AND PRICING CONTINGENCY	15.0%			\$2,409,864
SUB-TOTAL		34,000	\$543.40	\$18,475,622
GENERAL CONDITIONS	6.00%			\$1,108,537
GENERAL REQUIREMENTS	4.00%			\$739,025
BONDS	0.75%			\$138,567
INSURANCES	2.00%			\$369,512
PERMIT				Excl
SUB-TOTAL				\$20,831,263
CM FEE	3.0%			\$624,938
GMP CONTINGENCY	2.5%			\$461,891
TOTAL OF ALL CONSTRUCTION		34,000	\$644.65	\$21,918,092



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PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
G.2 RENO FIELD HOUSE OPTION 6				
RENOVATION		34,600	\$35.99	\$1,245,270
PREMIUM FOR GEOTHERMAL				NR
PREMIUM FOR PV				NR
DEMOLITION				NR
SITEWORK - Separate Utilities				\$50,000
SUB-TOTAL	Jun-28	34,600	\$37.44	\$1,295,270
ESCALATION TO MID-POINT	11.40%			\$147,661
DESIGN AND PRICING CONTINGENCY	15.0%			\$216,440
SUB-TOTAL		34,600	\$47.96	\$1,659,371
GENERAL CONDITIONS	6.00%			\$99,562
GENERAL REQUIREMENTS	4.00%			\$66,375
BONDS	0.75%			\$12,445
INSURANCES	2.00%			\$33,187
PERMIT				Excl
SUB-TOTAL				\$1,870,940
CM FEE	3.0%			\$56,128
GMP CONTINGENCY	2.5%			\$41,484
TOTAL OF ALL CONSTRUCTION		34,600	\$56.89	\$1,968,552

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
H.1 NEW POOL				
NEW POOL BUILDING		16,400	\$650.00	\$10,660,000
PREMIUM FOR GEOTHERMAL				\$2,625,000
PREMIUM FOR PV				\$354,240
DEMOLITION				NR
SITEWORK - Separate Utilities				\$250,000
SUB-TOTAL	Jun-28	16,400	\$846.90	\$13,889,240
ESCALATION TO MID-POINT	11.40%			\$1,583,373
DESIGN AND PRICING CONTINGENCY	15.0%			\$2,320,892
SUB-TOTAL		16,400	\$1,084.97	\$17,793,505
GENERAL CONDITIONS	6.00%			\$1,067,610
GENERAL REQUIREMENTS	4.00%			\$711,740
PHASING	2.00%			\$355,870
BONDS	0.75%			\$133,451
INSURANCES	2.00%			\$355,870
PERMIT				Excl
SUB-TOTAL				\$20,418,046
CM FEE	3.0%			\$612,541
GMP CONTINGENCY	2.5%			\$444,838
TOTAL OF ALL CONSTRUCTION		16,400	\$1,309.48	\$21,475,425



Lexington High School
Town of Lexington, MA

7-Oct-24

PSR Options Cost Estimate

MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
CENTRAL OFFICE				
NEW CONSTRUCTION		20,700	\$500.00	\$10,350,000
PREMIUM FOR GEOTHERMAL				\$750,000
PREMIUM FOR PV				\$432,000
SITEWORK -Allowance for 100 car spots				\$1,000,000
SUB-TOTAL	Jun-26	20,700	\$605.41	\$12,532,000
ESCALATION TO MID-POINT	13.90%			\$1,741,948
DESIGN AND PRICING CONTINGENCY	15.0%			\$2,141,092
SUB-TOTAL		20,700	\$793.00	\$16,415,040
GENERAL CONDITIONS	6.00%			\$984,902
GENERAL REQUIREMENTS	4.00%			\$656,602
PHASING	2.00%			\$328,301
BONDS	0.75%			\$123,113
INSURANCES	2.00%			\$328,301
PERMIT				Excl
SUB-TOTAL				\$18,836,259
CM FEE	3.0%			\$565,088
GMP CONTINGENCY	2.5%			\$410,376
TOTAL OF ALL CONSTRUCTION		20,700	\$957.09	\$19,811,723

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION B.1				
A10 FOUNDATIONS				
A1010 Standard Foundations	\$5,019,491			
A1020 Special Foundations	\$6,040,405			
A1030 Lowest Floor Construction	\$5,305,026	\$16,364,922	\$37.12	6.0%
A20 BASEMENT CONSTRUCTION				
A2010 Basement Excavation	\$0			
A2020 Basement Walls	\$0	\$0	\$0.00	0.0%
B10 SUPERSTRUCTURE				
B1010 Upper Floor Construction	\$13,081,193			
B1020 Roof Construction	\$9,333,996	\$22,415,189	\$50.85	8.3%
B20 EXTERIOR CLOSURE				
B2010 Exterior Walls	\$20,350,566			
B2020 Windows	\$9,009,917			
B2030 Exterior Doors	\$440,816	\$29,801,299	\$67.60	11.0%
B30 ROOFING				
B3010 Roof Coverings	\$9,179,923			
B3020 Roof Openings	\$54,000	\$9,233,923	\$20.95	3.4%
C10 INTERIOR CONSTRUCTION				
C1010 Partitions	\$19,786,516			
C1020 Interior Doors	\$5,399,528			
C1030 Specialties/Millwork	\$6,680,093	\$31,866,137	\$72.29	11.8%
C20 STAIRCASES				
C2010 Stair Construction	\$1,162,250			
C2020 Stair Finishes	\$340,000	\$1,502,250	\$3.41	0.6%
C30 INTERIOR FINISHES				
C3010 Wall Finishes	\$7,493,872			
C3020 Floor Finishes	\$7,045,090			
C3030 Ceiling Finishes	\$6,612,240	\$21,151,202	\$47.98	7.8%
D10 CONVEYING SYSTEMS				
D1010 Elevator	\$1,207,200	\$1,207,200	\$2.74	0.4%



CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION B.1				
D20 PLUMBING				
D20 Plumbing	\$13,342,848	\$13,342,848	\$30.27	4.9%
D30 HVAC				
D30 HVAC	\$62,423,440	\$62,423,440	\$141.61	23.0%
D40 FIRE PROTECTION				
D40 Fire Protection	\$4,117,344	\$4,117,344	\$9.34	1.5%
D50 ELECTRICAL				
D5010 Complete System	\$45,052,772	\$45,052,772	\$102.20	16.6%
E10 EQUIPMENT				
E10 Equipment	\$5,111,385	\$5,111,385	\$11.60	1.9%
E20 FURNISHINGS				
E2010 Fixed Furnishings	\$5,704,012			
E2020 Movable Furnishings	NIC	\$5,704,012	\$12.94	2.1%
F10 SPECIAL CONSTRUCTION				
F10 Special Construction	\$150,000	\$150,000	\$0.34	0.1%
F20 HAZMAT REMOVALS				
F2010 Building Elements Demolition	\$1,477,675			
F2020 Hazardous Components Abatement	\$0	\$1,477,675	\$3.35	0.5%
TOTAL DIRECT COST (Trade Costs)		\$270,921,598	\$614.59	100.0%

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.1

GROSS FLOOR AREA CALCULATION

Level 1	172,583
Level 2	61,437
Level 3	60,113
Level 4	60,113
Heavy Renovation	86,570

TOTAL GROSS FLOOR AREA (GFA)

440,816 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings: 1 x 3

Formwork	6,388	sf	15.00	95,820
Re-bar	42,161	lbs.	2.50	105,403
Concrete material	373	cy	160.00	59,680
Placing concrete	373	cy	120.00	44,760

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	22,358	sf	21.00	469,518
Re-bar	55,895	lbs.	2.50	139,738
Concrete material	726	cy	160.00	116,160
Placing concrete	726	cy	120.00	87,120
Form shelf	3,194	lf	8.00	25,552

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	20,232	sf	18.00	364,176
Re-bar	136,566	lbs.	2.50	341,415
Concrete material	1,770	cy	160.00	283,200
Placing concrete	1,770	cy	120.00	212,400
Set anchor bolts grout plates	281	ea	250.00	70,250

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	12,000	sf	18.00	216,000
Re-bar	90,000	lbs.	2.50	225,000
Concrete material	1,167	cy	160.00	186,720
Placing concrete	1,167	cy	120.00	140,040
Set anchor bolts grout plates	150	ea	250.00	37,500

Piers

Formwork	5,172	sf	24.00	124,128
Re-bar	58,185	lbs.	2.50	145,463
Concrete material	201	cy	160.00	32,160
Placing concrete	201	cy	160.00	32,160
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	12,776	sf	4.00	51,104
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	12,776	sf	5.00	63,880
Brick Shelf 4" insulation	3,194	lf	20.00	63,880

312000 EARTHWORK

Strip footings

Excavation	3,549	cy	14.00	49,686
Reuse excess material on site	1,999	cy	15.00	16,485
Backfill with select fill	2,450	cy	25.00	61,250

Spread footings

Excavation	8,237	cy	14.00	115,318
Reuse excess material on site	3,138	cy	15.00	47,070
Backfill with select fill	5,099	cy	25.00	127,475

Miscellaneous

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION B.1							
	Foundation drain	3,194	lf	30.00	95,820		
	New brick ledge tied to existing foundation wall	1,387	lf	200.00	277,400		
	Excavation + backfill to expose existing foundations	822	cy	80.00	65,760		
	New foundations in existing building for bracing etc.	1	ls	150,000.00	150,000		
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL						5,019,491
A1020 SPECIAL FOUNDATIONS							
	Rigid inclusions	172,583	sf	35.00	6,040,405		
	SUBTOTAL						6,040,405
A1030 LOWEST FLOOR CONSTRUCTION							
033000	CONCRETE						
	Vapor barrier, 15mils	172,583	sf	1.25	215,729		
	<u>Slab on grade</u>	172,583	sf				
	WWF reinforcement	198,470	sf	1.85	367,170		
	Concrete - 5" thick	2,752	cy	170.00	467,840		
	Placing concrete	2,752	cy	65.00	178,880		
	Finishing and curing concrete	172,583	sf	3.00	517,749		
	Control joints - saw cut	172,583	sf	0.10	17,258		
	<u>Miscellaneous</u>						
	Patch existing floors	48,870	sf	5.00	244,350		
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system						Excluded; NR
072100	THERMAL INSULATION						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	19,164	sf	5.00	95,820		
	Under slab insulation, 2" thick under slab	153,419	sf	3.00	460,257		
312000	EARTHWORK						
	Gravel base, 12"	6,392	cy	45.00	287,640		
	Structural fill	28,400	cy	55.00	1,562,000		
	Allowance for underslab drainage	172,583	sf	2.00	345,166		
	Compact existing sub-grade	172,583	sf	0.50	86,292		
	Underslab E&B for plumbing	172,583	sf	1.50	258,875		
	SUBTOTAL						5,305,026

TOTAL - FOUNDATIONS	\$16,364,922
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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

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

11.6 lbs/sf
2,564 tns including canopies + roof screens
\$6,680 \$/Ton

033000 CONCRETE

WWF reinforcement

208,912 sf 1.85 386,487

Concrete Fill to metal deck; lightweight, total thickness 6 1/4"

3,674 cy 190.00 698,060

Place and finish concrete

181,663 sf 3.00 544,989

Rebar to decks

54,499 lbs 2.00 108,998

051200 STRUCTURAL STEEL FRAMING

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.1

Structural steel framing; Complete; 15 lbs per SF	1,362	tns	5,000.00	6,810,000		
New bracing steel at existing; 1 PSF	43	tns	8,000.00	344,000		
Steel premium for lateral system due to poor soils; 1 PSF	91	tns	5,000.00	455,000		
Moment connections	68	ea	750.00	51,000		
Shear studs	45,416	ea	3.50	158,956		
3" metal galvanized floor deck	181,663	sf	8.00	1,453,304		
Expansion joints	1	ls	100,000.00	100,000		
Seismic upgrades	86,570	sf	10.00	865,700		
078100 FIREPROOFING/FIRESTOPPING						
Fire proofing to columns and beams; 2 hr	268,233	sf	3.00	804,699		
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
SUBTOTAL						13,081,193

B1020 ROOF CONSTRUCTION

033000 CONCRETE						
6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,900	sf	9.00	315,000		
051200 STRUCTURAL STEEL FRAMING						
Structural steel framing; Complete; 13 lbs per SF	1,122	tns	5,000.00	5,610,000		
Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	4,800.00	168,000		
Steel premium for lateral system due to poor soils; 1 PSF	86	tns	5,000.00	430,000		
Roof screens	80	tns	5,500.00	440,000		
Decking						
1 1/2" galvanized metal deck, typical	172,583	sf	7.00	1,208,081		
078100 FIREPROOFING/FIRESTOPPING						
Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	172,583	sf	5.00	862,915		
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
SUBTOTAL						9,333,996

TOTAL - SUPERSTRUCTURE	\$22,415,189
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B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS	165,687	Total closure area
Exterior Wall Area	104,735	sf total area solid
042000 MASONRY		
Mockup	1	ls
Brick veneer; 60% of Solid	43,311	sf
Repoint existing brick	19,530	sf
Granite veneer base; 2%	2,095	sf
Precast trim allowance	1	ls
4" CMU wall at auditorium	9,000	sf
8" Mineral wool at exterior closure (2 layers 4")	104,735	sf
Miscellaneous flashings and sealants	104,735	sf
Staging to exterior wall	104,735	sf
055000 MISC. METALS		
Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	43,311	sf
070001 WATERPROOFING, DAMPROOFING AND CAULKING		
Air barrier	104,735	sf
Miscellaneous sealants to closure	104,735	sf
072100 THERMAL INSULATION		
4" cellulose insulation in stud	104,735	sf

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION B.1							
	Insulation at glazed openings	13,807	lf	6.00	82,842		
076400	CLADDING						
	Composite metal panel, Alucobond or equal; 18% Terracotta; 20%	18,852	sf	100.00	1,885,200		
	12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		
	Canopies; soffit + framing	4,000	sf	100.00	400,000		
EXPANSION JOINT COVERS							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	GYPSUM BOARD ASSEMBLIES						
	<i>Exterior wall;</i>						
	6" Stud backup	104,735	sf	16.00	1,675,760		
	Gypsum Sheathing	104,735	sf	3.50	366,573		
	Drywall lining to interior face of stud backup	104,735	sf	4.00	418,940		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL						20,350,566
B2020 WINDOWS							
	Exterior Wall Area						
061000	ROUGH CARPENTRY						
	Wood blocking at openings	13,807	lf	10.00	138,070		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	13,807	lf	10.00	138,070		
	Backer rod & double sealant	13,807	lf	11.00	151,877		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	20,711	sf	175.00	3,624,425		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	20,711	sf	225.00	4,659,975		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL						9,009,917
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL						440,816
TOTAL - EXTERIOR CLOSURE							
\$29,801,299							

B30 ROOFING

055000	MISCELLANOUS METALS						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	224,978	sf	1.50	337,467		
070002	ROOFING AND FLASHING						
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	224,978	sf	33.00	7,424,274		
	Canopy roofing	4,000	sf	28.00	112,000		
	Plaza deck pavers system at terrace	4,661	sf	70.00	326,270		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	224,978	sf	4.00	899,912		

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.1

SUBTOTAL 9,179,923

B3020 ROOF OPENINGS

086300	ROOF SKYLIGHTS						None Assumed
	Aluminum framed skylight (4loc)						
	Smoke vents; 7'x7'	3	ea	18,000.00	54,000		

SUBTOTAL 54,000

TOTAL - ROOFING	\$9,233,923
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001	MASONRY					
	Allowance for masonry partitions	440,816	gsf	6.00	2,644,896	

061000 ROUGH CARPENTRY

	Backer panels in electrical closets	1	ls	10,000.00	10,000	
	Wood blocking at interiors	440,816	gsf	0.50	220,408	

078400 FIREPROOFING/FIRESTOPPING

	Fire stopping including slab edges and core	440,816	gsf	1.00	440,816	
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

	Miscellaneous sealants throughout building	440,816	gsf	1.25	551,020	
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078150 EXPANSION JOINTS

	Allowance for expansion joint covers	1	ls	50,000.00	50,000	
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081110 INTERIOR GLAZING

	Allowance for interior glazing	440,816	gsf	3.00	1,322,448	
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092900 GYPSUM BOARD ASSEMBLIES

	Allowance for GWB partitions	440,816	gsf	33.00	14,546,928	
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SUBTOTAL 19,786,516

C1020 INTERIOR DOORS

Doors, frames, hardware; complete 440,816 gsf 8.00 3,526,528

Fire shutters 1 ls 150,000.00 150,000

Security doors 16 loc 25,000.00 400,000

Premium for electronic hardware; Hardwired 882 set 1,500.00 1,323,000

SUBTOTAL 5,399,528

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building 440,816 gsf 5.00 2,204,080

061000 ROUGH CARPENTRY

062000 INTERIOR ARCHITECTURAL WOODWORK

Interior millwork package 440,816 gsf 3.00 1,322,448

101100 VISUAL DISPLAY SURFACES

Markerboard and tackboard package 440,816 gsf 2.00 881,632

101400 SIGNAGE

Room identification, directional & safety signage, building directory + environmental graphics 440,816 gsf 2.00 881,632

102800 TOILET ACCESSORIES

Toilet accessories/compartments 440,816 gsf 1.00 440,816

104400 FIRE PROTECTION SPECIALTIES

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.1

	Fire extinguisher cabinets	1	ls	65,852.71	65,853		
	AED cabinets	1	ls	2,000.00	2,000		
105000	LOCKERS						
	Student lockers	440,816	gsf	2.00	881,632		
	SUBTOTAL					6,680,093	

TOTAL - INTERIOR CONSTRUCTION	\$31,866,137
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION

033000	CONCRETE						
	Concrete to stairs	17	ft	5,000.00	85,000		
055000	MISCELLANEOUS METALS						
	Egress stairs w/ stainless steel rails and handrails	14	ft	50,000.00	700,000		
	Projection room stair, 4' wide	1	ft	40,000.00	40,000		
	Learning stair						
	Stainless steel guardrail	65	lf	425.00	27,625		
	Stainless steel handrail	55	lf	175.00	9,625		
	Adjacent stairs; 5'-3" wide	2	ft	75,000.00	150,000		
	Learning stair framing						
	Framing at learning stair - premium	1	ls	150,000.00	150,000		
	SUBTOTAL					1,162,250	

C2020 STAIR FINISHES

090005	RESILIENT FLOORS						
	Stair finishes	17	flts	20,000.00	340,000		
	SUBTOTAL					340,000	

TOTAL - STAIRCASES	\$1,502,250
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C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package	440,816	gsf	17.00	7,493,872	
SUBTOTAL					7,493,872

C3020 FLOOR FINISHES

Floor finishes complete package	440,816	gsf	15.00	6,612,240	
Floor prep at existing	86,570	sf	5.00	432,850	
SUBTOTAL					7,045,090

C3030 CEILING FINISHES

Ceiling finishes complete package	440,816	gsf	15.00	6,612,240	
SUBTOTAL					6,612,240

TOTAL - INTERIOR FINISHES	\$21,151,202
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR

055000	MISCELLANEOUS METALS						
	Pit ladder and miscellaneous metals	3	ea	900.00	2,700		
	Sill angles	3	ls	1,500.00	4,500		
142100	ELEVATOR						
	Electric traction elevator, 4 stop, 5,000lbs	3	ea	400,000.00	1,200,000		
	SUBTOTAL					1,207,200	

TOTAL - CONVEYING SYSTEMS	\$1,207,200
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.1

D2o PLUMBING

D2o PLUMBING, GENERALLY

Air source heat pump water heater (2) 500MBH	1	ls	1,000,000.00	1,000,000
Plumbing package complete	440,816	gsf	28.00	12,342,848
SUBTOTAL				13,342,848

TOTAL - PLUMBING

\$13,342,848

D3o HVAC

D3o HVAC, GENERALLY

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440
SUBTOTAL				62,423,440

TOTAL - HVAC

\$62,423,440

D4o FIRE PROTECTION

D4o FIRE PROTECTION, GENERALLY

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000
Sprinkler system; complete	440,816	gsf	9.00	3,967,344
SUBTOTAL				4,117,344

TOTAL - FIRE PROTECTION

\$4,117,344

D5o ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system				
4000A 277/480V main switchboard	2	ea	185,000.00	370,000
Panelboards/feeders	440,816	gsf	6.00	2,644,896

Emergency power

Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500
Emergency power feeders	440,816	gsf	3.00	1,322,448

Photovoltaic - 3500 kW

PV system equipment; roof top	120,633	sf	36.00	4,342,788
PV system equipment; canopy	93,060	sf	60.00	5,583,600

Battery Storage

Battery Storage	1	ls	2,500,000	2,500,000
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Transparent + opaque vertical cladding BIPV

Transparent + opaque vertical cladding BIPV	4,918	sf	200.00	983,600
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Equipment Wiring

Feeders + Electrical to equipment	440,816	gsf	7.00	3,085,712
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SUBTOTAL				21,645,544
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D5020 LIGHTING & POWER

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688
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SUBTOTAL				7,934,688
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D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264
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Performance lighting

Theater AV	1	ls	200,000.00	200,000
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Stage lighting fixture package	1	ls	250,000.00	250,000
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Audio Visual Systems	440,816	gsf	8.50	3,746,936
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Classroom speech + AV	225	rms	5,000.00	1,125,000
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Specialty Communications Systems

BDA system, antenna and annunciator	440,816	sf	0.65	286,530
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Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816
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Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.1

Fire Alarm	440,816	gsf	4.00	1,763,264
Security System	440,816	gsf	10.00	4,408,160
SUBTOTAL				14,083,970

D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245
Grounding	440,816	gsf	0.40	176,326
Misc. demolition work	440,816	gsf	0.25	110,204
Temp power and lights	440,816	gsf	1.20	528,979
Seismic restraints/Coordination/misc.	440,816	gsf	1.00	440,816
SUBTOTAL				1,388,570

TOTAL - ELECTRICAL

\$45,052,772

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

112000 LOADING DOCK EQUIPMENT

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000
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110620 THEATRICAL EQUIPMENT

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000
Stage rigging, installed	1	ls	275,000.00	275,000
Stage curtains, installed	1	ls	88,385.00	88,385
Forestage Platforms, installed	1	ls	100,000.00	100,000
Orchestra Enclosure, installed	1	ls	175,000.00	175,000
Orchestra Pit Lift	1	ls	150,000.00	150,000
Auditorium AV Equipment				See Electrical

113100 APPLIANCES

Residential appliances - allowance	1	ls	60,000.00	60,000
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114000 FOOD SERVICE EQUIPMENT

Kitchen equipment	1	ls	2,500,000.00	2,500,000
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115300 EDUCATIONAL EQUIPMENT

Science equipment;	1	ls	400,000.00	400,000
Kiln	1	ea	5,000.00	5,000
Allowance for miscellaneous equipment	1	ls	50,000	50,000

116600 GYM EQUIPMENT

Gym Equipment	1	ls	500,000.00	500,000
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126000 SEATING

Auditorium seating	1,000	seat	400.00	400,000
SUBTOTAL				5,111,385

TOTAL - EQUIPMENT

\$5,111,385

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	41,422	sf	10.00	414,220
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123553 CASEWORK

Casework package	440,816	gsf	12.00	5,289,792
SUBTOTAL				5,704,012

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL				NIC
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TOTAL - FURNISHINGS

\$5,704,012

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.1

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

Pre-engineered Greenhouse
SUBTOTAL

1 ls 150,000.00 150,000 150,000

TOTAL - SPECIAL CONSTRUCTION \$150,000

F20 SELECTIVE BUILDING DEMOLITION

E2010 BUILDING ELEMENTS DEMOLITION

Roof demolition
Gut demolition
Temporary shori
SUBTOTAL:

52,395	sf	5.00	261,975
86,570	sf	10.00	865,700
1	ls	350,000.00	350,000

1,477,675

E2020. HAZARDOUS COMPONENTS ABATEMENT

HAZARDOUS COMPONENTS ALERT
See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION \$1,477,675

SUBTOTAL

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PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK B.1

G SITEWORK	

G10 SITE PREPARATION & DEMOLITION

311000	<i>GENERAL CONDITIONS</i> Mobilizations/Temp Parking/Etc. 6' high site construction fence - perimeter	1	ls	500,000.00	500,000		
311000	<i>SITE DEMOLITION AND RELOCATIONS</i> Demolish existing site conditions	7,500	lf	18.00	135,000		
311000	<i>UTILITY DEMOLITION</i> Demolish existing utility lines	1	ls	900,000.00	900,000		
	Utility Support/Ground Improvements	1	ls	1,500,000.00	1,500,000		
311000	<i>VEGETATION & TOPSOIL MANAGEMENT</i> Strip + dispose topsoil (swell 25%) Street sweeping allowance during hauling	23,264	cy	37.00	860,768		
311000	Remove trees/vegetation	1	ls	50,000.00	50,000		
	Strip + dispose topsoil	1,600	cy	37.00	59,200		
	Rock removal; mechanical	1,600	cy	85.00	136,000		
312000	<i>EROSION & SEDIMENT CONTROL</i> Silt Fence; installation and removal Erosion Control monitoring & maintenance	7,500	lf	12.00	90,000		
312000	<i>SITE EARTHWORK</i> <u>Site cut to design subgrade</u> Cut	1	ls	80,000.00	80,000		
	Store cut onsite	0	cy		NR		
	Process cut and amend with additional soils for reuse	0	cy		NR		
	Imported fill	4,100	cy	40.00	164,000		
	General rock removal	3,400	cy	85.00	289,000		
312000	<i>SOIL DISPOSAL</i> - conversion factor 1.7 to tons Load excess soils for disposal Less than RCS-1 - clean non-regulated	1	ls		NR		
312000	<i>ESTABLISHING GRADE</i> Sub grade establishment	2,015,000	sf	0.15	302,250		
	Fine grading throughout the site	2,015,000	sf	0.25	503,750		
312000	<i>HAZARDOUS MATERIALS</i> UST removal allowance Soil disposal & replacement allowance				NR		
	SUBTOTAL				See Summary		
						5,829,968	

G20 SITE IMPROVEMENTS
Roadways and Parking Lots

<u>Bituminous concrete pavement - standard</u>	264,000	sf			
gravel base; 8" thick	20,411	cy	50.00	1,020,550	
asphalt top; 1.5" thick	2,524	tns	200.00	504,800	
asphalt binder; 2" thick	3,372	tns	190.00	640,680	
<u>Porous Pavement</u>	66,000	sf			
Choker course; 4" thick crushed stone	1,039	cy	75.00	77,925	
Filter course; 8" thick gravel	2,047	cy	65.00	133,055	
Reservoir course; 8" thick crushed stone	2,047	cy	55.00	112,585	
Porous pavement; 4" thick	1,666	tns	400.00	666,400	
Geotextiles to paving	330,000	sf	1.50	495,000	

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK B.1							
320000	<i>CURBING</i>						
320000	Vertical granite curb	18,000	lf	55.00	990,000		
320000	<i>ROAD MARKINGS AND SIGNS</i>						
	Parking spot	470	ea	85.00	39,950		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL						4,792,195
320000	<i>PEDESTRIAN PAVING</i>						
	<u>Concrete sidewalks</u>	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	9,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,113	cy	50.00	55,650		
	Open graded base AASHTO #57; 6" thick	208	cy	50.00	10,400		
	Open graded bedding course AASHTO #8; 2" thick	70	cy	65.00	4,550		
	Pavers	9,000	sf	28.00	252,000		
	Geotextiles on top, bottom and sides of subbase	10,000	sy	3.00	30,000		
	<u>Concrete paving; 80% of Plaza</u>	36,000	sf				
	gravel base; 12" thick	1,667	cy	50.00	83,350		
	Broom finish concrete paving; 5" thick	36,000	sf	18.00	648,000		
320000	<i>STAIRS AND RAMPS</i>						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL						3,481,350
320000	<i>SITE IMPROVEMENTS</i>						
320000	<i>SITE FURNISHINGS</i>						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	<i>EXISTING STADIUM + TRACK ETR</i>						No Costs Assumed
320000	<i>ATHLETIC FIELDS</i>						
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts						ETR

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK B.1							
320000	ATHLETIC EQUIPMENT						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	BLEACHERS AND SCOREBOARDS						
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	FENCING						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL						6,090,000
320000	SITE WALLS						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL						750,000
	Landscaping						
329900	LAWN AND SEED						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
	IRRIGATION						
	Irrigation area at athletic fields	360,000	sf	1.50	540,000		
	Wetlands reconstruction					NR	
	SUBTOTAL						3,638,165
G30	CIVIL MECHANICAL UTILITIES						
210000	FIRE PROTECTION						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	CONNECTIONS						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	EXCAVATION & BACKFILL						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities					NR	
	SUBTOTAL						994,250
333000	SANITARY SEWER						
	PVC sewer pipe	1,980	lf	60.00	118,800		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL						260,800
334000	STORM DRAINAGE						
	Infiltration systems	11,000	sf	45.00	495,000		
	Hydrodynamic separators	5	ea	20,000.00	100,000		
	Storm systems; complete at parking; piping; CB + MH etc.	264,000	sf	10.00	2,640,000		
	Sodded Athletic fields						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL						3,235,000
G40	ELECTRICAL UTILITIES						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK B.1							
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL						253,030
<u>Power</u>							
Site electrical 15 kVOLT- Transformers etc.		1	ls	2,500,000.00	By Owner		
Utility co. back charges					Included above		
Primary duct bank		900	lf	180.00	162,000		
Electric manhole		6	ea	12,500.00	75,000		
Transformers + 15kVolt switchgear by Owner					Included above		
Secondary service 4000A		200	lf	1,400.00	280,000		
Generator:							
Generator service		100	lf	400.00	40,000		
PV:							
PV 5000A secondary service (10) - 4"C		400	lf	600.00	240,000		
<u>Communications</u>							
Connect to existing utility pole		1	ea	1,500.00	1,500		
Communications duct bank		750	lf	150.00	112,500		
Communication manhole		2	ea	12,500.00	25,000		
<u>Site Lighting</u>							
Allowance		360,000	sf	2.00	720,000		
<u>EV Stations</u>							
EV stations; single		20	loc	15,000.00	300,000		
EV stations; EV ready; conduit only		75	loc	4,000.00	300,000		
EV stations; EV ready; conduit + wiring		50	loc	7,000.00	350,000		
<u>Sports Fields</u>							
Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field		2	loc	460,000.00	920,000		
Fixture MUSCO					Included above		
Sports field lighting circuitry		1,200	lf	12.00	Included above		
Scoreboard power & data, misc. sports field power, allow		1	ls	10,000.00	Included above		
Rough-in, allow		1	ls	35,000.00	Included above		
<u>Site Demolition</u>							
Site demolition work					Included w/ building		
SUBTOTAL							3,526,000
TOTAL - SITE DEVELOPMENT							\$32,850,758

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION B.4				
A10 FOUNDATIONS				
A1010 Standard Foundations	\$4,934,163			
A1020 Special Foundations	\$5,295,745			
A1030 Lowest Floor Construction	\$4,752,925	\$14,982,833	\$33.99	5.6%
A20 BASEMENT CONSTRUCTION				
A2010 Basement Excavation	\$0			
A2020 Basement Walls	\$0	\$0	\$0.00	0.0%
B10 SUPERSTRUCTURE				
B1010 Upper Floor Construction	\$11,959,981			
B1020 Roof Construction	\$8,333,684	\$20,293,665	\$46.04	7.6%
B20 EXTERIOR CLOSURE				
B2010 Exterior Walls	\$18,460,169			
B2020 Windows	\$8,008,751			
B2030 Exterior Doors	\$440,816	\$26,909,736	\$61.05	10.1%
B30 ROOFING				
B3010 Roof Coverings	\$9,943,819			
B3020 Roof Openings	\$54,000	\$9,997,819	\$22.68	3.7%
C10 INTERIOR CONSTRUCTION				
C1010 Partitions	\$19,786,516			
C1020 Interior Doors	\$5,399,528			
C1030 Specialties/Millwork	\$6,680,093	\$31,866,137	\$72.29	11.9%
C20 STAIRCASES				
C2010 Stair Construction	\$942,250			
C2020 Stair Finishes	\$260,000	\$1,202,250	\$2.73	0.5%
C30 INTERIOR FINISHES				
C3010 Wall Finishes	\$7,493,872			
C3020 Floor Finishes	\$7,317,140			
C3030 Ceiling Finishes	\$6,612,240	\$21,423,252	\$48.60	8.0%
D10 CONVEYING SYSTEMS				
D1010 Elevator	\$907,200	\$907,200	\$2.06	0.3%



CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION B.4				
D20 PLUMBING				
D20 Plumbing	\$13,342,848	\$13,342,848	\$30.27	5.0%
D30 HVAC				
D30 HVAC	\$62,423,440	\$62,423,440	\$141.61	23.4%
D40 FIRE PROTECTION				
D40 Fire Protection	\$4,117,344	\$4,117,344	\$9.34	1.5%
D50 ELECTRICAL				
D5010 Complete System	\$44,741,616	\$44,741,616	\$101.50	16.8%
E10 EQUIPMENT				
E10 Equipment	\$5,111,385	\$5,111,385	\$11.60	1.9%
E20 FURNISHINGS				
E2010 Fixed Furnishings	\$5,656,412			
E2020 Movable Furnishings	NIC	\$5,656,412	\$12.83	2.1%
F10 SPECIAL CONSTRUCTION				
F10 Special Construction	\$1,850,000	\$1,850,000	\$4.20	0.7%
F20 HAZMAT REMOVALS				
F2010 Building Elements Demolition	\$2,269,735			
F2020 Hazardous Components Abatement	\$0	\$2,269,735	\$5.15	0.8%
TOTAL DIRECT COST (Trade Costs)		\$267,095,672	\$605.91	100.0%

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.4

GROSS FLOOR AREA CALCULATION

Level 1	151,307
Level 2	74,265
Level 3	74,264
Heavy Renovation	140,980

TOTAL GROSS FLOOR AREA (GFA)

440,816 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings: 1 x 3

Formwork	6,908	sf	15.00	103,620
Re-bar	45,593	lbs.	2.50	113,983
Concrete material	403	cy	160.00	64,480
Placing concrete	403	cy	120.00	48,360

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	24,178	sf	21.00	507,738
Re-bar	60,445	lbs.	2.50	151,113
Concrete material	785	cy	160.00	125,600
Placing concrete	785	cy	120.00	94,200
Form shelf	3,454	lf	8.00	27,632

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	27,216	sf	18.00	489,888
Re-bar	183,708	lbs.	2.50	459,270
Concrete material	2,381	cy	160.00	380,960
Placing concrete	2,381	cy	120.00	285,720
Set anchor bolts grout plates	378	ea	250.00	94,500

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork		sf	18.00	
Re-bar		lbs.	2.50	
Concrete material		cy	160.00	
Placing concrete		cy	120.00	
Set anchor bolts grout plates		ea	250.00	

Piers

Formwork	4,536	sf	24.00	108,864
Re-bar	51,030	lbs	2.50	127,575
Concrete material	176	cy	160.00	28,160
Placing concrete	176	cy	160.00	28,160
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	13,816	sf	4.00	55,264
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	13,816	sf	5.00	69,080
Brick Shelf 4" insulation	3,454	lf	20.00	69,080

312000 EARTHWORK

Strip footings

Excavation	3,838	cy	14.00	53,732
Reuse excess material on site	1,188	cy	15.00	17,820
Backfill with select fill	2,650	cy	25.00	66,250

Spread footings

Excavation	6,776	cy	14.00	94,864
Reuse excess material on site	2,557	cy	15.00	38,355
Backfill with select fill	4,219	cy	25.00	105,475

Miscellaneous

Foundation drain	3,454	lf	30.00	103,620
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION B.4							
	New brick ledge tied to existing foundation wall	2,186	lf	200.00	437,200		
	Excavation + backfill to expose existing foundations	1,295	cy	80.00	103,600		
	New foundations in existing building for bracing etc.	1	ls	200,000.00	200,000		
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL						4,934,163
A1020 SPECIAL FOUNDATIONS							
	Rigid inclusions	151,307	sf	35.00	5,295,745		
	SUBTOTAL						5,295,745
A1030 LOWEST FLOOR CONSTRUCTION							
033000	CONCRETE						
	Vapor barrier, 15mils	151,307	sf	1.25	189,134		
	<u>Slab on grade</u>	<i>151,307</i>	sf				
	WWF reinforcement	174,003	sf	1.85	321,906		
	Concrete - 5" thick	2,413	cy	170.00	410,210		
	Placing concrete	2,413	cy	65.00	156,845		
	Finishing and curing concrete	151,307	sf	3.00	453,921		
	Control joints - saw cut	151,307	sf	0.10	15,131		
	<u>Miscellaneous</u>						
	Patch existing floors	115,000	sf	5.00	575,000		
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system						Excluded; NR
072100	THERMAL INSULATION						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	20,724	sf	5.00	103,620		
	Under slab insulation, 2" thick under slab	130,583	sf	3.00	391,749		
312000	EARTHWORK						
	Gravel base, 12"	5,604	cy	45.00	252,180		
	Structural fill	19,600	cy	55.00	1,078,000		
	Allowance for underslab drainage	151,307	sf	2.00	302,614		
	Compact existing sub-grade	151,307	sf	0.50	75,654		
	Underslab E&B for plumbing	151,307	sf	1.50	226,961		
	SUBTOTAL						4,752,925
TOTAL - FOUNDATIONS							
							\$14,982,833

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

9.9 lbs/sf

2,177 tns including canopies + roof screens

\$6,809 \$/Ton

033000 CONCRETE

WWF reinforcement

170,808 sf 1.85 315,995

Concrete Fill to metal deck; lightweight, total thickness 6 1/4"

3,004 cy 190.00 570,760

Place and finish concrete

148,529 sf 3.00 445,587

Rebar to decks

44,559 lbs 2.00 89,118

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 15 lbs per SF

1,114 tns 5,000.00 5,570,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.4

	Steel premium for lateral system due to poor soils; 1 PSF	74	tns	5,000.00	370,000		
	New bracing steel at existing; 1 PSF	70	tns	8,000.00	560,000		
	Moment connections	56	ea	750.00	42,000		
	Shear studs	37,132	ea	3.50	129,962		
	3" metal galvanized floor deck	148,529	sf	8.00	1,188,232		
	Expansion joints	1	ls	100,000.00	100,000		
	Seismic upgrades	140,980	sf	10.00	1,409,800		
078100	FIREPROOFING/FIRESTOPPING						
	Fire proofing to columns and beams; 2 hr	289,509	sf	3.00	868,527		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	SUBTOTAL						11,959,981

B1020 ROOF CONSTRUCTION

033000	CONCRETE						
	6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
051200	STRUCTURAL STEEL FRAMING						
	Structural steel framing; Complete; 13 lbs per SF	983	tns	5,000.00	4,915,000		
	Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	4,800.00	168,000		
	Steel premium for lateral system due to poor soils; 1 PSF	76	tns	5,000.00	380,000		
	Roof screens	80	tns	5,500.00	440,000		
	Decking						
	1 1/2" galvanized metal deck, typical	151,307	sf	7.00	1,059,149		
078100	FIREPROOFING/FIRESTOPPING						
	Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	151,307	sf	5.00	756,535		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	SUBTOTAL						8,333,684

TOTAL - SUPERSTRUCTURE	\$20,293,665
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B20 EXTERIOR CLOSURE

042000	MASONRY						
	Mockup	1	ls	100,000.00	100,000		
	Brick veneer; 60% of Solid	35,752	sf	44.00	1,573,088		
	Repoint existing brick	18,900	sf	45.00	850,500		
	Granite veneer base; 2%	1,822	sf	120.00	218,640		
	4" CMU wall at auditorium	9,000	sf	30.00	270,000		
	Precast trim allowance	1	ls	1,000,000.00	1,000,000		
	8" Mineral wool at exterior closure (2 layers 4")	91,087	sf	7.50	683,153		
	Miscellaneous flashings and sealants	91,087	sf	1.50	136,631		
	Staging to exterior wall	91,087	sf	4.00	364,348		
055000	MISC. METALS						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	35,752	sf	1.50	53,628		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	91,087	sf	10.00	910,870		
	Miscellaneous sealants to closure	91,087	sf	1.00	91,087		
072100	THERMAL INSULATION						
	4" cellulose insulation in stud	91,087	sf	3.25	296,033		
	Insulation at glazed openings	12,221	lf	6.00	73,326		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION B.4							
076400	<i>CLADDING</i>						
	Composite metal panel, Alucobond or equal; 18% Terracotta; 20%	16,396	sf	100.00	1,639,600		
	Canopies; soffit + framing	37,117	sf	160.00	5,938,720		
	12' high Acoustic Equipment Screen	4,000	sf	100.00	400,000		
		16,000	sf	95.00	1,520,000		
<i>EXPANSION JOINT COVERS</i>							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	<i>GYPSUM BOARD ASSEMBLIES</i>						
	<i>Exterior wall;</i>						
	6" Stud backup	91,087	sf	16.00	1,457,392		
	Gypsum Sheathing	91,087	sf	3.50	318,805		
	Drywall lining to interior face of stud backup	91,087	sf	4.00	364,348		
	Passive house premium					NR	
101400	<i>SIGNAGE</i>						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL						18,460,169
B2020 WINDOWS							
	<i>Exterior Wall Area</i>						
061000	<i>ROUGH CARPENTRY</i>						
	Wood blocking at openings	12,221	lf	10.00	122,210		
070001	<i>WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
	Air barrier/flashing at windows	12,221	lf	10.00	122,210		
	Backer rod & double sealant	12,221	lf	11.00	134,431		
080001	<i>METAL WINDOWS</i>						
	Aluminum windows, triple glazed including interior and exterior trim per details	18,331	sf	175.00	3,207,925		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	18,331	sf	225.00	4,124,475		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium					NR	
089000	<i>LOUVERS</i>						
	Louvers					N/A	
	SUBTOTAL						8,008,751
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL						440,816
TOTAL - EXTERIOR CLOSURE							
							\$26,909,736

B30 ROOFING

055000	<i>MISCELLANEOUS METALS</i>						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000	<i>ROUGH CARPENTRY</i>						
	Rough carpentry and blocking @ roof	253,294	sf	1.50	379,941		
070002	<i>ROOFING AND FLASHING</i>						
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	253,294	total area	33.00	8,358,702		
	Canopy roofing	4,000	sf	28.00	112,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.4

Plaza deck pavers system at terrace					NR
<u>Miscellaneous Roofing</u>					
Miscellaneous flashings/copings/walkway pads etc.	253,294	sf	4.00	1,013,176	

SUBTOTAL 9,943,819

B3020 ROOF OPENINGS

086300 ROOF SKYLIGHTS					None Assumed
Aluminum framed skylight (4loc)					
Smoke vents; 7'x7'	3	ea	18,000.00	54,000	54,000

SUBTOTAL 54,000

TOTAL - ROOFING	\$9,997,819
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY				
Allowance for masonry partitions	440,816	gsf	6.00	2,644,896

061000 ROUGH CARPENTRY				
Backer panels in electrical closets	1	ls	10,000.00	10,000
Wood blocking at interiors	440,816	gsf	0.50	220,408

078400 FIREPROOFING/FIRESTOPPING				
Fire stopping including slab edges and core	440,816	gsf	1.00	440,816

070001 WATERPROOFING, DAMPPROOFING AND CAULKING				
Miscellaneous sealants throughout building	440,816	gsf	1.25	551,020

078150 EXPANSION JOINTS				
Allowance for expansion joint covers	1	ls	50,000.00	50,000

081110 INTERIOR GLAZING				
Allowance for interior glazing	440,816	gsf	3.00	1,322,448

092900 GYPSUM BOARD ASSEMBLIES				
Allowance for GWB partitions	440,816	gsf	33.00	14,546,928

SUBTOTAL 19,786,516

C1020 INTERIOR DOORS

Doors, frames, hardware; complete	440,816	gsf	8.00	3,526,528
Fire shutters	1	ls	150,000.00	150,000
Security doors	16	loc	25,000.00	400,000
Premium for electronic hardware	882	set	1,500.00	1,323,000
SUBTOTAL				5,399,528

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS				
Miscellaneous metals throughout building	440,816	gsf	5.00	2,204,080

061000 ROUGH CARPENTRY

062000 INTERIOR ARCHITECTURAL WOODWORK				
Interior millwork package	440,816	gsf	3.00	1,322,448

101100 VISUAL DISPLAY SURFACES				
Markerboard and tackboard package	440,816	gsf	2.00	881,632

101400 SIGNAGE				
Room identification, directional & safety signage, building directory + environmental graphics	440,816	gsf	2.00	881,632

102800 TOILET ACCESSORIES

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.4

	Toilet accessories/compartments	440,816	gsf	1.00	440,816		
104400 FIRE PROTECTION SPECIALTIES							
	Fire extinguisher cabinets	1	ls	65,852.71	65,853		
	AED cabinets	1	ls	2,000.00	2,000		
105000 LOCKERS							
	Student lockers	440,816	gsf	2.00	881,632		
	SUBTOTAL					6,680,093	

TOTAL - INTERIOR CONSTRUCTION	\$31,866,137
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION

033000 CONCRETE	Concrete to stairs	13	ft	5,000.00	65,000		
055000 MISCELLANEOUS METALS							
	Egress stairs w/ stainless steel rails and handrails	10	ft	50,000.00	500,000		
	Projection room stair, 4' wide	1	ft	40,000.00	40,000		
	<u>Learning stair</u>						
	Stainless steel guardrail	65	lf	425.00	27,625		
	Stainless steel handrail	55	lf	175.00	9,625		
	Adjacent stairs; 5'-3" wide	2	ft	75,000.00	150,000		
	Learning stair framing						
	Framing at learning stair - premium	1	ls	150,000.00	150,000		
	SUBTOTAL					942,250	

C2020 STAIR FINISHES

090005 RESILIENT FLOORS	Stair finishes	13	flts	20,000.00	260,000		
	SUBTOTAL					260,000	

TOTAL - STAIRCASES	\$1,202,250
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C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package	440,816	gsf	17.00	7,493,872		
SUBTOTAL					7,493,872	

C3020 FLOOR FINISHES

Floor finishes complete package	440,816	gsf	15.00	6,612,240		
Floor prep at existing	140,980	sf	5.00	704,900		
SUBTOTAL					7,317,140	

C3030 CEILING FINISHES

Ceiling finishes complete package	440,816	gsf	15.00	6,612,240		
SUBTOTAL					6,612,240	

TOTAL - INTERIOR FINISHES	\$21,423,252
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR

055000 MISCELLANEOUS METALS						
Pit ladder and miscellaneous metals	3	ea	900.00	2,700		
Sill angles	3	ls	1,500.00	4,500		
142100 ELEVATOR						
Electric traction elevator, 3 stop, 5,000lbs	3	ea	300,000.00	900,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.4

SUBTOTAL

907,200

TOTAL - CONVEYING SYSTEMS	\$907,200
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D20 PLUMBING

D20 PLUMBING, GENERALLY

Air source heat pump water heater (2) 500MBH	1	ls	1,000,000.00	1,000,000
Plumbing package complete	440,816	gsf	28.00	12,342,848
SUBTOTAL				13,342,848

TOTAL - PLUMBING	\$13,342,848
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D30 HVAC

D30 HVAC, GENERALLY

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440
SUBTOTAL				62,423,440

TOTAL - HVAC	\$62,423,440
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D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

<u>Fire Equipment</u>				
Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000
Sprinkler system; complete	440,816	gsf	9.00	3,967,344
SUBTOTAL				4,117,344

TOTAL - FIRE PROTECTION	\$4,117,344
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D50 ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system	2	ea	185,000.00	370,000
4000A 277/480V main switchboard	440,816	gsf	6.00	2,644,896

Emergency power

Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500
Emergency power feeders	440,816	gsf	3.00	1,322,448

Photovoltaic - 3500 kW

PV system equipment; roof top	139,312	sf	36.00	5,015,232
PV system equipment; canopy	93,060	sf	60.00	5,583,600

Battery Storage

Battery Storage	1	ls	2,500,000	2,500,000
Transparent + opaque vertical cladding BIPV		sf	200.00	N/A

Equipment Wiring

Feeders + Electrical to equipment	440,816	gsf	7.00	3,085,712
SUBTOTAL				21,334,388

D5020 LIGHTING & POWER

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688
SUBTOTAL				7,934,688

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264
<u>Performance lighting</u>				

Theater AV	1	ls	200,000.00	200,000
Stage lighting fixture package	1	ls	250,000.00	250,000

Audio Visual Systems	440,816	gsf	8.50	3,746,936
Classroom speech + AV	225	rms	5,000.00	1,125,000

<u>Specialty Communications Systems</u>				
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.4

BDA system, antenna and annunciator	440,816	sf	0.65	286,530
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000
<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264
<u>Security System</u>	440,816	gsf	10.00	4,408,160
SUBTOTAL				14,083,970

D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245
Grounding	440,816	gsf	0.40	176,326
Misc. demolition work	440,816	gsf	0.25	110,204
Temp power and lights	440,816	gsf	1.20	528,979
Seismic restraints/Coordination/misc.	440,816	gsf	1.00	440,816
SUBTOTAL				1,388,570

TOTAL - ELECTRICAL

\$44,741,616

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

112000 LOADING DOCK EQUIPMENT

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000
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110620 THEATRICAL EQUIPMENT

Allowance per Architect

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000
Stage rigging, installed	1	ls	275,000.00	275,000
Stage curtains, installed	1	ls	88,385.00	88,385
Forestage Platforms, installed	1	ls	100,000.00	100,000
Orchestra Enclosure, installed	1	ls	175,000.00	175,000
Orchestra Pit Lift	1	ls	150,000.00	150,000
Auditorium AV Equipment				See Electrical

113100 APPLIANCES

Residential appliances - allowance	1	ls	60,000.00	60,000
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114000 FOOD SERVICE EQUIPMENT

Kitchen equipment	1	ls	2,500,000.00	2,500,000
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115300 EDUCATIONAL EQUIPMENT

Science equipment;	1	ls	400,000.00	400,000
Kiln	1	ea	5,000.00	5,000
Allowance for miscellaneous equipment	1	ls	50,000	50,000

116600 GYM EQUIPMENT

Gym Equipment	1	ls	500,000.00	500,000
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126000 SEATING

Auditorium seating	1,000	seat	400.00	400,000
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SUBTOTAL				5,111,385
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TOTAL - EQUIPMENT

\$5,111,385

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	36,662	sf	10.00	366,620
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123553 CASEWORK

Casework package	440,816	gsf	12.00	5,289,792
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SUBTOTAL				5,656,412
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION B.4

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

TOTAL - FURNISHINGS	\$5,656,412
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

Temporary kitchen	1	ls	500,000.00	500,000
Temporary dining; tent structure	12,000	sf	100.00	1,200,000
Pre-engineered Greenhouse	1	ls	150,000.00	150,000

SUBTOTAL

1,850,000

TOTAL - SPECIAL CONSTRUCTION	\$1,850,000
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F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

Roof demolition	101,987	sf	5.00	509,935
Gut demolition	140,980	sf	10.00	1,409,800
Temporary shoring	1	ls	350,000.00	350,000

SUBTOTAL

2,269,735

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION	\$2,269,735
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SUBTOTAL

\$267,095,672

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK B.4

G SITEWORK	

G10	SITE PREPARATION & DEMOLITION	2,015,000	sf				
311000	<i>GENERAL CONDITIONS</i> Mobilizations/Temp Parking/Etc. 6' high site construction fence - perimeter	1	ls	500,000.00	500,000		
311000		7,500	lf	18.00	135,000		
311000	<i>SITE DEMOLITION AND RELOCATIONS</i> Demolish existing site conditions	1	ls	900,000.00	900,000		
311000	<i>UTILITY DEMOLITION</i> Demolish existing utility lines	1	ls	250,000.00	250,000		
	Utility Support/Ground Improvements	1	ls	1,500,000.00	1,500,000		
311000	<i>VEGETATION & TOPSOIL MANAGEMENT</i> Strip + dispose topsoil (swell 25%) Street sweeping allowance during hauling	23,264	cy	37.00	860,768		
311000		1	ls	50,000.00	50,000		
311000	<i>CLEAR GRASSY KNOB</i> Remove trees/vegetation Strip + dispose topsoil Rock removal; mechanical	1	ls	10,000.00	10,000		
311000		1,600	cy	37.00	59,200		
311000		1,600	cy	85.00	136,000		
312000	<i>EROSION & SEDIMENT CONTROL</i> Silt Fence; installation and removal Erosion Control monitoring & maintenance	7,500	lf	12.00	90,000		
312000		1	ls	80,000.00	80,000		
312000	<i>SITE EARTHWORK</i> <u>Site cut to design subgrade</u> Cut Store cut onsite Process cut and amend with additional soils for reuse Imported fill	0	cy	20.00		NR	
312000		0	cy			NR	
312000		4,100	cy	40.00	164,000		
312000	<i>SOIL DISPOSAL</i> - conversion factor 1.7 to tons Load excess soils for disposal Less than RCS-1 - clean non-regulated	1	ls		NR		
312000							
312000	<i>ESTABLISHING GRADE</i> Sub grade establishment Fine grading throughout the site	2,015,000	sf	0.15	302,250		
312000		2,015,000	sf	0.25	503,750		
	General rock removal	3,400	cy	85.00	289,000		
312000	<i>HAZARDOUS MATERIALS</i> UST removal allowance Soil disposal & replacement allowance SUBTOTAL					NR	
312000						See Summary	
312000							5,829,968
G20	SITE IMPROVEMENTS						
	Roadways and Parking Lots						
	<u>Bituminous concrete pavement - standard</u>	240,000	sf				
	gravel base; 8" thick	18,556	cy	50.00	927,800		
	asphalt top; 1.5" thick	2,294	tns	200.00	458,800		
	asphalt binder; 2" thick	3,065	tns	190.00	582,350		
	<u>Porous Pavement</u>	60,000	<u>sf</u>				
	Choker course; 4" thick crushed stone	944	cy	75.00	70,800		
	Filter course; 8" thick gravel	1,861	cy	65.00	120,965		
	Reservoir course; 8" thick crushed stone	1,861	cy	55.00	102,355		
	Porous pavement; 4" thick	1,514	tns	400.00	605,600		
	Geotextiles to paving	300,000	sf	1.50	450,000		
320000	<i>CURBING</i>						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK B.4							
320000	Vertical granite curb	14,500	lf	55.00	797,500		
<i>ROAD MARKINGS AND SIGNS</i>							
	Parking spot	470	ea	85.00	39,950		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL						4,267,370
320000 PEDESTRIAN PAVING							
	<u>Concrete sidewalks</u>	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	14,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,731	cy	50.00	86,550		
	Open graded base AASHTO #57; 6" thick	324	cy	50.00	16,200		
	Open graded bedding course AASHTO #8; 2" thick	108	cy	65.00	7,020		
	Pavers	14,000	sf	28.00	392,000		
	Geotextiles on top, bottom and sides of subbase	3,111	sy	3.00	9,333		
	<u>Concrete paving; 80% of Plaza</u>	56,000	sf				
	gravel base; 12" thick	2,593	cy	50.00	129,650		
	Broom finish concrete paving; 5" thick	56,000	sf	18.00	1,008,000		
320000	STAIRS AND RAMPS						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL						4,046,153
320000 SITE IMPROVEMENTS							
320000	SITE FURNISHINGS						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	EXISTING STADIUM + TRACK ETR						No Costs Assumed
320000	ATHLETIC FIELDS						
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts						ETR
320000	ATHLETIC EQUIPMENT						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK B.4							
320000	Equipment allowance	1	ls	180,000.00	180,000		
320000	<i>BLEACHERS AND SCOREBOARDS</i>						
	Bleachers + pressbox	1,000	seat	900.00	NIC		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	NIC		
	Electronic scoreboard; softball	1	ea	45,000.00	NIC		
320000	<i>FENCING</i>						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					5,070,000	
320000	<i>SITE WALLS</i>						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	
<u>Landscaping</u>							
329900	<i>LAWN AND SEED</i>						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
<i>IRRIGATION</i>							
	Irrigation area	360,000	sf	1.50	540,000		
	Wetlands reconstruction	28,500	sf	20.00	NR		
	SUBTOTAL					3,638,165	
G30 CIVIL MECHANICAL UTILITIES							
210000	<i>FIRE PROTECTION</i>						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	<i>CONNECTIONS</i>						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	<i>EXCAVATION & BACKFILL</i>						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities				NR		
	SUBTOTAL					994,250	
333000	<i>SANITARY SEWER</i>						
	PVC sewer pipe	1,800	lf	60.00	108,000		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					250,000	
334000	<i>STORM DRAINAGE</i>						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	5	ea	20,000.00	100,000		
	Storm systems; complete at parking; piping; CB + MH etc.	240,000	sf	10.00	2,400,000		
<i>Sodded Athletic fields</i>							
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL					3,017,500	
G40 ELECTRICAL UTILITIES							
Concrete:							
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK B.4							
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL						253,030
<u>Power</u>							
	Site electrical 15 kVOLT- Transformers etc.	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
<u>Communications</u>							
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
<u>Site Lighting</u>							
	Allowance	360,000	sf	2.00	720,000		
<u>EV Stations</u>							
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
<u>Sports Fields</u>							
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
<u>Site Demolition</u>							
	Site demolition work				Included w/ building		
	SUBTOTAL						3,526,000
TOTAL - SITE DEVELOPMENT							
\$31,642,436							

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION C.1.d				
A10 FOUNDATIONS				
A1010 Standard Foundations	\$4,402,553			
A1020 Special Foundations	\$5,934,250			
A1030 Lowest Floor Construction	\$5,472,417	\$15,809,220	\$35.86	5.8%
A20 BASEMENT CONSTRUCTION				
A2010 Basement Excavation	\$0			
A2020 Basement Walls	\$0	\$0	\$0.00	0.0%
B10 SUPERSTRUCTURE				
B1010 Upper Floor Construction	\$17,143,803			
B1020 Roof Construction	\$9,192,600	\$26,336,403	\$59.74	9.7%
B20 EXTERIOR CLOSURE				
B2010 Exterior Walls	\$19,835,307			
B2020 Windows	\$8,930,842			
B2030 Exterior Doors	\$440,816	\$29,206,965	\$66.26	10.7%
B30 ROOFING				
B3010 Roof Coverings	\$7,581,795			
B3020 Roof Openings	\$54,000	\$7,635,795	\$17.32	2.8%
C10 INTERIOR CONSTRUCTION				
C1010 Partitions	\$19,786,516			
C1020 Interior Doors	\$5,399,528			
C1030 Specialties/Millwork	\$6,680,093	\$31,866,137	\$72.29	11.7%
C20 STAIRCASES				
C2010 Stair Construction	\$1,217,250			
C2020 Stair Finishes	\$360,000	\$1,577,250	\$3.58	0.6%
C30 INTERIOR FINISHES				
C3010 Wall Finishes	\$7,493,872			
C3020 Floor Finishes	\$6,612,240			
C3030 Ceiling Finishes	\$6,612,240	\$20,718,352	\$47.00	7.6%
D10 CONVEYING SYSTEMS				
D1010 Elevator	\$1,207,200	\$1,207,200	\$2.74	0.4%



CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION C.1.d				
D20 PLUMBING				
D20 Plumbing	\$13,342,848	\$13,342,848	\$30.27	4.9%
D30 HVAC				
D30 HVAC	\$62,423,440	\$62,423,440	\$141.61	22.9%
D40 FIRE PROTECTION				
D40 Fire Protection	\$4,117,344	\$4,117,344	\$9.34	1.5%
D50 ELECTRICAL				
D5010 Complete System	\$47,335,972	\$47,335,972	\$107.38	17.4%
E10 EQUIPMENT				
E10 Equipment	\$5,111,385	\$5,111,385	\$11.60	1.9%
E20 FURNISHINGS				
E2010 Fixed Furnishings	\$5,700,252			
E2020 Movable Furnishings	NIC	\$5,700,252	\$12.93	2.1%
F10 SPECIAL CONSTRUCTION				
F10 Special Construction	\$150,000	\$150,000	\$0.34	0.1%
F20 HAZMAT REMOVALS				
F2010 Building Elements Demolition	\$0			
F2020 Hazardous Components Abatement	\$0	\$0	\$0.00	0.0%
TOTAL DIRECT COST (Trade Costs)		\$272,538,563	\$618.26	100.0%

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.1.d

GROSS FLOOR AREA CALCULATION

Level 1	169,550
Level 2	111,060
Level 3	90,000
Level 4	70,206

TOTAL GROSS FLOOR AREA (GFA)

440,816 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings: 1 x 3

Formwork	5,750	sf	15.00	86,250
Re-bar	37,950	lbs.	2.50	94,875
Concrete material	335	cy	160.00	53,600
Placing concrete	335	cy	120.00	40,200

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	20,125	sf	21.00	422,625
Re-bar	50,313	lbs.	2.50	125,783
Concrete material	654	cy	160.00	104,640
Placing concrete	654	cy	120.00	78,480
Form shelf	2,875	lf	8.00	23,000

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	14,328	sf	18.00	257,904
Re-bar	96,714	lbs.	2.50	241,785
Concrete material	1,254	cy	160.00	200,640
Placing concrete	1,254	cy	120.00	150,480
Set anchor bolts grout plates	199	ea	250.00	49,750

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	18,000	sf	18.00	324,000
Re-bar	135,000	lbs.	2.50	337,500
Concrete material	1,750	cy	160.00	280,000
Placing concrete	1,750	cy	120.00	210,000
Set anchor bolts grout plates	225	ea	250.00	56,250

Piers

Formwork	5,088	sf	24.00	122,112
Re-bar	57,240	lbs	2.50	143,100
Concrete material	198	cy	160.00	31,680
Placing concrete	198	cy	160.00	31,680
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	11,500	sf	4.00	46,000
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	11,500	sf	5.00	57,500
Brick Shelf 4" insulation	2,875	lf	20.00	57,500

312000 EARTHWORK

Strip footings

Excavation	3,194	cy	14.00	44,716
Reuse excess material on site	989	cy	15.00	14,835
Backfill with select fill	2,205	cy	25.00	55,125

Spread footings

Excavation	8,367	cy	14.00	117,138
Reuse excess material on site	3,202	cy	15.00	48,030
Backfill with select fill	5,165	cy	25.00	129,125

Miscellaneous

Foundation drain	2,875	lf	30.00	86,250
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.1.d							
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL					4,402,553	
A1020 SPECIAL FOUNDATIONS							
	Rigid inclusions	169,550	sf	35.00	5,934,250		
	SUBTOTAL					5,934,250	
A1030 LOWEST FLOOR CONSTRUCTION							
033000	CONCRETE						
	Vapor barrier, 15mils	169,550	sf	1.25	211,938		
	<u>Slab on grade</u>	169,550	sf				
	WWF reinforcement	194,983	sf	1.85	360,719		
	Concrete - 5" thick	2,703	cy	170.00	459,510		
	Placing concrete	2,703	cy	65.00	175,695		
	Finishing and curing concrete	169,550	sf	3.00	508,650		
	Control joints - saw cut	169,550	sf	0.10	16,955		
	<u>Miscellaneous</u>						
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system					Excluded; NR	
072100	<i>THERMAL INSULATION</i>						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	17,250	sf	5.00	86,250		
	Under slab insulation, 2" thick under slab	152,300	sf	3.00	456,900		
312000	<i>EARTHWORK</i>						
	Gravel base, 12"	6,280	cy	45.00	282,600		
	Structural fill	37,000	cy	55.00	2,035,000		
	Allowance for underslab drainage	169,550	sf	2.00	339,100		
	Compact existing sub-grade	169,550	sf	0.50	84,775		
	Underslab E&B for plumbing	169,550	sf	1.50	254,325		
	SUBTOTAL					5,472,417	

TOTAL - FOUNDATIONS **\$15,809,220**

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

033000 CONCRETE

WWF reinforcement
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"
Place and finish concrete
Rebar to decks

14.6 lbs/sf
3,216 tns including canopies + roof screens
\$6,550 \$/Ton

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 15 lbs per SF
Steel premium for lateral system due to poor soils; 1 PSF
Moment connections
Shear studs
3" metal galvanized floor deck

2,034 tns 5,000.00 10,170,000
136 tns 5,000.00 680,000
102 ea 750.00 76,500
67,817 ea 3.50 237,360
271,266 sf 8.00 2,170,128

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.1.d

Expansion joints	1	ls	100,000.00	100,000	
078100 FIREPROOFING/FIRESTOPPING					
Fire proofing to columns and beams; 2 hr	271,266	sf	3.00	813,798	
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000	
SUBTOTAL					17,143,803

B1020 ROOF CONSTRUCTION

033000 CONCRETE					
6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000	
051200 STRUCTURAL STEEL FRAMING					
Structural steel framing; Complete; 13 lbs per SF	1,102	tns	5,000.00	5,510,000	
Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	4,800.00	168,000	
Steel premium for lateral system due to poor soils; 1 PSF	85	tns	5,000.00	425,000	
Roof screens	80	tns	5,500.00	440,000	
<u>Decking</u>					
1 1/2" galvanized metal deck, typical	169,550	sf	7.00	1,186,850	
078100 FIREPROOFING/FIRESTOPPING					
Fireproofing to columns, beams and deck; 1 hr	169,550	sf	5.00	847,750	
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000	
SUBTOTAL					9,192,600

TOTAL - SUPERSTRUCTURE

\$26,336,403

B20 EXTERIOR CLOSURE

042000 MASONRY					
Mockup	1	ls	100,000.00	100,000	
Brick veneer; 60% of Solid	73,882	sf	44.00	3,250,808	
Granite veneer base; 2%	2,463	sf	120.00	295,560	
Precast trim allowance	1	ls	1,200,000.00	1,200,000	
4" CMU wall at auditorium	9,000	sf	30.00	270,000	
8" Mineral wool at exterior closure (2 layers 4")	123,137	sf	7.50	923,528	
Miscellaneous flashings and sealants	123,137	sf	1.50	184,706	
Staging to exterior wall	123,137	sf	4.00	492,548	
055000 MISC. METALS					
Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	73,882	sf	1.50	110,823	
070001 WATERPROOFING, DAMPROOFING AND CAULKING					
Air barrier	123,137	sf	10.00	1,231,370	
Miscellaneous sealants to closure	123,137	sf	1.00	123,137	
072100 THERMAL INSULATION					
4" cellulose insulation in stud	123,137	sf	3.25	400,195	
Insulation at glazed openings	13,682	lf	6.00	82,092	
076400 CLADDING					
Composite metal panel, Alucobond or equal; 18%	22,165	sf	100.00	2,216,500	
Terracotta; 20%	24,627	sf	160.00	3,940,320	
Canopies; soffit + framing	4,000	sf	100.00	400,000	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.1.d							
	12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		
<i>EXPANSION JOINT COVERS</i>							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	<i>GYPSUM BOARD ASSEMBLIES</i>						
	Exterior wall;						
	6" Stud backup	123,137	sf	16.00	1,970,192		
	Gypsum Sheathing	123,137	sf	3.50	430,980		
	Drywall lining to interior face of stud backup	123,137	sf	4.00	492,548		
101400	<i>SIGNAGE</i>						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL						19,835.307
B2020 WINDOWS							
	<i>Exterior Wall Area</i>	41,046	sf				
061000	<i>ROUGH CARPENTRY</i>						
	Wood blocking at openings	13,682	lf	10.00	136,820		
070001	<i>WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
	Air barrier/flashing at windows	13,682	lf	10.00	136,820		
	Backer rod & double sealant	13,682	lf	11.00	150,502		
080001	<i>METAL WINDOWS</i>						
	Aluminum windows, triple glazed including interior and exterior trim per details	20,523	sf	175.00	3,591,525		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	20,523	sf	225.00	4,617,675		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium						NR
089000	<i>LOUVERS</i>						
	Louvers						N/A
	SUBTOTAL						8,930,842
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL						440,816
TOTAL - EXTERIOR CLOSURE							\$29,206,965

B30 ROOFING

055000	<i>MISCELLANOUS METALS</i>						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000 ROUGH CARPENTRY							
	Rough carpentry and blocking @ roof	169,550	sf	1.50	254,325		
070002 ROOFING AND FLASHING							
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	169,550	sf	33.00	5,595,150		
	Canopy roofing	4,000	sf	28.00	112,000		
	Plaza deck pavers system at terrace	12,316	sf	70.00	862,120		
	<u>Miscellaneous Roofing</u>						
	Miscellaneous flashings/copings/walkway pads etc.	169,550	sf	4.00	678,200		
	SUBTOTAL						7,581,795

B3020 ROOF OPENINGS

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.1.d							
086300	ROOF SKYLIGHTS						
	Aluminum framed skylight (4loc)						None Assumed
	Smoke vents; 7'x7'	3	ea	18,000.00	54,000		
	SUBTOTAL						54,000
TOTAL - ROOFING							\$7,635,795

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY

Allowance for masonry partitions

440,816 gsf

6.00

2,644,896

061000 ROUGH CARPENTRY

Backer panels in electrical closets

1 ls

10,000.00

10,000

Wood blocking at interiors

440,816 gsf

0.50

220,408

078400 FIREPROOFING/FIRESTOPPING

Fire stopping including slab edges and core

440,816 gsf

1.00

440,816

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Miscellaneous sealants throughout building

440,816 gsf

1.25

551,020

078150 EXPANSION JOINTS

Allowance for expansion joint covers

1 ls

50,000.00

50,000

081110 INTERIOR GLAZING

Allowance for interior glazing

440,816 gsf

3.00

1,322,448

092900 GYPSUM BOARD ASSEMBLIES

Allowance for GWB partitions

440,816 gsf

33.00

14,546,928

SUBTOTAL

19,786,516

C1020 INTERIOR DOORS

Doors, frames, hardware; complete

440,816 gsf

8.00

3,526,528

Fire shutters

1 ls

150,000.00

150,000

Security doors

16 loc

25,000.00

400,000

Premium for electronic hardware

882 set

1,500.00

1,323,000

SUBTOTAL

5,399,528

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building

440,816 gsf

5.00

2,204,080

061000 ROUGH CARPENTRY

062000 INTERIOR ARCHITECTURAL WOODWORK

Interior millwork package

440,816 gsf

3.00

1,322,448

101100 VISUAL DISPLAY SURFACES

Markerboard and tackboard package

440,816 gsf

2.00

881,632

101400 SIGNAGE

Room identification, directional & safety signage, building directory + environmental graphics

440,816 gsf

2.00

881,632

102800 TOILET ACCESSORIES

Toilet accessories/compartments

440,816 gsf

1.00

440,816

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets

1 ls

65,852.71

65,853

AED cabinets

1 ls

2,000.00

2,000

105000 LOCKERS

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.1.d							
	Student lockers	440,816	gsf	2.00	881,632		
	SUBTOTAL					6,680,093	
TOTAL - INTERIOR CONSTRUCTION							\$31,866,137

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

033000 CONCRETE

Concrete to stairs **18** ft 5,000.00 90,000

055000 MISCELLANEOUS METALS

Egress stairs w/ stainless steel rails and handrails **15** ft 50,000.00 750,000

Projection room stair, 4' wide **1** ft 40,000.00 40,000

Learning stair

Stainless steel guardrail **65** lf 425.00 27,625

Stainless steel handrail **55** lf 175.00 9,625

Adjacent stairs; 5'-3" wide **2** ft 75,000.00 150,000

Learning stair framing **1** ls 150,000.00 150,000

Framing at learning stair - premium

SUBTOTAL **1,217,250**

C2020 STAIR FINISHES

090005 RESILIENT FLOORS

Stair finishes **18** flts 20,000.00 360,000

SUBTOTAL **360,000**

TOTAL - STAIRCASES

\$1,577,250

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package **440,816** gsf 17.00 7,493,872

SUBTOTAL **7,493,872**

C3020 FLOOR FINISHES

Floor finishes complete package **440,816** gsf 15.00 6,612,240

SUBTOTAL **6,612,240**

C3030 CEILING FINISHES

Ceiling finishes complete package **440,816** gsf 15.00 6,612,240

SUBTOTAL **6,612,240**

TOTAL - INTERIOR FINISHES

\$20,718,352

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

055000 MISCELLANEOUS METALS

Pit ladder and miscellaneous metals **3** ea 900.00 2,700

Sill angles **3** ls 1,500.00 4,500

142100 ELEVATOR

Electric traction elevator, 3 stop, 5,000lbs **3** ea 400,000.00 1,200,000

SUBTOTAL **1,207,200**

TOTAL - CONVEYING SYSTEMS

\$1,207,200

D20 PLUMBING

D20 PLUMBING, GENERALLY

Air source heat pump water heater (2) 500MBH **1** ls 1,000,000.00 1,000,000

Plumbing package complete **440,816** gsf 28.00 12,342,848

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.1.d

SUBTOTAL

13,342,848

TOTAL - PLUMBING

\$13,342,848

D30 HVAC

D30 HVAC, GENERALLY

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440
SUBTOTAL				62,423,440

TOTAL - HVAC

\$62,423,440

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000
Sprinkler system; complete	440,816	gsf	9.00	3,967,344
SUBTOTAL				4,117,344

TOTAL - FIRE PROTECTION

\$4,117,344

D50 ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system				
4000A 277/480V main switchboard	2	ea	185,000.00	370,000
Panelboards/feeders	440,816	gsf	6.00	2,644,896

Emergency power

Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500
Emergency power feeders	440,816	gsf	3.00	1,322,448

Photovoltaic - 3500 kW

PV system equipment; roof top; low roof	33,808	sf	36.00	1,217,088
PV system equipment; roof top; High roof (with Structure)	84,825	sf	60.00	5,089,500
PV system equipment; canopy	102,250	sf	60.00	6,135,000

Battery Storage

Battery Storage	1	ls	2,500,000	2,500,000
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Transparent + opaque vertical cladding BIPV

Transparent + opaque vertical cladding BIPV	3,758	sf	200.00	751,600
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Equipment Wiring

Feeders + Electrical to equipment	440,816	gsf	7.00	3,085,712
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SUBTOTAL 23,928,744

D5020 LIGHTING & POWER

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688
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SUBTOTAL 7,934,688

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264
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Performance lighting

Theater AV	1	ls	200,000.00	200,000
Stage lighting fixture package	1	ls	250,000.00	250,000

Audio Visual Systems	440,816	gsf	8.50	3,746,936
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Classroom speech + AV	225	rms	5,000.00	1,125,000
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Specialty Communications Systems

BDA system, antenna and annunciator	440,816	sf	0.65	286,530
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Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816
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Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000
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<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264
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Security System	440,816	gsf	10.00	4,408,160
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SUBTOTAL 14,083,970

D5040 OTHER ELECTRICAL SYSTEMS

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.1.d

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245
Grounding	440,816	gsf	0.40	176,326
Misc. demolition work	440,816	gsf	0.25	110,204
Temp power and lights	440,816	gsf	1.20	528,979
Seismic restraints/Coordination/misc.	440,816	gsf	1.00	440,816

SUBTOTAL

1,388,570

TOTAL - ELECTRICAL

\$47,335,972

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

112000 **LOADING DOCK EQUIPMENT**

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000
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110620 **THEATRICAL EQUIPMENT**

Allowance per Architect

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000
Stage rigging, installed	1	ls	275,000.00	275,000
Stage curtains, installed	1	ls	88,385.00	88,385
Forestage Platforms, installed	1	ls	100,000.00	100,000
Orchestra Enclosure, installed	1	ls	175,000.00	175,000
Orchestra Pit Lift	1	ls	150,000.00	150,000

Auditorium AV Equipment

See Electrical

113100 **APPLIANCES**

Residential appliances - allowance	1	ls	60,000.00	60,000
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114000 **FOOD SERVICE EQUIPMENT**

Kitchen equipment	1	ls	2,500,000.00	2,500,000
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115300 **EDUCATIONAL EQUIPMENT**

Science equipment;	1	ls	400,000.00	400,000
Kiln	1	ea	5,000.00	5,000
Allowance for miscellaneous equipment	1	ls	50,000	50,000

116600 **GYM EQUIPMENT**

Gym Equipment	1	ls	500,000.00	500,000
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126000 **SEATING**

Auditorium seating	1,000	seat	400.00	400,000
SUBTOTAL				

5,111,385

TOTAL - EQUIPMENT

\$5,111,385

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 **WINDOW TREATMENT**

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	41,046	sf	10.00	410,460
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123553 **CASEWORK**

Casework package	440,816	gsf	12.00	5,289,792
SUBTOTAL				

5,700,252

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

TOTAL - FURNISHINGS

\$5,700,252

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.1.d

Pre-engineered Greenhouse	1	ls	150,000.00	150,000
SUBTOTAL				150,000

TOTAL - SPECIAL CONSTRUCTION	\$150,000
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F20 SELECTIVE BUILDING DEMOLITION

No items in this section

SUBTOTAL

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION
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SUBTOTAL	\$272,538,563
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PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK C.1.d

G SITEWORK	

G10 SITE PREPARATION & DEMOLITION

311000	<i>GENERAL CONDITIONS</i> Mobilizations/Temp Parking/Etc. 6' high site construction fence - perimeter	1	ls	500,000.00	500,000		
311000	<i>SITE DEMOLITION AND RELOCATIONS</i> Demolish existing site conditions	7,500	lf	18.00	135,000		
311000	<i>UTILITY DEMOLITION</i> Demolish existing utility lines	1	ls	900,000.00	900,000		
	Utility Support/Ground Improvements	1	ls	1,000,000.00	1,000,000		
311000	<i>VEGETATION & TOPSOIL MANAGEMENT</i> Strip + dispose topsoil (swell 25%) Street sweeping allowance during hauling	23,264	cy	37.00	860,768		
311000	Remove trees/vegetation	1	ls	50,000.00	50,000		
	Strip + dispose topsoil	1,600	cy	37.00	59,200		
	Rock removal; mechanical	1,600	cy	85.00	136,000		
312000	<i>EROSION & SEDIMENT CONTROL</i> Silt Fence; installation and removal Erosion Control monitoring & maintenance	7,500	lf	12.00	90,000		
312000	<i>SITE EARTHWORK</i> <u>Site cut to design subgrade</u> Cut	1	ls	80,000.00	80,000		
	Store cut onsite	0	cy		NR		
	Process cut and amend with additional soils for reuse	0	cy		NR		
	Imported fill	64,000	cy	40.00	2,560,000		
312000	<i>SOIL DISPOSAL</i> - conversion factor 1.7 to tons Load excess soils for disposal	1	ls			NR	
	Less than RCS-1 - clean non-regulated	3,400	cy	85.00	289,000		
	General rock removal	3,400	cy	85.00	289,000		
312000	<i>ESTABLISHING GRADE</i> Sub grade establishment	2,015,000	sf	0.15	302,250		
	Fine grading throughout the site	2,015,000	sf	0.25	503,750		
312000	<i>HAZARDOUS MATERIALS</i> UST removal allowance				NR		
	Soil disposal & replacement allowance				See Summary		
	SUBTOTAL						7,725,968

G20 SITE IMPROVEMENTS
Roadways and Parking Lots

	<u>Bituminous concrete pavement - standard</u>	286,400	sf				
	gravel base; 8" thick	22,143	cy	50.00	1,107,150		
	asphalt top; 1.5" thick	2,738	tns	200.00	547,600		
	asphalt binder; 2" thick	3,658	tns	190.00	695,020		
	<u>Porous Pavement</u>	71,600	sf				
	Choker course; 4" thick crushed stone	1,127	cy	75.00	84,525		
	Filter course; 8" thick gravel	2,221	cy	65.00	144,365		
	Reservoir course; 8" thick crushed stone	2,221	cy	55.00	122,155		
	Porous pavement; 4" thick	1,807	tns	400.00	722,800		
	Geotextiles to paving	358,000	sf	1.50	537,000		
320000	CURBING						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.1.d							
320000	Vertical granite curb	19,000	lf	55.00	1,045,000		
	<i>ROAD MARKINGS AND SIGNS</i>						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL						5,159,365
320000	PEDESTRIAN PAVING						
	<i>Concrete sidewalks</i>	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<i>Concrete pads</i>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<i>Porous concrete pavers; 20% of Plaza</i>	14,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,731	cy	50.00	86,550		
	Open graded base AASHTO #57; 6" thick	324	cy	50.00	16,200		
	Open graded bedding course AASHTO #8; 2" thick	108	cy	65.00	7,020		
	Pavers	14,000	sf	28.00	392,000		
	Geotextiles on top, bottom and sides of subbase	3,111	sy	3.00	9,333		
	<i>Concrete paving; 80% of Plaza</i>	56,000	sf				
	gravel base; 12" thick	2,593	cy	50.00	129,650		
	Broom finish concrete paving; 5" thick	56,000	sf	18.00	1,008,000		
320000	STAIRS AND RAMPS						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL						4,046,153
320000	SITE IMPROVEMENTS						
320000	SITE FURNISHINGS						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	EXISTING STADIUM + TRACK ETR						No Costs Assumed
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts						ETR
320000	ATHLETIC EQUIPMENT						
	Equipment allowance	1	ls	180,000.00	180,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.1.d							
320000	<i>BLEACHERS AND SCOREBOARDS</i>						
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	<i>FENCING</i>						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					6,090,000	
320000	<i>SITE WALLS</i>						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	
<u>Landscaping</u>							
329900	<i>LAWN AND SEED</i>						
	Topsoil - imported 6" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
<i>IRRIGATION</i>							
	Irrigation area	360,000	sf	1.50	540,000		
	Wetlands reconstruction	4,714	sf	20.00	NR		
	SUBTOTAL					3,638,165	
G30 CIVIL MECHANICAL UTILITIES							
210000	<i>FIRE PROTECTION</i>						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	<i>CONNECTIONS</i>						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	<i>EXCAVATION & BACKFILL</i>						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities					NR	
	SUBTOTAL					994,250	
333000	<i>SANITARY SEWER</i>						
	PVC sewer pipe	2,337	lf	60.00	140,220		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					282,220	
334000	<i>STORM DRAINAGE</i>						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	286,400	sf	10.00	2,864,000		
	<u>Sodded Athletic fields</u>						
	Drainage at field	360,000	sf	1.00	Included with Fields		
	SUBTOTAL					3,501,500	
G40 ELECTRICAL UTILITIES							
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.1.d							
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL						253,030
<u>Power</u>							
	Site electrical 15 kVOLT- Transformers etc.	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
<u>Communications</u>							
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
<u>Site Lighting</u>							
	Allowance	360,000	sf	2.00	720,000		
<u>EV Stations</u>							
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
<u>Sports Fields</u>							
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
<u>Site Demolition</u>							
	Site demolition work				Included w/ building		
	SUBTOTAL						3,526,000
TOTAL - SITE DEVELOPMENT							
\$35,966,651							



CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION C.2.b				
A10 FOUNDATIONS				
A1010 Standard Foundations	\$4,315,805			
A1020 Special Foundations	\$5,892,775			
A1030 Lowest Floor Construction	\$5,448,297	\$15,656,877	\$35.52	5.8%
A20 BASEMENT CONSTRUCTION				
A2010 Basement Excavation	\$0			
A2020 Basement Walls	\$0	\$0	\$0.00	0.0%
B10 SUPERSTRUCTURE				
B1010 Upper Floor Construction	\$17,214,220			
B1020 Roof Construction	\$9,140,380	\$26,354,600	\$59.79	9.8%
B20 EXTERIOR CLOSURE				
B2010 Exterior Walls	\$16,897,636			
B2020 Windows	\$7,360,052			
B2030 Exterior Doors	\$440,816	\$24,698,504	\$56.03	9.2%
B30 ROOFING				
B3010 Roof Coverings	\$9,629,383			
B3020 Roof Openings	\$54,000	\$9,683,383	\$21.97	3.6%
C10 INTERIOR CONSTRUCTION				
C1010 Partitions	\$19,786,516			
C1020 Interior Doors	\$5,399,528			
C1030 Specialties/Millwork	\$6,680,093	\$31,866,137	\$72.29	11.9%
C20 STAIRCASES				
C2010 Stair Construction	\$1,327,250			
C2020 Stair Finishes	\$400,000	\$1,727,250	\$3.92	0.6%
C30 INTERIOR FINISHES				
C3010 Wall Finishes	\$7,493,872			
C3020 Floor Finishes	\$6,612,240			
C3030 Ceiling Finishes	\$6,612,240	\$20,718,352	\$47.00	7.7%
D10 CONVEYING SYSTEMS				
D1010 Elevator	\$1,205,700	\$1,205,700	\$2.74	0.5%



CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION C.2.b				
D20 PLUMBING				
D20 Plumbing	\$13,342,848	\$13,342,848	\$30.27	5.0%
D30 HVAC				
D30 HVAC	\$62,423,440	\$62,423,440	\$141.61	23.3%
D40 FIRE PROTECTION				
D40 Fire Protection	\$4,117,344	\$4,117,344	\$9.34	1.5%
D50 ELECTRICAL				
D5010 Complete System	\$47,430,572	\$47,430,572	\$107.60	17.7%
E10 EQUIPMENT				
E10 Equipment	\$2,861,385	\$2,861,385	\$6.49	1.1%
E20 FURNISHINGS				
E2010 Fixed Furnishings	\$5,625,562			
E2020 Movable Furnishings	NIC	\$5,625,562	\$12.76	2.1%
F10 SPECIAL CONSTRUCTION				
F10 Special Construction	\$150,000	\$150,000	\$0.34	0.1%
F20 HAZMAT REMOVALS				
F2010 Building Elements Demolition	\$0			
F2020 Hazardous Components Abatement	See Summary		\$0	\$0.00
TOTAL DIRECT COST (Trade Costs)		\$267,861,954	\$607.65	100.0%

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

GROSS FLOOR AREA CALCULATION

Level 1	168,365
Level 2	120,000
Level 3	90,000
Level 4	62,451

TOTAL GROSS FLOOR AREA (GFA)

440,816 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings: 1 x 3

Formwork	5,466	sf	15.00	81,990
Re-bar	36,076	lbs.	2.50	90,190
Concrete material	319	cy	160.00	51,040
Placing concrete	319	cy	120.00	38,280

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	19,131	sf	21.00	401,751
Re-bar	47,828	lbs.	2.50	119,570
Concrete material	621	cy	160.00	99,360
Placing concrete	621	cy	120.00	74,520
Form shelf	2,733	lf	8.00	21,864

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	14,112	sf	18.00	254,016
Re-bar	95,256	lbs.	2.50	238,140
Concrete material	1,235	cy	160.00	197,600
Placing concrete	1,235	cy	120.00	148,200
Set anchor bolts grout plates	196	ea	250.00	49,000

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	18,000	sf	18.00	324,000
Re-bar	135,000	lbs.	2.50	337,500
Concrete material	1,750	cy	160.00	280,000
Placing concrete	1,750	cy	120.00	210,000
Set anchor bolts grout plates	225	ea	250.00	56,250

Piers

Formwork	5,052	sf	24.00	121,248
Re-bar	56,835	lbs	2.50	142,088
Concrete material	196	cy	160.00	31,360
Placing concrete	196	cy	160.00	31,360
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	10,932	sf	4.00	43,728
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	10,932	sf	5.00	54,660
Brick Shelf 4" insulation	2,733	lf	20.00	54,660

312000 EARTHWORK

Strip footings

Excavation	3,037	cy	14.00	42,518
Reuse excess material on site	940	cy	15.00	14,100
Backfill with select fill	2,097	cy	25.00	52,425

Spread footings

Excavation	8,313	cy	14.00	116,382
Reuse excess material on site	3,181	cy	15.00	47,715
Backfill with select fill	5,132	cy	25.00	128,300

Miscellaneous

Foundation drain	2,733	lf	30.00	81,990
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.2.b							
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL					4,315,805	
A1020 SPECIAL FOUNDATIONS							
	Rigid inclusions	168,365	sf	35.00	5,892,775		
	SUBTOTAL					5,892,775	
A1030 LOWEST FLOOR CONSTRUCTION							
033000	CONCRETE						
	Vapor barrier, 15mils	168,365	sf	1.25	210,456		
	<u>Slab on grade</u>	168,365	sf				
	WWF reinforcement	193,620	sf	1.85	358,197		
	Concrete - 5" thick	2,684	cy	170.00	456,280		
	Placing concrete	2,684	cy	65.00	174,460		
	Finishing and curing concrete	168,365	sf	3.00	505,095		
	Control joints - saw cut	168,365	sf	0.10	16,837		
	<u>Miscellaneous</u>						
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system					Excluded; NR	
072100	<i>THERMAL INSULATION</i>						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	16,398	sf	5.00	81,990		
	Under slab insulation, 2" thick under slab	151,967	sf	3.00	455,901		
312000	<i>EARTHWORK</i>						
	Gravel base, 12"	6,236	cy	45.00	280,620		
	Structural fill	37,000	cy	55.00	2,035,000		
	Allowance for underslab drainage	168,365	sf	2.00	336,730		
	Compact existing sub-grade	168,365	sf	0.50	84,183		
	Underslab E&B for plumbing	168,365	sf	1.50	252,548		
	SUBTOTAL					5,448,297	
TOTAL - FOUNDATIONS							
							\$15,656,877

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

033000 CONCRETE

WWF reinforcement
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"
Place and finish concrete
Rebar to decks

14.6 lbs/sf
3,217 tns including canopies + roof screens
\$6,551 \$/Ton

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 15 lbs per SF
Steel premium for lateral system due to poor soils; 1 PSF
Moment connections
Shear studs
3" metal galvanized floor deck

2,043 tns 5,000.00 10,215,000
136 tns 5,000.00 680,000
102 ea 750.00 76,500
68,113 ea 3.50 238,396
272,451 sf 8.00 2,179,608

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

Expansion joints	1	ls	100,000.00	100,000	
078100 FIREPROOFING/FIRESTOPPING					
Fire proofing to columns and beams; 2 hr	272,451	sf	3.00	817,353	
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000	

SUBTOTAL

17,214,220

B1020 ROOF CONSTRUCTION

033000 CONCRETE					
6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000	
051200 STRUCTURAL STEEL FRAMING					
Structural steel framing; Complete; 13 lbs per SF	1,094	tns	5,000.00	5,470,000	
Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	5,000.00	175,000	
Steel premium for lateral system due to poor soils; 1 PSF	84	tns	5,000.00	420,000	
Roof screens	80	tns	5,500.00	440,000	
Decking					
1 1/2" galvanized metal deck, typical	168,365	sf	7.00	1,178,555	
078100 FIREPROOFING/FIRESTOPPING					
Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	168,365	sf	5.00	841,825	
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000	
SUBTOTAL					9,140,380

TOTAL - SUPERSTRUCTURE

\$26,354,600

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS	134,309	Total closure area
Exterior Wall Area	100,732	sf total area solid
042000 MASONRY		
Mockup	1	ls
Brick veneer; 60% of Solid	60,439	sf
Granite veneer base; 2%	2,015	sf
Precast trim allowance	1	ls
4" CMU wall at auditorium	9,000	sf
8" Mineral wool at exterior closure (2 layers 4")	100,732	sf
Miscellaneous flashings and sealants	100,732	sf
Staging to exterior wall	100,732	sf
055000 MISC. METALS		
Misc. metals at masonry including loose lintels (relieving angles included in steel trns)	60,439	sf
070001 WATERPROOFING, DAMPROOFING AND CAULKING		
Air barrier	100,732	sf
Miscellaneous sealants to closure	100,732	sf
072100 THERMAL INSULATION		
4" cellulose insulation in stud	100,732	sf
Insulation at glazed openings	11,192	lf
076400 CLADDING		
Composite metal panel, Alucobond or equal; 18%	18,132	sf
Terracotta; 20%	20,146	sf
Canopies; soffit + framing	4,000	sf
12' high Acoustic Equipment Screen	16,000	sf

EXPANSION JOINT COVERS

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.2.b							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900 GYPSUM BOARD ASSEMBLIES							
	Exterior wall;						
	6" Stud backup	100,732	sf	16.00	1,611,712		
	Gypsum Sheathing	100,732	sf	3.50	352,562		
	Drywall lining to interior face of stud backup	100,732	sf	4.00	402,928		
101400 SIGNAGE							
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL						16,897,636
B2020 WINDOWS							
	Exterior Wall Area	33.577	sf				
061000 ROUGH CARPENTRY							
	Wood blocking at openings	11,192	lf	10.00	111,920		
070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
	Air barrier/flashing at windows	11,192	lf	10.00	111,920		
	Backer rod & double sealant	11,192	lf	11.00	123,112		
080001 METAL WINDOWS							
	Aluminum windows, triple glazed including interior and exterior trim per details	16,789	sf	175.00	2,938,075		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	16,789	sf	225.00	3,777,525		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium				NR		
089000 LOUVERS							
	Louvers				N/A		
	SUBTOTAL						7,360,052
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL						440,816
TOTAL - EXTERIOR CLOSURE							\$24,698,504

B30 ROOFING

055000 MISCELLANEOUS METALS						
Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000 ROUGH CARPENTRY						
Rough carpentry and blocking @ roof	168,365	sf	1.50	252,548		
070002 ROOFING AND FLASHING						
PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	168,365	sf	33.00	5,556,045		
Canopy roofing	4,000	sf	28.00	112,000		
Plaza deck pavers system at terrace	42,219	sf	70.00	2,955,330		
<u>Miscellaneous Roofing</u>						
Miscellaneous flashings/copings/walkway pads etc.	168,365	sf	4.00	673,460		
SUBTOTAL						9,629,383

B3020 ROOF OPENINGS

086300 ROOF SKYLIGHTS						
Aluminum framed skylight (4loc)					None Assumed	
Smoke vents; 7'x7'	3	ea	18,000.00	54,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

SUBTOTAL

54,000

TOTAL - ROOFING

\$9,683,383

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY

Allowance for masonry partitions **440,816** gsf 6.00 2,644,896

061000 ROUGH CARPENTRY

Backer panels in electrical closets **1** ls 10,000.00 10,000

Wood blocking at interiors **440,816** gsf 0.50 220,408

078400 FIREPROOFING/FIRESTOPPING

Fire stopping including slab edges and core **440,816** gsf 1.00 440,816

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building **440,816** gsf 1.25 551,020

078150 EXPANSION JOINTS

Allowance for expansion joint covers **1** ls 50,000.00 50,000

081110 INTERIOR GLAZING

Allowance for interior glazing **440,816** gsf 3.00 1,322,448

092900 GYPSUM BOARD ASSEMBLIES

Allowance for GWB partitions **440,816** gsf 33.00 14,546,928

SUBTOTAL

19,786.516

C1020 INTERIOR DOORS

Doors, frames, hardware; complete **440,816** gsf 8.00 3,526,528

Fire shutters **1** ls 150,000.00 150,000

Security doors **16** loc 25,000.00 400,000

Premium for electronic hardware **882** set 1,500.00 1,323,000

SUBTOTAL

5,399,528

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building **440,816** gsf 5.00 2,204,080

061000 ROUGH CARPENTRY

062000 INTERIOR ARCHITECTURAL WOODWORK

Interior millwork package **440,816** gsf 3.00 1,322,448

101100 VISUAL DISPLAY SURFACES

Markerboard and tackboard package **440,816** gsf 2.00 881,632

101400 SIGNAGE

Room identification, directional & safety signage, building directory + environmental graphics **440,816** gsf 2.00 881,632

102800 TOILET ACCESSORIES

Toilet accessories/compartments **440,816** gsf 1.00 440,816

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets **1** ls 65,852.71 65,853

AED cabinets **1** ls 2,000.00 2,000

105000 LOCKERS

Student lockers **440,816** gsf 2.00 881,632

SUBTOTAL

6,680,093

TOTAL - INTERIOR CONSTRUCTION

\$31,866,137

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

033000 CONCRETE

Concrete to stairs **20** ft 5,000.00 100,000

055000 MISCELLANEOUS METALS

Egress stairs w/ stainless steel rails and handrails **17** ft 50,000.00 850,000

Projection room stair, 4' wide **1** ft 40,000.00 40,000

Learning stair

Stainless steel guardrail **65** lf 425.00 27,625

Stainless steel handrail **55** lf 175.00 9,625

Adjacent stairs; 5'-3" wide **2** ft 75,000.00 150,000

Learning stair framing **1** ls 150,000.00 150,000

Framing at learning stair - premium

SUBTOTAL 1,327,250

C2020 STAIR FINISHES

090005 RESILIENT FLOORS

Stair finishes **20** flts 20,000.00 400,000

SUBTOTAL 400,000

TOTAL - STAIRCASES

\$1,727,250

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package **440,816** gsf 17.00 7,493,872

SUBTOTAL 7,493,872

C3020 FLOOR FINISHES

Floor finishes complete package **440,816** gsf 15.00 6,612,240

SUBTOTAL 6,612,240

C3030 CEILING FINISHES

Ceiling finishes complete package **440,816** gsf 15.00 6,612,240

SUBTOTAL 6,612,240

TOTAL - INTERIOR FINISHES

\$20,718,352

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

055000 MISCELLANEOUS METALS

Pit ladder and miscellaneous metals **3** ea 900.00 2,700

Sill angles **2** ls 1,500.00 3,000

142100 ELEVATOR

Electric traction elevator, 4 stop, 5,000lbs **3** ea 400,000.00 1,200,000

SUBTOTAL 1,205,700

TOTAL - CONVEYING SYSTEMS

\$1,205,700

D20 PLUMBING

D20 PLUMBING, GENERALLY

Air source heat pump water heater (2) 500MBH **1** ls 1,000,000.00 1,000,000

Plumbing package complete **440,816** gsf 28.00 12,342,848

SUBTOTAL 13,342,848

TOTAL - PLUMBING

\$13,342,848

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

D30 HVAC

D30 HVAC, GENERALLY

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440
SUBTOTAL				62,423,440

TOTAL - HVAC

\$62,423,440

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

<u>Fire Equipment</u>				
Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000
Sprinkler system; complete	440,816	gsf	9.00	3,967,344
SUBTOTAL				4,117,344

TOTAL - FIRE PROTECTION

\$4,117,344

D50 ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system				
4000A 277/480V main switchboard	2	ea	185,000.00	370,000
Panelboards/feeders	440,816	gsf	6.00	2,644,896

Emergency power

Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500
Emergency power feeders	440,816	gsf	3.00	1,322,448

Photovoltaic - 3500 kW

PV system equipment; low roof top	27,703	sf	36.00	997,308
PV system equipment; roof top; High roof (with Structure)	69,258	sf	60.00	4,155,480
PV system equipment; canopy	102,250	sf	60.00	6,135,000

Battery Storage

Battery Storage	1	ls	2,500,000	2,500,000
Transparent + opaque vertical cladding BIPV	10,000	sf	200.00	2,000,000

Equipment Wiring

Feeders + Electrical to equipment	440,816	gsf	7.00	3,085,712
SUBTOTAL				24,023,344

D5020 LIGHTING & POWER

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688
SUBTOTAL				7,934,688

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264
<u>Performance lighting</u>				

Theater AV	1	ls	200,000.00	200,000
Stage lighting fixture package	1	ls	250,000.00	250,000

Audio Visual Systems	440,816	gsf	8.50	3,746,936
Classroom speech + AV	225	rms	5,000.00	1,125,000

<u>Specialty Communications Systems</u>				
BDA system, antenna and annunciator	440,816	sf	0.65	286,530
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000

<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264
<u>Security System</u>	440,816	gsf	10.00	4,408,160

SUBTOTAL				14,083,970
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D5040 OTHER ELECTRICAL SYSTEMS

<u>Common Work Results for Electrical</u>				
Lightning prevention	440,816	gsf	0.30	132,245
Grounding	440,816	gsf	0.40	176,326
Misc. demolition work	440,816	gsf	0.25	110,204

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

Temp power and lights	440,816	gsf	1.20	528,979
Seismic restraints/Coordination/misce.	440,816	gsf	1.00	440,816
SUBTOTAL				1,388,570

TOTAL - ELECTRICAL	\$47,430,572
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

112000 **LOADING DOCK EQUIPMENT**

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000
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110620 **THEATRICAL EQUIPMENT**

Allowance per Architect

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000
Stage rigging, installed	1	ls	275,000.00	275,000
Stage curtains, installed	1	ls	88,385.00	88,385
Forestage Platforms, installed	1	ls	100,000.00	100,000
Orchestra Enclosure, installed	1	ls	175,000.00	175,000
Orchestra Pit Lift	1	ls	150,000.00	150,000
Auditorium AV Equipment				See Electrical

113100 **APPLIANCES**

Residential appliances - allowance	1	ls	60,000.00	60,000
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114000 **FOOD SERVICE EQUIPMENT**

Kitchen equipment	1	ls	250,000.00	250,000
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115300 **EDUCATIONAL EQUIPMENT**

Science equipment;	1	ls	400,000.00	400,000
Kiln	1	ea	5,000.00	5,000
Allowance for miscellaneous equipment	1	ls	50,000	50,000

116600 **GYM EQUIPMENT**

Gym Equipment	1	ls	500,000.00	500,000
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126000 **SEATING**

Auditorium seating	1,000	seat	400.00	400,000
SUBTOTAL				2,861,385

TOTAL - EQUIPMENT	\$2,861,385
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 **WINDOW TREATMENT**

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	33,577	sf	10.00	335,770
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123553 **CASEWORK**

Casework package	440,816	gsf	12.00	5,289,792
SUBTOTAL				5,625,562

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL				NIC
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TOTAL - FURNISHINGS	\$5,625,562
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

Pre-engineered Greenhouse	1	ls	150,000.00	150,000
SUBTOTAL				150,000

TOTAL - SPECIAL CONSTRUCTION	\$150,000
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

F20 SELECTIVE BUILDING DEMOLITION

No items in this section
SUBTOTAL

F2010 BUILDING ELEMENTS DEMOLITION

No items in this section
SUBTOTAL

See main summary for HazMat allowance

See Summary

TOTAL - SELECTIVE BUILDING DEMOLITION

SUBTOTAL	\$267,861,954
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PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK C.2.b

G SITEWORK	

G10 SITE PREPARATION & DEMOLITION

311000	<i>GENERAL CONDITIONS</i> Mobilizations/Temp Parking/Etc. 6' high site construction fence - perimeter	1	ls	500,000.00	500,000		
311000	<i>SITE DEMOLITION AND RELOCATIONS</i> Demolish existing site conditions	7,500	lf	18.00	135,000		
311000	<i>UTILITY DEMOLITION</i> Demolish existing utility lines	1	ls	900,000.00	900,000		
	Utility Support/Ground Improvements	1	ls	1,500,000.00	1,500,000		
311000	<i>VEGETATION & TOPSOIL MANAGEMENT</i> Strip + dispose topsoil (swell 25%) Street sweeping allowance during hauling	23,264	cy	37.00	860,768		
311000	Remove trees/vegetation	1	ls	50,000.00	50,000		
	Strip + dispose topsoil	1,600	cy	37.00	59,200		
	Rock removal; mechanical	1,600	cy	85.00	136,000		
312000	<i>EROSION & SEDIMENT CONTROL</i> Silt Fence; installation and removal Erosion Control monitoring & maintenance	7,500	lf	12.00	90,000		
312000	<i>SITE EARTHWORK</i> <u>Site cut to design subgrade</u> Cut	1	ls	80,000.00	80,000		
	Store cut onsite	0	cy		NR		
	Process cut and amend with additional soils for reuse	0	cy		NR		
	Imported fill	64,000	cy	40.00	2,560,000		
312000	<i>SOIL DISPOSAL</i> - conversion factor 1.7 to tons Load excess soils for disposal Less than RCS-1 - clean non-regulated	1	ls		NR		
312000	<i>ESTABLISHING GRADE</i> Sub grade establishment	2,015,000	sf	0.15	302,250		
	Fine grading throughout the site	2,015,000	sf	0.25	503,750		
	General rock removal	3,400	cy	85.00	289,000		
312000	<i>HAZARDOUS MATERIALS</i> UST removal allowance Soil disposal & replacement allowance				NR		
	SUBTOTAL				See Summary		
					8,225,968		

G20 SITE IMPROVEMENTS
Roadways and Parking Lots

	<u>Bituminous concrete pavement - standard</u>	286,400	sf			
	gravel base; 8" thick	22,143	cy	50.00	1,107,150	
	asphalt top; 1.5" thick	2,738	tns	200.00	547,600	
	asphalt binder; 2" thick	3,658	tns	190.00	695,020	
	<u>Porous Pavement</u>	71,600	sf			
	Choker course; 4" thick crushed stone	1,127	cy	75.00	84,525	
	Filter course; 8" thick gravel	2,221	cy	65.00	144,365	
	Reservoir course; 8" thick crushed stone	2,221	cy	55.00	122,155	
	Porous pavement; 4" thick	1,807	tns	400.00	722,800	
	Geotextiles to paving	358,000	sf	1.50	537,000	
320000	<i>CURBING</i>	19,000	lf	55.00	1,045,000	
	Vertical granite curb					

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.2.b							
320000	ROAD MARKINGS AND SIGNS						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL						5,159,365
320000	PEDESTRIAN PAVING						
	Concrete sidewalks	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	Concrete pads	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	Porous concrete pavers; 20% of Plaza	17,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	2,101	cy	50.00	105,050		
	Open graded base AASHTO #57; 6" thick	394	cy	50.00	19,700		
	Open graded bedding course AASHTO #8; 2" thick	131	cy	65.00	8,515		
	Pavers	17,000	sf	28.00	476,000		
	Geotextiles on top, bottom and sides of subbase	3,778	sy	3.00	11,334		
	Concrete paving; 80% of Plaza	68,000	sf				
	gravel base; 12" thick	3,148	cy	50.00	157,400		
	Broom finish concrete paving; 5" thick	68,000	sf	18.00	1,224,000		
320000	STAIRS AND RAMPS						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL						4,399,399
320000	SITE IMPROVEMENTS						
320000	SITE FURNISHINGS						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	EXISTING STADIUM + TRACK ETR						No Costs Assumed
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts						ETR
320000	ATHLETIC EQUIPMENT						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	BLEACHERS AND SCOREBOARDS						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.2.b							
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	FENCING						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL						6,090,000
320000	SITE WALLS						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL						750,000
	Landscaping						
329900	LAWN AND SEED						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	IRRIGATION						
	Irrigation area	360,000	sf	1.50	540,000		
	Wetlands reconstruction	4,714	sf	20.00	NR		
	SUBTOTAL						3,488,165
G30	CIVIL MECHANICAL UTILITIES						
210000	FIRE PROTECTION						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	CONNECTIONS						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	EXCAVATION & BACKFILL						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities				NR		
	SUBTOTAL						994,250
333000	SANITARY SEWER						
	PVC sewer pipe	2,368	lf	60.00	142,080		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL						284,080
334000	STORM DRAINAGE						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	286,400	sf	10.00	2,864,000		
	Sodded Athletic fields						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL						3,501,500
G40	ELECTRICAL UTILITIES						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4" C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.2.b							
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL						253,030
	<u>Power</u>						
	Site electrical 15 kVOLT- Transformers etc.	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
	<u>Communications</u>						
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
	<u>Site Lighting</u>						
	Allowance	360,000	sf	2.00	720,000		
	<u>EV Stations</u>						
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
	<u>Sports Fields</u>						
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
	<u>Site Demolition</u>						
	Site demolition work				Included w/ building		
	SUBTOTAL						3,526,000
	TOTAL - SITE DEVELOPMENT						\$36,671,757

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION C.5b				
A10 FOUNDATIONS				
A1010 Standard Foundations	\$4,492,250			
A1020 Special Foundations	\$6,055,455			
A1030 Lowest Floor Construction	\$5,537,720	\$16,085,425	\$36.49	5.9%
A20 BASEMENT CONSTRUCTION				
A2010 Basement Excavation	\$0			
A2020 Basement Walls	\$0	\$0	\$0.00	0.0%
B10 SUPERSTRUCTURE				
B1010 Upper Floor Construction	\$16,933,043			
B1020 Roof Construction	\$9,366,156	\$26,299,199	\$59.66	9.7%
B20 EXTERIOR CLOSURE				
B2010 Exterior Walls	\$19,689,774			
B2020 Windows	\$8,853,029			
B2030 Exterior Doors	\$440,816	\$28,983,619	\$65.75	10.6%
B30 ROOFING				
B3010 Roof Coverings	\$7,855,541			
B3020 Roof Openings	\$54,000	\$7,909,541	\$17.94	2.9%
C10 INTERIOR CONSTRUCTION				
C1010 Partitions	\$19,786,516			
C1020 Interior Doors	\$5,399,528			
C1030 Specialties/Millwork	\$6,680,093	\$31,866,137	\$72.29	11.7%
C20 STAIRCASES				
C2010 Stair Construction	\$1,217,250			
C2020 Stair Finishes	\$360,000	\$1,577,250	\$3.58	0.6%
C30 INTERIOR FINISHES				
C3010 Wall Finishes	\$7,493,872			
C3020 Floor Finishes	\$6,612,240			
C3030 Ceiling Finishes	\$6,612,240	\$20,718,352	\$47.00	7.6%
D10 CONVEYING SYSTEMS				
D1010 Elevator	\$1,207,200	\$1,207,200	\$2.74	0.4%



CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION C.5b				
D20 PLUMBING				
D20 Plumbing	\$13,342,848	\$13,342,848	\$30.27	4.9%
D30 HVAC				
D30 HVAC	\$62,423,440	\$62,423,440	\$141.61	22.9%
D40 FIRE PROTECTION				
D40 Fire Protection	\$4,117,344	\$4,117,344	\$9.34	1.5%
D50 ELECTRICAL				
D5010 Complete System	\$46,679,652	\$46,679,652	\$105.89	17.2%
E10 EQUIPMENT				
E10 Equipment	\$5,111,385	\$5,111,385	\$11.60	1.9%
E20 FURNISHINGS				
E2010 Fixed Furnishings	\$5,696,552			
E2020 Movable Furnishings	NIC	\$5,696,552	\$12.92	2.1%
F10 SPECIAL CONSTRUCTION				
F10 Special Construction	\$150,000	\$150,000	\$0.34	0.1%
F20 HAZMAT REMOVALS				
F2010 Building Elements Demolition	\$0			
F2020 Hazardous Components Abatement	\$0	\$0	\$0.00	0.0%
TOTAL DIRECT COST (Trade Costs)		\$272,167,944	\$617.42	100.0%

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.5b

GROSS FLOOR AREA CALCULATION

Level 1	173,013
Level 2	115,000
Level 3	110,000
Level 4	42,803

TOTAL GROSS FLOOR AREA (GFA)

440,816 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings: 1 x 3

Formwork	5,702	sf	15.00	85,530
Re-bar	37,633	lbs.	2.50	94,083
Concrete material	333	cy	160.00	53,280
Placing concrete	333	cy	120.00	39,960

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	19,957	sf	21.00	419,097
Re-bar	49,893	lbs.	2.50	124,733
Concrete material	648	cy	160.00	103,680
Placing concrete	648	cy	120.00	77,760
Form shelf	2,851	lf	8.00	22,808

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	11,376	sf	18.00	204,768
Re-bar	76,788	lbs.	2.50	191,970
Concrete material	995	cy	160.00	159,200
Placing concrete	995	cy	120.00	119,400
Set anchor bolts grout plates	158	ea	250.00	39,500

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	22,000	sf	18.00	396,000
Re-bar	165,000	lbs.	2.50	412,500
Concrete material	2,139	cy	160.00	342,240
Placing concrete	2,139	cy	120.00	256,680
Set anchor bolts grout plates	275	ea	250.00	68,750

Piers

Formwork	5,196	sf	24.00	124,704
Re-bar	58,455	lbs	2.50	146,138
Concrete material	202	cy	160.00	32,320
Placing concrete	202	cy	160.00	32,320
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	11,404	sf	4.00	45,616
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	11,404	sf	5.00	57,020
Brick Shelf 4" insulation	2,851	lf	20.00	57,020

312000 EARTHWORK

Strip footings

Excavation	3,168	cy	14.00	44,352
Reuse excess material on site	981	cy	15.00	14,715
Backfill with select fill	2,187	cy	25.00	54,675

Spread footings

Excavation	8,699	cy	14.00	121,786
Reuse excess material on site	3,336	cy	15.00	50,040
Backfill with select fill	5,363	cy	25.00	134,075

Miscellaneous

Foundation drain	2,851	lf	30.00	85,530
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.5b							
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL					4,492,250	
A1020 SPECIAL FOUNDATIONS							
	Rigid inclusions	173,013	sf	35.00	6,055,455		
	SUBTOTAL					6,055,455	
A1030 LOWEST FLOOR CONSTRUCTION							
033000	CONCRETE						
	Vapor barrier, 15mils	173,013	sf	1.25	216,266		
	<u>Slab on grade</u>	173,013	sf				
	WWF reinforcement	198,965	sf	1.85	368,085		
	Concrete - 5" thick	2,759	cy	170.00	469,030		
	Placing concrete	2,759	cy	65.00	179,335		
	Finishing and curing concrete	173,013	sf	3.00	519,039		
	Control joints - saw cut	173,013	sf	0.10	17,301		
	<u>Miscellaneous</u>						
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system					Excluded; NR	
072100	<i>THERMAL INSULATION</i>						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	17,106	sf	5.00	85,530		
	Under slab insulation, 2" thick under slab	155,907	sf	3.00	467,721		
312000	<i>EARTHWORK</i>						
	Gravel base, 12"	6,408	cy	45.00	288,360		
	Structural fill	37,000	cy	55.00	2,035,000		
	Allowance for underslab drainage	173,013	sf	2.00	346,026		
	Compact existing sub-grade	173,013	sf	0.50	86,507		
	Underslab E&B for plumbing	173,013	sf	1.50	259,520		
	SUBTOTAL					5,537,720	

TOTAL - FOUNDATIONS

\$16,085,425

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

033000 CONCRETE

WWF reinforcement
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"
Place and finish concrete
Rebar to decks

14.6 lbs/sf
3,214 tns including canopies + roof screens
\$6,550 \$/Ton

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 15 lbs per SF
Steel premium for lateral system due to poor soils; 1 PSF
Moment connections
Shear studs
3" metal galvanized floor deck

2,009 tns 5,000.00 10,045,000
134 tns 5,000.00 670,000
100 ea 750.00 75,000
66,951 ea 3.50 234,329
267,803 sf 8.00 2,142,424

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.5b							
	Expansion joints	1	ls	100,000.00	100,000		
078100	FIREPROOFING/FIRESTOPPING						
	Fire proofing to columns and beams; 2 hr	267,803	sf	3.00	803,409		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	SUBTOTAL						16,933,043
B1020 ROOF CONSTRUCTION							
033000	CONCRETE						
	6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
051200	STRUCTURAL STEEL FRAMING						
	Structural steel framing; Complete; 13 lbs per SF	1,125	tns	5,000.00	5,625,000		
	Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	5,000.00	175,000		
	Steel premium for lateral system due to poor soils; 1 PSF	87	tns	5,000.00	435,000		
	Roof screens	80	tns	5,500.00	440,000		
	Decking						
	1 1/2" galvanized metal deck, typical	173,013	sf	7.00	1,211,091		
078100	FIREPROOFING/FIRESTOPPING						
	Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	173,013	sf	5.00	865,065		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	SUBTOTAL						9,366,156
TOTAL - SUPERSTRUCTURE							
							\$26,299,199

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

162,702 Total closure area
122,027 sf total area solid

042000 MASONRY

Mockup	1	ls	100,000.00	100,000
Brick veneer; 60% of Solid	73,216	sf	44.00	3,221,504
Granite veneer base; 2%	2,441	sf	120.00	292,920
Precast trim allowance	1	ls	1,200,000.00	1,200,000
4" CMU wall at auditorium	9,000	sf	30.00	270,000
8" Mineral wool at exterior closure (2 layers 4")	122,027	sf	7.50	915,203
Miscellaneous flashings and sealants	122,027	sf	1.50	183,041
Staging to exterior wall	122,027	sf	4.00	488,108

055000 MISC. METALS

Misc. metals at masonry including loose lintels (relieving angles included in steel trns)	73,216	sf	1.50	109,824
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070001 WATERPROOFING, DAMPROOFING AND CAULKING

Air barrier	122,027	sf	10.00	1,220,270
Miscellaneous sealants to closure	122,027	sf	1.00	122,027

072100 THERMAL INSULATION

4" cellulose insulation in stud	122,027	sf	3.25	396,588
Insulation at glazed openings	13,559	lf	6.00	81,354

076400 CLADDING

Composite metal panel, Alucobond or equal; 18%	21,965	sf	100.00	2,196,500
Terracotta; 20%	24,405	sf	160.00	3,904,800
Canopies; soffit + framing	4,000	sf	100.00	400,000
12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000

EXPANSION JOINT COVERS

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION C.5b							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900 GYPSUM BOARD ASSEMBLIES							
	Exterior wall;						
	6" Stud backup	122,027	sf	16.00	1,952,432		
	Gypsum Sheathing	122,027	sf	3.50	427,095		
	Drywall lining to interior face of stud backup	122,027	sf	4.00	488,108		
101400 SIGNAGE							
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL						19,689,774
B2020 WINDOWS							
	Exterior Wall Area	40,676	sf				
061000 ROUGH CARPENTRY							
	Wood blocking at openings	13,559	lf	10.00	135,590		
070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
	Air barrier/flashing at windows	13,559	lf	10.00	135,590		
	Backer rod & double sealant	13,559	lf	11.00	149,149		
080001 METAL WINDOWS							
	Aluminum windows, triple glazed including interior and exterior trim per details	20,338	sf	175.00	3,559,150		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	20,338	sf	225.00	4,576,050		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium				NR		
089000 LOUVERS							
	Louvers				N/A		
	SUBTOTAL						8,853,029
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL						440,816
TOTAL - EXTERIOR CLOSURE							
							\$28,983,619

B30 ROOFING

055000 MISCELLANEOUS METALS						
Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000 ROUGH CARPENTRY						
Rough carpentry and blocking @ roof	173,013	sf	1.50	259,520		
070002 ROOFING AND FLASHING						
PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	173,013	sf	33.00	5,709,429		
Canopy roofing	4,000	sf	28.00	112,000		
Plaza deck pavers system at terrace	14,322	sf	70.00	1,002,540		
<u>Miscellaneous Roofing</u>						
Miscellaneous flashings/copings/walkway pads etc.	173,013	sf	4.00	692,052		
SUBTOTAL						7,855,541

B3020 ROOF OPENINGS

086300 ROOF SKYLIGHTS						
Aluminum framed skylight (4loc)					None Assumed	
Smoke vents; 7'x7'	3	ea	18,000.00	54,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.5b

SUBTOTAL

54,000

TOTAL - ROOFING

\$7,909,541

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY

Allowance for masonry partitions **440,816** gsf 6.00 2,644,896

061000 ROUGH CARPENTRY

Backer panels in electrical closets **1** ls 10,000.00 10,000

Wood blocking at interiors **440,816** gsf 0.50 220,408

078400 FIREPROOFING/FIRESTOPPING

Fire stopping including slab edges and core **440,816** gsf 1.00 440,816

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building **440,816** gsf 1.25 551,020

078150 EXPANSION JOINTS

Allowance for expansion joint covers **1** ls 50,000.00 50,000

081110 INTERIOR GLAZING

Allowance for interior glazing **440,816** gsf 3.00 1,322,448

092900 GYPSUM BOARD ASSEMBLIES

Allowance for GWB partitions **440,816** gsf 33.00 14,546,928

SUBTOTAL

19,786.516

C1020 INTERIOR DOORS

Doors, frames, hardware; complete **440,816** gsf 8.00 3,526,528

Fire shutters **1** ls 150,000.00 150,000

Security doors **16** loc 25,000.00 400,000

Premium for electronic hardware **882** set 1,500.00 1,323,000

SUBTOTAL

5,399,528

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building **440,816** gsf 5.00 2,204,080

061000 ROUGH CARPENTRY

062000 INTERIOR ARCHITECTURAL WOODWORK

Interior millwork package **440,816** gsf 3.00 1,322,448

101100 VISUAL DISPLAY SURFACES

Markerboard and tackboard package **440,816** gsf 2.00 881,632

101400 SIGNAGE

Room identification, directional & safety signage, building directory + environmental graphics **440,816** gsf 2.00 881,632

102800 TOILET ACCESSORIES

Toilet accessories/compartments **440,816** gsf 1.00 440,816

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets **1** ls 65,852.71 65,853

AED cabinets **1** ls 2,000.00 2,000

105000 LOCKERS

Student lockers **440,816** gsf 2.00 881,632

SUBTOTAL

6,680,093

TOTAL - INTERIOR CONSTRUCTION

\$31,866,137

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.5b

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

033000 CONCRETE

Concrete to stairs **18** ft 5,000.00 90,000

055000 MISCELLANEOUS METALS

Egress stairs w/ stainless steel rails and handrails **15** ft 50,000.00 750,000

Projection room stair, 4' wide **1** ft 40,000.00 40,000

Learning stair

Stainless steel guardrail **65** lf 425.00 27,625

Stainless steel handrail **55** lf 175.00 9,625

Adjacent stairs; 5'-3" wide **2** ft 75,000.00 150,000

Learning stair framing **1** ls 150,000.00 150,000

Framing at learning stair - premium

SUBTOTAL **1,217,250**

C2020 STAIR FINISHES

090005 RESILIENT FLOORS

Stair finishes **18** flts 20,000.00 360,000

SUBTOTAL **360,000**

TOTAL - STAIRCASES

\$1,577,250

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package **440,816** gsf 17.00 7,493,872

SUBTOTAL **7,493,872**

C3020 FLOOR FINISHES

Floor finishes complete package **440,816** gsf 15.00 6,612,240

SUBTOTAL **6,612,240**

C3030 CEILING FINISHES

Ceiling finishes complete package **440,816** gsf 15.00 6,612,240

SUBTOTAL **6,612,240**

TOTAL - INTERIOR FINISHES

\$20,718,352

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

055000 MISCELLANEOUS METALS

Pit ladder and miscellaneous metals **3** ea 900.00 2,700

Sill angles **3** ls 1,500.00 4,500

142100 ELEVATOR

Electric traction elevator, 4 stop, 5,000lbs **3** ea 400,000.00 1,200,000

SUBTOTAL **1,207,200**

TOTAL - CONVEYING SYSTEMS

\$1,207,200

D20 PLUMBING

D20 PLUMBING, GENERALLY

Air source heat pump water heater (2) 500MBH **1** ls 1,000,000.00 1,000,000

Plumbing package complete **440,816** gsf 28.00 12,342,848

SUBTOTAL **13,342,848**

TOTAL - PLUMBING

\$13,342,848

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.5b

D30 HVAC

D30 HVAC, GENERALLY

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440
SUBTOTAL				62,423,440

TOTAL - HVAC

\$62,423,440

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

<u>Fire Equipment</u>				
Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000
Sprinkler system; complete	440,816	gsf	9.00	3,967,344
SUBTOTAL				4,117,344

TOTAL - FIRE PROTECTION

\$4,117,344

D50 ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system				
4000A 277/480V main switchboard	2	ea	185,000.00	370,000
Panelboards/feeders	440,816	gsf	6.00	2,644,896

Emergency power

Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500
Emergency power feeders	440,816	gsf	3.00	1,322,448

Photovoltaic - 3500 kW

PV system equipment; low roof top	31,738	sf	36.00	1,142,568
PV system equipment; roof top; High roof (with Structure)	79,345	sf	60.00	4,760,700
PV system equipment; canopy	102,250	sf	60.00	6,135,000

Battery Storage

Battery Storage	1	ls	2,500,000	2,500,000
Transparent + opaque vertical cladding BIPV	2,493	sf	200.00	498,600

Equipment Wiring

Feeders + Electrical to equipment	440,816	gsf	7.00	3,085,712
SUBTOTAL				23,272,424

D5020 LIGHTING & POWER

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688
SUBTOTAL				7,934,688

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264
<u>Performance lighting</u>				

Theater AV	1	ls	200,000.00	200,000
Stage lighting fixture package	1	ls	250,000.00	250,000

Audio Visual Systems	440,816	gsf	8.50	3,746,936
Classroom speech + AV	225	rms	5,000.00	1,125,000

<u>Specialty Communications Systems</u>				
BDA system, antenna and annunciator	440,816	sf	0.65	286,530
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000

<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264
<u>Security System</u>	440,816	gsf	10.00	4,408,160

SUBTOTAL				14,083,970
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D5040 OTHER ELECTRICAL SYSTEMS

<u>Common Work Results for Electrical</u>				
Lightning prevention	440,816	gsf	0.30	132,245
Grounding	440,816	gsf	0.40	176,326
Misc. demolition work	440,816	gsf	0.25	110,204

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.5b

Temp power and lights	440,816	gsf	1.20	528,979
Seismic restraints/Coordination/misce.	440,816	gsf	1.00	440,816
SUBTOTAL				1,388,570

TOTAL - ELECTRICAL	\$46,679,652
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

112000 **LOADING DOCK EQUIPMENT**

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000
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110620 **THEATRICAL EQUIPMENT**

Allowance per Architect

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000
Stage rigging, installed	1	ls	275,000.00	275,000
Stage curtains, installed	1	ls	88,385.00	88,385
Forestage Platforms, installed	1	ls	100,000.00	100,000
Orchestra Enclosure, installed	1	ls	175,000.00	175,000
Orchestra Pit Lift	1	ls	150,000.00	150,000
Auditorium AV Equipment				See Electrical

113100 **APPLIANCES**

Residential appliances - allowance	1	ls	60,000.00	60,000
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114000 **FOOD SERVICE EQUIPMENT**

Kitchen equipment	1	ls	2,500,000.00	2,500,000
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115300 **EDUCATIONAL EQUIPMENT**

Science equipment;	1	ls	400,000.00	400,000
Kiln	1	ea	5,000.00	5,000
Allowance for miscellaneous equipment	1	ls	50,000	50,000

116600 **GYM EQUIPMENT**

Gym Equipment	1	ls	500,000.00	500,000
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126000 **SEATING**

Auditorium seating	1,000	seat	400.00	400,000
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SUBTOTAL

5,111,385

TOTAL - EQUIPMENT	\$5,111,385
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 **WINDOW TREATMENT**

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	40,676	sf	10.00	406,760
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123553 **CASEWORK**

Casework package	440,816	gsf	12.00	5,289,792
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SUBTOTAL

5,696,552

E2020 MOBILE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

TOTAL - FURNISHINGS	\$5,696,552
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

Pre-engineered Greenhouse	1	ls	150,000.00	150,000
SUBTOTAL				150,000

TOTAL - SPECIAL CONSTRUCTION	\$150,000
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.5b

F20 SELECTIVE BUILDING DEMOLITION

No items in this section

SUBTOTAL

F2010 BUILDING ELEMENTS DEMOLITION

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION

SUBTOTAL

\$272,167,944

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK C.5.b

G SITEWORK	

G10 SITE PREPARATION & DEMOLITION

311000	<i>GENERAL CONDITIONS</i> Mobilizations/Temp Parking/Etc. 6' high site construction fence - perimeter	1	ls	500,000.00	500,000		
311000	<i>SITE DEMOLITION AND RELOCATIONS</i> Demolish existing site conditions	7,500	lf	18.00	135,000		
311000	<i>UTILITY DEMOLITION</i> Demolish existing utility lines	1	ls	900,000.00	900,000		
	Utility Support/Ground Improvements	1	ls	1,500,000.00	1,500,000		
311000	<i>VEGETATION & TOPSOIL MANAGEMENT</i> Strip + dispose topsoil (swell 25%) Street sweeping allowance during hauling	23,264	cy	37.00	860,768		
311000	Remove trees/vegetation	1	ls	50,000.00	50,000		
	Strip + dispose topsoil	1,600	cy	37.00	59,200		
	Rock removal; mechanical	1,600	cy	85.00	136,000		
312000	<i>EROSION & SEDIMENT CONTROL</i> Silt Fence; installation and removal Erosion Control monitoring & maintenance	7,500	lf	12.00	90,000		
312000	<i>SITE EARTHWORK</i> <u>Site cut to design subgrade</u> Cut	1	ls	80,000.00	80,000		
	Store cut onsite	0	cy		NR		
	Process cut and amend with additional soils for reuse	0	cy		NR		
	Imported fill	64,000	cy	40.00	2,560,000		
312000	<i>SOIL DISPOSAL</i> - conversion factor 1.7 to tons Load excess soils for disposal Less than RCS-1 - clean non-regulated	1	ls		NR		
312000	<i>ESTABLISHING GRADE</i> Sub grade establishment	2,015,000	sf	0.15	302,250		
	Fine grading throughout the site	2,015,000	sf	0.25	503,750		
	General rock removal	3,400	cy	85.00	289,000		
312000	<i>HAZARDOUS MATERIALS</i> UST removal allowance Soil disposal & replacement allowance SUBTOTAL				NR See Summary		8,225,968

G20 SITE IMPROVEMENTS
Roadways and Parking Lots

	<u>Bituminous concrete pavement - standard</u>	300,800	sf		
	gravel base; 8" thick	23,256	cy	50.00	1,162,800
	asphalt top; 1.5" thick	2,876	tns	200.00	575,200
	asphalt binder; 2" thick	3,842	tns	190.00	729,980
	<u>Porous Pavement</u>	75,200	sf		
	Choker course; 4" thick crushed stone	1,184	cy	75.00	88,800
	Filter course; 8" thick gravel	2,333	cy	65.00	151,645
	Reservoir course; 8" thick crushed stone	2,333	cy	55.00	128,315
	Porous pavement; 4" thick	1,898	tns	400.00	759,200
	Geotextiles to paving	376,000	sf	1.50	564,000
320000	<i>CURBING</i>	18,900	lf	55.00	1,039,500
	Vertical granite curb				

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.5.b							
320000	ROAD MARKINGS AND SIGNS						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL						5,353,190
320000	PEDESTRIAN PAVING						
	Concrete sidewalks	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	15,600	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,928	cy	50.00	96,400		
	Open graded base AASHTO #57; 6" thick	361	cy	50.00	18,050		
	Open graded bedding course AASHTO #8; 2" thick	121	cy	65.00	7,865		
	Pavers	15,600	sf	28.00	436,800		
	Geotextiles on top, bottom and sides of subbase	3,467	sy	3.00	10,401		
	<u>Concrete paving; 80% of Plaza</u>	62,400	sf				
	gravel base; 12" thick	2,889	cy	50.00	144,450		
	Broom finish concrete paving; 5" thick	62,400	sf	18.00	1,123,200		
320000	STAIRS AND RAMPS						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL						4,234,566
320000	SITE IMPROVEMENTS						
320000	SITE FURNISHINGS						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	EXISTING STADIUM + TRACK ETR						No Costs Assumed
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts						ETR
320000	ATHLETIC EQUIPMENT						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	BLEACHERS AND SCOREBOARDS						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.5.b							
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	<i>FENCING</i>						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL						6,090,000
320000	<i>SITE WALLS</i>						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL						750,000
	Landscaping						
329900	<i>LAWN AND SEED</i>						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
	<i>IRRIGATION</i>						
	Irrigation area	360,000	sf	2.00	720,000		
	Wetlands reconstruction					NR	
	SUBTOTAL						3,818,165
G30	CIVIL MECHANICAL UTILITIES						
210000	<i>FIRE PROTECTION</i>						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	<i>CONNECTIONS</i>						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	<i>EXCAVATION & BACKFILL</i>						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities					NR	
	SUBTOTAL						994,250
333000	<i>SANITARY SEWER</i>						
	PVC sewer pipe	2,964	lf	60.00	177,840		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL						319,840
334000	<i>STORM DRAINAGE</i>						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	300,800	sf	10.00	3,008,000		
	<i>Sodded Athletic fields</i>						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL						3,645,500
G40	ELECTRICAL UTILITIES						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4" C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK C.5.b							
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL						253,030
<u>Power</u>							
	Site electrical 15 kVOLT- Transformers etc.	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
<u>Communications</u>							
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
<u>Site Lighting</u>							
	Allowance	360,000	sf	2.00	720,000		
<u>EV Stations</u>							
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
<u>Sports Fields</u>							
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
<u>Site Demolition</u>							
	Site demolition work				Included w/ building		
	SUBTOTAL						3,526,000
TOTAL - SITE DEVELOPMENT							
\$37,210,509							

CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION D.2				
A10 FOUNDATIONS				
A1010 Standard Foundations	\$4,153,071			
A1020 Special Foundations	\$5,474,035			
A1030 Lowest Floor Construction	\$5,068,730	\$14,695,836	\$33.34	5.5%
A20 BASEMENT CONSTRUCTION				
A2010 Basement Excavation	\$0			
A2020 Basement Walls	\$0	\$0	\$0.00	0.0%
B10 SUPERSTRUCTURE				
B1010 Upper Floor Construction	\$17,954,546			
B1020 Roof Construction	\$8,581,812	\$26,536,358	\$60.20	9.9%
B20 EXTERIOR CLOSURE				
B2010 Exterior Walls	\$18,742,750			
B2020 Windows	\$8,346,536			
B2030 Exterior Doors	\$440,816	\$27,530,102	\$62.45	10.2%
B30 ROOFING				
B3010 Roof Coverings	\$6,798,499			
B3020 Roof Openings	\$54,000	\$6,852,499	\$15.55	2.5%
C10 INTERIOR CONSTRUCTION				
C1010 Partitions	\$19,786,516			
C1020 Interior Doors	\$5,399,528			
C1030 Specialties/Millwork	\$6,680,093	\$31,866,137	\$72.29	11.8%
C20 STAIRCASES				
C2010 Stair Construction	\$1,382,250			
C2020 Stair Finishes	\$420,000	\$1,802,250	\$4.09	0.7%
C30 INTERIOR FINISHES				
C3010 Wall Finishes	\$7,493,872			
C3020 Floor Finishes	\$6,612,240			
C3030 Ceiling Finishes	\$6,612,240	\$20,718,352	\$47.00	7.7%
D10 CONVEYING SYSTEMS				
D1010 Elevator	\$1,207,200	\$1,207,200	\$2.74	0.4%



CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
BUILDING SUMMARY - OPTION D.2				
D20 PLUMBING				
D20 Plumbing	\$13,342,848	\$13,342,848	\$30.27	5.0%
D30 HVAC				
D30 HVAC	\$62,423,440	\$62,423,440	\$141.61	23.2%
D40 FIRE PROTECTION				
D40 Fire Protection	\$4,117,344	\$4,117,344	\$9.34	1.5%
D50 ELECTRICAL				
D5010 Complete System	\$47,152,928	\$47,152,928	\$106.97	17.5%
E10 EQUIPMENT				
E10 Equipment	\$5,111,385	\$5,111,385	\$11.60	1.9%
E20 FURNISHINGS				
E2010 Fixed Furnishings	\$5,672,472			
E2020 Movable Furnishings	NIC	\$5,672,472	\$12.87	2.1%
F10 SPECIAL CONSTRUCTION				
F10 Special Construction	\$150,000	\$150,000	\$0.34	0.1%
F20 HAZMAT REMOVALS				
F2010 Building Elements Demolition	\$0			
F2020 Hazardous Components Abatement	\$0	\$0	\$0.00	0.0%
TOTAL DIRECT COST (Trade Costs)		\$269,179,151	\$610.64	100.0%

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

GROSS FLOOR AREA CALCULATION

Level 1	156,401
Level 2	100,000
Level 3	92,000
Level 4	92,415

TOTAL GROSS FLOOR AREA (GFA)

440,816 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings: 1 x 3

Formwork	5,510	sf	15.00	82,650
Re-bar	36,366	lbs.	2.50	90,915
Concrete material	321	cy	160.00	51,360
Placing concrete	321	cy	120.00	38,520

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	19,285	sf	21.00	404,985
Re-bar	48,213	lbs.	2.50	120,533
Concrete material	626	cy	160.00	100,160
Placing concrete	626	cy	120.00	75,120
Form shelf	2,755	lf	8.00	22,040

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	11,592	sf	18.00	208,656
Re-bar	78,246	lbs.	2.50	195,615
Concrete material	1,014	cy	160.00	162,240
Placing concrete	1,014	cy	120.00	121,680
Set anchor bolts grout plates	161	ea	250.00	40,250

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	18,400	sf	18.00	331,200
Re-bar	138,000	lbs.	2.50	345,000
Concrete material	1,789	cy	160.00	286,240
Placing concrete	1,789	cy	120.00	214,680
Set anchor bolts grout plates	230	ea	250.00	57,500

Piers

Formwork	4,692	sf	24.00	112,608
Re-bar	52,785	lbs	2.50	131,963
Concrete material	182	cy	160.00	29,120
Placing concrete	182	cy	160.00	29,120
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	11,020	sf	4.00	44,080
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	11,020	sf	5.00	55,100
Brick Shelf 4" insulation	2,755	lf	20.00	55,100

312000 EARTHWORK

Strip footings

Excavation	3,061	cy	14.00	42,854
Reuse excess material on site	947	cy	15.00	14,205
Backfill with select fill	2,114	cy	25.00	52,850

Spread footings

Excavation	7,793	cy	14.00	109,102
Reuse excess material on site	2,985	cy	15.00	44,775
Backfill with select fill	4,868	cy	25.00	120,200

Miscellaneous

Foundation drain	2,755	lf	30.00	82,650
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION D.2							
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL					4,153,071	
A1020 SPECIAL FOUNDATIONS							
	Rigid inclusions	156,401	sf	35.00	5,474,035		
	SUBTOTAL					5,474,035	
A1030 LOWEST FLOOR CONSTRUCTION							
033000	CONCRETE						
	Vapor barrier, 15mils	156,401	sf	1.25	195,501		
	<u>Slab on grade</u>	156,401	sf				
	WWF reinforcement	179,861	sf	1.85	332,743		
	Concrete - 5" thick	2,494	cy	170.00	423,980		
	Placing concrete	2,494	cy	65.00	162,110		
	Finishing and curing concrete	156,401	sf	3.00	469,203		
	Control joints - saw cut	156,401	sf	0.10	15,640		
	<u>Miscellaneous</u>						
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system					Excluded; NR	
072100	<i>THERMAL INSULATION</i>						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	16,530	sf	5.00	82,650		
	Under slab insulation, 2" thick under slab	139,871	sf	3.00	419,613		
312000	<i>EARTHWORK</i>						
	Gravel base, 12"	5,793	cy	45.00	260,685		
	Structural fill	34,200	cy	55.00	1,881,000		
	Allowance for underslab drainage	156,401	sf	2.00	312,802		
	Compact existing sub-grade	156,401	sf	0.50	78,201		
	Underslab E&B for plumbing	156,401	sf	1.50	234,602		
	SUBTOTAL					5,068,730	

TOTAL - FOUNDATIONS **\$14,695,836**

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

033000 CONCRETE

WWF reinforcement
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"
Place and finish concrete
Rebar to decks

14.7 lbs/sf

3,230 tns including canopies + roof screens

\$6,552 \$/Ton

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 15 lbs per SF
Steel premium for lateral system due to poor soils; 1 PSF
Moment connections
Shear studs
3" metal galvanized floor deck

2,133 tns 5,000.00 10,665,000

142 tns 5,000.00 710,000

107 ea 750.00 80,250

71,104 ea 3.50 248,864

284,415 sf 8.00 2,275,320

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

Expansion joints	1	ls	100,000.00	100,000	
078100 FIREPROOFING/FIRESTOPPING					
Fire proofing to columns and beams; 2 hr	284,415	sf	3.00	853,245	
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000	

SUBTOTAL

17,954,546

B1020 ROOF CONSTRUCTION

033000 CONCRETE					
6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000	
051200 STRUCTURAL STEEL FRAMING					
Structural steel framing; Complete; 13 lbs per SF	1,017	tns	5,000.00	5,085,000	
Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	5,000.00	175,000	
Steel premium for lateral system due to poor soils; 1 PSF	78	tns	5,000.00	390,000	
Roof screens	80	tns	5,500.00	440,000	
Decking					
1 1/2" galvanized metal deck, typical	156,401	sf	7.00	1,094,807	
078100 FIREPROOFING/FIRESTOPPING					
Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	156,401	sf	5.00	782,005	
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000	

SUBTOTAL

8,581,812

TOTAL - SUPERSTRUCTURE

\$26,536,358

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS	153,072	Total closure area
Exterior Wall Area	114,804	sf total area solid
042000 MASONRY		
Mockup	1	ls
Brick veneer; 60% of Solid	68,882	sf
Granite veneer base; 2%	2,296	sf
Precast trim allowance	1	ls
4" CMU wall at auditorium	9,000	sf
8" Mineral wool at exterior closure (2 layers 4")	114,804	sf
Miscellaneous flashings and sealants	114,804	sf
Staging to exterior wall	114,804	sf
055000 MISC. METALS		
Misc. metals at masonry including loose lintels (relieving angles included in steel trns)	68,882	sf
070001 WATERPROOFING, DAMPROOFING AND CAULKING		
Air barrier	114,804	sf
Miscellaneous sealants to closure	114,804	sf
072100 THERMAL INSULATION		
4" cellulose insulation in stud	114,804	sf
Insulation at glazed openings	12,756	lf
076400 CLADDING		
Composite metal panel, Alucobond or equal; 18%	20,665	sf
Terracotta; 20%	22,961	sf
Canopies; soffit + framing	4,000	sf
12' high Acoustic Equipment Screen	16,000	sf

EXPANSION JOINT COVERS

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
BUILDING BACKUP - OPTION D.2							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900 GYPSUM BOARD ASSEMBLIES							
	Exterior wall;						
	6" Stud backup	114,804	sf	16.00	1,836,864		
	Gypsum Sheathing	114,804	sf	3.50	401,814		
	Drywall lining to interior face of stud backup	114,804	sf	4.00	459,216		
	Passive house premium					NR	
101400 SIGNAGE							
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL					18,742,750	
B2020 WINDOWS							
	Exterior Wall Area	38,268	sf				
061000 ROUGH CARPENTRY							
	Wood blocking at openings	12,756	lf	10.00	127,560		
070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
	Air barrier/flashing at windows	12,756	lf	10.00	127,560		
	Backer rod & double sealant	12,756	lf	11.00	140,316		
080001 METAL WINDOWS							
	Aluminum windows, triple glazed including interior and exterior trim per details	19,134	sf	175.00	3,348,450		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	19,134	sf	225.00	4,305,150		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium					NR	
089000 LOUVERS							
	Louvers					N/A	
	SUBTOTAL					8,346,536	
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL					440,816	
TOTAL - EXTERIOR CLOSURE							\$27,530,102

B30 ROOFING

055000 MISCELLANEOUS METALS						
Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000 ROUGH CARPENTRY						
Rough carpentry and blocking @ roof	156,401	sf	1.50	234,602		
070002 ROOFING AND FLASHING						
PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	156,401	sf	33.00	5,161,233		
Canopy roofing	4,000	sf	28.00	112,000		
Plaza deck pavers system at terrace	8,358	sf	70.00	585,060		
<u>Miscellaneous Roofing</u>						
Miscellaneous flashings/copings/walkway pads etc.	156,401	sf	4.00	625,604		
SUBTOTAL						6,798,499

B3020 ROOF OPENINGS

086300 ROOF SKYLIGHTS

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

Aluminum framed skylight (4loc) None Assumed
Smoke vents; 7'x7'
SUBTOTAL 3 ea 18,000.00 54,000 54,000

TOTAL - ROOFING		\$6,852,499

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY

Allowance for masonry partitions 440,816 gsf 6.00 2,644,896

061000 ROUGH CARPENTRY

Backer panels in electrical closets 1 ls 10,000.00 10,000
Wood blocking at interiors 440,816 gsf 0.50 220,408

078400 FIREPROOFING/FIRESTOPPING

Fire stopping including slab edges and core 440,816 gsf 1.00 440,816

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building 440,816 gsf 1.25 551,020

078150 EXPANSION JOINTS

Allowance for expansion joint covers 1 ls 50,000.00 50,000

081110 INTERIOR GLAZING

Allowance for interior glazing 440,816 gsf 3.00 1,322,448

092900 GYPSUM BOARD ASSEMBLIES

Allowance for GWB partitions 440,816 gsf 33.00 14,546,928

SUBTOTAL 19,786,516

C1020 INTERIOR DOORS

Doors, frames, hardware; complete 440,816 gsf 8.00 3,526,528

Fire shutters 1 ls 150,000.00 150,000

Security doors 16 loc 25,000.00 400,000

Premium for electronic hardware 882 set 1,500.00 1,323,000

SUBTOTAL 5,399,528

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building 440,816 gsf 5.00 2,204,080

061000 ROUGH CARPENTRY

062000 INTERIOR ARCHITECTURAL WOODWORK

Interior millwork package 440,816 gsf 3.00 1,322,448

101100 VISUAL DISPLAY SURFACES

Markerboard and tackboard package 440,816 gsf 2.00 881,632

101400 SIGNAGE

Room identification, directional & safety signage, building directory + environmental graphics 440,816 gsf 2.00 881,632

102800 TOILET ACCESSORIES

Toilet accessories/compartments 440,816 gsf 1.00 440,816

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets 1 ls 65,852.71 65,853

AED cabinets 1 ls 2,000.00 2,000

105000 LOCKERS

Student lockers 440,816 gsf 2.00 881,632

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

SUBTOTAL

6,680,093

TOTAL - INTERIOR CONSTRUCTION

\$31,866,137

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

033000 CONCRETE

Concrete to stairs

21 flt

5,000.00

105,000

055000 MISCELLANEOUS METALS

Egress stairs w/ stainless steel rails and handrails

18 flt

50,000.00

900,000

Projection room stair, 4' wide

1 flt

40,000.00

40,000

Learning stair

Stainless steel guardrail

65 lf

425.00

27,625

Stainless steel handrail

55 lf

175.00

9,625

Adjacent stairs; 5'-3" wide

2 flt

75,000.00

150,000

Learning stair framing

Framing at learning stair - premium

1 ls

150,000.00

150,000

SUBTOTAL

1,382,250

C2020 STAIR FINISHES

090005 RESILIENT FLOORS

Stair finishes

21 flts

20,000.00

420,000

SUBTOTAL

420,000

TOTAL - STAIRCASES

\$1,802,250

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package

440,816 gsf

17.00

7,493,872

SUBTOTAL

7,493,872

C3020 FLOOR FINISHES

Floor finishes complete package

440,816 gsf

15.00

6,612,240

SUBTOTAL

6,612,240

C3030 CEILING FINISHES

Ceiling finishes complete package

440,816 gsf

15.00

6,612,240

SUBTOTAL

6,612,240

TOTAL - INTERIOR FINISHES

\$20,718,352

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

055000 MISCELLANEOUS METALS

Pit ladder and miscellaneous metals

3 ea

900.00

2,700

Sill angles

3 ls

1,500.00

4,500

142100 ELEVATOR

Electric traction elevator, 4 stop, 5,000lbs

3 ea

400,000.00

1,200,000

SUBTOTAL

1,207,200

TOTAL - CONVEYING SYSTEMS

\$1,207,200

D20 PLUMBING

D20 PLUMBING, GENERALLY

Air source heat pump water heater (2) 500MBH

1 ls

1,000,000.00

1,000,000

Plumbing package complete

440,816 gsf

28.00

12,342,848

SUBTOTAL

13,342,848

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

TOTAL - PLUMBING	\$13,342,848
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D30 HVAC

D30 HVAC, GENERALLY

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440
SUBTOTAL				62,423,440

TOTAL - HVAC	\$62,423,440
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D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

<u>Fire Equipment</u>				
Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000
Sprinkler system; complete	440,816	gsf	9.00	3,967,344
SUBTOTAL				4,117,344

TOTAL - FIRE PROTECTION	\$4,117,344
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D50 ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system				
4000A 277/480V main switchboard	2	ea	185,000.00	370,000
Panelboards/feeders	440,816	gsf	6.00	2,644,896

Emergency power

Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500
Emergency power feeders	440,816	gsf	3.00	1,322,448

Photovoltaic - 3500 kW

PV system equipment; low roof top	29,609	sf	36.00	1,065,924
PV system equipment; roof top; High roof (with Structure)	74,022	sf	60.00	4,441,320
PV system equipment; canopy	91,715	sf	60.00	5,502,900
Battery Storage	1	ls	2,500,000	2,500,000
Transparent + opaque vertical cladding BIPV	10,000	sf	200.00	2,000,000

Equipment Wiring

Feeders + Electrical to equipment	440,816	gsf	7.00	3,085,712
SUBTOTAL				23,745,700

D5020 LIGHTING & POWER

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688
SUBTOTAL				7,934,688

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264
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Performance lighting

Theater AV	1	ls	200,000.00	200,000
Stage lighting fixture package	1	ls	250,000.00	250,000
Audio Visual Systems	440,816	gsf	8.50	3,746,936
Classroom speech + AV	225	rms	5,000.00	1,125,000

Specialty Communications Systems

BDA system, antenna and annunciator	440,816	sf	0.65	286,530
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000
<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264
<u>Security System</u>	440,816	gsf	10.00	4,408,160

SUBTOTAL				14,083,970
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D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245
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PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

Grounding	440,816	gsf	0.40	176,326
Misc. demolition work	440,816	gsf	0.25	110,204
Temp power and lights	440,816	gsf	1.20	528,979
Seismic restraints/Coordination/misc.	440,816	gsf	1.00	440,816
SUBTOTAL				1,388,570

TOTAL - ELECTRICAL	\$47,152,928
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

112000 LOADING DOCK EQUIPMENT

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000
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110620 THEATRICAL EQUIPMENT

Allowance per Architect

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000
Stage rigging, installed	1	ls	275,000.00	275,000
Stage curtains, installed	1	ls	88,385.00	88,385
Forestage Platforms, installed	1	ls	100,000.00	100,000
Orchestra Enclosure, installed	1	ls	175,000.00	175,000
Orchestra Pit Lift	1	ls	150,000.00	150,000
Auditorium AV Equipment				See Electrical

113100 APPLIANCES

Residential appliances - allowance	1	ls	60,000.00	60,000
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114000 FOOD SERVICE EQUIPMENT

Kitchen equipment	1	ls	2,500,000.00	2,500,000
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115300 EDUCATIONAL EQUIPMENT

Science equipment;	1	ls	400,000.00	400,000
Kiln	1	ea	5,000.00	5,000
Allowance for miscellaneous equipment	1	ls	50,000	50,000

116600 GYM EQUIPMENT

Gym Equipment	1	ls	500,000.00	500,000
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126000 SEATING

Auditorium seating	1,000	seat	400.00	400,000
SUBTOTAL				5,111,385

TOTAL - EQUIPMENT	\$5,111,385
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	38,268	sf	10.00	382,680
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123553 CASEWORK

Casework package	440,816	gsf	12.00	5,289,792
SUBTOTAL				5,672,472

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL				NIC
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TOTAL - FURNISHINGS	\$5,672,472
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

Pre-engineered Greenhouse	1	ls	150,000.00	150,000
SUBTOTAL				150,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

TOTAL - SPECIAL CONSTRUCTION	\$150,000
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F20 SELECTIVE BUILDING DEMOLITION

No items in this section
SUBTOTAL

F2010 BUILDING ELEMENTS DEMOLITION

No items in this section
SUBTOTAL

See main summary for HazMat allowance

See Summary

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION	
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SUBTOTAL

\$269,179,151

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK D.2

G SITEWORK	

G10 SITE PREPARATION & DEMOLITION

311000	<i>GENERAL CONDITIONS</i> Mobilizations/Temp Parking/Etc. 6' high site construction fence - perimeter	1	ls	500,000.00	500,000
7,500	lf			18.00	135,000

311000	<i>SITE DEMOLITION AND RELOCATIONS</i> Demolish existing site conditions	1	ls	900,000.00	900,000
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311000	<i>UTILITY DEMOLITION</i> Demolish existing utility lines	1	ls	250,000.00	250,000
	Utility Support/Ground Improvements	1	ls	1,500,000.00	1,500,000

311000	<i>VEGETATION & TOPSOIL MANAGEMENT</i> Strip + dispose topsoil (swell 25%)	23,264	cy	37.00	860,768
	Street sweeping allowance during hauling	1	ls	50,000.00	50,000

311000	<i>CLEAR GRASSY KNOB</i> Remove trees/vegetation	1	ls	10,000.00	10,000
	Strip + dispose topsoil	1,600	cy	37.00	59,200
	Rock removal; mechanical	1,600	cy	85.00	136,000

312000	<i>EROSION & SEDIMENT CONTROL</i> Silt Fence; installation and removal	7,500	lf	12.00	90,000
	Erosion Control monitoring & maintenance	1	ls	80,000.00	80,000

312000	<i>SITE EARTHWORK</i> <u>Site cut to design subgrade</u>	0	cy		
	Cut	0	cy	20.00	
	Store cut onsite				NR
	Process cut and amend with additional soils for reuse				NR
	Imported fill	4,100	cy	40.00	164,000

312000	<i>SOIL DISPOSAL</i> - conversion factor 1.7 to tons Load excess soils for disposal	1	ls		
	Less than RCS-1 - clean non-regulated				NR

312000	<i>ESTABLISHING GRADE</i> Sub grade establishment	2,015,000	sf	0.15	302,250
	Fine grading throughout the site	2,015,000	sf	0.25	503,750
	General rock removal	3,400	cy	85.00	289,000

312000	<i>HAZARDOUS MATERIALS</i> UST removal allowance				NR
	Soil disposal & replacement allowance				See Summary
	SUBTOTAL				5,829,968

G20 SITE IMPROVEMENTS
Roadways and Parking Lots

Bituminous concrete pavement - standard	288,000	sf		
gravel base; 8" thick	22,267	cy	50.00	1,113,350
asphalt top; 1.5" thick	2,753	tns	200.00	550,600
asphalt binder; 2" thick	3,678	tns	190.00	698,820

Porous Pavement

Choker course; 4" thick crushed stone	1,133	cy	75.00	84,975
Filter course; 8" thick gravel	2,233	cy	65.00	145,145
Reservoir course; 8" thick crushed stone	2,233	cy	55.00	122,815
Porous pavement; 4" thick	1,817	tns	400.00	726,800
Geotextiles to paving	360,000	sf	1.50	540,000

320000	<i>CURBING</i> Vertical granite curb	15,500	lf	55.00	852,500
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PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK D.2							
320000	ROAD MARKINGS AND SIGNS						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL						4,988,755
320000	PEDESTRIAN PAVING						
	Concrete sidewalks	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	13,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,607	cy	50.00	80,350		
	Open graded base AASHTO #57; 6" thick	301	cy	50.00	15,050		
	Open graded bedding course AASHTO #8; 2" thick	101	cy	65.00	6,565		
	Pavers	13,000	sf	28.00	364,000		
	Geotextiles on top, bottom and sides of subbase	2,889	sy	3.00	8,667		
	<u>Concrete paving; 80% of Plaza</u>	52,000	sf				
	gravel base; 12" thick	2,407	cy	50.00	120,350		
	Broom finish concrete paving; 5" thick	52,000	sf	18.00	936,000		
320000	STAIRS AND RAMPS						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL						3,928,382
320000	SITE IMPROVEMENTS						
320000	SITE FURNISHINGS						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	EXISTING STADIUM + TRACK ETR						No Costs Assumed
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts						ETR
320000	ATHLETIC EQUIPMENT						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	BLEACHERS AND SCOREBOARDS						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK D.2							
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	FENCING						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL						6,090,000
320000	SITE WALLS						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL						750,000
	Landscaping						
329900	LAWN AND SEED						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	IRRIGATION						
	Irrigation area	360,000	sf	2.00	720,000		
	Wetlands reconstruction					NR	
	SUBTOTAL						3,668,165
G30	CIVIL MECHANICAL UTILITIES						
210000	FIRE PROTECTION						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	CONNECTIONS						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	EXCAVATION & BACKFILL						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities					NR	
	SUBTOTAL						994,250
333000	SANITARY SEWER						
	PVC sewer pipe	1,850	lf	60.00	111,000		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL						253,000
334000	STORM DRAINAGE						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	288,000	sf	10.00	2,880,000		
	Sodded Athletic fields						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL						3,517,500
G40	ELECTRICAL UTILITIES						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4" C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK D.2							
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL						253,030
<u>Power</u>							
	Site electrical 15 kVOLT- Transformers etc.	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
<u>Communications</u>							
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
<u>Site Lighting</u>							
	Allowance	360,000	sf	2.00	720,000		
<u>EV Stations</u>							
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
<u>Sports Fields</u>							
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
<u>Site Demolition</u>							
	Site demolition work				Included w/ building		
	SUBTOTAL						3,526,000
TOTAL - SITE DEVELOPMENT							
							\$33,799,050

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.1 - NEW FIELDHOUSE - OPTION 1

GROSS FLOOR AREA CALCULATION

Level 1

36,000

TOTAL GROSS FLOOR AREA (GFA)

36,000 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings; 1 x 3

Formwork	1,532	sf	15.00	22,980
Re-bar	10,111	lbs.	2.50	25,278
Concrete material	60	cy	160.00	9,600
Placing concrete	60	cy	120.00	7,200
<u>Perimeter foundation walls; 20" Thick x 3.5 ft H</u>				

Formwork	5,362	sf	21.00	112,602
Re-bar	13,405	lbs.	2.50	33,513
Concrete material	174	cy	160.00	27,840
Placing concrete	174	cy	120.00	20,880
Form shelf	766	lf	8.00	6,128

Spread Footings; 9 x 9 x 2

Formwork	6,480	sf	18.00	116,640
Re-bar	43,740	lbs.	2.50	109,350
Concrete material	567	cy	160.00	90,720
Placing concrete	567	cy	120.00	68,040
Set anchor bolts grout plates	90	ea	250.00	22,500

Piers

Formwork	1,080	sf	24.00	25,920
Re-bar	12,150	lbs.	2.50	30,375
Concrete material	42	cy	160.00	6,720
Placing concrete	42	cy	160.00	6,720

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	3,064	sf	4.00	12,256
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	3,064	sf	3.00	9,192
Brick Shelf 4" insulation	766	lf	20.00	15,320

312000 EARTHWORK

Strip footings

Excavation	851	cy	14.00	11,914
Reuse excess material on site	234	cy	15.00	3,510
Backfill with select fill	617	cy	25.00	15,425

Spread footings

Excavation	1,613	cy	14.00	22,582
Reuse excess material on site	609	cy	15.00	9,135
Backfill with select fill	1,004	cy	25.00	25,100

Miscellaneous

Foundation drain	766	lf	30.00	22,980
SUBTOTAL				
Foundation drain	766	lf	30.00	22,980
SUBTOTAL				

890,420

A1020 SPECIAL FOUNDATIONS

Rigid inclusions	36,000	sf	35.00	1,260,000
SUBTOTAL				
Rigid inclusions	36,000	sf	35.00	1,260,000
SUBTOTAL				

A1030 LOWEST FLOOR CONSTRUCTION

033000 CONCRETE

Vapor barrier, 15mils	36,000	sf	1.25	45,000
Slab on grade				
WWF reinforcement	41,400	sf	1.85	76,590
Concrete - 5" thick	574	cy	170.00	97,580

PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
F.1 - NEW FIELDHOUSE - OPTION 1							
	Placing concrete	574	cy	65.00	37,310		
	Finishing and curing concrete	36,000	sf	3.00	108,000		
	Control joints - saw cut	36,000	sf	0.10	3,600		
072100	THERMAL INSULATION						
	Under slab insulation, 2" thick under slab	36,000	sf	3.00	108,000		
312000	EARTHWORK						
	Gravel base, 12"	1,333	cy	45.00	59,985		
	Allowance for underslab drainage	36,000	sf	2.00	72,000		
	Compact existing sub-grade	36,000	sf	0.50	18,000		
	Underslab E&B for plumbing	36,000	sf	1.50	54,000		
	SUBTOTAL						680,065

TOTAL - FOUNDATIONS

\$2,830,485

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

SUBTOTAL

B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 13 lbs per SF
Decking
3" galvanized metal deck, acoustic

234 tns

6,500.00

1,521,000

36,000 sf

12.00

432,000

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes
Intumescent

36,000 sf

5.00

NR

SUBTOTAL

1,953,000

TOTAL - SUPERSTRUCTURE

\$1,953,000

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area

26,810 Total closure area

21,448 sf total area solid

042000 MASONRY

Brick veneer; 60% of Solid
8" Mineral wool at exterior closure (2 layers 4")

12,869 sf

44.00

566,236

Miscellaneous flashings and sealants

21,448 sf

7.50

160,860

Staging to exterior wall

21,448 sf

1.50

32,172

055000 MISC. METALS

Misc. metals at masonry including loose lintels (relieving angles included in steel tns)

12,869 sf

1.50

19,304

PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.1 - NEW FIELDHOUSE - OPTION 1

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Air barrier	21,448	sf	10.00	214,480
Miscellaneous sealants to closure	21,448	sf	1.00	21,448

072100 THERMAL INSULATION

4" Cellulose insulation in stud	21,448	sf	3.25	69,706
Insulation at glazed openings	1,787	lf	6.00	10,722

076400 CLADDING

Composite metal panel, Alucobond or equal; 40%	8,579	sf	100.00	857,900
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092900 GYPSUM BOARD ASSEMBLIES

<i>Exterior wall;</i>				
6" Stud backup	21,448	sf	16.00	343,168
Gypsum Sheathing	21,448	sf	3.50	75,068
Drywall lining to interior face of stud backup; IRGWB	21,448	sf	6.00	128,688

101400 SIGNAGE

Exterior signage - allowance	1	ls	10,000.00	10,000
SUBTOTAL				

2,595,544

B2020 WINDOWS

Exterior Wall Area

5,362 sf

061000 ROUGH CARPENTRY

Wood blocking at openings	1,787	lf	10.00	17,870
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070001 WATERPROOFING, DAMPROOFING AND CAULKING

Air barrier/flashing at windows	1,787	lf	10.00	17,870
Backer rod & double sealant	1,787	lf	11.00	19,657

080001 METAL WINDOWS

Aluminum windows, triple glazed including interior and exterior trim per details	5,362	sf	175.00	938,350
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Passive house premium NR

089000 LOUVERS

Louvers			N/A
SUBTOTAL			

993,747

B2030 EXTERIOR DOORS

Allowance for exterior doors	36,000	gsf	1.00	36,000
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SUBTOTAL 36,000

TOTAL - EXTERIOR CLOSURE **\$3,625,291**

B30 ROOFING

061000 ROUGH CARPENTRY

Rough carpentry and blocking @ roof	36,000	sf	1.50	54,000
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070002 ROOFING AND FLASHING

PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	36,000	total area	33.00	1,188,000
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Miscellaneous Roofing

Miscellaneous flashings/copings/walkway pads etc.	36,000	sf	4.00	144,000
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SUBTOTAL 1,386,000

B3020 ROOF OPENINGS

SUBTOTAL

TOTAL - ROOFING **\$1,386,000**

PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.1 - NEW FIELDHOUSE - OPTION 1

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001	MASONRY						
	Allowance for masonry partitions	4,508	sf	35.00	157,780		
061000	ROUGH CARPENTRY						
	Backer panels in electrical closets	1	ls	10,000.00	10,000		
	Wood blocking at interiors	36,000	gsf	0.50	18,000		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Miscellaneous sealants throughout building	36,000	gsf	1.00	36,000		
	SUBTOTAL					221,780	

C1020 INTERIOR DOORS

Doors, frames, hardware; complete	10	lvs	3,500.00	35,000	
SUBTOTAL					35,000

C1030 SPECIALTIES / MILLWORK

055000	MISCELLANEOUS METALS						
	Miscellaneous metals throughout building	36,000	gsf	3.00	108,000		
101400	SIGNAGE						
	Room identification, directional & safety signage, building directory + environmental graphics	36,000	gsf	2.00	72,000		
102800	TOILET ACCESSORIES						
	Toilet accessories/compartments	2	rms	1,500.00	3,000		
104400	FIRE PROTECTION SPECIALTIES						
	Fire extinguisher cabinets	1	ls	8,021.86	8,022		
	AED cabinets	1	ls	2,000.00	2,000		
105000	LOCKERS						
	Student lockers	36,000	gsf	1.50	54,000		
	SUBTOTAL					247,022	

TOTAL - INTERIOR CONSTRUCTION

\$503,802

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

SUBTOTAL

C2020 STAIR FINISHES

SUBTOTAL

TOTAL - STAIRCASES

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package	36,000	gsf	3.00	108,000	
SUBTOTAL					108,000

C3020 FLOOR FINISHES

Rubber flooring	26,700	sf	18.00	480,600	
Floor finishes; track	7,500	sf	30.00	225,000	
SUBTOTAL					705,600

C3030 CEILING FINISHES

PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.1 - NEW FIELDHOUSE - OPTION 1

Cap over rooms	4,224	sf	30.00	126,720
Ceiling finishes; paint exposed structure	36,000	gsf	3.00	108,000
SUBTOTAL				234,720

TOTAL - INTERIOR FINISHES	\$1,048,320
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D1o CONVEYING SYSTEMS

D1010 ELEVATOR

SUBTOTAL

TOTAL - CONVEYING SYSTEMS

D2o PLUMBING

D20 PLUMBING, GENERALLY

Plumbing package complete	36,000	gsf	10.00	360,000
SUBTOTAL				360,000

TOTAL - PLUMBING	\$360,000
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D3o HVAC

D30 HVAC, GENERALLY

HVAC System	36,000	gsf	50.00	1,800,000
SUBTOTAL				1,800,000

TOTAL - HVAC	\$1,800,000
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D4o FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Fire Equipment

Sprinkler system; complete	36,000	gsf	9.00	324,000
SUBTOTAL				324,000

TOTAL - FIRE PROTECTION	\$324,000
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D5o ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system	36,000	gsf	6.00	216,000
Panelboards/feeders				

Equipment Wiring

Feeders + Electrical to equipment	36,000	gsf	7.00	252,000
SUBTOTAL				468,000

D5020 LIGHTING & POWER

Lighting, Controls + Power	36,000	gsf	12.00	432,000
SUBTOTAL				432,000

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	36,000	gsf	4.00	144,000
Fire Alarm	36,000	gsf	3.00	108,000
Security System	36,000	gsf	10.00	360,000

SUBTOTAL

612,000

D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	36,000	gsf	0.30	10,800
Grounding	36,000	gsf	0.40	14,400
Misc. demolition work	36,000	gsf	0.25	9,000
Temp power and lights	36,000	gsf	1.20	43,200

PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.1 - NEW FIELDHOUSE - OPTION 1

Seismic restraints/Coordination/misc.	36,000	gsf	1.00	36,000
SUBTOTAL				113,400

TOTAL - ELECTRICAL	\$1,625,400
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

AV Equipment	1	ls	100,000.00	100,000
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116600 GYM EQUIPMENT

Gym Equipment	1	ls	500,000.00	500,000
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126000 SEATING

Retractable bleachers	750	seat	250.00	187,500
SUBTOTAL				187,500

TOTAL - EQUIPMENT	\$787,500
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window shades at exterior glazing; electric	5,362	sf	30.00	160,860
SUBTOTAL				160,860

E2020 MOBILE FURNISHINGS

All movable furnishings to be provided and installed by owner
SUBTOTAL

NIC

TOTAL - FURNISHINGS	\$160,860
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

SUBTOTAL

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

No items in this section

SUBTOTAL

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance	See Summary
SUBTOTAL	

TOTAL - SELECTIVE BUILDING DEMOLITION
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SUBTOTAL

\$16,404,658

PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.2 - NEW FIELDHOUSE OPTION 2

GROSS FLOOR AREA CALCULATION

Level 1

72,000

TOTAL GROSS FLOOR AREA (GFA)	72,000 sf
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A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings; 1 x 3

Formwork	2,200	sf	15.00	33,000
Re-bar	14,520	lbs.	2.50	36,300
Concrete material	86	cy	160.00	13,760
Placing concrete	86	cy	120.00	10,320

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	7,700	sf	21.00	161,700
Re-bar	19,250	lbs.	2.50	48,125
Concrete material	250	cy	160.00	40,000
Placing concrete	250	cy	120.00	30,000
Form shelf	1,100	lf	8.00	8,800

Spread Footings; 9 x 9 x 2

Formwork	12,960	sf	18.00	233,280
Re-bar	87,480	lbs.	2.50	218,700
Concrete material	1,134	cy	160.00	181,440
Placing concrete	1,134	cy	120.00	136,080
Set anchor bolts grout plates	180	ea	250.00	45,000
<u>Piers</u>				
Formwork	2,160	sf	24.00	51,840
Re-bar	24,300	lbs.	2.50	60,750
Concrete material	84	cy	160.00	13,440
Placing concrete	84	cy	160.00	13,440

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	4,400	sf	4.00	17,600
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	4,400	sf	3.00	13,200
Brick Shelf 4" insulation	1,100	lf	20.00	22,000

312000 EARTHWORK

Strip footings

Excavation	1,222	cy	14.00	17,108
Reuse excess material on site	336	cy	15.00	5,040
Backfill with select fill	886	cy	25.00	22,150

Spread footings

Excavation	3,227	cy	14.00	45,178
Reuse excess material on site	1,218	cy	15.00	18,270
Backfill with select fill	2,009	cy	25.00	50,225

Miscellaneous

Foundation drain	1,100	lf	30.00	33,000
SUBTOTAL				

1,579,746

A1020 SPECIAL FOUNDATIONS

Rigid inclusions	72,000	sf	35.00	2,520,000
SUBTOTAL				

2,520,000

A1030 LOWEST FLOOR CONSTRUCTION

033000 CONCRETE

Vapor barrier, 15mils	72,000	sf	1.25	90,000
Slab on grade	72,000	sf		
WWF reinforcement	82,800	sf	1.85	153,180
Concrete - 5" thick	1,148	cy	170.00	195,160

PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
F.2 - NEW FIELDHOUSE OPTION 2							
	Placing concrete	1,148	cy	65.00	74,620		
	Finishing and curing concrete	72,000	sf	3.00	216,000		
	Control joints - saw cut	72,000	sf	0.10	7,200		
072100	THERMAL INSULATION						
	Under slab insulation, 2" thick under slab	72,000	sf	3.00	216,000		
312000	EARTHWORK						
	Gravel base, 12"	2,667	cy	45.00	120,015		
	Allowance for underslab drainage	72,000	sf	2.00	144,000		
	Compact existing sub-grade	72,000	sf	0.50	36,000		
	Underslab E&B for plumbing	72,000	sf	1.50	108,000		
	SUBTOTAL						1,360,175

TOTAL - FOUNDATIONS

\$5,459,921

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

SUBTOTAL

B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 13 lbs per SF
Decking
3" galvanized metal deck, acoustic

468 tns

6,500.00

3,042,000

72,000 sf

12.00

864,000

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes
Intumescent

72,000 sf

5.00

NR

SUBTOTAL

3,906,000

TOTAL - SUPERSTRUCTURE

\$3,906,000

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area

38,500 Total closure area

30,800 sf total area solid

042000 MASONRY

Brick veneer; 60% of Solid
8" Mineral wool at exterior closure (2 layers 4")
Miscellaneous flashings and sealants
Staging to exterior wall

18,480 sf

44.00

813,120

30,800 sf

7.50

231,000

30,800 sf

1.50

46,200

30,800 sf

4.00

123,200

055000 MISC. METALS

Misc. metals at masonry including loose lintels (relieving angles included in steel tns)

18,480 sf

1.50

27,720

PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
F.2 - NEW FIELDHOUSE OPTION 2							
<i>070001 WATERPROOFING, DAMPROOFING AND CAULKING</i>							
	Air barrier	30,800	sf	10.00	308,000		
	Miscellaneous sealants to closure	30,800	sf	1.00	30,800		
<i>072100 THERMAL INSULATION</i>							
	4" Cellulose insulation in stud	30,800	sf	3.25	100,100		
	Insulation at glazed openings	2,567	lf	6.00	15,402		
<i>076400 CLADDING</i>							
	Composite metal panel, Alucobond or equal; 40%	12,320	sf	100.00	1,232,000		
<i>092900 GYPSUM BOARD ASSEMBLIES</i>							
	<i>Exterior wall;</i>						
	6" Stud backup	30,800	sf	16.00	492,800		
	Gypsum Sheathing	30,800	sf	3.50	107,800		
	Drywall lining to interior face of stud backup; IRGWB	30,800	sf	6.00	184,800		
<i>101400 SIGNAGE</i>							
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL						3,722,942
B2020 WINDOWS							
Exterior Wall Area							
<i>061000 ROUGH CARPENTRY</i>							
	Wood blocking at openings	2,567	lf	10.00	25,670		
<i>070001 WATERPROOFING, DAMPROOFING AND CAULKING</i>							
	Air barrier/flashing at windows	2,567	lf	10.00	25,670		
	Backer rod & double sealant	2,567	lf	11.00	28,237		
<i>080001 METAL WINDOWS</i>							
	Aluminum windows, triple glazed including interior and exterior trim per details	7,700	sf	175.00	1,347,500		
	Passive house premium						NR
<i>089000 LOUVERS</i>							
	Louvers						N/A
	SUBTOTAL						1,427,077
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	72,000	gsf	1.00	72,000		
	SUBTOTAL						72,000
TOTAL - EXTERIOR CLOSURE							
							\$5,222,019
B30 ROOFING							
<i>061000 ROUGH CARPENTRY</i>							
	Rough carpentry and blocking @ roof	72,000	sf	1.50	108,000		
<i>070002 ROOFING AND FLASHING</i>							
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	72,000	sf	33.00	2,376,000		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	72,000	sf	4.00	288,000		
	SUBTOTAL						2,772,000
B3020 ROOF OPENINGS							
	SUBTOTAL						-
TOTAL - ROOFING							
							\$2,772,000

PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.2 - NEW FIELDHOUSE OPTION 2

C1o INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY

Allowance for masonry partitions

6,678 sf

35.00

233,730

061000 ROUGH CARPENTRY

Backer panels in electrical closets

1 ls

10,000.00

10,000

Wood blocking at interiors

72,000 gsf

0.50

36,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building

72,000 gsf

1.00

72,000

SUBTOTAL

351,730

C1020 INTERIOR DOORS

Doors, frames, hardware; complete

17 lvs

3,500.00

59,500

SUBTOTAL

59,500

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building

72,000 gsf

3.00

216,000

101400 SIGNAGE

Room identification, directional & safety signage, building directory + environmental graphics

72,000 gsf

2.00

144,000

102800 TOILET ACCESSORIES

Toilet accessories/compartments

2 rms

1,500.00

3,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets

1 ls

13,164.71

13,165

AED cabinets

1 ls

2,000.00

2,000

105000 LOCKERS

Student lockers

72,000 gsf

1.50

108,000

SUBTOTAL

486,165

TOTAL - INTERIOR CONSTRUCTION

\$897,395

C2o STAIRCASES

C2010 STAIR CONSTRUCTION

SUBTOTAL

C2020 STAIR FINISHES

SUBTOTAL

TOTAL - STAIRCASES

C3o INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package

72,000 gsf

3.00

216,000

SUBTOTAL

216,000

C3020 FLOOR FINISHES

Rubber flooring

50,400 sf

18.00

907,200

Floor finishes; Wood 50% of infield

14,000 sf

38.00

532,000

Floor finishes; track

18,000 sf

30.00

540,000

SUBTOTAL

1,979,200

C3030 CEILING FINISHES

PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.2 - NEW FIELDHOUSE OPTION 2

Cap over rooms	6,700	sf	30.00	201,000
Ceiling finishes; paint exposed structure	72,000	gsf	3.00	216,000
SUBTOTAL				417,000

TOTAL - INTERIOR FINISHES	\$2,612,200
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D1o CONVEYING SYSTEMS

D1010 ELEVATOR

SUBTOTAL

TOTAL - CONVEYING SYSTEMS

D2o PLUMBING

D20 PLUMBING, GENERALLY

Plumbing package complete	72,000	gsf	10.00	720,000
SUBTOTAL				720,000

TOTAL - PLUMBING	\$720,000
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D3o HVAC

D30 HVAC, GENERALLY

HVAC System	72,000	gsf	50.00	3,600,000
SUBTOTAL				3,600,000

TOTAL - HVAC	\$3,600,000
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D4o FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

<u>Fire Equipment</u>				
Sprinkler system; complete	72,000	gsf	9.00	648,000
SUBTOTAL				648,000

TOTAL - FIRE PROTECTION	\$648,000
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D5o ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system

Panelboards/feeders	72,000	gsf	6.00	432,000
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Equipment Wiring

Feeders + Electrical to equipment	72,000	gsf	7.00	504,000
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SUBTOTAL				936,000
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D5020 LIGHTING & POWER

Lighting, Controls + Power	72,000	gsf	12.00	864,000
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SUBTOTAL				864,000
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D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	72,000	gsf	4.00	288,000
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Fire Alarm	72,000	gsf	3.00	216,000
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<u>Security System</u>	72,000	gsf	10.00	720,000
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SUBTOTAL				1,224,000
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D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	72,000	gsf	0.30	21,600
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Grounding	72,000	gsf	0.40	28,800
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Misc. demolition work	72,000	gsf	0.25	18,000
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Temp power and lights	72,000	gsf	1.20	86,400
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PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.2 - NEW FIELDHOUSE OPTION 2

Seismic restraints/Coordination/misc.	72,000	gsf	1.00	72,000
SUBTOTAL				226,800

TOTAL - ELECTRICAL	\$3,250,800
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

AV Equipment	1	ls	100,000.00	100,000
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116600 GYM EQUIPMENT

Gym Equipment	1	ls	500,000.00	500,000
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126000 SEATING

Retractable bleachers	1,500	seat	250.00	375,000
SUBTOTAL				975,000

TOTAL - EQUIPMENT	\$975,000
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window shades at exterior glazing; electric	7,700	sf	30.00	231,000
SUBTOTAL				231,000

E2020 MOBILE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL NIC

TOTAL - FURNISHINGS	\$231,000
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

SUBTOTAL

TOTAL - SPECIAL CONSTRUCTION	-
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F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

No items in this section

SUBTOTAL

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION	-
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SUBTOTAL

\$30,294,335

PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3

GROSS FLOOR AREA CALCULATION

New	13,600
Reno	34,400

TOTAL GROSS FLOOR AREA (GFA)

48,000 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings: 1 x 3

Formwork	600	sf	15.00	9,000
Re-bar	3,960	lbs.	2.50	9,900
Concrete material	23	cy	160.00	3,680
Placing concrete	23	cy	120.00	2,760

Perimeter foundation walls; 20" Thick x 3.5 ft H

Formwork	2,100	sf	21.00	44,100
Re-bar	5,250	lbs.	2.50	13,125
Concrete material	68	cy	160.00	10,880
Placing concrete	68	cy	120.00	8,160
Form shelf	300	lf	8.00	2,400

Spread Footings: 9 x 9 x 2

Formwork	2,448	sf	18.00	44,064
Re-bar	16,524	lbs.	2.50	41,310
Concrete material	214	cy	160.00	34,240
Placing concrete	214	cy	120.00	25,680
Set anchor bolts grout plates	34	ea	250.00	8,500
Piers	34	ea		
Formwork	408	sf	24.00	9,792
Re-bar	4,590	lbs	2.50	11,475
Concrete material	16	cy	160.00	2,560
Placing concrete	16	cy	160.00	2,560

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	1,200	sf	4.00	4,800
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	1,200	sf	3.00	3,600
Brick Shelf 4" insulation	300	lf	20.00	6,000

312000 EARTHWORK

Strip footings

Excavation	333	cy	14.00	4,662
Reuse excess material on site	91	cy	15.00	1,365
Backfill with select fill	242	cy	25.00	6,050

Spread footings

Excavation	609	cy	14.00	8,526
Reuse excess material on site	230	cy	15.00	3,450
Backfill with select fill	379	cy	25.00	9,475

Miscellaneous

Foundation drain	300	lf	30.00	9,000
SUBTOTAL				341,114

A1020 SPECIAL FOUNDATIONS

Rigid inclusions	13,600	sf	35.00	476,000
SUBTOTAL				476,000

A1030 LOWEST FLOOR CONSTRUCTION

033000 CONCRETE

Vapor barrier, 15mils	13,600	sf	1.25	17,000
<u>Slab on grade</u>	13,600	sf		
WWF reinforcement	15,640	sf	1.85	28,934

PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3

Concrete - 5" thick	217	cy	170.00	36,890	
Placing concrete	217	cy	65.00	14,105	
Finishing and curing concrete	13,600	sf	3.00	40,800	
Control joints - saw cut	13,600	sf	0.10	1,360	
Replace existing slab	34,400	sf	15.00	516,000	
<i>072100 THERMAL INSULATION</i>					
Under slab insulation, 2" thick under slab	13,600	sf	3.00	40,800	
<i>312000 EARTHWORK</i>					
Gravel base, 12"	504	cy	45.00	22,680	
Allowance for underslab drainage	13,600	sf	2.00	27,200	
Compact existing sub-grade	13,600	sf	0.50	6,800	
Underslab E&B for plumbing	13,600	sf	1.50	20,400	
SUBTOTAL					772,969

TOTAL - FOUNDATIONS

\$1,590,083

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

SUBTOTAL

-

B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 13 lbs per SF	88	tns	6,500.00	572,000
Modify existing framing	1	ls	150,000.00	150,000
<u>Decking</u>				

3" galvanized metal deck, acoustic; assume all new

48,000 sf 12.00 576,000

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	48,000	sf	5.00	NR
SUBTOTAL				1,298,000

TOTAL - SUPERSTRUCTURE

\$1,298,000

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area

28,000 Total closure area
22,400 sf total area solid

042000 MASONRY

Brick veneer; 100% of Solid	22,400	sf	44.00	985,600
8" Mineral wool at exterior closure (2 layers 4")	22,400	sf	7.50	168,000
Miscellaneous flashings and sealants	22,400	sf	1.50	33,600

PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3							
	Staging to exterior wall	22,400	sf	4.00	89,600		
055000	<i>MISC. METALS</i>						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	22,400	sf	1.50	33,600		
070001	<i>WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
	Air barrier	22,400	sf	10.00	224,000		
	Miscellaneous sealants to closure	22,400	sf	1.00	22,400		
072100	<i>THERMAL INSULATION</i>						
	4" Cellulose insulation in stud	22,400	sf	3.25	72,800		
	Insulation at glazed openings	1,867	lf	6.00	11,202		
076400	<i>CLADDING</i>						
	Composite metal panel, Alucobond or equal					NR	
092900	<i>GYPSUM BOARD ASSEMBLIES</i>						
	<i>Exterior wall;</i>						
	6" Stud backup	22,400	sf	16.00	358,400		
	Gypsum Sheathing	22,400	sf	3.50	78,400		
	Drywall lining to interior face of stud backup; IRGWB	22,400	sf	6.00	134,400		
101400	<i>SIGNAGE</i>						
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL					2,222,002	
B2020 WINDOWS							
	Exterior Wall Area						
061000	<i>ROUGH CARPENTRY</i>						
	Wood blocking at openings	1,867	lf	10.00	18,670		
070001	<i>WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
	Air barrier/flashing at windows	1,867	lf	10.00	18,670		
	Backer rod & double sealant	1,867	lf	11.00	20,537		
080001	<i>METAL WINDOWS</i>						
	Aluminum windows, triple glazed including interior and exterior trim per details	5,600	sf	175.00	980,000		
	Passive house premium					NR	
089000	<i>LOUVERS</i>						
	Louvers					N/A	
	SUBTOTAL					1,037,877	
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	48,000	gsf	1.00	48,000		
	SUBTOTAL					48,000	
TOTAL - EXTERIOR CLOSURE							
							\$3,307,879

B30 ROOFING

061000	<i>ROUGH CARPENTRY</i>						
	Rough carpentry and blocking @ roof	48,000	sf	1.50	72,000		
070002	<i>ROOFING AND FLASHING</i>						
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	48,000	total area	33.00	1,584,000		
	<i>Miscellaneous Roofing</i>						
	Miscellaneous flashings/copings/walkway pads etc.	48,000	sf	4.00	192,000		
	SUBTOTAL					1,848,000	

PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3

B3020 ROOF OPENINGS

SUBTOTAL

TOTAL - ROOFING		\$1,848,000

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001	MASONRY	Allowance for masonry partitions	6,104	sf	35.00	NR
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061000 ROUGH CARPENTRY

061000	ROUGH CARPENTRY	Backer panels in electrical closets	1	ls	10,000.00	10,000
		Wood blocking at interiors	48,000	gsf	0.50	24,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

070001	WATERPROOFING, DAMPROOFING AND CAULKING	Miscellaneous sealants throughout building	48,000	gsf	1.00	48,000
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SUBTOTAL

82,000

C1020 INTERIOR DOORS

Doors, frames, hardware; complete	17	lvs	3,500.00	NR
SUBTOTAL				-

C1030 SPECIALTIES / MILLWORK

055000	MISCELLANEOUS METALS	Miscellaneous metals throughout building	48,000	gsf	3.00	144,000
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101400 SIGNAGE

101400	SIGNAGE	Room identification, directional & safety signage, building directory + environmental graphics	48,000	gsf	2.00	96,000
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102800 TOILET ACCESSORIES

Toilet accessories/compartments	2	rms	1,500.00	3,000
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104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets	1	ls	9,736.14	9,736
AED cabinets	1	ls	2,000.00	2,000

105000 LOCKERS

Student lockers	48,000	gsf	1.50	72,000
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SUBTOTAL

326,736

TOTAL - INTERIOR CONSTRUCTION		\$408,736

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

SUBTOTAL

C2020 STAIR FINISHES

SUBTOTAL

TOTAL - STAIRCASES	

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package	48,000	gsf	3.00	144,000
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SUBTOTAL

144,000

C3020 FLOOR FINISHES

Rubber flooring	36,900	sf	18.00	664,200
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PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3

Floor finishes; Wood 50% of infield	15,000	sf	38.00	570,000
Floor finishes; track	8,700	sf	30.00	261,000
SUBTOTAL				1,495,200

C3030 CEILING FINISHES

Cap over rooms	5,664	sf	30.00	NR
Ceiling finishes; paint exposed structure	48,000	gsf	3.00	144,000
SUBTOTAL				144,000

TOTAL - INTERIOR FINISHES

\$1,783,200

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

SUBTOTAL

TOTAL - CONVEYING SYSTEMS

-

D20 PLUMBING

D20 PLUMBING, GENERALLY

Plumbing package complete	48,000	gsf	10.00	480,000
Temporary restrooms	1	ls	60,000.00	60,000
SUBTOTAL				540,000

TOTAL - PLUMBING

\$540,000

D30 HVAC

D30 HVAC, GENERALLY

HVAC System	48,000	gsf	50.00	2,400,000
SUBTOTAL				2,400,000

TOTAL - HVAC

\$2,400,000

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Fire Equipment				
Sprinkler system; complete	48,000	gsf	9.00	432,000
SUBTOTAL				432,000

TOTAL - FIRE PROTECTION

\$432,000

D50 ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution				
Normal power distribution system				
Panelboards/feeders	48,000	gsf	6.00	288,000
Equipment Wiring				
Feeders + Electrical to equipment	48,000	gsf	7.00	336,000
SUBTOTAL				624,000

D5020 LIGHTING & POWER

Lighting, Controls + Power	48,000	gsf	12.00	576,000
SUBTOTAL				576,000

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	48,000	gsf	4.00	192,000
Fire Alarm	48,000	gsf	3.00	144,000
Security System	48,000	gsf	10.00	480,000
SUBTOTAL				816,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3

D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	48,000	gsf	0.30	14,400
Grounding	48,000	gsf	0.40	19,200
Misc. demolition work	48,000	gsf	0.25	12,000
Temp power and lights	48,000	gsf	1.20	57,600
Seismic restraints/Coordination/misc.	48,000	gsf	1.00	48,000

SUBTOTAL

151,200

TOTAL - ELECTRICAL

\$2,167,200

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

AV Equipment	1	ls	100,000.00	100,000
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116600 GYM EQUIPMENT

Gym Equipment	1	ls	500,000.00	500,000
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126000 SEATING

Retractable bleachers	1,500	seat	250.00	375,000
SUBTOTAL				

975,000

TOTAL - EQUIPMENT

\$975,000

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window shades at exterior glazing; electric	5,600	sf	30.00	168,000
SUBTOTAL				

168,000

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

TOTAL - FURNISHINGS

\$168,000

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

SUBTOTAL

-

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

Remove existing closure	9,870	sf	10.00	98,700
Remove existing roofing	34,400	sf	5.00	172,000
Gut demolition	34,400	sf	10.00	344,000
SUBTOTAL				

614,700

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION

\$614,700

SUBTOTAL

\$17,532,798

PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

GROSS FLOOR AREA CALCULATION

Level 1

60,000

TOTAL GROSS FLOOR AREA (GFA)	60,000 sf
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A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Strip Footings; 1 x 3

Formwork	2,008	sf	15.00	30,120
Re-bar	13,253	lbs.	2.50	33,133
Concrete material	78	cy	160.00	12,480
Placing concrete	78	cy	120.00	9,360
<u>Perimeter foundation walls; 20" Thick x 3.5 ft H</u>				

Formwork	7,028	sf	21.00	147,588
Re-bar	17,570	lbs.	2.50	43,925
Concrete material	228	cy	160.00	36,480
Placing concrete	228	cy	120.00	27,360
Form shelf	1,004	lf	8.00	8,032

Spread Footings; 9 x 9 x 2

Formwork	10,800	sf	18.00	194,400
Re-bar	72,900	lbs.	2.50	182,250
Concrete material	945	cy	160.00	151,200
Placing concrete	945	cy	120.00	113,400
Set anchor bolts grout plates	150	ea	250.00	37,500
<u>Piers</u>				

Formwork	1,800	sf	24.00	43,200
Re-bar	20,250	lbs.	2.50	50,625
Concrete material	70	cy	160.00	11,200
Placing concrete	70	cy	160.00	11,200

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Damproofing @ foundation wall	4,016	sf	4.00	16,064
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	4,016	sf	3.00	12,048
Brick Shelf 4" insulation	1,004	lf	20.00	20,080

312000 EARTHWORK

<u>Strip footings</u>				
Excavation	1,116	cy	14.00	15,624
Reuse excess material on site	306	cy	15.00	4,590
Backfill with select fill	810	cy	25.00	20,250
<u>Spread footings</u>				

Excavation	2,689	cy	14.00	37,646
Reuse excess material on site	1,015	cy	15.00	15,225
Backfill with select fill	1,674	cy	25.00	41,850
<u>Miscellaneous</u>				

Foundation drain	1,004	lf	30.00	30,120
SUBTOTAL				1,356,950

A1020 SPECIAL FOUNDATIONS

Rigid inclusions	60,000	sf	35.00	2,100,000
SUBTOTAL				2,100,000

A1030 LOWEST FLOOR CONSTRUCTION

033000 CONCRETE

Vapor barrier, 15mils	60,000	sf	1.25	75,000
<u>Slab on grade</u>	60,000	sf		
WWF reinforcement	69,000	sf	1.85	127,650
Concrete - 5" thick	957	cy	170.00	162,690

PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

Placing concrete	957	cy	65.00	62,205
Finishing and curing concrete	60,000	sf	3.00	180,000
Control joints - saw cut	60,000	sf	0.10	6,000
072100 THERMAL INSULATION				
Under slab insulation, 2" thick under slab	60,000	sf	3.00	180,000
312000 EARTHWORK				
Gravel base, 12"	2,222	cy	45.00	99,990
Allowance for underslab drainage	60,000	sf	2.00	120,000
Compact existing sub-grade	60,000	sf	0.50	30,000
Underslab E&B for plumbing	60,000	sf	1.50	90,000
SUBTOTAL				1,133,535

TOTAL - FOUNDATIONS	\$4,590,485
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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

SUBTOTAL

B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 13 lbs per SF	390	tns	6,500.00	2,535,000
<u>Decking</u> 3" galvanized metal deck, acoustic	60,000	sf	12.00	720,000

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes
Intumescent

SUBTOTAL

3,255,000

TOTAL - SUPERSTRUCTURE	\$3,255,000
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B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area

35.140 Total closure area
28,112 sf total area solid

042000 MASONRY

Brick veneer; 60% of Solid	16,867	sf	44.00	742,148
8" Mineral wool at exterior closure (2 layers 4")	28,112	sf	7.50	210,840
Miscellaneous flashings and sealants	28,112	sf	1.50	42,168
Staging to exterior wall	28,112	sf	4.00	112,448

055000 MISC. METALS

Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	16,867	sf	1.50	25,301
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PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Air barrier	28,112	sf	10.00	281,120
Miscellaneous sealants to closure	28,112	sf	1.00	28,112

072100 THERMAL INSULATION

4" Cellulose insulation in stud	28,112	sf	3.25	91,364
Insulation at glazed openings	2,343	lf	6.00	14,058

076400 CLADDING

Composite metal panel, Alucobond or equal; 40%	11,245	sf	100.00	1,124,500
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092900 GYPSUM BOARD ASSEMBLIES

<i>Exterior wall;</i>				
6" Stud backup	28,112	sf	16.00	449,792
Gypsum Sheathing	28,112	sf	3.50	98,392
Drywall lining to interior face of stud backup; IRGWB	28,112	sf	6.00	168,672

101400 SIGNAGE

Exterior signage - allowance	1	ls	10,000.00	10,000
SUBTOTAL			3,398,915	

B2020 WINDOWS

Exterior Wall Area

7,028 sf

061000 ROUGH CARPENTRY

Wood blocking at openings	2,343	lf	10.00	23,430
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070001 WATERPROOFING, DAMPROOFING AND CAULKING

Air barrier/flashing at windows	2,343	lf	10.00	23,430
Backer rod & double sealant	2,343	lf	11.00	25,773

080001 METAL WINDOWS

Aluminum windows, triple glazed including interior and exterior trim per details	7,028	sf	175.00	1,229,900
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Passive house premium NR

089000 LOUVERS

Louvers N/A

SUBTOTAL 1,302,533

B2030 EXTERIOR DOORS

Allowance for exterior doors	60,000	gsf	1.00	60,000
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SUBTOTAL 60,000

TOTAL - EXTERIOR CLOSURE **\$4,761,448**

B30 ROOFING

061000 ROUGH CARPENTRY

Rough carpentry and blocking @ roof	60,000	sf	1.50	90,000
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070002 ROOFING AND FLASHING

PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	60,000	total area	33.00	1,980,000
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Miscellaneous Roofing

Miscellaneous flashings/copings/walkway pads etc.	60,000	sf	4.00	240,000
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SUBTOTAL 2,310,000

B3020 ROOF OPENINGS

SUBTOTAL -

TOTAL - ROOFING **\$2,310,000**

PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY

Allowance for masonry partitions

6,104 sf

35.00

213,640

061000 ROUGH CARPENTRY

Backer panels in electrical closets

1 ls

10,000.00

10,000

Wood blocking at interiors

60,000 gsf

0.50

30,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

Miscellaneous sealants throughout building

60,000 gsf

1.00

60,000

SUBTOTAL

313,640

C1020 INTERIOR DOORS

Doors, frames, hardware; complete

17 lvs

3,500.00

59,500

SUBTOTAL

59,500

C1030 SPECIALTIES / MILLWORK

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building

60,000 gsf

3.00

180,000

101400 SIGNAGE

Room identification, directional & safety signage, building directory + environmental graphics

60,000 gsf

2.00

120,000

102800 TOILET ACCESSORIES

Toilet accessories/compartments

2 rms

1,500.00

3,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets

1 ls

11,450.43

11,450

AED cabinets

1 ls

2,000.00

2,000

105000 LOCKERS

Student lockers

60,000 gsf

1.50

90,000

SUBTOTAL

406,450

TOTAL - INTERIOR CONSTRUCTION

\$779,590

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

SUBTOTAL

C2020 STAIR FINISHES

SUBTOTAL

TOTAL - STAIRCASES

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package

60,000 gsf

3.00

180,000

180,000

C3020 FLOOR FINISHES

Rubber flooring

44,000 sf

18.00

792,000

Floor finishes; Wood 50% of infield

14,000 sf

38.00

532,000

Floor finishes; track

13,000 sf

30.00

390,000

SUBTOTAL

1,714,000

C3030 CEILING FINISHES

PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

Cap over rooms	5,664	sf	30.00	169,920
Ceiling finishes; paint exposed structure	60,000	gsf	3.00	180,000
SUBTOTAL				349,920

TOTAL - INTERIOR FINISHES	\$2,243,920
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR

SUBTOTAL

TOTAL - CONVEYING SYSTEMS	
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D20 PLUMBING

D20 PLUMBING, GENERALLY

Plumbing package complete	60,000	gsf	10.00	600,000
SUBTOTAL				600,000

TOTAL - PLUMBING	\$600,000
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D30 HVAC

D30 HVAC, GENERALLY

HVAC System	60,000	gsf	50.00	3,000,000
SUBTOTAL				3,000,000

TOTAL - HVAC	\$3,000,000
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D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Fire Equipment

Sprinkler system; complete	60,000	gsf	9.00	540,000
SUBTOTAL				540,000

TOTAL - FIRE PROTECTION	\$540,000
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D50 ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system	60,000	gsf	6.00	360,000
Panelboards/feeders				

Equipment Wiring

Feeders + Electrical to equipment	60,000	gsf	7.00	420,000
SUBTOTAL				780,000

D5020 LIGHTING & POWER

Lighting, Controls + Power	60,000	gsf	12.00	720,000
SUBTOTAL				720,000

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	60,000	gsf	4.00	240,000
Fire Alarm	60,000	gsf	3.00	180,000

Security System	60,000	gsf	10.00	600,000
SUBTOTAL				1,020,000

D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	60,000	gsf	0.30	18,000
Grounding	60,000	gsf	0.40	24,000
Misc. demolition work	60,000	gsf	0.25	15,000
Temp power and lights	60,000	gsf	1.20	72,000

PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

Seismic restraints/Coordination/misc.	60,000	gsf	1.00	60,000
SUBTOTAL				189,000

TOTAL - ELECTRICAL	\$2,709,000
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

AV Equipment	1	ls	100,000.00	100,000
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116600 GYM EQUIPMENT

Gym Equipment	1	ls	500,000.00	500,000
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126000 SEATING

Retractable bleachers	1,500	seat	250.00	375,000
SUBTOTAL				975,000

TOTAL - EQUIPMENT	\$975,000
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS

122100 WINDOW TREATMENT

Window shades at exterior glazing; electric	7,028	sf	30.00	210,840
SUBTOTAL				210,840

E2020 MOBILE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL NIC

TOTAL - FURNISHINGS	\$210,840
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F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

SUBTOTAL

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

No items in this section

SUBTOTAL

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION
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SUBTOTAL

\$25,975,283

PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5

GROSS FLOOR AREA CALCULATION

Reno 34,000

TOTAL GROSS FLOOR AREA (GFA)

34,000 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

SUBTOTAL

A1020 SPECIAL FOUNDATIONS

SUBTOTAL

A1030 LOWEST FLOOR CONSTRUCTION

Replace existing slab

34,000 sf

15.00

510,000

SUBTOTAL

510,000

TOTAL - FOUNDATIONS

\$510,000

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

SUBTOTAL

B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Modify existing framing

1 ls

150,000.00

NR

Decking

3" galvanized metal deck, acoustic; assume all new

34,000 sf

12.00

ETR

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes
Intumescent

34,000 sf

5.00

NR

SUBTOTAL

TOTAL - SUPERSTRUCTURE

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area

23,030 Total closure area

18,424 sf total area solid

042000 MASONRY

Brick veneer; 100% of Solid

18,424 sf

44.00

810,656

8" Mineral wool at exterior closure (2 layers 4")

18,424 sf

7.50

138,180

Miscellaneous flashings and sealants

18,424 sf

1.50

27,636

PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5							
	Staging to exterior wall	18,424	sf	4.00	73,696		
055000	<i>MISC. METALS</i>						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	18,424	sf	1.50	27,636		
070001	<i>WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
	Air barrier	18,424	sf	10.00	184,240		
	Miscellaneous sealants to closure	18,424	sf	1.00	18,424		
072100	<i>THERMAL INSULATION</i>						
	4" Cellulose insulation in stud	18,424	sf	3.25	59,878		
	Insulation at glazed openings	1,535	lf	6.00	9,210		
076400	<i>CLADDING</i>						
	Composite metal panel, Alucobond or equal					NR	
092900	<i>GYPSUM BOARD ASSEMBLIES</i>						
	<i>Exterior wall;</i>						
	6" Stud backup	18,424	sf	16.00	294,784		
	Gypsum Sheathing	18,424	sf	3.50	64,484		
	Drywall lining to interior face of stud backup; IRGWB	18,424	sf	6.00	110,544		
101400	<i>SIGNAGE</i>						
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL					1,829,368	
B2020 WINDOWS							
	Exterior Wall Area						
061000	<i>ROUGH CARPENTRY</i>						
	Wood blocking at openings	1,535	lf	10.00	15,350		
070001	<i>WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
	Air barrier/flashing at windows	1,535	lf	10.00	15,350		
	Backer rod & double sealant	1,535	lf	11.00	16,885		
080001	<i>METAL WINDOWS</i>						
	Aluminum windows, triple glazed including interior and exterior trim per details	4,606	sf	175.00	806,050		
	Passive house premium					NR	
089000	<i>LOUVERS</i>						
	Louvers					N/A	
	SUBTOTAL					853,635	
B2030 EXTERIOR DOORS							
	Allowance for exterior doors	34,000	gsf	1.00	34,000		
	SUBTOTAL					34,000	
TOTAL - EXTERIOR CLOSURE							\$2,717,003

B30 ROOFING

061000	<i>ROUGH CARPENTRY</i>						
	Rough carpentry and blocking @ roof	34,000	sf	1.50	51,000		
070002	<i>ROOFING AND FLASHING</i>						
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	34,000	total area				
	Miscellaneous Roofing	34,000	sf	33.00	1,122,000		
	Miscellaneous flashings/copings/walkway pads etc.	34,000	sf	4.00	136,000		
	SUBTOTAL					1,309,000	

PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5

B3020 ROOF OPENINGS

SUBTOTAL

TOTAL - ROOFING	\$1,309,000
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001	MASONRY	Allowance for masonry partitions	6,104	sf	35.00	NR
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061000 ROUGH CARPENTRY

061000	ROUGH CARPENTRY	Backer panels in electrical closets	1	ls	10,000.00	10,000
		Wood blocking at interiors	34,000	gsf	0.50	17,000

070001 WATERPROOFING, DAMPROOFING AND CAULKING

070001	WATERPROOFING, DAMPROOFING AND CAULKING	Miscellaneous sealants throughout building	34,000	gsf	1.00	34,000
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SUBTOTAL

61,000

C1020 INTERIOR DOORS

Doors, frames, hardware; complete	17	lvs	3,500.00	NR
SUBTOTAL				-

C1030 SPECIALTIES / MILLWORK

055000	MISCELLANEOUS METALS	Miscellaneous metals throughout building	34,000	gsf	3.00	102,000
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101400 SIGNAGE

101400	SIGNAGE	Room identification, directional & safety signage, building directory + environmental graphics	34,000	gsf	2.00	68,000
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102800 TOILET ACCESSORIES

Toilet accessories/compartments	2	rms	1,500.00	3,000
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104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets	1	ls	7,736.14	7,736
AED cabinets	1	ls	2,000.00	2,000

105000 LOCKERS

Student lockers	34,000	gsf	1.50	51,000
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SUBTOTAL

233,736

TOTAL - INTERIOR CONSTRUCTION	\$294,736
--------------------------------------	------------------

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

SUBTOTAL

C2020 STAIR FINISHES

SUBTOTAL

TOTAL - STAIRCASES

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package	34,000	gsf	3.00	102,000
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SUBTOTAL

102,000

C3020 FLOOR FINISHES

Rubber flooring	26,100	sf	18.00	469,800
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PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5

Floor finishes; track	6,200	sf	30.00	186,000	
SUBTOTAL					655,800

C3030 CEILING FINISHES

Ceiling finishes; paint exposed structure	34,000	gsf	3.00	102,000	
SUBTOTAL					102,000

TOTAL - INTERIOR FINISHES	\$859,800
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D10 D10 CONVEYING SYSTEMS

D1010 ELEVATOR

SUBTOTAL					-
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TOTAL - CONVEYING SYSTEMS

D20 D20 PLUMBING

D20 D20 PLUMBING, GENERALLY

Plumbing package complete	34,000	gsf	10.00	340,000	
SUBTOTAL					340,000

TOTAL - PLUMBING	\$340,000
-------------------------	------------------

D30 D30 HVAC

D30 D30 HVAC, GENERALLY

HVAC System	34,000	gsf	50.00	1,700,000	
SUBTOTAL					1,700,000

TOTAL - HVAC	\$1,700,000
---------------------	--------------------

D40 D40 FIRE PROTECTION

D40 D40 FIRE PROTECTION, GENERALLY

<u>Fire Equipment</u>	34,000	gsf	9.00	306,000	
Sprinkler system; complete					306,000
SUBTOTAL					

TOTAL - FIRE PROTECTION	\$306,000
--------------------------------	------------------

D50 D50 ELECTRICAL

D5010 D5010 ELECTRICAL SYSTEMS

Gear & Distribution

Normal power distribution system					
Panelboards/feeders	34,000	gsf	6.00	204,000	
<u>Equipment Wiring</u>					
Feeders + Electrical to equipment	34,000	gsf	7.00	238,000	
SUBTOTAL					442,000

D5020 D5020 LIGHTING & POWER

Lighting, Controls + Power	34,000	gsf	12.00	408,000	
SUBTOTAL					408,000

D5030 D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock	34,000	gsf	4.00	136,000	
<u>Fire Alarm</u>	34,000	gsf	3.00	102,000	
<u>Security System</u>	34,000	gsf	10.00	340,000	
SUBTOTAL					578,000

D5040 D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical

Lightning prevention	34,000	gsf	0.30	10,200	
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PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5

Grounding	34,000	gsf	0.40	13,600
Misc. demolition work	34,000	gsf	0.25	8,500
Temp power and lights	34,000	gsf	1.20	40,800
Seismic restraints/Coordination/misc.	34,000	gsf	1.00	34,000
SUBTOTAL				107,100

TOTAL - ELECTRICAL	\$1,535,100
---------------------------	--------------------

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

AV Equipment	1	ls	100,000.00	100,000
<i>116600 GYM EQUIPMENT</i>				
Gym Equipment	1	ls	500,000.00	500,000
<i>126000 SEATING</i>				
Retractable bleachers	750	seat	250.00	187,500
SUBTOTAL				787,500

TOTAL - EQUIPMENT	\$787,500
--------------------------	------------------

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

<i>122100 WINDOW TREATMENT</i>				
Window shades at exterior glazing; electric	4,606	sf	30.00	138,180
SUBTOTAL				138,180

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner	
SUBTOTAL	NIC

TOTAL - FURNISHINGS	\$138,180
----------------------------	------------------

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

SUBTOTAL	-
TOTAL - SPECIAL CONSTRUCTION	

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

Remove existing closure	9,870	sf	10.00	98,700
Remove existing roofing	34,000	sf	5.00	170,000
Gut demolition	34,000	sf	10.00	340,000
SUBTOTAL				608,700

F2020 HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance	See Summary
SUBTOTAL	

TOTAL - SELECTIVE BUILDING DEMOLITION	\$608,700
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SUBTOTAL	\$11,106,019
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PSR Options Cost Estimate

GFA

34,600

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6

GROSS FLOOR AREA CALCULATION

Reno	34,000
New Addition	600

TOTAL GROSS FLOOR AREA (GFA)

34,600 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

New foundations	600	sf	40.00	24,000
SUBTOTAL				24,000

A1020 SPECIAL FOUNDATIONS

SUBTOTAL				-
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A1030 LOWEST FLOOR CONSTRUCTION

New SOG	600	sf	20.00	12,000
SUBTOTAL				12,000

TOTAL - FOUNDATIONS

\$36,000

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

SUBTOTAL				-
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B1020 ROOF CONSTRUCTION

051200 STRUCTURAL STEEL FRAMING

Modify existing framing	1	ls	150,000.00	NR
<u>Decking</u>				
3" galvanized metal deck, acoustic; assume all new	34,600	sf	12.00	NR

078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes	34,600	sf	5.00	NR
Intumescent				-
SUBTOTAL				-

TOTAL - SUPERSTRUCTURE

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area	23,030	Total closure area
	18,424	sf total area solid
New headhouse for ductwork	1	ls
		40,000.00
SUBTOTAL		40,000

B2020 WINDOWS

PSR Options Cost Estimate

GFA

34,600

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6

SUBTOTAL

B2030 EXTERIOR DOORS

Vestibule doors

1 ls 15,000.00 15,000

SUBTOTAL

15,000

TOTAL - EXTERIOR CLOSURE	\$55,000
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B30 ROOFING

SUBTOTAL

B3020 ROOF OPENINGS

SUBTOTAL

TOTAL - ROOFING

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

040001 MASONRY

Allowance for masonry partitions

1 ls 5,000.00 5,000

SUBTOTAL

5,000

C1020 INTERIOR DOORS

Doors, frames, hardware; complete

4 lvs 3,500.00 14,000

SUBTOTAL

14,000

C1030 SPECIALTIES / MILLWORK

101400 SIGNAGE

Room identification, directional & safety signage, building directory
+ environmental graphics

1 ls 1,000.00 1,000

102800 TOILET ACCESSORIES

Toilet accessories/compartments

2 rms 1,500.00 3,000

SUBTOTAL

4,000

TOTAL - INTERIOR CONSTRUCTION	\$23,000
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C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes complete package

600 gsf 15.00 9,000

SUBTOTAL

9,000

C3020 FLOOR FINISHES

Flooring

600 sf 40.00 24,000

SUBTOTAL

24,000

C3030 CEILING FINISHES

Ceiling finishes; paint exposed structure

600 gsf 3.00 1,800

SUBTOTAL

1,800

TOTAL - INTERIOR FINISHES	\$34,800
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR

SUBTOTAL

-

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6

TOTAL - CONVEYING SYSTEMS							
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D2o PLUMBING

D2o PLUMBING, GENERALLY

Plumbing package complete
SUBTOTAL

600 gsf 40.00 24,000

24,000

TOTAL - PLUMBING	\$24,000
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D3o HVAC

D3o HVAC, GENERALLY

Replace existing 25,000 cfm
Clean ductwork
New DDC controls
HVAC System at addition
SUBTOTAL

1 ls 750,000.00 750,000
34,000 gsf 1.00 34,000
34,000 gsf 5.00 170,000
600 gsf 50.00 30,000
984,000

TOTAL - HVAC	\$984,000
---------------------	------------------

D4o FIRE PROTECTION

D4o FIRE PROTECTION, GENERALLY

Fire Equipment
Sprinkler system; complete
SUBTOTAL

600 gsf 9.00 5,400

5,400

TOTAL - FIRE PROTECTION	\$5,400
--------------------------------	----------------

D5o ELECTRICAL

D5010 ELECTRICAL SYSTEMS

Equipment Wiring
Feeders + Electrical to equipment
SUBTOTAL

600 gsf 7.00 4,200

4,200

D5020 LIGHTING & POWER

Lighting, Controls + Power
SUBTOTAL

600 gsf 12.00 7,200

7,200

D5030 COMMUNICATION & SECURITY SYSTEMS

Telecommunications/PA + Clock
Fire Alarm
Security System
SUBTOTAL

600 gsf 4.00 2,400
600 gsf 3.00 1,800
600 gsf 10.00 6,000

10,200

D5040 OTHER ELECTRICAL SYSTEMS

Common Work Results for Electrical
Misc. demolition work
Temp power and lights
Seismic restraints/Coordination/misc.
SUBTOTAL

600 gsf 0.25 150
600 gsf 1.20 720
600 gsf 1.00 600

1,470

TOTAL - ELECTRICAL	\$23,070
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E1o EQUIPMENT

E1o EQUIPMENT, GENERALLY

SUBTOTAL

TOTAL - EQUIPMENT	-
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

SUBTOTAL

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

TOTAL - FURNISHINGS

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

PEMB

600

gsf

100.00

60,000

60,000

TOTAL - SPECIAL CONSTRUCTION

\$60,000

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

SUBTOTAL

\$1,245,270

D. Master Educational Plan (markups)

LEXINGTON PUBLIC SCHOOLS

Joy | Curiosity | Compassion



Photo credit to Vikram Anantha, Lexington High School, Class of 2024.

THE EDUCATIONAL PLAN FOR LEXINGTON HIGH SCHOOL

LPS MISSION: JOY IN LEARNING | CURIOSITY IN LIFE | COMPASSION IN ALL WE DO

Special Thanks to Plan Contributors

Lexington School Committee

Sara Cuthbertson
Eileen Jay
Larry Freeman

Kathleen Lenihan
Deepika Sawhney

Lexington School Building Committee

Kathleen Lenihan
Michael Cronin
Julie Hackett
James Malloy
Joe Pato
Mark Barret
Chuck Favazzo Jr.

Jon Himmel
Andrew Baker
Carolyn Kosnoff
Hsing Min Sha
Kseniya Slavksy
Charles Lamb
Alan Levine
Dan Voss

Lexington Student - School Building Committee

Nitsa Agarwal
Jason Atanasov
Lola Capapey
Ananya Chopra
Madeline Huang
Nidhi Inamdar
Rithvik Iyer
Shaurya Kasi
Langlen Khurajam
Elle Kieval
Keshav Krishna

Brynnna Kurspahic
Shiyu Liu
Alex Mao
Rayan Mohsenzadeh
Nanako Nishikori
Juliana Nudi
Yuna Ono
Franklin
Guerrero-Plasencia
Kenisha Ramakrishnan
Izadore Schuman-Olivier
Ziqin (Sophia) Sha

Amir Shalabi
Jeongwon Suh
Sanjana Thesayi
Marcus Tisdale
Spencer Tisdale
Ella Tyson
Nishanth Veeragandham
Jason Wong
Rebecca Wu
Christina Xiao
Elizabeth Yan

Lexington High School Faculty

Zachary Abdu-Glass	Melissa Brooks	Amy Daniels
Daniel Abramovich	Christopher Brunner	Tammy Darling
Stephen Abreu	Renee Bryant	Alessandro DaSilva
Barbara Adolph	Thomas Buckley	Lawrence David
Danielle Agresti	Marjorie Bulger	Robin Davidian
Nicholas Akers	Nicole Canniff	Amir Davis
Ariana Akram	Marc Cantor	Habiba Davis
Glenn Allen	Krista Cardellicchio	Jane Day
Janet Almeida	Anne Carey	Felicia De Soriano
Elyse Amicangioli	Angela Carpenter	Stephen DeFrancesco
Kelly Anderson	Melissa Carroll	Kristie Demirev
Sarah Anderson	Carin Casey	Diane Dennehy
Jessica Antoline	Edward Casey	Scott Dennehy
Justin Aramat	Ryan Casey	Kristen DePesa
Cynthia Arens	Jared Cassedy	Kathryn Dewitt
Jane Aronson	Evalinda Castaneda	Evan Dodge
Heather Arrigo	Kelly Chamberlin	Patrick Donaher
Emma Auden	Carrissa Cho	Margaret Donnellan
Skip Avery	Chelsea Choate	Maeve Donnelly
Stephen Babbitt	Shelby Chung	Stephen Dooley
Sukhmani Bains	Amanda Ciarletta	Paola Dorfmann
Andrew Baker	Peter Cimini	Christopher Doucette
Christiana Bakolas	Jennifer Cohen	Jordan Dowling
Danielle Ballou	Siobhan Collins	David Drellich
Andriy Barchuk	Kirsty Collis	Kerry Dunne
Michelle Barkson	Carrie Conlon	Dakota Durbin
Damian Barneschi	Suzanne Conlon	Rachel Durocher
Erin Barrett	Joseph Conroy	Marshall Dury
Edward Barry	Tracy Conte	Taylor Dyer
Joanne Barry	Elizabeth Cook	Michael Egbert
Linda Bartlett	Hannah Coombs	Jay Eidson
Jeremie Bateman	Edward Cooper	Blessing Emmanuel
Paul Belenky	Wendy Cordero	Robert Erickson
Theresa Bell	Maggie Correa	Jacqui Falco
Jane Bergin	Marlene Couture	Caroline Fantasia
Sadie Biale	Michelle Coyle	James Farnham
Jessica Billings-White	Abigail Coyne	Julie Fenn
Olivia Bliss	Sarah Cravedi	Laura Ferrari
Carolyn Boggia-Dooley	Alyssa Creney	Samantha Flannery
Erzsebet Bognar	Thomas Cunningham	Patrick Flynn
Madinah Bond	Nicholas Curran	Heather Foley
Rilie Bouchard	Elizabeth Curtin	Toby Forman
Allison Bradley	Karlee Dana	Brooke Forrelli

EDUCATIONAL PLAN - LEXINGTON HIGH SCHOOL

Aubrey Frazier	User Ima Test	Patricia Lyons
Rosa Freitas Sousa	Felicity Inthisone	Scott Maitland
Marissa Gable	Deborah Jackson	April Maloney
Matthew Gardner	Rachel Jayson	Rebecca Malouf
Brittney Geary	Julie Jeffery	Brooke Mancuso
Holly Gilligan	Patricia Jenness	Katherine Manning
Ashley Gillooly	Lin Jensen	Robert Marcin
Stacy Glickman	Jamie Johannsen	Justin Marsh
Cara Goldberg	Sheryl Kaczmarek	Erick Martha-Reynolds
Rafael Gomez Nunez	Susan Kaftan	Naomi Martin
Jessica Goodstone	Gabriel Kaprielian	Barbara Mattos
Jill Gormisky	Arpan Kaur	Linda Mayer
Nicholas Gould	Kevin Kelly	Rina Mazor
Katherine Grady	Kelly Kilts	Tina McBride
Ryan Grams	Heather Kimura	Debra McCanne
Maria-Liza Granada	Joshua King	Matthew McCarthy
Ashley Grant	Lori King	Timothy McClelland
Kristen Grant	Susanne Klein	Amanda McDonald
Shannon Grant	Scott Kmack	Stacy McFadden
Shalini Gupta	Sheera Knecht	Jane McFarland
Jeanmarie Hale	Meric Kocer	Jessica McGarvie
Sarah Hall	Parul Kumar	Jeffrey McKearney
Carrie Hamblin	Sarah Labrie	Ian McWilliams
Barbara Hamilton	Sherry Laderoute	Matthew Medugno
Debra Hankins	Ashley Lai	Daniel Melia
John Harper	Erin Langton	Annmarie Meuse
Monique Harris Schramme	Cynthia Larkin Traynham	Veronique Meyer
Jeffrey Harris	Patrick Larkin	Stephanie Michael
Maureen Haviland	Jenna Lashley	Charles Mixer
Emirjona Haxhimihali	Rachel LeBlanc	Steven Moody
Caitlyn Hayden	Rachel LeComte	Amy Moran
Heather Hayes	Sarah Legge	Brendan Moran
Sophia Hayward	Gregory LeMay	Emily Moran
Justin Hemm	Brian Lenihan	Greg Morano
Kathleen Henry	Ruth Levanoni	Arielle Mossberg
Eileen Hirsch	Nia Levell	John Moynagh
Reginald Hobbs	Sarah Lewis	Dianne Murphy
Carter Hoey	Sandra Lewitzky	Alexa Muse
Michael Horesh	Counseling LHS	Bethany Newberg
Samantha Hotz	Main Office LHS	Jonathan Ng
David Hough	Taylor Liljegren	Michael Ng
Annina Hsieh	Matthew Linden	Elizabeth Nichols
Karen Hurley	Yan Liu	Olivia Nolen-Carr
Jason Iannuzzi	Alexandra Lonardo	Janet Novack
Elizabeth Ilagan	Samantha Lowe	Kimberly Nudi

EDUCATIONAL PLAN - LEXINGTON HIGH SCHOOL

David O'Connell	Carol Sampson	Saffana Syed
Lisa Olaharski	Michael Sanborn	Cameron Tabatabaie
Joshua Olivier-Mason	Maria Monica Sanderson	Rachel Tadeu
Emily O'Neil	Hannah Sanville	Ann Tenhor
Francis Pagliuca	Lucciana Sarkis	Paul Tiernan
Brielle Palin	Scot Schaming	Jenny Torrice
Casey Paoletti	Kimberly Scheltz	Michaela Tracy
Amy Parrish	Leah Schwartz	Leah Travers
Erin Patterson	Mary Gretchen Segars	Stacey Truesdale
Casey Paulhus	Kellie Shapazian	Heather Tunnicliffe
Eric Pekarsky	Nicole Shapoff	Edward Unger
Kelly Pendergast	Ciara Shaughnessy	Aban Unwalla
Sarah Perez	Ellen Shea	Erica Uriarte
Nicholas Pezzote	Eamonn Sheehan	Jeanette Urquhart
Francesca Pfrommer	Laura Sheppard-Brick	Claudia Vanegas
Sandra Pike	Margaret Shih	Kristine Vargas
Andrew Porter	Joshua Sideman	Lauren Venuti
Linda Prisco	Geraldo Silva	Andre Verner
Joseph Quarantello	Jillian Singer-Wong	Lindsey Wall
Martha Queenin	Donna Sintiris	Harriet Wallen
Anita Quinn	Camryn Skinner	David Walsh
Thomas Quirk	Leah Small	Christen Walters
Anna Raboin	Ashley Smith	Carlton Ward
Jason Rajotte	Steven Solly	Jonathon Weintraub
Emelyn Ramirez-Galindez	Veronica Solomon	Eric Weiss
Rebekah Rankin	Michael Sopko	Jessica Welch
Christina Rausa	Melissa Soule	Janet West
Marianne Reamer	Valentina Sountsova	Marylee White
Domingo Regalado	Bryce Spalding	Nathan Wilcox
Kade Reticker	Tiffany Spano	Steven Wilkins
Zachary Rhodes	Jessica Sperandio	Megan Willey
Annie Richards	Test Staff	Shane Wilson
Walter Richardson	Robin Strizhak	David Wininger
Elizabeth Riley	Kristin Strobel	Kiyanna Wise
Katelyn Riley	Christine Stueve	Rynel Wise
Stephanie Ringer	Kelly Suber	Jennifer Wolcott
Carrie Rogaris	Christine Sullivan	Madeline Wong
Elyn Rossi	Conor Sullivan	Jieying Yao
Paola Rossi	Debra Sullivan	Mary Zeytoonian
Alethea Roy	Joseph Sullivan	Lily Zhu
Kimberly Rudge	Michael Sullivan	
Marie Saba	Rohen Sundaram	

EDUCATIONAL PLAN - LEXINGTON HIGH SCHOOL

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PART I: INTRODUCTION

Town Demographics

Our core values are uniquely reflective of our school community, but none so much as “embrace your revolutionary spirit,” which is a nod to Lexington’s rich history, fierce independence, and passion for innovation. Lexington is a suburban town in Middlesex County, Massachusetts, located only ten (10) miles from Downtown Boston. The population was 34,454 as of the 2020 census; the area was originally inhabited by indigenous peoples and then settled by Europeans in 1641. Lexington is well-known as the site of the first shots of the [American Revolutionary War](#), in the [Battle of Lexington](#) on April 19, 1775, otherwise known as the location of the notorious “shot heard ‘round the world.”

Our community values education and Lexington residents demonstrate their deep commitment in many ways. According to the U.S. Census Bureau, approximately [84.9% of Lexington residents have a Bachelor's degree or higher](#) compared to 44.5% in Massachusetts. [The Town of Lexington was named the fourth most educated city \(town\) in America.](#) In the last two years, not one, but two Lexington High School graduates were named Nobel Prize Winners, including [Dr. Carolyn Bertozzi](#) and [Dr. Drew Weismann](#). Dr. Bertozzi, now a Stanford University professor, was honored for developing chemical techniques used to study cancer, immune disease, pathogens, and more. Dr. Weismann, now a professor at the Roberts Family Professor in Vaccine Research at the University of Pennsylvania Perelman School of Medicine, acknowledges his strong interest in biology that blossomed at Lexington High School. His groundbreaking efforts “fundamentally changed our understanding of how mRNA interacts with our immune system,” leading to the recognition (along with his co-researcher, Katalin Kariko) of his “pioneering work developing the technology that powers the Pfizer-BioNTech and Moderna COVID-19 vaccines.” Perhaps what is most impressive about Dr. Weismann’s accomplishment is the understanding that his [prize-winning research](#) happened 15 years before COVID-19.

Lexington’s well-educated populace brings higher wages to the community, as well as improved health outcomes, lower mortality rates, and lower crime rates. Increased resources in a safe community profoundly focused on education help all children thrive, and a strong commitment to public education contributes to our school community’s success. Four of Lexington’s nine schools (not including Lexington Children’s Place) have been named National Blue Ribbon Schools, including Bridge Elementary School, Harrington Elementary School, Hastings Elementary School, and Jonas Clarke Middle School. Lexington Public Schools is consistently recognized as one of the top school systems in the United States. In 2021, [Jonas Clarke Middle School ranks 9th best middle school in Massachusetts](#). In 2022, [Lexington High School was recognized as the fourth best high school in Massachusetts](#), and the only traditional academic public school (i.e., non-charter school) to be recognized in the top four best high schools in the State. In addition to excellent academic outcomes and a 99%

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graduation rate, our students excel in the creative and performing arts and successfully compete at the national level. The success of LPS is a testament to the hard work of our students, faculty and staff and our community's unwavering commitment to educational excellence.

District & School Configuration

LPS comprises ten schools and services approximately 6,843 students (as of October 1st enrollment counts) from preschool through 12th grade. Preschool students attend Lexington Children's Place (LCP). Students in kindergarten through grade four attend one of six (6) elementary schools, including Bowman, Bridge, Estabrook, Fiske, Harrington, and Hastings. Students in grades five through eight attend one of two (2) middle schools, including Jonas Clarke Middle School and William Diamond Middle School. Finally, students in grades nine through twelve attend Lexington High School. In addition, Lexington serves approximately 238 Boston resident students in the METCO program, 75 of whom are high school students, making our program the second largest in the State.

Lexington has approximately 6,845 students enrolled in SY 2022-2023. Approximately 14.7% of students are identified as students with disabilities. Approximately 581 students are identified as English Learners (EL), and approximately 7.6% of the population is low income, compared to 42.3% (State). EL students in Year 1 or Year 2 are 40%, compared to the State average of 28.3%. There are 40 languages spoken by EL families representing 36 countries, and the two most common languages spoken are Chinese (33.6%) and Japanese (11.2%). Academic outcomes are relatively strong for Lexington ELs, as compared to the State average. Lexington EL students attaining proficiency on the ACCESS was 56% (Lexington), compared to 12% (State). In Grades 3-8 pm the Next Generation MCAS, Lexington ELs outperformed their counterparts by "Meeting" or "Exceeding" the standard as follows: ELA - 36% (Lexington), compared to 6% (State); Math - 59% (Lexington), compared to 9% (State). For more information about ELL outcomes, please [click here](#).

For the most recent [LHS Profile](#), with graduation and post-secondary information, please click here.

Brief Building History

Lexington High School (LHS) was relocated in 1953 to a new building at 251 Waltham Street. This building was enlarged to accommodate more students in 1955. As enrollments rose, 3 separate new buildings were completed around 1964, one for science classes and two, together with much of the 1950's main building, to accommodate a "house model" in which students would be assigned to a particular house within a building. The intention was to limit the need for students to travel from building to building during the school day. Each of 9

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houses, 3 in each of 3 buildings, contained a cafeteria, classrooms, and support areas sufficient to serve up to 300 students except in classes for science, physical education, performing arts, visual arts, and other special subjects. The field house was also constructed in the early 1960s. The house model was abandoned prior to 1990. A major renovation of LHS that included construction of a new library was completed in 2001 and was intended to serve up to 1850 students. In this renovation, the walls that originally separated the houses were removed to facilitate indoor passage within each building. Even so, the LHS campus was left with 4 detached buildings, now curriculum-focused and known as the Humanities, Math, World Language, and Science buildings. In 2014, when it was clear that enrollment growth was outpacing capacity, 17,000 square feet was added via modular construction to accommodate our growing population. In 2015, this was augmented with an additional 8,000 sf modular installation, most of which is dedicated to students with disabilities. At present the buildings at LHS comprise approximately 360,000 GSF of floor area.

In 2014, Lexington participated in the Green Repair Project, in which part of the aging and damaged roof over the cafeteria was replaced. The MSBA contributed \$360,547 (approximately 34%) of the funding for this project. There is currently a proposal under review for a renovation that will reconfigure space in the science building into biology and chemistry lab spaces to accommodate increasing enrollments. Throughout the years, there have been many other modest space-mining and reconfiguration projects to meet the needs of our growing population, as well as work to retrofit our buildings with wireless capacity needed to incorporate technology into learning. Although financial support from the Town and the State have allowed for maintenance and numerous renovations and expansions over the past decades, today the general infrastructure of the buildings is in poor condition. The existing steam piping system, pneumatic controls system, and unit ventilators in the main building were all installed in the 1950's or 1960's and are well beyond the life expectancy of 20-25 years. The heating and air conditioning roof units are also at the end of their 15-year life expectancy. The roof has sprung leaks and, although replaced in 2000 and later repaired in part through the 2014 Green Repair Project, it, too, is close to its end of life. The Lexington Public Facilities Department does an admirable job keeping these systems up and running; however, the systems are neither efficient nor reliable. In 2016, the Town contracted with an architectural and engineering firm to explore potential updates to mechanical systems in only the main building of LHS. A feasibility study, pre-schematic, schematic, and design development was completed. The process was halted when the estimated price of \$21,000,000 was determined to be cost-prohibitive, especially considering other facility needs across the campus. With aging facilities and the projection of an anticipated 400 +/- student increase by 2025, it is becoming increasingly difficult to meet even the most basic needs of students.

Lexington High school is situated currently on the southerly edge of a 56-acre parcel of land owned by the Town of Lexington. The open high school campus abuts Worthen Road to the

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South, Waltham Street to the East, and Park Drive to the North. The site has no visible slope with access for parking and service to the four detached buildings, several athletic fields, and an outdoor track. LHS is surrounded on three sides by a densely settled residential neighborhood. Paved areas and play-fields are in fair condition. Worthen Road is used as both access to and egress from the Main Building and provides faculty parking (Parking Lot A), while also serving as the drop-off bus loop and the student drop-off and pick-up. Waltham Street provides a secondary means of access to parking for faculty (Parking Lot B) and a single point of access to the central area of the campus. The Park Drive entrance is used as both access to and from the rear of the property and the three outer buildings. It is used as a drop-off and pick-up point for parents and also has access to Parking Lot B. There is inadequate on-site parking for staff and itinerant staff, some of whom utilize on-street parking when needed.

Exceeding Planned Operating Capacity

A significant and steady uptick in enrollment has led to an increase of over 1,000 students in the district in the past ten years. The school district has consistently experienced overcrowding in all of the elementary, middle and high school grades, but nowhere is the overcrowding felt more intensely than at Lexington High School (LHS). Analysis of enrollment data indicates that by the year 2024-2025, the LHS projected enrollment could reach roughly 2500+ students and could continue at or near that level for the foreseeable future. Even if enrollment does not reach 2,500+ students, any measurable increase puts additional pressure on the planned operating capacity for large core spaces, such as the cafeteria and lunchroom spaces, as well as the instructional spaces. The core spaces were designed for 1,850 students, and the current high school enrollment would need to decline by approximately 450 students for the core spaces to be within the planned operating capacity.

Significant Overcrowding

The significant overcrowding at Lexington High School creates a serious challenge for our community. Nearly 100% of existing classrooms are undersized; 100% of science rooms do not meet the MSBA standard of 850 square feet, and approximately 30% of general education classrooms do not meet the recommended square footage guidelines. Common areas such as cafeterias and hallways are inadequate for their intended functions. Teaching and learning are impacted on a daily basis, and overcrowding creates safety hazards, such as congested hallways. Educators are forced to search for space to teach and collaborate, and LHS is in a constant state of retrofitting classrooms to ensure all students have access to fundamental learning experiences.

LHS lacks adequate space for invaluable learning experiences in areas such as the science labs and in the performing arts. Many students must eat lunches in hallways, as there is not

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enough seating in the dining areas to accommodate all students. Hallway spaces are already congested with mobility equipment due to inadequate storage and students trying to complete schoolwork, creating additional health and safety concerns. Many campus doors have been locked in an effort to tighten security; however, this means there are fewer viable routes to move from one building to another, which further exacerbates overcrowding in the hallway.

Overcrowding also impacts our ability to implement a new schedule that would enable LHS to meet the 990-hour time-on-learning requirement. A new schedule would require approximately 10% more space at LHS than does the current antiquated 8-period schedule that negatively impacts time-on-learning. Moreover, the impact of overcrowding has resulted in inadequate space for students with disabilities in the LABBB Collaborative Program and the Intensive Learning Program (ILP), as well as a shortage of space for English Language Learners (ELLs). Due to space limitations, we are unable to create more appropriate inclusive, in-district programs for students with disabilities who should be educated with their peers for the mutual benefit of all.

LPS Core Values

The Lexington Public Schools (LPS) is a high-performing school system committed to providing “joy in learning, curiosity in life, and compassion in all we do.” Our eight (8) core values were created by the school community—and not for the school community; therefore, they remain deeply embedded in the day-to-day lives of our students, faculty, and staff, and they are heard, felt, and seen by all. Our core values are visible on school swag and featured in our school-based “Joy in Learning” celebrations. They come alive in the “We All Belong” elementary school song that 100+ elementary school students performed at this year’s districtwide convocation. Our core values are part of our diverse hiring practices, school committee agendas, school budget documents, curriculum development, and supervision and evaluation processes. In Lexington, the values and beliefs created by our school community—and not for our school community—are words to live by, and they include the following:

We All Belong: We are inclusive of all people, and we embrace and serve one another. We are dedicated to working toward mutual understanding of all cultures, backgrounds, identities, ideas, beliefs, learning styles, and abilities that are different from our own. In our community, we all bring unique skills, perspectives, and experiences. We create a safe and supportive learning environment when we work to ensure that everyone is honored and respected.

Use Your Mind: To learn and grow, we must continually seek new knowledge, think critically, know how to process information and apply skills to new situations. We seek out other points of view and work to understand the perspective of others. We recognize that all learning

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requires failure and making mistakes. We grow from these experiences and strive to continually challenge ourselves to our highest ability.

Be Curious and Have Fun: Joyful learning is fueled by an inquisitive mindset, a questioning attitude, and an imaginative, playful spirit. Mastery of facts and skills is not enough. Active inquiry, application of skills, good humor, and productive struggle are the hallmarks of deep, lifelong learning.

Care for Yourself and Others: We nurture empathy and compassion for one another and care for our own well-being and that of others. When we seek joy for ourselves and nurture our own mental, physical, and emotional health and well-being, we are able to share our gifts with others.

Do Your Part: As members of communities, both small and large, we are united in many purposes. When we encounter challenges or conflicts, we work together with confidence and humility. None of humanity's great accomplishments were done in isolation. Members of our community meet each other where they are and are invested in one another's success.

Be Courageous: Doing the right thing requires daily practice. When we act with integrity and moral courage, even our small actions can lead to big changes. We believe it is our obligation to serve and care for others in our local and global communities and stand up for just causes, even when it might be unpopular to do so.

Embrace Your Revolutionary Spirit: We are pioneers and innovators with the power to make meaningful, lasting change. We take bold and thoughtful risks, and we do not shy away when it is our time to lead. We resist the urge to make changes for the sake of change, and we willingly embrace new ideas that hold long-term promise and help us grow.

You Are Enough: We are all, at this moment, on unique paths. Life is a personal journey that is our own and not to be compared with others. Everyone has moments of doubt. Persevere. There is no one definition of success. We get to define and redefine success throughout our lifetime.

Community Priorities

What a community values is an important aspect of any school construction process. To know Lexington is to understand our deep, longstanding commitment to diversity, equity and inclusion and sustainability and resilience.

In Lexington, we are inclusive of all people, and we embrace and serve one another. We recognize that people from different backgrounds offer new ways of seeing the world and solving problems. We are dedicated to working toward mutual understanding of all cultures, backgrounds, identities, ideas, beliefs, learning styles, and abilities that are different from our

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own. In our community, we all bring unique skills, perspectives, and experiences. We create a safe and supportive learning environment when we work to ensure that everyone is honored and respected. Lexington also has a long-standing and deep commitment to global stewardship and to building sustainable, resilient, high performance facilities. Our new or renovated high school should be inclusive, accessible, aesthetically pleasing, cost effective, functional, flexible, productive, secure, and safe.

Diversity, Equity & Inclusion

A Brief History of DEI in LPS

The Lexington High School community engaged in a visioning session with a consultant in 2017. Interestingly, diversity, equity, and inclusion was notably missing from the high school educational visioning process of 2017, with the official record reflecting disappointment in the absence of diversity, cultural proficiency, Civics and citizenship, learners with disabilities, cognition science, social context, redefining failure, parents and community, and helping children develop happy and fulfilling lives.

Much has changed since 2017, and if one were to randomly ask members of our school community to define what matters most in the Lexington Public Schools, it would be safe to assume the resounding response would be diversity, equity, and inclusion. What matters most to a community matters most to its schools. In 2018, members of our community expressed concern about a lack of DEI prioritization in Lexington, and a firmer commitment began to take shape at this time in the Lexington Public Schools. In the summer of 2018, LPS educational leaders organized a retreat and worked together to draft and publish [DEI: Our Call to Action](#). Once the white paper was finalized, the Superintendent met with all of the community groups identified to share DEI plans and seek community feedback and input.

The concepts articulated in the DEI: Our Call to Action were incorporated in the [LPS Strategic Plan](#) that was developed by the school community in the 2018 - 2019 school year. In the Strategic Plan, we recognize that people from different backgrounds offer new ways of seeing the world and solving problems (see LPS Strategic Plan). DEI is prioritized in the Superintendent-School Committee Collaborative Goals, in educators' goals, and in School Innovation Plans, as we work to "address and narrowing equity gaps." These efforts have produced additional important bodies of work, such the [Inclusion Community Input Team \(Inclusion CIT\) Report](#) and the development of a PK-12 DEI Curriculum, which is in its early stages. Now in its fourth edition, LPS also published the [Eliminating Systemic Barriers Annual Report](#)—a public report card of sorts—designed to hold ourselves publicly accountable through an honest annual assessment of the extent to which we live up to our DEI ideals and commitments.

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LPS also actively works to recruit and retain a diverse staff. There is substantial research suggesting that students of color, especially Black students, benefit socially and academically from having educators who look like them. [Our LPS students, themselves, acknowledge why diversity matters.](#) There is great power in the collaboration of individuals with different backgrounds, identities, and experiences, and it matters to our students. Staff diversity enhances our ability to creatively solve problems and improve the educational experience for students. We are able to identify new and more effective approaches to teaching and learning and solutions to challenging problems. In pursuit of this goal, we continue to use multiple strategies to attract and keep diverse candidates on staff. We periodically evaluate the impact of specific strategies, monitor our progress, and make adjustments as needed. Some key accomplishments to date include:

- The development of Affinity Groups linked by a common purpose, ideology, or interest.
- The creation of policies and guidance for hiring managers related to [diversity in hiring and supporting new staff from diverse backgrounds](#), which are updated annually and periodically re-issued to hiring managers. This guidance currently resides within our DEI Staff Guidebook and is available through the LPS staff website, “LexCommunicate.”
- Students are included in the hiring process. We invite them to serve on hiring committees across the district, and we incorporate their feedback in hiring decisions.
- Students from the DEI Student Advisory Council helped to create new recruitment materials, including [a video](#) and [an electronic flyer](#). Our students produced the video about the need for teacher diversity that has been used for the last two years by the Massachusetts Department of Elementary and Secondary Education (MA DESE), as an example of elevating student voice in recruitment and hiring practices.
- Lexington is becoming more diverse! In the last three years, approximately one (1) out of three (3) new LPS hires is an educator of color. During our most recent hiring season, 28.3% (21 out of the 74 new employees, with a hire date of July 1, 2022 or later) were employees of color and/or Hispanic. Among our leadership positions, since July 1, 2022, we have welcomed three new administrators to the district, as well as eight internal candidates taking new leadership roles. Among these 11 staff members, four identify as employees of color and seven identify as white. Additionally, two interim leaders (both employees of color) were permanently assigned to their roles.

Diverse Representation Policy

We know that it takes more than a focus on the *interpersonal* and *intrapersonal* aspects of our work to live our DEI values; it takes a real commitment to actively dismantle the policies and practices that perpetuate racism and the many other harmful ideologies that exist in every

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community, organization, and school system in America. Consistent with our DEI vision, the School Committee and Superintendent created [Policy KCBC - Diverse Representation on Working Groups and Committees](#). Through this policy, the School Committee encourages all those in our school community to ensure diverse representation on working groups and committees. Through its four (4) guiding principles, the school community is encouraged to:

1. Increase participation from under-represented groups on decision-making committees or working groups is fundamental to achieving fair and equitable outcomes in employment and education.
2. As committees or working groups make decisions that affect the school community in both employment and education, the participation of diverse individuals on decision-making committees or working groups is fundamental to achieving equitable outcomes; therefore, consideration shall be given to age, race, color, sex, religion, national origin, sexual orientation, gender identity, or disability.
3. To the extent possible, committee or working group membership should reflect the diversity of the school community, ensuring that all voices are heard in decision-making processes.
4. Speaking against prevalent opinion or the expected opinion—or even speaking up—can be an act of courage for a member of a marginalized group. Community outreach to marginalized individuals or groups may prove useful in validating those who may feel vulnerable due to their prior experiences or lack of experience, undermining their comfort, confidence, and valuable contributions to our schools. Thought and effort must be given to how we continue to lift up the voices of those from marginalized populations, helping them bring their whole selves to spaces where their voices may not represent the views of the majority.

Keeping in mind our vision and the guiding principles of DEI-related policies and practices, we highlight various programs that require us to demonstrate our commitment to equity by providing additional resources, including investments of time, talent, and money.

Marginalized Populations First in Lexington

Any school design process in Lexington must start with the needs of those underrepresented and marginalized populations in our community. While these populations are typically included in most educational planning processes, we are placing them first in Lexington High School's Educational Plan, with explicit design instructions to ensure that we prioritize the needs of underserved populations first. A more expansive version of Special Education needs can be found in the "Teaching Methodologies and Structures" section of this Plan, along with other disciplines, ensuring that special education will be integrated into the general education setting

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so that students with disabilities and those without will have the opportunity to learn together whenever possible.

Equity is not giving **equal** consideration to all individuals or programs; equity is giving **equitable** consideration to those individuals and programs, meaning that those who need more, get more. We have intentionally elevated several populations in the community priority section of this Educational Plan to send a clear signal to the Design Team that our first priority is in meeting the needs of these individuals. In addition to the various [Affinity Groups](#) that exist in our school community that will be considered in the design process, there are a number of marginalized populations enumerated below that need our attention and support. As we design and build a new or renovated high school, we will work to ensure that our new high school is a safe and welcoming environment. Our equity goals promise to address and narrow equity gaps by eliminating systemic barriers. In alignment with these goals, we will begin the design process of this new school construction project by first considering the needs of the following stakeholders (in alphabetical order), and the students and staff affiliated with them: (1) English Language Learners; (2) LABBB Collaborative Students; (3) LGBTQIA+ Students & Staff; and (4) METCO Students & Staff.

English Language Learners

The ELL Program

Lexington has approximately 6,845 students enrolled in SY 2022-2023. Approximately 581 students are identified as English Learners (EL) and 7.6% of the population is low income, compared to 42.3% (State). EL students in Year 1 or Year 2 is 40%, compared to 28.3% (State). There are 40 languages spoken by EL families who represent 36 countries; the two most common languages spoken are Chinese (33.6%) and Japanese (11.2%). Academic outcomes are relatively strong for Lexington ELs, as compared to the State. Approximately 56% of Lexington ELs, compared to 12% (State) attain proficiency on the ACCESS. In Grades 3-8 on the Next Generation MCAS, Lexington ELs outperform their counterparts by “Meeting” or “Exceeding” the standard in English and Mathematics: ELA - 36% (Lexington), compared to 6% (State); Math - 59% (Lexington), compared to 9% (State). For more information, [click here](#). The outcomes may be partially attributable to the push-in and co-teaching inclusion models that exist throughout the district, which has implications for the design of a new high school.

Lexington Public Schools offers a comprehensive English Language Education program for grades pre-K through 12. In each of the district's ten schools, English learners typically receive daily English as a Second Language (ESL) instruction, using state of the art materials that build skills in each of the four domains of reading, writing, speaking, and listening. Our instruction is based on World Class Instructional Design and Assessment (WIDA) standards for English proficiency, developed at the University of Wisconsin, Madison. Massachusetts joined the

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consortium and adopted the standards beginning in the 2012-13 school year. Throughout the students' day, they learn academic content in their general classrooms from educators who have been trained to "shelter" the content, using strategies that increase student comprehension.

PreK students receive ELL support, and at the elementary level, English learners are instructed in a warm and welcoming classroom, where they learn the language with their grade-level peers using National Geographic's REACH and Hampton Brown's Avenues series. These series were selected because of their comprehensive approach to teaching academic vocabulary, grammar, study skills, and fiction and non-fiction writing. Students read a wide variety of genres, including short stories, scientific articles, poetry, biography, and more. In addition, ESL teachers often provide 'push-in' instruction in the students' general education classroom, a particularly effective strategy for improving writing and for content area instruction. At the middle school levels, ELLs are scheduled into daily English as a Second Language instruction, where they learn with their grade level peers, using Pearson's Keystone series levels A-C.

At the high school, students are scheduled into ESL classes with other students of similar English proficiency (ESL I, ESL II, ESL III & ESL IV), using Pearson Longman's Keystone series levels D-F, or Edge, Level C. Students learn academic vocabulary, grammar, study skills, and fiction and non-fiction writing through the reading of text typically found in a high school setting. These include excerpts from novels, plays, short stories, biographies, and informational text, such as those found in a Science or Social Studies classroom. Students produce the types of writing that they will need for their content classes, thus improving their success in the classroom. The Keystone series is a parallel curriculum that presents the English development instructional material using literature that is suited to what adolescent students need in our rigorous school environment. The series also offers a vertically aligned educational experience for our English learners, moving from middle school to high school.

A New Family Welcome Center

Lexington is becoming increasingly more diverse, and it would be ideal to have a New Family Welcome Center to replace "Central Registration," which currently is housed at the Central Offices on 146 Maple Street. As we consider a new high school, we need to thoughtfully consider the ways that we are welcoming many newcomers to the Lexington Public Schools throughout the year. Unfortunately, current space limitations impede our ability to welcome newcomers to a more centralized location like Lexington High School. Approximately six years ago, the school registration process took place in individual school buildings. In the 2017-2018 school year, a new Central Registration workflow was developed; four (4) staff were hired, including two (2) administrative assistants and one (1) nurse, and space was made available at the Central Office.

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Our current registration process for all families is housed at Central Office, 146 Maple Street, Lexington. The intent was to streamline the Central Registration process to make it easier for newcomers, but the reality is that it is challenging for newcomers, who hail from different countries and speak different languages. Our current setup forces newcomers to locate the Central Office, which is separate from their child's school. Currently, Central Registration is located in the back of the CO building, which sends the wrong message to newcomers. We want to create an atmosphere where newcomers feel welcomed and valued. Newcomers must navigate a complex registration process, access translation support, provide proof of residence and medical vaccinations, which can be substantially more challenging when English is not one's first language.

We believe that a new Family Welcome Center located on our largest school campus next to the ELL Department is an ideal arrangement for newcomers. The FWC could be incorporated into the Central Office wing of the new or renovated high school, and in close proximity to the English Language Learners Department. We envision newcomers being greeted by a colorful word art in their native language in the lobby of our Family Welcome Center, with words of welcome in many different languages: 欢迎; Irasshaimase – いらっしゃいませ; i mirépritur; dobrodošli; vitejte; welkom; tere tulemast; tervetuloa; bienvenue/bienvenu; herzlich willkommen; қалоң HPƏATE; üdvözöljük; velkominn; fáilte; benvenuta/ benvenuto; 환영하다; hwan-yeonghabnida; добредојден; merhba; velkommen; witamy; bem-vinda; bine ati venit; добро пожаловать; bienvenidas/bienvenidos; väkommen; croeso; and בָּאָגְרִיסָן (hela); and many more!

The Family Welcome Center will function as a resource for PK-12 families and a Central Registration center where all children can enroll in the Lexington Public Schools. Language proficiency assessments could be administered at this location and IEPs could be evaluated during this process to determine appropriate program placement. Central Registration personnel could work with families in small conference rooms with technology hubs and work stations, helping them navigate and complete their paperwork. Central Registration staff could arrange meetings between school building personnel and families to tour school buildings upon family request. We want all families new to Lexington to have a warm and welcoming experience when they walk through our doors.

DESIGN CONSIDERATIONS (ENGLISH LANGUAGE LEARNERS):

- ELL needs both inclusionary spaces for co-teaching, as well as separate spaces for appropriate “pull out” services.
- The new high school, with the largest student population, will include a Family Welcome Center to serve English Language Learners and all newcomers to the

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Lexington Public Schools.

- Currently, Central Registration is located at 146 Maple Street in Lexington. The location is less than ideal, requiring non-English speaking families to find the entrance in the back of the building. Our new Family Welcome Center will be located next to the Central Office in the new high school. We will welcome families with signage in various languages and comfortable, conversational seating.
- In addition to five (5) small workstations for staff members, one office for the Director of English Language Learners, a small conference room, a resource area to learn more about the Lexington community, and a small playroom for children that includes books in multiple languages will be incorporated to make the space as warm and inviting for our new families as possible.

LABBB Collaborative

Over 50 years ago, a few forward thinking Lexington parents “embraced their revolutionary spirit,” seeking innovative ways to ensure the inclusion of students with disabilities at a time when exclusionary practices were more widespread in public education. Due to their efforts, a unique partnership was formed among five member districts, including Lexington, Arlington, Burlington, Bedford, and Belmont (LABBB). Watertown recently joined the LABBB Collaborative as a sixth member district. The Superintendents of these districts serve on the LABBB Board of Directors, sharing space for specialized programs in their respective school systems to educate students with disabilities. In addition to its member districts, LABBB now proudly serves students from more than 60 communities in Massachusetts.

Lexington High School is an inclusive, loving environment where dedicated educators strive to help students feel a deep sense of belonging and purpose. We proudly serve 120 students with disabilities in the LABBB program at Lexington High School. We believe that a student’s first placement should be in the general education setting, so inclusivity is the goal. Whenever possible, LABBB students are included in the general educational setting, which is mutually beneficial for students with and without disabilities.

Best Buddies is a club that works to promote inclusion and build friendships between people with and without intellectual and developmental disabilities. Students with and without disabilities work together to host dances, events, and fundraisers at Lexington High School. Special Olympics is a significant community event proudly hosted each year by LHS students and staff. Lexington High School has been the host site for LABBB students for many years. LABBB students from the 60 member districts converge at LHS for a spectacular Special Olympics event once a year, and there is a great sense of camaraderie, community, and inclusivity. It is a special event for the entire Lexington school community.

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Transportation and Other Needs

There are approximately 120 LABBB students on campus at any given time with many vans coming and going throughout the day. Transportation at Lexington High School is complex due to time constraints between tiers. LHS is a second tier school, which means that drop-off/pick-up must be efficient in order for the bus drivers to get to their next destination on time. Elementary schools are on the third tier, so late buses from the high school affect the on-time delivery of elementary students. Additional buses and vans to transport students with disabilities are part of the daily arrival on the high school campus. The placement of the LABBB program in the new or renovated high school is critical. Students arrive on campus in specialized vans and buses that come and go throughout the day. Space for students in the LABBB program should be in close proximity to the pick-up/drop-off site, and close to large shared spaces like the gymnasium, cafeteria, music, and art, so our LABBB students can more easily integrate with their peers.

Storage space in the LABBB portion of Lexington High School is wholly inadequate for students with significant disabilities. We do not have enough space to store wheelchairs or other mobility equipment. Students with disabilities must have some of their personal care needs met behind a curtain in the classroom, rather than in a private and more dignified separate space.

DESIGN CONSIDERATIONS (LABBB PROGRAM):

- Significant storage for wheelchairs and other mobility and medical equipment.
- At least two small private medical areas should be designed so staff can attend to students' personal care needs.
- LABBB will have a dedicated suite of rooms for students that will be centrally located with easy access to transportation and shared public spaces, such as the cafeteria, gymnasium, music, art, etc.
- Transition services should be considered, and students should have authentic environments to work and learn, such as a coffee shop that they can run and manage. Later in this report, we discuss the relocation of our current Print Shop (see "other speciality areas" section), as well as the addition of a bank that we create within our high school (see "humanities" section) near LABBB, so partnerships and work opportunities can develop.
- Consideration of a separate drop-off/pick-up space for LABBB students who come and go throughout the day in specialized vans and buses.

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LGBTQIA+

The Department of Elementary and Secondary Education ([DESE published guidance](#)) for Massachusetts public schools to create safe and supportive school environments. As noted on the DESE website, “*An Act Relative to Gender Identity* (Chapter 199 of the Acts of 2011), which became effective on July 1, 2012, amended several Massachusetts statutes prohibiting discrimination on the basis of specified categories, ***to include discrimination on the basis of gender identity.*** Among the statutes amended is G.L. c. 76, § 5, prohibiting discrimination on the basis of gender identity against students who enroll in or attend the public schools. G.L. c. 76, §5 now reads as follows:

Every person shall have a right to attend the public schools of the town where he actually resides, subject to the following section. No school committee is required to enroll a person who does not actually reside in the town unless said enrollment is authorized by law or by the school committee. Any person who violates or assists in the violation of this provision may be required to remit full restitution to the town of the improperly-attended public schools. No person shall be excluded from or discriminated against in admission to a public school of any town, or in obtaining the advantages, privileges and courses of study of such public school on account of race, color, sex, *gender identity*, religion, national origin or sexual orientation.”

We honor all members of the LGBTQIA+ community, including students, staff, parents/caregivers, and community members in Lexington. Beginning in preschool, our curriculum is designed to reflect the diversity that exists in the school and the larger world beyond. Consistent with research on adolescent development, we believe that young children need to be exposed to a variety of experiences and ideas, as they are formulating their schemas of understanding about the world. Classroom materials and books reflect diverse populations, including exploring what it means to be a family and concepts of gender are part of every school in the district, starting with preschool.

In an effort to ensure that all students see themselves and their families reflected in the curriculum, staff has worked diligently to create inclusive lessons for LGBTQIA+ students and families. The K-3 Social Studies curriculum in LPS elementary schools includes a focus on the diversity of families that includes members of the LGBT community. Lexington Public Schools has developed gender-inclusive lessons for the 4th and 5th grades that educate all students at age-appropriate levels about how bodies develop and grow. The Gender and Sexuality Alliance is an important part of our students’ educational experience, with GSA’s starting in middle school.

Each of our LPS school buildings has all-gender restroom options. LHS has one all-gender restroom in each of the campus’s four main buildings. In the main building, the restroom is a multiple-occupancy restroom, and the others are single-occupancy. There are also all-gender

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restrooms in the Health Office. Middle school and high school students have raised a pressing concern about the proximity of gender-inclusive bathrooms to core academic spaces. Our students describe how difficult it is to walk from one part of the campus to another to use an inclusive restroom. As we begin to imagine a schematic design for a new or renovated high school, we must keep in mind that every student and staff member deserves access to safe and inclusive spaces.

DESIGN CONSIDERATIONS (LGBTQIA+):

- Consistent with the Create safe and confidential affinity spaces for LGBTQIA+ students and staff.
- Using the principles of universal design, ensure an appropriate number of gender-inclusive bathrooms throughout the building and in close proximity to all teaching and learning pods for easy access.
- Special attention should be paid to restrooms, locker rooms, and changing facilities. All students are entitled to have access to these spaces that are sanitary, safe, and appropriate, so they can comfortably engage in
- Transgender students who are uncomfortable using a sex-segregated restroom should be provided with a safe and appropriate alternative, such as a “unisex” restroom, ideally located in close proximity or in the nurse’s restroom, for those who prefer this location. Encourage districts to include an appropriate number of gender-neutral restrooms commensurate with the size of the school, and at least one gender-neutral changing facility, into the design of new schools and school renovations.

METCO Program

The METCO Program (Metropolitan Council for Educational Opportunities) was founded in 1966. It is a voluntary integration program that provides a suburban public school education for African-American, Hispanic, and Asian students from Boston. The Lexington Public Schools has participated in the program since 1968, and we have the third largest program in the State. METCO provides Lexington students and staff an opportunity to interact with many minority students and to benefit from a culturally diverse learning environment.

A total of 238 students currently attend the Lexington METCO program. There are 101 elementary school students; 62 middle school students; and 75 high school students.

The Guiding Principles of the Lexington METCO program are as follows:

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- **COMMUNITY** – We strive to contribute to and build our community by using our talents and creativity in a positive manner.
- **DIGNITY** – We practice mutual respect, honor who we are and recognize the victory of our struggle.
- **HUMOR** – We do not take ourselves too seriously, and strive to see the humor in every situation while bringing a clever sensibility to bear upon intellectual challenges when appropriate.
- **INTEGRITY** – We are honest and ethical in our words and actions.
- **LEADERSHIP** – We define ourselves with our actions. We are creative and are willing to lead by example.
- **PEACE AND EMPATHY** – We respect the thoughts and feelings of others, and strive to resolve conflicts in a cooperative and constructive manner.
- **PERSEVERANCE** – We are resourceful, work hard and always strive to do our best. We invest the time and effort to improve our skills and work habits.
- **PURPOSE** – We develop specific goals for ourselves, and are thoughtful and deliberate in working toward those goals.
- **SCHOLARSHIP** – We think critically, and aspire to achieve academic excellence.

METCO students are transported daily to and from Boston to Lexington High School. When students get off the bus, they typically stop at the METCO Academic Support classroom to check-in and prepare for the day ahead. Others go to the METCO Office to connect, regroup from the bus ride, and/or prepare for their first class. At the end of the day, students check back in at these spaces before boarding the bus. METCO students, as well as resident students, utilize the METCO office as an affinity space throughout the day. This affinity space allows students to process their experiences and day in real time with each other.

A relaxation room or a space where students can unwind that is in close proximity to the bus pick-up and drop-off would be ideal. Students also need small gathering spaces to gather, perform, and celebrate. For example, we have an African American Latinx Scholars Club that meets regularly and could benefit from dedicated space. The AALS Club has historically been a recognition program that identifies students of color at LHS who are exceptional in their achievement and potential for leadership. It drives these students to reach for higher goals and set high standards for themselves. Additionally, it rewards them by offering access to additional support and by increasing their content knowledge about matters related to their racial and cultural identities. Most importantly, this program encourages students to develop personal

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relationships that will help them be successful now and in the future. It does this through field trips, seminars, community service, readings, guest speakers, weekly discussion groups, and mentorship with successful adults who look like them. The AALS program honors student commitment to their academics and fosters a culture of high scholastic achievement for African-American and Latinx students at LHS.

DESIGN CONSIDERATIONS (METCO):

- The METCO suite should include offices for the Director of METCO, the Administrative Assistant, and one to two Social Workers. An area with comfortable seating for students and families should be included, as some students wait for late buses or practices in the METCO area. The suite should be close to the bus drop-off/pick-up location, enabling students to have easy access to a space to relax and unwind before and after their bus ride.
- The suite should be climate controlled (with air conditioning and heat control) and include an area with comfortable seating, as some students wait for late buses or practices in the METCO area. The suite should be close to the bus drop-off/pick-up location, enabling students to have easy access to a space where they can relax and unwind before and after their bus ride.
- The suite should include at least one (1) conference room and one (1) medium-sized room for small group gatherings and performances of approximately 40-50 people.
- The Administrative Assistant will require an office space located upon entering the METCO suite that would enable them to have confidential conversations (e.g. phone calls). This space also should include a space for confidential records to be stored away from the student space.
- One (1) of the Social Worker's office spaces will be used for the METCO Social Worker to conduct clinical work with students and should include enough space to have a desk, chair, comfortable/flexible seating for students, and a round table for games, worksheets, and other activities. This office should have an operable window, climate control (AC/heat), and the ability for warm lighting.
- A second office space will be a therapeutic quiet space where students can be affirmed in their racial and cultural identities. Ideally, this space would be close to the general counseling pods in order to demonstrate to students that we are unified in purpose and support.
- METCO Academic Support needs a fully equipped classroom. The space needs to be open enough to move the tables and chairs in a flexible configuration for optimal collaboration. The classroom needs to be soundproofed and include shelving, technology, and lighting that helps to create a sense of calmness and warmth. Ideally, it would include operable windows and carpeting to reduce noise. A separate area in

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addition to the METCO Academic Support classroom is needed with conversational seating, as well.

- The Furniture, Fixtures & Equipment (FF & E) for this space should include various types of seating, nooks and workspaces (e.g., a round table, single desks, two (2) cubicles, and comfortable conversational seating) The color of the room should be warm and neutral, as a calming environment is optimal for academics.

PRIORITY #2 - A SUSTAINABLE, RESILIENT LEXINGTON

Lexington's diversity, equity, and inclusion goals are a priority for our community, as is our community's serious commitment to reduce our contributions to climate change. By taking action at the local level, Lexington can contribute to a broader collective effort to build resilience against climate impacts.

The recently adopted [Resilient Lexington - Climate Action and Resilience Plan](#) notes the reality that climate change threatens our environment, health, infrastructure, and economy. "Lexington is designing solutions to ensure our Town thrives in the future. From transforming our energy and transportation systems, to protecting our health and natural environment and striving for equity and inclusion, Lexington has long embraced a thoughtful approach that understands how climate connects to our daily lives. Resilient Lexington is our pathway to a sustainable future. While the effects of climate change are local, their cumulative impact is global.

The Climate Action and Resilience Plan seeks to build upon a solid foundation of climate leadership and complement ongoing efforts to create a sustainable future. This Plan strives to incorporate the recommendations and priorities from previous plans, including the "Getting to Net Zero Emissions Roadmap & Recommendations." With a bold vision for a resilient community at its core, our community can continue to lead the way with action."

Lexington has long been a leader in climate action and resilience. The following history of our community's efforts speaks to the community's deep commitment to climate leadership and creating a sustainable future.

- 2010 - Created the Sustainable Lexington Committee; designated as one of the first Green Communities in Massachusetts
- 2013 - Adopted a Climate Change Resolution to require consideration of climate change in all appropriate decisions (Article 33)
- 2017 - Launched Lexington's Community Choice Program
- 2018 - Adopted the Lexington Sustainable Action Plan and released Lexington's Getting to Net Zero Emissions Roadmap & Recommendations
- 2021 - Passed a Fossil Fuel Free New Construction bylaw
- 2022 - Passed a Zero Waste Resolution and a Building Energy Use Disclosure bylaw
- 2023 - Launched Lexington's Climate Action and Resilience Plan

High Impact Actions

Lexington's Climate Action and Resilience Plan has identified a number of actions that are especially high impact given their ability to reduce greenhouse gas emissions, lower life-cycle costs and improve public health when implemented:

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- [Building Efficiency & Electrification](#)
- [Renewable Energy](#)
- [Sustainable Transportation](#)
- [Waste Diversion](#)

Integrated Building Design & Construction Policy

Prior to the publication of the Lexington Climate Action and Resilience Plan, Lexington worked to develop a policy for high performance buildings. First approved by the Select Board and School Committee (SC) in 2019 and updated in 2023, the [Integrated Building Design & Construction Policy](#) applies to all Town funded building projects, including LPS school building projects. Also referred to as the Integrated Building Policy, the goal of this policy is to “achieve the highest reasonably attainable and economically viable performance standards for health, energy, and resilience.” According to this policy, a high performance facility will build on the LEED standard, but with a particular emphasis on:

- Creating a healthy environment, by focusing on indoor air quality and ventilation, while minimizing the use of toxic materials and eliminating the combustion of fossil fuels onsite.
- Creating an energy efficient, low operating cost structure by (1) optimizing layout to maximize passive energy and maximize onsite renewables and energy storage systems, (2) selecting design options, materials and equipment that allow the Department of Public Facilities to minimize energy use and cost and (3) achieving a net zero facility.
- Maximizing the utility of the buildings, from a resiliency standpoint, taking into account short term weather events (e.g. heat waves, black outs, storms or floods) and expected longer term changes in climate conditions.

Hastings Elementary School and Lexington Children’s Place are net zero school buildings that were developed using the performance standards included in the Integrated Building Policy. The Integrated Building Policy ensures that any future projects, including a new or renovated high school, will consider design options required to meet the specified building standards, including a total life cycle cost analysis.

Renewable Energy & Energy Storage

The Town of Lexington Department of Public Facilities has installed solar energy systems at all nine (9) schools (see Table 6). The projects are currently providing significant economic and social benefits to the Town of Lexington. Solar energy and energy storage systems are

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expected to provide similar significant economic and health benefits in a new or renovated high school project.

Economic Benefits

The Town is expected to save \$7,735,311 over the expected life of the systems. The solar energy systems generate revenue for the Town in the form of electricity savings, PILOT payments paid by the developer, and energy storage (battery) related savings. Lexington High School currently has a 459 kW rooftop installation, which produces about 532,486 kWh each year. This rooftop installation is expected to yield a 20-year savings to the Town of \$1,373,277. We would expect a significantly larger solar energy and energy storage system to be installed on the rooftops and in the parking lots of a new high school building.

Health Benefits & Sustainable Practices

The Lexington Children's Place and Hastings Elementary School are net-zero energy facilities. The solar energy systems at the nine (9) schools produce a total of 4,428,102 kWh of renewable electricity annually. This represents approximately 40% of the Town of Lexington's annual electricity use. This reduction is equivalent to the electricity used by 600 homes and provides \$2.3 million in health benefits from greenhouse gas emission reductions over 20 years. Additionally, the avoided fossil fuel consumption from these projects will result in a yearly 2,255-ton reduction of CO₂ emissions.

Lexington teachers utilize the solar energy systems as educational tools, including real-time monitoring and dashboards available to students, and for public outreach at school or public events.

Lexington School Solar Energy Systems

School Name	Installation Type	System Size (kWh)	Expected Annual Electricity Production (kWh)	Energy Storage System (kW/kWh)	20-year Savings to Town
Lexington HS	Rooftop	459	532,486		\$1,373,277
Estabrook	Rooftop	133	154,344		\$ 495,382
LCP	Rooftop, Carport	314	373,660	120/240	\$ 645,700
Hastings	Rooftop, Carport	865	1,029,350	250/500	\$ 1,886,923
Bowman	Rooftop, Carport	94	109,695		
		210	249,900	120/240	\$ 240,824
Clarke	Rooftop, Carport	214	248,946		\$ 637,489
		266	316,540	120/240	\$ 549,558

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Diamond	Rooftops, Carport	549	653,310	250/500	\$ 550,877
Bridge	Carport	210	249,900	120/240	\$ 165,854
Harrington	Rooftop, Carport	168 266	193,431 316,540	120/240	\$ 620,167 \$ 569,260
Total		3,748	4,428,102	1,100 / 2,200	\$7,735,311

Net Zero or Net Positive

Lexington's Climate Action and Resilience Plan notes, "The goals and targets put forth in the Plan are meant to be ambitious and representative of what it takes to get to a net-zero, resilient future, whereas the strategies and actions are designed to help us get started on reaching those goals quickly and efficiently. If Lexington were to continue on our current path without concerted action to address climate change, we would generate over 9.5 million metric tons of CO₂e by 2050.

The strategies in the Plan will reduce our community's GHG emissions and allow us to reach near-zero emissions by mid-century. The faster we act, the more emissions we can avoid. If we achieve the (desired) pathway, we could avoid over 6.4 million MTCO₂e by 2050, 67% of business-as-usual emissions. As the regional grid becomes cleaner, it is important that we are electrifying our buildings alongside that transition. To decarbonize and fight climate change in the timescale needed, electrification and clean energy development must happen together."

Lexington's Integrated Building Policy requires net zero design options in order to create an energy efficient, low operating cost structure, along with maximizing passive energy and onsite renewables and selecting materials and equipment that minimizes energy consumption and cost. Lexington's new high school should be net zero at a minimum.

Increasingly, we are learning about new schools working toward "net positive" school buildings. For example, [Fales Elementary School in Westborough, MA](#) is "striving for net-positive performance by consuming far less energy (less than two-thirds of a code compliant building) and harnessing on-site renewable energy sources." The Town of Westborough has a goal of becoming carbon-emissions free by 2035. This net-positive school is the first project completed towards that goal, with forty geothermal wells that heat and cool the building and a 25,000 square rooftop solar array that generates renewable energy.

At a minimum, Lexington's new or renovated high school should be a net zero building, and potentially a net positive building. Given the expected size of the building and associated

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parking areas, and the expected low energy use, a net positive scenario is not only likely achievable, but very important to meeting our economic and sustainability goals.

Toward LEED Platinum

The Integrated Building Policy puts Lexington High School on a path to LEED Gold certification, which should be the minimum standard for the new high school project. Embodied and operational carbon should be at the forefront of the design and construction process. According to the [World Green Building Council](#), “Buildings are currently responsible for 39% of global energy related carbon emissions: 28% from operational emissions, from energy needed to heat, cool and power them, and the remaining 11% from materials and construction.”

[LEED-certified buildings](#) are critical to addressing climate change and meeting Environment, Social and Governance (ESG) sustainability goals, enhancing resilience, and supporting more equitable communities. LEED is a holistic system that doesn’t simply focus on one building element, such as energy, water or health. Instead, it looks at the big picture, factoring in all critical elements that work together to create the best building possible. The goal of LEED is to create better buildings that: (1) Reduce contribution to global climate change; (2) Enhance individual human health; (3) Protect and restore water resources; (4) Protect and enhance biodiversity and ecosystem services; (5) Promote sustainable and regenerative material cycles; and (7) Enhance community quality of life.

Of all LEED credits, 35% relate to climate change, 20% directly impact human health, 15% impact water resources, 10% affect biodiversity, 10% relate to the green economy, and 5% impact community and natural resources. In [LEED v4.1](#), most LEED credits are related to operational and embodied carbon. [Learn more](#). LEED categories can also contribute toward meeting the U.N.’s Sustainable Development Goals (SDGs). [Explore synergies between LEED and SDGs](#).

DESIGN CONSIDERATIONS:

- Minimally, a new Lexington High School must be a LEED Gold net zero building. We should explore what it would take to design and construct a LEED Platinum, net positive building, including the resultant long-term economic savings of increased efficiency and energy generation.
- Geothermal energy is a renewable resource, and ground source heat pumps will be an important design option to consider as we work to meet the requirements in the Integrated Building Policy and achieve all our sustainability goals.

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- In accordance with the Town's "Building Efficiency and Electrification" goals and Integrated Building Policy, a new Lexington Hlgh School must be an all-electric school building to contribute to the Town's goal of prioritizing healthy, resilient, and energy efficient buildings. The building must also achieve an EUI (energy use intensity) of the lower of 1. the [Eversource Path 1 incentive requirement](#) for K-12, EUI of 25 kBtu/sf/yr or less, and 2. 30% less than the ASHRAE 90.1-2019 baseline according to the Integrated Building Policy.
- In accordance with the Town's "Renewable Energy" goals and Integrated Building Policy, designs must maximize photovoltaic solar arrays on all roof, parking surfaces as well as consider building facades, outdoor plazas and walkways.
- In accordance with the Town's Integrated Building Policy, the building must "utilize energy storage when cost effective to lower peak demand charges and integrate with onsite solar." Battery storage paired with solar behind the meter will lower total life cycle costs, while increasing building resiliency and not adding much in upfront cost. Battery storage also dramatically increases the size of the solar energy system the utility will approve.
- In accordance with the Town's Integrated Building Policy, plans must "include embodied carbon in the total life-cycle analysis for each design option," and should seek to use materials with the lowest possible levels of embodied carbon.
- In accordance with the Town's "Sustainable Transportation" goals and Integrated Building Policy, the new high school should include a plan to accelerate the transition to electric vehicles (EVs) for school buses. Also working to improve charging infrastructure, enhancing pedestrian and bicyclist safety and access, and shifting to low emissions transit vehicles, Lexington will enable safe, pleasant, efficient, and sustainable mobility options.
- In accordance with the Town's "Waste Diversion" goals, the [Zero Waste Plan](#) and Integrated Building Policy, the design must maximize opportunities for resource reduction, material reuse and waste diversion. The new high school must have spaces and appliances to allow waste reduction, composting and recycling in all applicable areas. This includes dishwashers for, storage for, and collection of reusable foodware in all cafeteria, kitchen and lounge areas. In order to maximize reusable products, the building must also include an adequate number of filtered water bottle filling stations and include laundry facilities. In addition to following the [LPS Waste](#)

[Reduction Policy](#), maximizing reusable products will reduce operating costs each year.

PART II: COMMUNITY PLANNING PROCESSES

A process for establishing a school community's plans or shared vision is as important as the plan or vision itself. To that end, the school community has been involved in a number of planning exercises that contribute to the development of this document. A brief timeline follows:

2017 - 2018: The Educational Vision reflects the work of a Visioning Team; approximately 80 teachers, administrators, students, parents, school committee members, municipal representatives, and business representatives. Created in three days of intense facilitated workshops, initially by the Educator Team, followed by two days of the Community Team, it is intended to guide the long-term development of both education and facilities for Lexington High School. Much of the work was conducted by "Table Teams," small groups of six participants each. They brainstormed, debated, and attempted to reach consensus on most of the defining issues. Each Table Team had educators, students, parents, and community members evenly distributed to the greatest extent possible. A comprehensive report was developed, outlining the process. The report includes: guiding principles that establish broad parameters for educational delivery, school structure, and facilities; keywords for education that express concepts for future education and facilities; school transformation and developmental maps that relate educational delivery and facilities to

2018-2019: The Lexington Public Schools administration spent a year and a half collaborating to develop a new LPS Strategic Plan. The process is well-documented through agendas, minutes, products, processes, and multiple drafts. The plan's mission, vision, and core values reflect the kind of educational system we envision for our students, PK-12.

2018 - 2021: In 2018, DiNisco Design also finalized the Facilities Master Plan, which incorporates the District's Master Educational Plan that was developed in collaboration with 15 community leaders through the Master Planning Advisory Committee (MPAC). DiNisco's Facilities Master Plan provides an educational plan for students in grades PK-8. Soon after the completion of the Facilities Master Plan, the MPAC developed a Master Planning Compendium to create a flexible, versatile plan for impacts of unanticipated shifts in enrollment by grade span.

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2020-2021: The district and high school administration, including curriculum leaders, worked together to develop a comprehensive narrative identifying unmet programmatic needs by department. Each curriculum supervisor worked with educators to identify facilities-related obstacles to students achieving a 21st century education. The comprehensive narrative identifies specific building needs and connects to the Lexington Public Schools Strategic Plan.

Master Planning Advisory Committee

In 2017, the School Committee developed a charge to establish a Master Planning Advisory Committee (MPAC), and planning efforts were underway early in SY 2018. Members of the MPAC include representatives from municipal government, various boards, and the school community. When the MPAC was formed, elementary school enrollments were increasing, and the School Committee sought assurances that we were adequately assessing the capacity of our school buildings, enrollment shifts, and planning for future educational needs. The MPAC's collaboration led to the creation of two master planning documents to guide our capital planning efforts: (1) the Facilities Master Plan; and (2) the Master Planning Compendium.

The Facilities Master Plan includes all of the traditional elements that one might expect to find in a capital plan, including enrollment projections, square footage in schools, space utilization, planned operating capacity, and more. The LPS Master Planning Compendium is different than a traditional plan in that it is uniquely Lexington's—designed to be flexible, responsive, complex and intricate, but practical. It is a master plan that accounts for enrollment shifts and other unknown variables. It is organized by grade span (elementary, middle and high school) and it tells us what we should consider if enrollments are (a) as anticipated; (b) lower than expected; or (c) higher than expected.

After many MPAC meetings, several creative problem-solving sessions, and extensive data analyses, the MPAC members strongly endorsed the decision to engage in a districtwide elementary school redistricting effort (completed in SY 2021) along with a plan to increase the size of the high school facility by replacing it with a new or renovated building.

Enrollment Working Group

A subgroup of the Master Planning Advisory Committee (MPAC) is the Enrollment Advisory Group (EAG), a group of talented Lexington residents and data analysts who have studied enrollment trends throughout the last decade. In collaboration with the Director of Data and Strategy, the group formerly known as the Enrollment Working Group (EWG), have been instrumental in providing accurate enrollment projections to determine future space utilization and needs.

Through a collaborative effort with the EAG, Lexington Public Schools updated statistical models, sharing them with members of the MPAC. The EAG used the Cohort Survival Method,

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the statistical method used historically by the district, to forecast future student enrollment growth for the next five years. The elementary and middle school enrollment numbers appear to be aligned with earlier CSM projections; however, there is an anticipated increase in enrollment at the high school. At the time of the analysis, Lexington High School enrollments were expected to increase by 400 +/- students in the next five years, with the highest enrollments anticipated in the 2024-2025 school year. A 90% confidence interval is produced for all enrollment projections, which tells us that there is a 90% chance that the confidence interval contains the true value of future enrollment. We anticipate that enrollment will continue to rise until it reaches its peak of 2,621 students in the 2024-2025 school year and remain that way for the foreseeable future.

Enrollment is outpacing existing space in schools across the district, but nowhere is the pressure felt as intensely than at Lexington High School. When enrollment reaches 2,600, that would place Lexington High School among the top four largest high schools in Massachusetts. Even if enrollment does not reach 2,500+ students, any measurable increase puts additional pressure on the planned operating capacity for large core spaces, such as the cafeteria and lunchroom spaces, as well as the instructional spaces. The core spaces were designed for 1,850 students. No other suburban community in the Commonwealth of MA has high school enrollments at this level, which is what prompted the Master Planning Advisory Committee to explore all possibilities, including two high schools. The (MPAC) concluded that such an idea is not feasible given the excessive costs for two building projects coupled with the land constraints in the Town of Lexington.

Lexington High School was built in 1953 with a substantial increase in population shortly thereafter, so determining the original capacity and utilization of the building is a somewhat storied tale. In 1940, the Town's population was 13,113. By 1950, the population had grown to 17,335. In 1960, the population reached 27,691 and continued to grow over the next decade, increasing to 31,388 in 1970. From 1950 through the 1970's, the Town of Lexington saw a dramatic increase in population, leading to an upsurge in student enrollment. Over the course of 30 years the population had more than doubled.

Student enrollment increases are commensurate with the Town's overall population growth. From 1950 to 1960, the school district's total student population grew from 2,813 students to nearly three times that number (6,280 students). The high school facility could no longer accommodate the increasing student population. After a contentious process, the first phase of new construction was approved in 1951 and began shortly thereafter. Students moved into the new facility in 1953. Stage two of construction was completed in 1957, which included a new auditorium, shop wing, and 16 additional classes. In 1961, student enrollment continued to rise, requiring additions to LHS. These additions were intentionally designed to be detached, separate buildings on the Waltham Street High School campus. In 2014, a total of 17,000 sf of

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modular space was added to accommodate our growing population. In 2015, an additional 8,000 square feet of modular space was added, most of which is dedicated to educate students with disabilities in the Intensive Learning Program (ILP), ensuring safer access to the space and better compliance with the ADA guidelines. Safety is paramount, but it goes without saying that these conditions and modular spaces are less than ideal given our inclusionary efforts for students with disabilities.

The significant overcrowding at Lexington High School creates a serious challenge for our community. Based on current projections, by the year 2025, enrollment in grades 9-12 is expected to reach its peak with over 2,500 students. An enrollment topping 2,500 means that LHS will be approximately 650 students over planned operating capacity in the core spaces and classrooms. In addition to overcrowding, the current high school facility faces deteriorating conditions, and it is not well configured for modern instructional approaches to meet our students' educational needs.

Facilities Master Plan

The MPAC, comprising municipal and school community leaders, provided oversight and input into the development of the first LPS 10-year Facilities Master Plan. The Lexington School Committee formally approved the [Facilities Master Plan](#) on May 25, 2021. DiNisco Design assisted in the completion of the ten-year plan, and the extensive community engagement in the capital planning process was fundamental to the MPAC's planning efforts. The detailed plan was completed by DiNisco Design prior to the pandemic in March of 2020, but our master planning efforts were not complete. The MPAC opted to engage in additional work to develop an even more nimble Master Planning Compendium (Compendium). The Compendium was finalized in May, 2021, at which time the School Committee unanimously voted to formally approve both documents. The detailed Facilities Master Plan includes the following information: an introduction; evaluation of existing conditions; educational programming; district enrollment projections; evaluation of strategies; and appendices.

Master Planning Compendium

The [Master Planning Compendium](#) is a companion to the more detailed and technical [Facilities Master Plan](#) developed by DiNisco Design. It is the first of its kind in Lexington, designed to be fluid and responsive to unknowns, such as how to respond to various fluctuations in enrollment. We engaged the community in a planning process that prioritizes school-based capital needs through the Master Planning Advisory Committee (MPAC), a group of municipal and school community leaders who provided extensive input into the document. The Compendium contains the following information: the Superintendent's foreword; an introduction and plan highlights; who are we and what do we believe; defining the problem; LPS facilities and student assignment; student enrollment and trends; summary of advisory

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committee recommendations; land swaps and purchases; high performance facilities; and an appendix to describe our planning process.

DESIGN CONSIDERATIONS (OVERCROWDING): The MSBA has authorized a [design enrollment of 2,395](#) students for Lexington High School students. MSBA hires an independent demographer, and a negotiation occurs between the MSBA demographer and the staff, which starts a dialogue with the district. Through this process, we were able to increase our enrollment number by just under 200 additional students; however, the school community remains concerned about the design enrollment figures.

There are several reasons for the concern, and we know that right-sizing a school building requires accurate enrollment projections. Given (a) Lexington's upsurge in enrollment history, once tripling in size from 1950-1960; (b) the unreliability of 10-year projections; (c) the trend of substantial overcrowding at the high school in the past several years; (d) the uncertainty of enrollment rebounds related to the pandemic; and given (d) the Multi-Family Zoning Requirement for MBTA communities (resulting in Lexington's new zoning ordinance that exceeds State requirements), there is significant community concern that a new high school built for 2,400 students may not be large enough. The Designer must take these community concerns into account, ensuring that the Schematic Design incorporates a plan to build up and/or out, should Lexington encounter another significant, unanticipated influx of students.

Our Vision for Learning

In 2019, the Lexington school community engaged in an inclusive process to develop a districtwide strategic plan, including a mission, vision, core values, goals, and strategies. Our vision for learning tells us what our school community will look like ten years from now, as a result of living our mission and achieving our goals. It gives us a glimpse into our future and lets us know what we can expect from the Lexington Public School community if we do what we say we will do.

The vision is written in the present tense, as though it is the year 2029, when our vision has become a reality. The use of present tense allows us to convey the seriousness of our intentions and the level of our commitment. The Synthesis Team engaged in many conversations about how best to structure the vision. We created lists, drafted visions in narrative form, and paragraphs highlighting particular concepts. Ultimately, we decided that categorizing the bold ideas and adding detailed "snapshot paragraphs" would be the best way to convey our school community's preferred future to others. Five memorable snapshots to

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help you better visualize our new direction in the Lexington Public Schools include the following: (1) diversity, equity, and inclusion; (2) redefining success; (3) students as active agents; (4) authentic learning; and (5) community partnership.

Diversity, Equity, Inclusion

Everyone has a right to an excellent education, and it is our individual and collective responsibility to create learning opportunities and systems that are fair and just. Moreover, we believe a child's first placement is in an inclusive general education setting together with peers. We foster a culture of respect for all members of our community, where everyone is honored and everyone belongs. We dedicate ourselves to exploring and understanding diverse cultures, backgrounds, identities, ideas, beliefs, learning styles, and abilities that are different from our own. We embrace and appreciate the richness of our community, and we continuously learn from one another. We recognize that people from different backgrounds offer new ways of seeing the world and solving problems. We all learn differently, and our educators draw upon varied approaches to teaching and learning to help meet the needs of every student. Educators model and teach our students to seek varying perspectives and to understand that reaching consensus takes effort. Our students have access to a culturally-responsive curriculum, and we strive for staffing that is reflective of the diversity of our student community. Through our curriculum we provide, *for all students*, robust learning opportunities that challenge them and stretch them to reach their full potential. Every child has equitable access to rigorous learning environments, as well as the needed support to bolster a belief in their own abilities to learn and succeed.

Redefining Success

Lexington Public Schools has expanded its definition of success beyond traditional notions of student achievement. We continue to provide rich academic opportunities and excellence in teaching, but we now recognize that our students' future success requires much more. Our educators cultivate essential personal qualities, such as a curious and questioning attitude, a caring and compassionate spirit, and a lifelong joy of learning. Our students think deeply and value civil discourse and informed debate. They seek to create, innovate, and work collaboratively. They explore different cultures, ideas and beliefs, care for themselves and others, and protect our world and its inhabitants. Our staff readily embrace our families and community members as vital partners in developing these qualities and skills. Moreover, we value the process of teaching and learning, though not easily measured by traditional achievement outcomes. This expanded definition of success, anchored in our core values, is now reflected in a well-rounded and comprehensive approach to assessing the achievement of our students, staff, and schools.

Students as Active Agents

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Students are primary agents in their own learning. Through dynamic, interactive learning experiences and deep inquiry, students are genuinely engaged and active participants. They contribute to thoughtful discourse, and apply knowledge and skills to novel situations. Students voice their opinions, choose their learning pathways, and help shape their experiences and school culture. As modeled by the adults throughout our school system, students embrace education as a process where taking risks, making mistakes, and encountering failure are an inherent part of learning. We value progress over perfection, and educators, in partnership with families, assist students in becoming increasingly independent and responsible for their own learning. Students experience higher levels of engagement and a greater sense of enjoyment by actively participating in their own learning. Students know their schools are places where their ideas are honored and challenged, exploration and discovery are supported and encouraged, and they feel safe and secure.

Authentic Learning Experiences

Learning is authentic and connected to the real world, allowing students to apply knowledge and skills in context. It prepares them for their futures as employees, leaders, citizens, and productive contributors in the world. When educators make learning relevant and meaningful, students experience higher levels of engagement, curiosity, and joy. Students apply their conceptual understanding, engage in healthy debate, and work to solve open-ended, real-world problems in and out of school. Independent and collaborative skills are practiced regularly. Supported by administrators, our educators continuously pursue non-traditional methods to improve real-world connections by engaging in internships and externships with mentors, career professionals, local experts, community members, and partnerships with outside organizations. Interdisciplinary inquiry is encouraged and occurs throughout a student's PK-12 education. Students gain extensive experience in actual processes used in pursuit of deep understanding and artful practice across a broad range of disciplines. As a district, we invest in professional learning that is connected to our vision, seeking to support the continued growth of our educators and staff through high quality, authentic learning experiences of their own.

Community Partnership

Learning is a collective endeavor that involves students, educators, families, and the community. We all join in partnership with the common goal of providing the highest quality education for our students. In doing so, we recognize that each of us represents different communities, roles, and perspectives. As a well-resourced district, we accept the responsibility we have to our profession and to the larger world outside of Lexington. In every interaction, we work together on a foundation of trust and mutual respect. When there is a concern or unmet need, we collaborate and share perspectives and expertise. When disagreements arise, our first reflex is to listen. We communicate regularly and make meaningful connections.

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Collectively, we emphasize collaboration over competition. Staff readily partner with one another and community experts to improve our practice and solve problems. These partnerships allow us to provide high quality, authentic, contextualized learning experiences and career opportunities for our students. We have healthy, constructive school-family partnerships where all parties are focused on supporting students' growth and learning. We recognize and respect the expertise of educators and staff in matters related to teaching and learning, and we value the personal experiences and good judgment of our families. We are continually grateful for the strong support for education demonstrated by our parents, caregivers, and community members.

PART III: CLASS SIZE & SCHOOL SCHEDULE

Class Size

The School Committee recognizes that class size is an important factor in quality education and establishes student-teacher ratios at the elementary levels. While middle and high school class sizes are favorable, no policy or contractual language exists to guide class size. The average class size at Lexington High School is approximately 22-24 students.

At the elementary level, the teacher/pupil ratios are based upon the projected number of students in the budget guidelines for the coming year. The School Committee makes every effort to maintain the following building-wide teacher/pupil ratios:

- Kindergarten: 1-18
- Grade 1: 1-22
- Grades 2-5: 1-24

Principals, librarians, reading specialists, art specialists, music specialists, and physical education specialists, foreign language teachers, speech and language pathologists, special needs teachers, counselors, and other professional support personnel are excluded in the computation of the teacher/pupil ratios. Children in substantially separate placements are incorporated in the mainstreamed homeroom core lists for the computation of the teacher/pupil ratios.

In the event that an elementary classroom exceeds the following maxima listed below on October 1 of the school year, or on any day following October 1 of that school year, the teacher will be provided with two (2) hours per day of instructional aide assistance. The scheduling of this aide time shall be determined by the School Council.

- Kindergarten: 20
- Grade 1: 24
- Grades 2-5: 26

If any class exceeds the maxima by twenty percent (20%) or more, the class will be split. The above maxima apply to "home room" class size and not to class sizes as a result of redeployment of students for specific subjects as mutually determined between and among teachers.

LHS Scheduling History

2017 - 2018

In 2018, for the first time in over 20 years, Lexington High School convened a committee to review the LHS school schedule and propose options for a new schedule starting in 2019-2020. Motivations include:

- changes in educational practices since the last review
- opportunities for different kinds of teaching and learning
- concerns about instructional time in current schedule
- concerns about equitable teaching loads
- concerns about student stress and well-being
- concerns about physical space constraints
- need for I Block implementation and effectiveness review
- possible need for a schedule that fits a change in start time

The 2018 Schedule: Investigating LHS's schedule, the Schedule Committee found that it provides shorter class periods (44-49 minutes) and less total class time (191 minutes/week for a standard class) than any of the 11 high schools in comparison groups. The average class length of comparison groups is 59 minutes (range of 47-80 minutes) and the average total class time per week is 229 minutes (range of 206-240 minutes). While some of LHS's class time shortfall is due to I Block, the most significant cause is that our schedule has an 8-block (A through H) structure where most comparable schools have 7 blocks within a similar-length day. The Schedule Committee also learned that the LHS schedule presents logistical problems, ranging from crowded lunch periods to building security challenges.

Schedules of Comparable Schools: The Schedule Committee collected and analyzed the schedules of dozens of schools, including all of the schools in our comparison group. They found that, even among the schools most similar to ours, there exists a remarkable variety of schedules. The following trends were noted, especially among schools that more recently experienced scheduling changes:

- longer class periods with fewer class periods per day
- introduction of flexible blocks (comparable to LHS's I Block)
- use of class cycles other than a week

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To investigate a similar school with a significantly different schedule, the Schedule Committee visited Natick High School where classes meet for 80-minute periods on alternating days, and found that educators had a broadly positive view of its schedule. The Committee also reviewed published research about school schedules, but found no conclusive body of research favoring any particular type of schedule. Some research suggests that a schedule with longer class blocks, fewer transitions, and more downtime during the school day has student mental health benefits without adverse educational impacts.

Faculty Perspectives: The Schedule Committee's gathering of faculty views included input sessions for the entire faculty about strengths and challenges of the LHS schedule, as well as the potential teaching and learning opportunities of a new schedule. A focus group on schedule design was offered and approximately 30 faculty attended. Questions about preferences related to the length of a class were posed and tabulated departmentally. The Committee's main findings about faculty views are as follows:

- Many teachers appreciate that our current schedule provides students opportunities for elective choices, and that it provides support/intervention time through I Blocks.
- Many teachers find our current class periods to be too short. They want longer and more consistent class period lengths than we presently have, but some want periods only slightly longer, (e.g., 55-60 minutes) while others want them much longer (e.g., 70-80 minutes).
- Some teachers expressed concerns about demands on their time, as well as the frenetic pace of our current schedule for both students and teachers.

Student Perspectives: The Schedule Committee engaged students in varied ways to gather their input about the current schedule. These included a meeting with the Student-Faculty Senate, student focus groups during I Block, and class assemblies for grades 10 and 11, using electronic polling methods. Preliminary student views identified included the following:

- Students appreciate the number of course choices available.
- Students want more class time to ask questions, finish assessments and labs, make music and art, etc.
- I Block is really helpful, but appointment booking and access to desired sessions could improve.

Parent/Caregiver Perspective: The Schedule Committee also sought parent feedback in multiple ways. About 75 parents in the Associate Principal's monthly daytime parent group engaged in the same activity as faculty about strengths and challenges of the current schedule,

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as well as the potential opportunities afforded by a new schedule. Perceptions and viewpoints of this group included:

- I Block helps students get teacher support and start homework, limiting stress and anxiety.
- Classes are not long enough to cover all the content which leads to more homework.
- The opportunity for students to take an additional course in an 8th block is valued.
- Transition time between classes is too short.

The Committee also hosted evening parent focus groups that were unsuccessful due to a lack of attendance; therefore, future outreach is necessary.

Emergent Themes: The pre-pandemic efforts of the 2017 - 2018 Schedule Committee yielded the following results:

- There is a desire for longer class periods in order to enable active learning, exploration, inquiry, and project-based learning, but mixed views about how long to make them. Educators may need professional development opportunities on teaching in longer class periods.
- There is a need to increase the total amount of instructional time per course, but the existing constraints (length of school day, 8-block structure) currently make it impossible to reach the time amounts that exist in comparable schools.
- Many stakeholders expressed a preference to continue having flexible I Blocks.
- Some scheduling obstacles, such as those related to teaching loads, curriculum, and graduation requirements, cannot be overcome without decisions by district leaders and the School Committee.

Schedule Types to Consider: Of the varied types of schedules that could be designed, the Committee has found three general types that warrant further consideration:

- Monday-Friday schedules where typical classes meet 3x per week instead of 4x per week.
- Schedules with a cycle other than weekly (for example, classes meet “4 out of 6” or “5 out of 8” days).
- Alternating-day schedules (classes of 75-80 minutes, but only on every other day).

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Any of these schedule types would allow longer class periods than what currently exist. In the Fall of 2018, the Committee focused on developing schedule prototypes to be considered for adoption in SY 2019 - 2020.

2019 - 2022

In the words of Robert Burns, “The best laid schemes o' mice an' men” often go awry, which aptly describes what happened next. A catastrophic [pandemic shut down](#) to “stop the spread” impacted public education and governmental agencies, alike, derailing our previous scheduling efforts.

The Centers for Disease Control and Prevention and Boards of Health recommended six foot separation between older students and adults, which had a profound impact on public education in Massachusetts, with typical class sizes necessitating a three foot boundary or less between student desks. These unimaginable conditions led to the creation of a “hy-flex learning model” with flexibility of attendance modes and synchronous and asynchronous options. The LHS Hy-Flex Schedule would become one of the most contentious and challenging aspects of pandemic education. Various iterations of the high school schedule emerged during this period of time.

2022 - 2023

The schedule that follows is a sample daily and weekly schedule for a Lexington High School student. Currently, there are three lunches, as shown below. The current six (6) day schedule that incorporates the follows, with built-in I Block and Advisory time.



Student School-Building Committee Members (S-SBC) from left to right: Nidhi Inhamdar, Elizabeth Yan, Paige Freeman, Sanjana Thesayi, Izadore Schuman-Olivier, Rithvik Iyer, Juliana Nudi, Itamar Assulin.

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Lunch Periods

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
11:35-12:05	11:55-12:25	11:40-12:10	11:30-12:00	11:35-12:05	11:45-12:15
12:05-12:35	12:30-1:00	12:10-12:40	12:00-12:30	12:10-12:40	12:15-12:45
12:40-1:10	1:05-1:35	12:45-1:15	12:35-1:05	12:45-1:15	12:50-1:20

6-Day Schedule

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
8:30–9:30 (60) A ₁	8:30–9:35 (65) G ₁	8:30–9:35 (65) B ₂	8:30–9:25 (55) A ₃	8:30–9:30 (60) G ₃	8:30–9:30 (60) B ₄
9:35–10:35 (60) B ₁	9:40–10:45 (65) H ₁	9:40–10:40 (60) A ₂	9:30–10:25 (55) B ₃	9:35–10:30 (55) H ₃	9:35–10:40 (65) A ₄
10:40–11:35 (55) C ₁	10:50–11:55 (65) E ₂	10:45–11:40 (55) G ₂	10:30–11:30 (60) C ₃	10:35–11:35 (60) E ₄	10:45–11:45 (60) G ₄
11:40–1:10 (60 or 25+30) D ₁	12:00–1:35 (65 or 30+30) F ₂	11:45–1:15 (60 or 25+30) H ₂	11:35–1:05 (60 or 25+30) D ₃	11:40–1:15 (65 or 30+30) F ₄	11:50–1:20 (60 or 25+30) H ₄
11:35-12:05	11:55-12:25	11:40-12:10	11:30-12:00	11:35-12:05	11:45-12:15
12:05-12:35	12:30-1:00	12:10-12:40	12:00-12:30	12:10-12:40	12:15-12:45
12:40-1:10	1:05-1:35	12:45-1:15	12:35-1:05	12:45-1:15	12:50-1:20
1:15–2:10 (55) E ₁	1:40–2:05 (25) Advisory	1:20–2:00 (40) I Block	1:10–2:10 (60) E ₃	1:20–2:05 (45) I Block	1:25–2:05 (40) I Block
2:15–3:10 (55) F ₁	2:10–3:10 (60) D ₂	2:05–3:10 (65) C ₂	2:15–3:10 (55) F ₃	2:10–3:10 (60) D ₄	2:10–3:10 (60) C ₄

A Day in the Life of A LHS Student

by LHS Students, *Elizabeth Yan, Juliana Nudi, and Itamar Assulin.*



Photo credit to Vikram Anantha, Lexington High School, Class of 2024.

It's another Monday morning in October, and I'm ready to head back to school after a restful weekend. My alarm goes off at 7:00 a.m., and I wake up and make breakfast, keeping in mind that I have first lunch today at 10:45 a.m. Afterwards, I pack my

school bag, violin, and soccer backpack, making sure that I have all the gear that I need for the school day and practice afterwards.

At 7:55 a.m., I make my way to my bus stop. We arrive at school at around 8:20 a.m.. There are lots of students that take the bus each morning, and my bus driver always tries to get there a little earlier to avoid the crowd of buses. He carefully navigates along Worthen Road, making sure to pause for the students crossing the road and trying to parallel park on the sidewalks. After arrival, I drop my soccer things off at the team room in the locker room and head to the Orchestra room to put my violin down. By the time I get back to the main hallway on my way to English class, it's around 8:28 and I have two minutes to fight my way through the extremely congested portion of the school to the stairs leading upstairs. I usually avoid the main hallway at all costs, because it's nearly impossible to get through and not be late, but this morning I accidentally get caught in a crowd.

After English, I head over to the Rock Room at 9:35 a.m. during my free block to make hot chocolate and talk with some other peer leaders. It's a highlight of my day because it is quiet and I get to relax. It's super nice to have a space to slow down during such a busy day, but I wish there were more rooms like this throughout the school. At 10:45 a.m., I walk to get lunch in Commons 2 and squeeze in with everyone else in the lunch line. The cafeterias need to be much bigger because there isn't enough room for everyone. I like that there are options to sit outside in the quad, but it rained last night and the benches are wet, so my friends and I opt to sit inside. We finally find a spot to squeeze in in the corner, but we can barely hear each other or move since it is so cramped.

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After lunch, I head to Orchestra in Room 133 at 11:20 a.m. Today, we can't use the stage, so the Orchestra teachers are especially flexible and creative in order to fit all 60 musicians into one room. The performing arts programs are all world class and hold amazing concerts, but it would be great if we had more space and better chairs and stands. The ones in 133 work, but the real musician chairs are all on the stage.

At 12:25 p.m., I go out to the quad to take a minute of fresh air before going to Spanish class. I love being able to see greenery and feel the breeze in the middle of my day after spending so much time inside. I'm glad the rain has stopped, though, because the world language building is a bit far. The Spanish room is a good temperature today, which I cherish before winter hits and it becomes freezing due to the lack of good heating.

Afterwards, I head to I-block for Chemistry at 1:35 p.m. I have to work on a lab that I missed last week, and I'm happy to have the time to. The science building's classrooms have great lab space and equipment. However, I wish we had some more flexibility in the spaces we have to learn- doing so labs outside would be super cool.

My last class at 2:05 p.m. is History in the main building. The ventilation system is oddly loud today, so my teacher has to speak louder when giving us directions for the upcoming test.

Once the bell rings at 3:10 p.m., I head to the locker room and change quickly to get ready for soccer practice. Before I leave, I rush back to the orchestra room and pick up my violin. At 3:20 p.m., I walk with a couple teammates to Lincoln fields for practice. It's a bit far with all my stuff, but we make it just in time. It's very nice that we have our own fields for practice, though, with good turf and equipment.

After practice, I head home at around 5:40 and shower before starting my homework. At 6:30 p.m., my family has dinner, and I pause my math homework. Afterwards, I do some chores and practice violin. Finally, at 9:00, I go back to my homework and study for my History test. After I finish, I finally get to sleep, ready for the rest of the week to continue tomorrow.

A Week in the Life of A LHS Student

The next week is a bit hectic, but very fun and full of activity and productivity. On Monday, I follow my Day 2 schedule and have a study and time to study for my test on Wednesday. In advisory, we spend some time covering the upcoming school events and signing up for I block. Afterwards, I have an away soccer game, and head out to the bus after changing in the locker room. Heading home, I barely manage to finish my homework and practice violin before getting to bed.

On Tuesday, I'm especially busy as I have an orchestra concert right after practice. I rush back to school and change quickly before rehearsal. It's worth it though, as the auditorium is filled

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with students, parents, and others that come to appreciate the great music. I get home and try to do some quick review before sleeping early for the History test on the next day.

On Wednesday, I have the History test I've been studying for. It goes well, thanks to the time I spent in preparation. Our teacher focuses on learning content and concepts for the long term over short term memorization, which is a pedagogy that I agree with. It's super important to me that my classes help me develop skills that I can use after I finish them.

On Thursday, it's raining. Everything else goes as usual, but I have to sit indoors again in Commons 1 because of the pouring rain in the quad. On my way to math, I try my best to walk under the overhangs to keep from getting soaked.

On Friday, we have a half day. I love half days, as I can spend some extra time with my friends and unwind after a busy week. My friends and I walk to the nearby center and get some ice cream after school lets out early. I head back to the locker room at 3:00 to change and get to practice.

On Saturday, I finish up the homework for the weekend and practice violin before my lesson. It's a pretty chill day, as I don't have practice.

On Sunday, I spend time with my friends and family before the start of another week.

PART IV: OVERALL BUILDING ORGANIZATION

What School Could Be

At this year's Convocation, we gave every LPS staff member a copy of Ted Dintersmith's book, *What School Could Be*, to mark the halfway point in our LPS strategic planning process. Our hope is to inspire bold thinking as we enter into the feasibility study phase of our new or renovated high school. We are compelled by Dintersmith's assessment that "Our education system is stuck in time, training students for a world that no longer exists. Absent profound change in our schools, adults will keep piling up on life's sidelines, jeopardizing the survival of a civil society." Dintersmith visited schools in 50 States for one year and discovered some innovative and inspirational ideas that could be taken to scale to transform schooling. His words inspire school communities like ours to "think big" and embrace their revolutionary spirit!

Published works like *What School Could Be* can influence the brick and mortar of the new Lexington High School, as the design of a school building influences the educational delivery model. Unlike education in the Industrial Era, contemporary education includes small learning communities, teacher collaboration, shared leadership, and personalized, student-centered learning. Students are actively engaged in their own learning, making use of small and large-group learning spaces, performance spaces, and specialty areas, such as nooks and quiet spaces to encourage reflection and mindfulness. Students use their multiple intelligences¹ (i.e., spatial, linguistic-verbal, logical-mathematical, body-kinesthetic, interpersonal; intrapersonal, and naturalistic) to engage with content and make their learning visible through written and artistic expression, public speaking, multimedia presentations, and other products and processes. Educators and educational leaders thrive in spaces created to foster shared leadership and interdisciplinary collaboration.

Community Visioning

In December 2017, the Lexington school community engaged in [educational visioning](#) with Fran Locker. Approximately 80 students, parents/caregivers, community members, faculty and staff, and school building and district administrators convened to explore what the high school of the future holds for the community. After three days of intensive facilitated workshops, beginning with the Educator Team and followed by two days by the Community Team, the plans developed can be used to help guide the educational and facilities-related plans for a new or renovated Lexington High School (LHS.) Much of the work was conducted by "Table Teams," or small groups of six participants each. They brainstormed, debated, and attempted to reach consensus on most of the defining issues. Each Table Team had educators, students, parents, and community members evenly distributed to the greatest extent possible.

¹ Gardner, H. (1983;2003). *Frames of Mind. The Theory of Multiple Intelligences*. New York: BasicBooks.

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It is important to note that the work of the educational visioning work predates the development of most of our critical planning documents, including the DEI: Our Call to Action (2018); Eliminating Systemic Barriers (2019); LPS Strategic Plan (2019); the Facilities Master Plan (2019); and the Master Planning Compendium (2020). Interestingly, although it may be implicit in concepts such as small learning environments, there is little to no explicit mention of diversity, equity, and inclusion. Today, most would identify DEI as the single most impactful effort defining our school system today. In light of the community's extensive contributions to these planning processes and the publication of a number of key planning documents, as well as profound educational changes resulting from the pandemic, it will be important for the Designer to work with us to reconvene teams and test the ideas and assumptions of the 2017 educational visioning process against the newly acquired knowledge that derives from the impacts of pandemic education, as well as a better understanding of the future direction of our school system.

The Organizational Structure

As we think about a new or renovated Lexington High School, in 2017, the Community Workshop participants identified a preferred organizational structure that is based on the concept of small learning communities. These interdisciplinary small learning communities would include elements, such as a freshman house, synchronous teacher teaming, and sharing students in real time.

Desired Core Learning Spaces

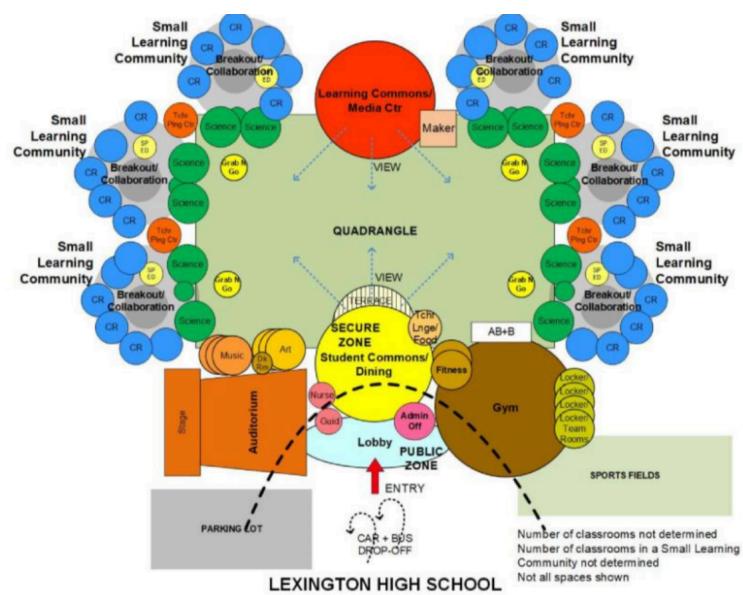
The visioning team reviewed 13 exemplary schools from the USA, the United Kingdom, and Australia. Working in “Table Teams,” they ranked the exemplars for their appropriateness for our future new or renovated Lexington High School. The essential characteristics of the core learning spaces include the following:

- Learning spaces arranged as small learning communities
- Classrooms are components of “suite spaces,” supported by other spaces, immediately adjacent to each other
- Circulation to be used for learning
- Flexible classrooms spaces that are interconnected and supported by auxiliary spaces, including extended learning, collaboration, breakout, and commons spaces
- Interdisciplinary possibilities
- Open, shared presentation areas

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- A variety of furnishings, offering students and teachers more choices in supporting learning
- Possibility of students working in multiple spaces under the guidance of a teacher
- Teacher collaboration supported by the facilities, through double-sized classrooms and strategic placement of related functions
- Teacher Planning Centers to support teacher collaboration and sense of community
- Innovative relationships to cafeterias, such as the breakout/collaborative space centering classrooms or immediately adjacent to enable breakout activities, movement, etc.

Overall School Organization



Community Workshop participants' desired school organization. These visioning team members were asked to identify the most important concepts for future learning and future facilities at Lexington High School. The Educator Visioning Team noted three priorities: (1) project based learning; (2) social emotional learning; and (3) relationships.

The Community Workshop participants identified the following priorities in the organization and structure of a new high school: making things to learn; student engagement; 21st century learning; relationships; flexible platform for continued change; end of isolated teaching; safety and security; interdisciplinary teaching and project based learning; teacher planning centers;

The Lexington Community Workshop participants engaged in a series of exercises to develop an overall school organization relationship diagram (shown on left). From a list of exemplars, they selected characteristics that they found favorable and those that were less desirable. Ultimately, the preferred concept featured the following characteristics: whole school planning; small learning communities; essential functions; and exterior functions.

The map on the left includes the

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and the end of the classroom as we know it today. As noted in the report, these concepts, collectively, call for radical change in educational deliveries and facilities.

Whole School Planning

The current design of Lexington High School has strengths and weaknesses. While some refer to the “California-style” design of the old high school with its open access in New England as a detriment and a safety hazard, others appreciate that the design of the building helps students and staff. Although there are pros and cons, most appear to agree that the new design should be organized around a “quad” or “quadrangle” (i.e., a square or rectangular space or courtyard enclosed by buildings).

Although not originally discussed during the 2017 visioning, air conditioning is a must in the new building, particularly as global climate change and global warming worsen environmental conditions. According to [Scientific American](#), extreme heat threatens student health in schools. This [2018 research paper by the Harvard Kennedy School](#) found that in schools without air conditioning, every 1-degree Fahrenheit increase in temperature reduces learning over a school year by 1 percent. The following list includes important considerations for the overall organization of the school building:

- Organize the building around a Quadrangle
- Air conditioning in all classrooms and interior spaces in the high school
- The Cafeteria and the Media Center/Learning Commons to be located in prominent positions with views to overlook the Quadrangle
- Create small learning communities in the Secure Zone
- Create Public Zones for the most common community uses, including the gymnasium, cafeteria, and the auditorium
- Lots of natural light from windows, hallways, and skylights.
- Windows that open.
- Quality air filtration systems to minimize germs.
- Sound proofing/mitigation in all spaces so sounds don’t get amplified
- Climate control that allows our classrooms to be comfortable enough for learning and teaching during periods of increasing climate instability.
- Environmental and sustainability features meeting a LEED rating level that is commensurate with community values and financial resources.

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- Out-of-classroom space where students can casually sit and collaborate during off periods.
- Elevators, hallways, and doorways that make all rooms on all floors fully accessible to those with physical disabilities or mobility needs.
- Gender-inclusive bathrooms that are central. Bathrooms that are inclusive and bathrooms that are gender specific so all students' and teachers' needs are met.

Small Learning Communities

Small learning communities were a priority as identified in the educational visioning exercises. Educators and community members articulated the following preferences:

- Create Small Learning Communities(SLCs) in the Secure Zone:
- Departmental organization with SLCs assigned to departments AND/OR “House” organization with interdisciplinary SLCs Could be thematic or Freshmen
- Extended Learning Area Common zone at the heart of each
- Teacher Planning Centers
- Small Group rooms
- Special Education spaces

Essential Functions

- Media Center/Learning Commons
- Satellite Administration suites with Deans and Assistant Principals
- Guidance to be part of a College and Career Center
- PE/Athletics Center to include:

Exterior Functions

- Outdoor spaces designed for teaching and learning, and student study
- Parking
- Visitors/Community
- Faculty and staff

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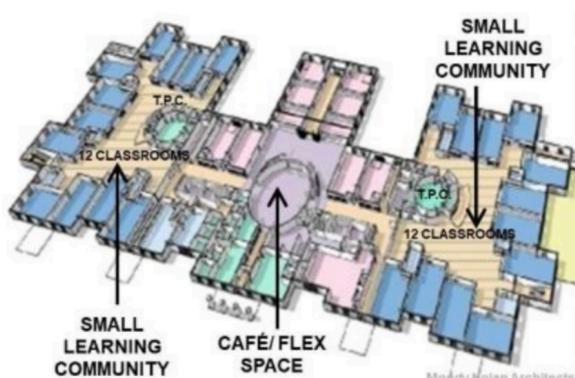
- Students
- Several Drop off/Pick up zones
- Community use
- Bus drop off/pick up separate from car drop off/pick up

Exemplars

The final step in the educational visioning process was to identify organizational exemplars that may be useful in the design of a new or renovated Lexington High School. The 80+ participants selected schools whose designs contain the most appropriate planning concepts for a future LHS, including Old Town Elementary School in Old Town, Maine and New Albany Grade 1-8 School, among others. Educators and community members alike appreciated the flexibility of spaces that could encourage more hands-on learning opportunities.

Old Town Elementary School

Participants appreciated that classrooms in this design were arranged as a cluster around a central Commons. The number of classrooms intentionally does not match the number of classrooms needed for each grade level. Six foot wide openings between adjacent classrooms. Commons area has presentation area, alcoves for breakout/tutorials, mini-library area. Accessible through Commons are the Teacher Planning Center, student toilets, storage, and specialist offices. Participants liked the smaller learning communities, communal spaces that connect, flexibility, learning commons as the epicenter, garage doors, flex furniture, potential outdoors, encourage project based learning.



New Albany Grade 1-8 School

This elementary/middle school included a large number of classrooms arranged in Small Learning Communities. The 12 classrooms are arranged around a Breakout or Commons space, and the classrooms are not identical. Varieties of folding walls exist between some of the rooms, allowing for flexibility. Many of the rooms have garage doors to the

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Breakout/Commons space. The positioning of the classrooms is not identical; some are central and highly connected to the Breakout/Commons space, while others are at the edges, less connected to the Teacher Planning Center located in a strategic position at the center of each Small Learning Community. There is a small, low Stage located in a paramount position in each SLC Conference/Small Group Room, which participants also appreciated. Finally, they appreciated the location of the Conference/Small Group Room located between the Stage and the Teacher Planning Center.

In terms of our school community's priorities, participants in the December 2017 educational visioning work identified Southampton High School as one of the least appropriate planning concepts for Lexington. For our purposes, we hope to avoid isolated classrooms arranged along single-purpose corridors, a lack of support spaces for classrooms; traditional grade-based and curriculum-based planning, with no consideration for collaboration and relationship-building and no sense of learning communities within the buildings. We also want to limit challenging separations between learning spaces, as well as isolated classrooms with no central focus.

PART VI: TEACHING METHODOLOGY & STRUCTURE

An exploration of the teaching methodology and structure begins with the [program of studies](#). Inclusive, collaborative, and technologically-advanced classrooms are a must, as we consider our new or renovated high school. The teaching methodology and structure at Lexington High School is changing in positive ways, as we work to create teaching and learning environments in which all students can succeed. Every classroom must have access to aesthetically pleasing shared spaces to minimize stress and promote wellness and to promote interdisciplinary work, project-based learning, engaging student and community presentations, and student and teacher collaboration. If feasible and cost effective, classrooms or communal spaces in each teaching pod should be equipped with the advanced technology necessary to create hybrid learning environments, providing opportunities for remote or asynchronous learning, as appropriate.

Inclusionary Practices

We believe that inclusionary practices can benefit all learner and that whenever possible, a child's first placement is in the general education setting. At Lexington High School many approaches to co-teaching occur on a daily basis. There are six approaches to co-teaching, which can be seen utilized throughout the high school, and they include the following: (1) one teach, one observe; (2) one teach, one assist; (3) parallel teaching; (4) station teaching; (5) alternative teaching; and (6) team teaching. Despite some misconceptions, no single approach to co-teaching is better than another. In support of our equity and inclusion goals, educators have begun using Multi-Tiered Systems of Support (MTSS) and [Universal Design for Learning \(UDL\)](#) practices, "a lever of change to make learning inclusive and transformative" for all students.

Teacher Workloads

Teacher caseloads are changing, which will increase collaboration and our educators' ability to support students' academic and social-emotional needs. A failed override of 2006 left LHS teacher assignments imbalanced, with inequitable teacher workloads ranging from 3-5 courses taught, depending upon the discipline. A new and more equitable system, more commonly referred to as "the 4 vs. 5 phase-in plan," will bring our high school teachers' caseload to four (4) classes, which has implications for the number of classroom spaces needed by the department. Departments will increase the number of teachers over a period of a few years, and we should design classroom spaces with this reality in mind.

Hybrid Technology

In 2017, the Lexington Public Schools adopted a 1:1 technology initiative. Every student in grades 6-12 has a Google Chromebook assigned exclusively for their use. Students may take their device home. During the pandemic, all students and families, PK-12, had access to these devices. Google Classroom is a classroom management tool and resource that is consistently used throughout the district, including at Lexington High School, to enrich and personalize our students' learning experience.

Our textbooks are important supplemental resources, but teachers draw the core of their instructional materials from online resources from many different sources. Most critical technology is extremely strong and reliable Wi-Fi, and a crystal clear projection system with integrated audio. Additionally, we serve numerous hearing impaired students and staff who would benefit from a built-in amplification system in every room.

The pandemic had widespread implications for all systems and organizations, especially public education. At the height of the pandemic, six foot physical distancing was mandated by Boards of Health, which had drastic implications for schools. During this trying time, Lexington High School adopted a "Hy-Flex" model of teaching and learning, integrating face-to-face learning and synchronous learning. Given the physical distancing requirements, students were able to participate in education in three ways: (1) face-to-face synchronous class sessions in person in the classroom; (2) face-to-face class sessions by video conference; and (3) asynchronous participation utilizing Google Classroom.

At a minimum, there should be a shared space equipped with a hybrid learning environment that includes technology that enables teachers to instruct students, as though they were physically in the classrooms with them. Technology that lends itself to this effort includes visualizers or document cameras that enable the teacher to project HD quality images to student devices. Another important addition to classrooms of today and the future are auto-tracking cameras with Artificial Intelligence (AI) tracking functions. Interactive control boxes enable teachers to integrate a variety of sources (e.g., computers, visualizers, and tablets) into a diverse layout that the teacher can easily adjust, without the need to plug in and out to switch devices. Finally, charging carts and cabinets should be a built-in feature for departments, if not all classrooms.

ART & DESIGN

Current Staffing

The Visual Arts Department currently has 24 K-12 art educators, 11 of which are at Lexington High School, 2 department secretaries shared with Performing Arts, and one Visual Arts

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Department Head, with the possibility of an Assistant Visual Arts Department Head. For more information, please click [here](#).

Current Program

The Art & Design program at Lexington High School offers a comprehensive curriculum encompassing traditional, contemporary, and digital art forms, and is aligned with Lexington Public Schools' Strategic Plan, the National Core Art Standards, and Massachusetts Art Curriculum Framework. The Art & Design Department at Lexington High School is high achieving and nationally recognized. What sets us apart is our ability to cater to students of all levels, from beginners to advanced artists, acknowledging the diverse range of artistic experiences and abilities within our student body.

Our curriculum and teaching approaches embrace art appreciation, individual student growth, skill development, community engagement, and social justice. The courses we offer provide students with invaluable opportunities to develop essential 21st century life skills that include effective communication, creative problem solving, critical thinking, self-discovery, social emotional learning and a deeper understanding of the world in which we live. Our LHS Visual Art & Design team is deeply invested in adapting to the educational needs of ALL students in our program and facilitating opportunities for each of them to experience growth and success.

Offering a comprehensive Art & Design program that continues to provide the most effective learning experiences for evolving and diverse students can present unique challenges that are universally recognized by art educators everywhere, no matter what city or state. This is because the quality and success of our programs, curriculum, teaching, and student learning relies so directly and heavily on access to external resources, such as funding, facilities, and maintaining and replenishing a large volume of consumable supplies at any given moment, as well as several unique considerations for health and safety and proper disposal of these essential teaching and learning tools.

The content and learning experiences in our department are complex and unique with varied and highly specific spatial, media, technological, and pedagogical nuances. As such, our spaces necessitate tailored consideration. As a department made up of professional art educators and artists, we collectively bring to the table decades of specialized knowledge, skills, abilities, and experiences. We are excited to strengthen what is already working, and to find new ways to best serve our students and community. We believe high priority considerations for our Art & Design program in this future building include increasing classroom space and storage to better support student choice, integrating additional technology and industry-standard equipment, spaces designed and dedicated to facilitating teacher collaboration, and centrally located large and small scale spaces for professional level presentation of student work that is so important to bringing visibility of that amazing work to

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the broader Lexington community (Please refer to the specifics around current limitations outlined below and in the “Design Considerations” at the bottom of this document.)

The LHS Art & Design current courses include: Foundations of Fine Art, Foundations of Digital Art, Animation, Graphic Design, Collaborative Art Studio, Drawing I, Drawing II, Illustration, Painting I, Painting II, Art for Social Change, Video Game Design, Advanced Video Game Design, Ceramics, Advanced Ceramics, Honors Ceramics, Photography, Advanced Photography, Digital Imaging, Sculpture, Advanced Placement Art Studio, Digital Video Production, Advanced Digital Art, Collaborative Art, and more than 40 Independent Studies and Teachers Assistants each year. In recent years, LPS Art & Design has engaged in interdisciplinary curriculum development in the creations of Art for Social Justice and an anticipated art and science course, Art of the Natural World. We have increased opportunities for project-based learning in classes like Video Game Design, Graphic Design, and Illustration in which students explore real world scenarios developing their work. Art & Design boasts a full calendar of Art Exhibitions that engage the community, and student and teacher collaboration. Currently, teachers are collaborating with a team of students to expand the Digital Video Production offerings, updating the curriculum, finding more access points for students, and expanding the ways in which students experience real life applications in our community.

The department presently has seven well-equipped but small classrooms outfitted with a wide array of specialized equipment, allowing students to explore various media, techniques, and processes. Among the state-of-the-art resources are Apple iMacs, Wacom tablets, Animation cell pegboards, Glowforges, and a fully functional darkroom with 18 Beseler 23CII enlargers. A comprehensive selection of software, ranging from Adobe Suite to Blender and Godot video game software, equips students with the necessary tools to integrate traditional techniques with contemporary technology. Our Ceramics Studio offers more than 16 wheels, including a standing/wheelchair accessible wheel, two kilns, pugmill, extruder, slab roller, and an extensive selection of glazes, enabling students to create functional pottery and sculpture projects. We have a single storage room.

Our department and existing spaces also support an array of extracurricular activities overseen by dedicated art educators, providing additional avenues for creative expression and collaboration. These additional opportunities include the National Art Honors Society, Animation Club, Sustainable Fashion Club, Fashion Club, LHS Mural Crew, HighCut/HighLine, Illustration Club, Humans of LHS, and Lex Create. Students in the Art & Design program have numerous opportunities for recognition and exhibition. Students participate in renowned contests such as the Scholastic Art Awards, LexArt Regional Art Show, and The Griffin Museum of Art Photography Contest. Within Lexington, students display their work at the K-12 Art Show, Cary Library, and the Senior Art Show. For more information about our current facilities (2023) please visit our informational document, “[Things you might Not Know about Art & Design.](#)”

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Delivery

The current facilities allocated to the Lexington High School Art Department present significant challenges in meeting the demands of our dynamic and growing program. The Art department has 7 classrooms shared by 11 educators teaching 24 distinct course offerings (83+ class sections per year). These are made up of 1 ceramics classroom, 1 photography classroom with a darkroom, 3 general art studios, 2 computer labs, a gallery space, and one storage room.

The existing film Photography space proves inadequate on multiple fronts, falling short of meeting the high student demand and failing to cater to the programmatic and curricular requirements of our courses. It is imperative that we prioritize the establishment of a dedicated space characterized by light-tightness, precise temperature control, and equipped with state-of-the-art ventilation systems. This space should feature ample workstations complete with sinks and safelights, as well as designated storage and drying areas for film negatives and prints. Furthermore, our analog photography class is limited in space and cannot comfortably accommodate a full class load of students in the darkroom at this time. The constraints of the Photography classroom have impeded our ability to integrate digital photography and facilitate post-production processes. To address this, an upgraded facility must have access to a nearby digital art lab. Currently we must find temporary spaces to set up photo studio spaces and backdrops. A dedicated space with professional-grade lighting and customizable backdrop options will facilitate a wide range of dynamic photography projects.

The current Ceramics studio finds itself overwhelmed by the high student interest in the course, highlighting a pressing need for expansion. To meet the demand and sustainability of our ceramics program, it is imperative that we provide a specialized environment commensurate with its unique requirements. This entails the incorporation of a second dedicated ceramics space as well as additional kilns. A ventilation system tailored specifically for ceramics is needed both for the kiln and air purification. The present Ceramics room has a single small storage closet. There is a need for a large storage closet, ample shelving and optimized storage solutions for materials and projects is crucial to accommodate materials increase as we meet student demand. Designated workspaces are needed for hand-building and wheel-throwing and additionally, we must prioritize inclusive spaces for adaptive potter's wheels, catering to the specific needs of all students to foster an environment where every artist can thrive. ~~In the past, in order to allow students to experience the use of a raku kiln the ceramics instructor has facilitated field trips in order to take select students to visit a studio with a raku kiln. In order for all Ceramics students to be able to have access to this experience, LHS would benefit from a permanent raku kiln to be installed in an appropriate space on campus outside, near the Ceramics studio.~~

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Similarly, our digital arts classes (including Graphic Design, Digital Imaging, Video Game Design, Advanced Video Game Design, Advanced Digital Art and Animation) are confined within a repurposed general classroom and a repurposed storage closet. These spaces can only accommodate a fraction of the demand, with each room hosting a maximum of 18-20 students. The expansion of our digital arts curriculum to encompass Video Game Design, Advanced Video Game Design, and a new Animation curriculum, has revealed an acute need for larger, collaborative spaces. To meet the needs of our current program spaces should be equipped to facilitate model-making and stop-motion animation, large scale 2D printers, 3D printers, and laser cutters and other devices vital that are already components of these courses. A forward-thinking digital arts facility should be equipped with collaborative workspaces that encourage interaction and idea-sharing among students. High-performance computers with animation software, a designated area for model-making and stop-motion animation equipped, and professional-grade cameras and lighting setups would support the unique requirements of these courses.

The Digital Video Production program classroom, having been retrofitted for its current purpose, is ill-suited for its intended use. It lacks designated spaces for production and editing, fundamentally limiting both instruction and students' hands-on experiences. Moreover, the room's size constraints, capping at 20 students, significantly hinders our ability to accommodate the high demand for this course. In a typical video production facility, separate spaces for production and editing are crucial for a seamless workflow. A studio with a green screen backdrop, adjustable lighting fixtures, and high-quality audio equipment would enable students to produce content of exceptional quality. To facilitate post-production work, an advanced editing suite complete with industry-standard software and hardware should be available. Moreover, a spacious layout allowing for flexible seating arrangements and camera placements is vital to accommodate diverse shooting scenarios.

Our department-owned cameras and digital devices currently circulate through the library's check-out system. This arrangement is far from optimal, prompting the necessity for a designated departmental space for the storage and easy accessibility of these vital resources. This need arises from the challenge of overseeing the condition and use of these devices under the current arrangement. Additionally, having a dedicated space will enhance security, organization, and the availability of these crucial tools for our students' creative endeavors.

The LHS Art & Design department previously enjoyed a large walk-in gallery space on the first floor. This space has been reduced by two-thirds to accommodate office areas in the entry hallway. This has compromised our ability to properly showcase our students' creative works impeding student recognition and growth opportunities. To properly showcase the diverse talents of our students, a spacious and flexible gallery area is essential. Adjustable wall panels and display fixtures would enable the curated presentation of various mediums, accommodating both traditional and digital artworks. Adequate lighting, including adjustable

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spotlights and natural lighting options, would ensure that each piece is exhibited in its best possible light. Additionally, digital displays and interactive elements could be incorporated to enhance the viewer experience and provide context for the showcased works.

Lastly, we must address the needs of our students for dedicated studio spaces beyond regular class hours. A substantial cohort of over 100 students actively participates in independent studies, assumes roles as teacher assistants, and immerses themselves in advanced level and Advanced Placement Art classes. This underscores the imperative nature of ensuring studio spaces on par with the resources allocated to our performing arts counterparts for their practice rooms.

Addressing these critical facility needs is paramount to sustaining student success and expansion of a growing Lexington High School Art Department. It is imperative that we undertake these upgrades to create an environment conducive to nurturing our students' artistic potential.

Future Educational Activities

The Lexington High School Art & Design Department envisions a transformative shift over the next five to ten years. The Art & Design program is in the Research Phase of the curriculum review process and we are gathering feedback and data from students and other stakeholders that is informing our current practices and future curricular goals and offerings. We are in the process of adjusting our foundational offerings to be more responsive to student interest while providing greater access and opportunity for students to choose a specialized or exploratory pathway in upper level courses. As we move forward we will:

- Work with student artists in purpose-built collaborative environments within our evolving facilities in which we can merge traditional craftsmanship with cutting-edge technology.
- Offer cross-disciplinary exploration and engagement through collaborative projects
- Offer partnerships with local artisans, art studios, and initiatives, to enhance students' understanding of sustainable art-making practices.
- Fostering collaborative ventures with neighboring institutions, local businesses, and community organizations to provide students with invaluable real-world experiences, nurturing a strong sense of civic responsibility.
- Empower students to play an active role in their creative journeys by introducing specialized tracks in multidisciplinary collaboration, enabling them to delve into art forms leveraging emerging technologies and addressing critical issues.

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- Continue to implement ethics and personal responsibility as part of artistic practice, prompting students to critically engage with matters of justice, cultural representation, and environmental sustainability.
- Equipping graduates with not only artistic expertise but also visionary thinking and visual literacy to navigate our ever-evolving global society.

This forward-looking approach embodies boundless creativity, ethical consciousness, and transformative collaboration. Our design considerations are guided by the department's specific curricular needs, [LPS Strategic Plan](#), [National Core Art Standards](#), [NAEA Design Standards for School Art Facilities](#), course enrollment requests, student input, and the collective expertise of our highly-qualified team of art educators. The National Core Art Standards dictate the necessity for areas dedicated to presentation, curation, analysis, display, collaboration, and art production. Further, our discipline has specific and varied material needs, equipment, storage, instructional, and safety needs. These design considerations are based on our current program, historical enrollments, and work being done within the curriculum review process.

DESIGN CONSIDERATIONS (ART):

- Art display space throughout the school that accommodates both 2D and 3D work with locks, appropriate lighting, and pedestals.
- A lockable Walk-In Gallery with adjustable lighting, pedestals and windows to a common space.
- Adjustable wall panels and display fixtures
- Digital displays
- Storage and Materials - must include large, lockable shared storage space for large quantities of consumable supplies that supports 21st century student-centered learning that promotes student choice in all classes. Also, Storage for portable display panels (on casters)
- Two (2) Ceramics Studios
- One (1) Photography Studio with Darkroom
- Five (5) Advanced Placement Art/General Art Studios (one of which is Sculpture-specific)
- Three (3) Digital Labs
- Digital Video Production Studio
- Gallery/Central Studio Maker Space (Flex Space)
- Teacher offices/workroom
- All department rooms should all be together on the ground floor to promote accessibility mobility impaired students and avoid the need for using the elevator for supplies, furniture, and equipment including kilns.
- Adjacent classrooms are essential for the sharing of supplies, resources, media, and materials, flexible instruction, and to support PLC collaboration among department

members. This will also allow for greater integration of traditional and new media as it forms the core of artistic innovation through the synthesis of ideas, art forms, and different disciplines and is aligned with post secondary and field experiences.

- Larger doors than a typical classroom to allow for installation and replacement of large equipment and art pieces (double doors?)
- Outdoor light, north facing, fill light, focal lighting, full spectrum led lighting, rheostat/dimmable, spotlights, controlled window coverings like blinds and opaque shades in order to ensures optimal illumination for accurate color perception and reduces glare, creating an ideal environment for artistic work in the classroom.
- Designated shared Art & Design-specific office space (as with other departments) designed to support collegial collaboration

General Space Considerations for All Rooms

- Flexible spaces within the classroom (this also makes space for anticipating the ever changing and future needs of art education)
 - Flexible points of instruction and demonstration in the round
 - Space for students collaboration
 - Art Display
 - Critiques and student discussion space
 - Flexible space for the changing material and equipment needs of courses so that teachers can continue to implement things like sewing machines and dress forms, printing presses, large scale sculpture and installations, still life setups, etc. Students often work on different media within one class or unit (student choice/project based learning)
- All rooms equipped with three (3) sinks and one utility sink. Eyewash stations, hot and cold, faucets and depth able to fill buckets, all with clay/plaster traps and filtration systems, ADA compliant. (Digital Art rooms only require 1 sink, utility)
- Ventilation to accommodate materials and media such as 3D printers and laser cutters as well as for the specialized needs of ceramics, sculpture, and photography.
- In-class space to store materials and secure them. Open storage, locking cabinets and closet spaces, portfolio storage, cubbies, finished artwork storage print storage (flat files), Walk in storage closets.
- Slip resistant flooring
- Technology in classrooms to support hybrid teaching and learning (visualizers, auto-tracking cameras, interactive control boxes, charging stations and carts)
- Classroom sets of Apple Pencils and iPads with art and design applications like ProCreate and Adobe apps.

Ceramics

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- Ceramics needs two classrooms each, with:
 - Two main sections, the room design should accommodate the Educators need to see students working in all areas of the room space needs to be: Hand building section with large tables and a dedicated area for 20 Potter's Wheels, featuring safe electrical placement options (either in-floor with waterproof covering or on knee-high walls with outlets on either side). Additionally, include floor drains for easy cleanup around the wheels. Wheelchair accessible design with at least 2 accessible/adaptive wheels for students.
 - Four or more sinks per classroom, with clay traps and double faucets if possible. Include one eye wash station.
 - Locking kiln room located separately, between the adjacent ceramics rooms with four kilns to accommodate class loads. Proper ventilation and metal storage cabinets for kiln shelves and supports.
 - Special electrical wire circuits to meet the kiln manufacturers requirements, state and local codes; ventilation, vent/hood to the outdoors to remove fumes and residual heat.
 - Metal storage cabinets to accommodate kiln shelves, shelf supports, and kiln wash.
 - ~~Outdoor location for raku kiln, covered and fenced, in a lockable space. Direct access from the Ceramics room to Raku space outside.~~
 - Pug mill room with essential equipment like a pug mill, a sink, extruder, work surfaces, and storage for clay. Additionally, it should have proper ventilation and safety equipment.
 - Slab roller and wedging tables
 - Damp box cabinet or room for storing works in progress (to accommodate 100+ students.)
 - Spray booth for ceramic glazing
 - Air filter
 - Storage and additional workspace including a large storage closet. Multiple tall metal adjustable shelves to store works in progress. Shelving for storing ceramic studio examples and student projects. Countertops, lockable high and low cabinets for storage of clay, glazes, aprons, and tools.

Sculpture

- The Sculpture-specific classroom to support non-ceramic sculpture (Adjacent to Ceramics studios)
- 220v wiring for glass fusing, enameling, welding

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- Walls wired with many outlets, and mounted extendable electrical cords for plugging in tools. Outlets wired to lockable disconnect boxes for locking out power to machinery like kilns, saws and drills when the room is unsupervised
- Ventilated hoods over work benches, for enameling, glass fusing, soldering, casting
- Sculpture specific kiln for glass and enameling
- Sturdy flexible height workbenches with vices and heat proof surfaces for metal works and jewelry-making
- Central compressed air with expandable hoses
- Appropriate storage for gasses and hazardous/flammable materials. Cage for storing tools. Storage space for student work. Built storage cabinets for bulky materials, plaster, fibers, cardboard ect.
- 3 ample sinks with traps, one utility sink
- Art Nature Lab (within the sculpture classroom)
 - Storage for organizing natural examples, bones, models, specimens,
 - Microscopes, magnifying glasses, cameras for observing and recording
 - Refrigeration and freezers for perishable art examples
- An outdoor gravel flex space adjoining the sculpture room for installing outdoor sculpture, doing work that requires outdoor ventilation

Photography

- ~~Photography classroom with an adjoining film darkroom and film developing room (3 spaces total)~~
- Adjacent to digital art studio space
- Light table for reviewing negatives and a white light viewing station.
- Ample storage with locks for cameras and specialty equipment. Ample counter space and spacious area for large work tables
- Shelving for drying prints (specific to silver gelatin printmaking needs)
- Separate light type film loading space/room with a long countertop and including electrical outlets at countertop height
 - Double door system for exiting/entering while lights are out; during film development. Safety light on a key switch. One 4' by 2' photo sink with temperature controlled water
 - An enclosed tall cabinet for drying negatives. Other ample cabinet space.
- ~~A dedicated space with professional grade lighting and customizable backdrop options~~
- Darkroom
 - large spacious area with separations between each work station/enlarger. Counter space and individual stalls with electrical outlets for 18 enlargers and

- timers, with one large drawer under each stall, and cabinets under drawers. One or two of these spaces should be accessible to persons with disabilities
- Light tight with maze entrance accessible by students with disabilities
 - One 4' x 8' photo sink with temperature controlled water at the end of the darkroom near the door, to keep wet and dry areas separate. Storage under sink for trays and measurement containers. Exhaust is to be located directly above the sinks where the photographic paper will be developed to enable adequate ventilation. Controlled by a lockable switch. Surge protected electrical outlet for a timer and clock should be located on the wall near the sink
 - A silver recovery unit/system
 - Chemical storage cabinets centrally located back to back with wet/dry chemical storage cabinets below the sinks
 - Countertop for the photo paper cutter should be located away from the entrance, sink and enlarging stations
 - Drains on downgrade on floor silver filters for all sinks
 - Safety eye-wash station

3 Digital Art Computer Labs

- With layouts that can accommodate individual computers as well as a collaborative space. Presentation board with screen casting capabilities that can be viewed from all seats in the room and/or TVs around the room that replicate the presentation board to maximize students ability to see demonstrations.
- Walk-in closet with plugs to charge technology and help organize materials and media of different sizes. This includes traditional art media.
- Lighting in all digital art spaces are LED rheostat/dimmable canister lamps to accommodate the need for both lower lighting (reduced glare on computer screens) and brighter lighting (to be able to have classroom conversations).
- In or adjacent to the Animation and Art for Social Change classroom (Lab A)- The space also requires enough surfaces for creating models, sculpting characters, refining and iterating on Graphic Design merchandise, 3D sculpture pieces, and Art for Social change installation components. These surfaces should be flexible and movable, so that in one block when animation is using them for stop motion, the stage can be saved and moved for the Graphic Design model products to be displayed and viewed.
- In or adjacent to the Video Game Design Classroom (Lab B) - A versatile gaming hub which would foster a sense of community and camaraderie among students, a space for both casual and competitive gaming, including eSports practice. It would double

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as an educational center, providing resources for learning game theory, vocabulary, and mechanics, while also offering a platform for testing and refining student-made games in a collaborative environment.

Video Production Facility

- Adjacent to Digital Art Lab
- With separate spaces for production and editing, a studio with a green/ blue / black / white screen backdrop, adjustable lighting fixtures, and high-quality audio equipment, an advanced editing suite with appropriate software and hardware. A spacious layout allowing for flexible seating arrangements to accommodate various in class shooting scenarios.
- A separate recording booth is essential for voice overs, character acting, sound effect creation for both Animation, Digital Video Production and both levels of Video Game Design. When not in use, this space would also be available for use by sign up Performing Arts students.
- Seating arrangements should allow for students to pitch ideas to each other, a storyboard wall, a few circle tables for script feedback and script reading, and community building

Gallery/Central Studio Maker Space (Flex Space)

- A collaborative space for students and educators that doubles as gallery spaces. This large professional level gallery space is dedicated to showcasing student artwork on a rotating basis and for annual school-wide shows. This can also be used for class critiques, and should be regarded as an equivalent level of need as performing arts spaces necessary for showcasing student performances and work.
- A Makerspace that can be viewed from the hallway and some classrooms with sound proof windows. The Makerspace will have adequate venting for 3D printers, large-scale 2D printers, laser cutters, and traditional media like spray booths, printing press tables, as well as giant tables that can work as collaborative work space. Will be open to be used for Art & Design classes, clubs, and independent studies.
- Worktables and cubicle studio spaces for students (as with performing arts practice rooms)
- Sewing machine bank and dress forms
- Dedicated print making space for intaglio, block, and screen printing
- Spray booth for spray painting, fixative, etc.
- Studio washing machine and dryer for laundering smocks/aprons
- Lockers upon request for students personal art supplies

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- A lockable “Cage” or lending library for art equipment and technology as well as large equipment storage.
- 3 computer stations equipped with access to large color printer, large bed scanner, drawing tablets, and edit specific keyboard

HUMANITIES: ELA & SOCIAL STUDIES

Current Staffing

The English Department currently has 25 teachers, 1 staff (administrative assistant shared with Social Studies), and an English Language Arts Department Head. For more information, please click [here](#).

The Social Studies Department currently has 30 full- and part-time teachers; 0.5 FTE administrative assistant; and one (1) Social Studies Department Head. For more information, please click [here](#).

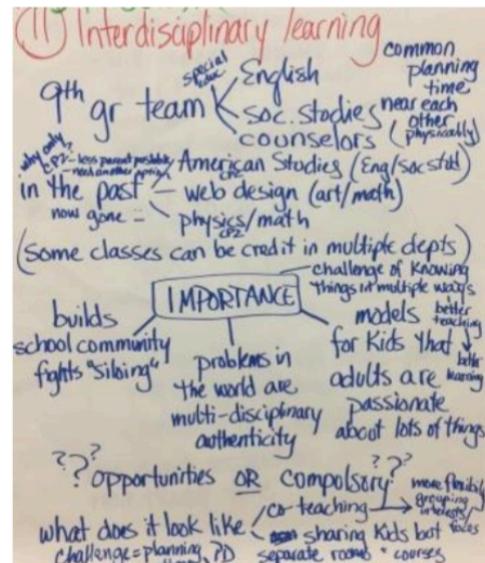
Please note that as of 2023-2024, the history department has adequate staffing to place all students in the elective courses they have selected during the scheduling process. Any new electives/course offerings would likely require additional staffing, or the corresponding elimination of another course.

Current Program, Delivery & Future Educational Activities

9th Grade Humanities Program

Currently, there are seven (7) pairs of History/English teachers who share a common roster of students with the goal of integrating the curriculum over the course of the year. This process has been inhibited by the inability of the teaching pairs to combine or reconfigure classes (taking the two (2) classes and breaking them into smaller groups by skill level or differentiated assignments) due to the small nature of the classrooms and that these paired classes are frequently not adjacent to each other.

Ideally, we would have rooms that could be opened up into one large collaborative space for instruction, activities



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or speakers. These rooms also could be broken into smaller spaces or regular singular class spaces.

Interdisciplinary Courses

Although at times we have ideas for interdisciplinary course offerings or collaborative course offerings, our current building limits these opportunities (As did different teaching loads between departments, which is being resolved through the last contract negotiation.) If it was more feasible for a science/history or math/history teacher to be in the same space at the same time, we could feasibly run large-size elective or required classes (i.e. 40-45 students) with TWO content area specialty teachers leading the course, planning together, and facilitating smaller groups. This would be very exciting! There are other opportunities and structures that would potentially allow for greater interdisciplinary collaboration and offerings for students as well, if our spaces were more conducive to it. It would be harder to do if the buildings are not connected and travel means walking outside in winter, and if there are not large capacity classrooms available.

Addressing and Narrowing Equity Gaps

CP2 level of classes are for students who are struggling, and these classes tend to disproportionately serve special education and students of color. For the past several years, the Social Studies and English departments have been collaborating to address concerns and plans are in the works to phase out College Prep (CP2) classes. In order to support this planned phase-out, additional breakout and collaborative space is required. Our phase-out plan creates more heterogeneous sections of CP1 or College Prep classes that will be supported by co-teachers from the Special Education department. Moreover, we have piloted a co-taught English Language Learners class for ninth (9th) graders, in which an ELL instructor has been paired with a team of English/Social Studies teachers in order to support and develop language skills for students new to the high school who need additional support, as measured by the WIDA chart. The current space limitation inhibits the effectiveness of efforts to expand heterogeneity and co-teaching strategies. Ideally, this breakout space could support students from different class sections in small group instruction or reteaching and support strategies.

Furthermore, having co-taught ELL/ELA classes in grades 10-12 would support the growing number of students with ELL needs. Providing this valuable support for ELL students would require additional staff, then, with more ELL staff in classrooms, the need for more break-out spaces increases. Right now, these co-taught classes exist in grade 9 only, and there is no breakout space there.

Another support for ELL students is the co-taught World History course taught by an ELL teacher and a history teacher for grade 9 students. Having similar co-taught history courses for students who enter above grade 9 but whose WIDA scores are low would serve this population

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(we would need this for grade 10 modern world history, and grade 11 US history as well as potentially for one elective such as child development). An alternative would be to have small group sheltered English sections of each of these courses taught by a dually licensed history/ELL teacher.

Additionally, with the English department's Honors for All model of heterogeneous classes, the need for greater flexibility in learning spaces becomes more apparent. Employing UDL strategies requires a nimbleness that our current classrooms do not support. Classrooms do not have the means to create smaller learning spaces within them that are not affected by the sounds of the rest of the group. Classrooms with glassed-in small conference rooms would be ideal for providing support and extension activities in one teacher's eyeline.

Research Skills

Social Studies students engage in lessons and assessments that develop research skills throughout their grade 9-12 experience at LHS. This serves to address two of the seven practice standards for History and Social studies in MA:

- 3. Organize information and data from multiple primary and secondary sources.
- 5. Evaluate the credibility, accuracy, and relevance of each source.

While our 9th grade students do complete the steps of a classical research paper assignment, students in all other history classes have frequent opportunities to select, use, and cite sources in learning activities tailored to the content of each course, ranging in size and scope. The current small room configuration inhibits the ability of the students to work in small groups. Access to the library and support from professional librarians is essential for all history/social studies instruction.

Debate Program

The Debate Program can accommodate 150 students and currently explores three (3) styles of debate in a high powered co-curricular program. The Debate Program has room to grow and hopes to expand to other styles of debate in future academic years, including developing Debate Across the Curriculum courses for single semester noncompeting students that focus on critical thinking, research, and communication skills. The Varsity or Advanced Policy, Public Forum, and Lincoln-Douglas Debate classes combine sophomore, junior, and senior students, where students are able to collaborate across grade and experience levels. The novice classes combine freshmen and sophomores with different background knowledge and research skills and at least two senior Teaching Assistants.

All three Varsity debate classes are Honors courses, meaning that the courses may exceed the standard 25 student cap based on student interest. Because debate teachers manage large

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classes with students at varied skill levels and different argument styles, even when classes have fewer than 25 students, the fact that second, third, and fourth year students share a classroom means additional space, flexible furniture, and opportunities for small group work is vital. There is also a need for debate practice spaces so the classes can be broken down into soundproofed areas that the current singular classroom arrangement cannot support. Ideally, these spaces should fit at least five (5) people, preferably closer to 8-10 people. We should have at least four (4) practice spaces given the size of the Debate Program. Having multiple small-group learning spaces would also be helpful for our beginning students who currently work with Teaching Assistants in one noisy and crowded classroom.

The students in the Debate Program practice after school in order to get ready for the local, regional, and national tournaments that occur on weekends. We also run a Debate Club for students interested in debate, who do not compete and who do not have to be enrolled in any Debate Class. Currently a safety concern exists because whenever students go into separate classrooms for practice rounds it is impossible for the coach to adequately monitor all of these student spaces simultaneously. A common breakout space that would allow students additional collaborative space, but in a setting that would allow for simultaneous supervision, is needed.

Journalism and Digital Media

In order for Lexington High School to continue its long tradition of a student newspaper, the facilities to produce it and the faculty to instruct must be present. At the moment, we have neither. *The Musket* is a beloved student publication functioning the same way it did 50 years ago, but the burden of advising this in the modern era is too much for one person who also teaches full time. A journalism curriculum can foster the 21st Century and enhance student engagement. Having a dedicated FTE to instruct journalism and digital media will bring our student publications into modernity and enhance student skills of critical thinking, communication, collaboration, and creativity. A dedicated space for this program, which includes desktops for layout and design and flexible work tables, will provide the necessary resources for students who have a passion for journalism, and who are not currently served, to produce a newspaper of note.

I Block

I Block is a highly-valued time set aside during the school day for interventions and enrichment. There is an additional need for larger class spaces for speakers or activities or small group work areas during I Block. There is a need for breakout spaces for teachers who are organizing and supporting students from differing classes or needs as well as larger spaces for speakers, activities or AP review sessions. Currently, our space restrictions hinder special enrichment topic i-block opportunities for staff to provide to students.

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Business, Personal Finance, and Economics Courses

We currently teach 20+ sections of business and economics courses each semester at LHS, many of which are directly related to state standards. These are often key parts of the student experience, and are a popular part of the course catalog offerings– and they help students explore potential majors and career options prior to college. Recently, our personal finance teachers have begun planning a “Credit for Life” fair, which will provide all 11th graders an opportunity to learn about budgeting and managing their finances in an interactive, experiential format.

Dedicated spaces for these courses would facilitate sharing resources, benefit the school store, and could allow for an expansion on existing programming. Some schools have spaces for student credit unions, banking services, and an ATM that would benefit our courses as well as students and faculty. Many universities have at least one classroom that has a stock broker trading floor design, and business school buildings almost always have capacity for tech-integrated small group collaboration and presentation.

Psychology and Child Development Courses

Currently, we offer approximately 14 child development or psychology sections per semester, and there is perennial high demand for these classes. There is an interest in extending offerings in this area to include an introductory teaching course (which would require additional staffing). We hope that an on-site daycare or preschool could lend itself to learning opportunities and field study work for our students in this strand. We are interested in a dedicated space that emphasizes Color and Aesthetics (especially Ingrid Fetell Lee’s work around designing for the aesthetics of joy), choosing color schemes and aesthetics that promote a positive and calming atmosphere while considering the psychological impact of colors on mood. Additionally, the space should facilitate collaboration by designing common areas akin to a lounge that foster social interaction, group projects, and a sense of community, acknowledging the importance of social development in high school. Lastly, outdoor classrooms and green spaces would encourage outdoor learning and interaction with nature, which has proven benefits for mental health.

Student Teachers/Interns

At the moment, the office space for student teaching interns is extremely limited. It does little to encourage a young educator to become part of the profession when we cannot support them with quality workspace and the ability to have conversations with their collaborating teacher in private. When considering office spaces, we must plan for more units than we have faculty.

DESIGN CONSIDERATIONS (HUMANITIES):

Technology

- Technology in classrooms to support hybrid teaching and learning (visualizers, auto-tracking cameras, interactive control boxes, charging stations and carts)
- Way to monitor each student computer (main computer that shows each screen).
- Dedicated computer that doesn't move from the room to eliminate dongle issues, and allows all students to see a projected image, instructions, or even video content while the teacher circulates with their own laptop to meet individual student needs.
- Room with desktops with production programing
- OUTLETS (10+/room)
- Chargers in hallways
- Phone jammers (private student phones cannot access wifi)

Teacher Office Space

- Individual work spaces for teachers with doors and landline phones
- Offices separate from lunch space, kitchen & restrooms... a place where you can close the door/have privacy for planning & grading
- Individual Offices / Dedicated personal spaces
- Additional spaces for student teachers/interns
- Teacher wellness is considered with a kitchen, refrigeration, and eating space with modern equipment, even allowing for some light cooking.

Classrooms

- All teachers have their own classroom.
- All teachers teach in a single classroom.
- Breakout spaces to facilitate inclusion and differentiation
- Classrooms with flexible seating arrangements and large enough to alter desk setups into different configurations.
- Easy access to outdoor green spaces for discussions and performances, outdoor green spaces that have sound capabilities
- Large enough classrooms to have tables for teachers/co-teachers to do small group work with students.
- Not fluorescent lighting; lighting with dimmers (teacher controlled), more than overhead lighting
- Flooring that is easier on the body (cushioned, carpeted)
- Desks with chromebook charging capabilities

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- Bar-height counters outside of classrooms (instead of lockers)
- Proximity to working photocopiers, printers every few classrooms for easy access.
- Coat hooks
- Permanent phone banks/hotels/jails in the classrooms with chargers
- Unified seating / all desks and chairs match
- Charging stations for electric vehicles
- More standing desks
- More whiteboard/display space on walls
- Whiteboard desks and [sliding whiteboard panels](#).
- Doors with jammers/double lock features for lockdown situations
- Window shades for classroom doors for lockdown situations
- Windows that fully open and provide sufficient ventilation for the room should the HVAC system not be working; also that can be used as an emergency egress
- Dedicated charging station/cabinet for student chromebooks with additional Chromebooks in each room to limit the amount of time kids spend out of the classroom getting loaners
- Better projectors/HD television screens for visuals/movie clips etc. Works in a bright space.
- Universal keys

Alternative Class/Teaching Spaces

- Collaborative spaces for students and educators to double as presentation spaces
- Large collaborative spaces and classrooms for interdisciplinary work.
 - 9th grade humanities rooms for 2x25 or 1x50
- A space or room like [Bentley's Trading Room](#) to support Business, Economics, and Personal Finance classes
- “LHS branch” of a community bank with working financial services for students
- A department-specific lecture or presentation hall or interdepartmental meeting space
 - With adequate Wi-Fi
 - Clocks and wall panels that tell you what day it is and what block is next
 - Room for guest speakers, shared class activities, etc.
 - Designated spaces where students can showcase their work.
- ~~Dedicated spaces for Socratics/discussions with Harkness tables (could be reserved by teachers ahead of time?)~~
- Private spaces for students to make up work/extra time for assessments (outside of I block)
- Book-able private spaces for one-on-one meetings

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- ADA compliant Project Based Learning (PBL) spaces that students can access within 5 minutes. These PBL spaces should include sound proofed classroom space, a quiet work and lunch space for teachers, a place to store valuables, and work with students one on one. Ideally, these PBL spaces would incorporate green plants and natural elements, with access to the outside, integrating the local conservation trails into our school.
- Acting/Performance space for English specific performances and a place to take classes when using acting techniques to teach content
- Access to an event space that has the capacity to connect 500+ devices to school WiFi
- This space would enable schoolwide events to access WiFi easily (One example being the annual Credit for Life Fair, but would allow for other such events)!!
- Craft room
- 2 film screening rooms to be booked

Debate Building Considerations

- Soundproofed classroom for at least 35 students.
- Four (4) soundproofed practice spaces that fit at minimum five (5); preferably eight to ten (8-10) people around one table
- Fully functional projectors / sound equipment to watch demonstration debates in class
- Cases to display trophies and plaques
- Lots of electrical outlets for charging devices
- WiFi that allows for students to use their personal devices to practice in our classroom spaces
- Movable tables instead of individual student desks to promote collaboration in practice debates
- Debate Office needs include: locking filing cabinet, phone, computer monitor, printer/copier, and bookshelf
- Storage units for tournament items such as medals, team sweatshirts, other team apparel, caution tape, posters, masking tape, etc.
- Bulletin boards for posting team announcements and other relevant information for students on the team, in addition to white boards.
- Standing tables for student presentations; one (1) per practice room and at least one (1) in the main classroom

General Space Considerations

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- Private spaces for conferencing, parent phone calls, IEP/504 meetings; these spaces should fit up to six (6) people
- Conference rooms for PLCs to meet
- Climate controlled spaces (teacher controlled)
- Quiet HVAC systems
- HVAC with appropriate filters to optimize student and staff safety
- Bookcases built into classroom walls
- Locking storage in classrooms
- Book storage space (separate from classroom, climate controlled)
- Storage space for backpacks in the classroom, so teachers don't trip over them

Other Important Spaces

- Lactation Room near department spaces
- Gender inclusive and/or gender neutral bathrooms in all wings of building
- Sufficient parking for ALL staff - in areas close to their primary building - and perhaps even upperclassmen?
- Daycare options on campus, proximity of child development classes to the daycare, space to accommodate high school student assistants in addition to small children and daycare teachers.
- Student Lounge - a hip space for cool cats
- Recreational space for freshman to go outside (recess, play games, etc.) that is near humanities spaces
- Areas separate from staff and student parking for parent drop off/pick up
- More bottle filling stations
- “Peace Corner” for teachers to minimize stress and maximize health and wellness; it might look like this: “Wellness Room”
- Individual lockers/drawers with personalizable codes for students to store their personal computers during the day; 15-20 to use on a first come, first served basis with student selected changing padlock codes

MATHEMATICS & COMPUTER SCIENCE

Current Staffing

For 2023-24, Lexington High School has 29 mathematics teachers (25.8 FTE), 2 math academic support teachers (1.6 FTE), and 8 computer science teachers (4.0 FTE), totaling 31.4 FTE. The department is part way through a phase-in of a teaching load change established through collective bargaining; this already-determined increase will add 4.6 FTE to the department for a total of 36.0 FTE by 2025-26. A new facility will need to reflect this permanent change in faculty size. Additionally there is an 0.5 FTE Administrative Assistant and an 0.8 FTE Math Department Head, thus a total staffing baseline of 37.3 FTE.

The mathematics department has a long history of a single, collaborative work space where we keep our desks. While we desperately need private space, and while we yearn to work with colleagues in other disciplines, we fear losing this space and the culture that it enables.

Current Program, Delivery & Future Educational Activities

Teaching of mathematics and computer science at Lexington High School has consistently been responsive to contemporary best practices for meeting the needs of all learners. To a greater extent than at most high schools, instructional methodology has shifted from teacher-centered approaches to student-centered approaches. Students are active learners engaging in inquiry-based, problem-centered learning in communication with peers and teachers. For students, working in collaborative groups is an everyday experience, which is visible through student desks in every math classroom being configured in tables as a default arrangement, even in undersized classrooms where movement is difficult. Future classrooms will need to have sufficient space and furniture to move flexibly between front-facing seating and collaborative seating.

While Lexington High School has had adequate classroom capacity for its core set of math courses, the spaces are extremely small and inflexible, making it difficult to utilize flexible grouping as current educational best practices demand. Moreover, there is no space to help students during unscheduled periods and it can be difficult to collaborate or conference with colleagues and parents.

There has not been sufficient space for a widening range of elective computer and technology courses. LHS has introduced three (3) new computer science courses in the past decade, all aimed at attracting more diverse students into the subject, including the State-encouraged equity-oriented AP Computer Science Principles course. This program expansion has been tremendously successful in attracting more students with greater diversity: the number of students requesting computer courses has gone from 200 in SY12, to 350 in SY17, to 700 in SY22. While adding 500 additional computer science enrollments, LHS has only been able to

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add one (1) more room for computer science, covering less than half of the demand increase. The remainder has needed to be absorbed into math classrooms through overcrowding. To meet even the current demand for computer courses without burdening math classroom capacity, LHS would need 2-to-3 additional computer classrooms, and trends of increasing demand are likely to continue.

Lack of appropriate and sufficient classroom space is a significant obstacle as Lexington High School attempts to fulfill the expectations of the 2016 Massachusetts Curriculum Framework in Digital Literacy and Computer Science. Meeting this framework's standards (in the areas of Computing and Society, Digital Tools and Collaboration, Computing Systems, and Computational Thinking) for every student, not just those who choose to take computer electives, will require either new technology courses taken by all students, or additional instructional time in existing STEM courses. Either approach requires additional classroom capacity that the school currently lacks. For example, adding a single half-year technology course as a graduation requirement would require 2 additional classrooms to serve 300 students per semester.

Lexington High School does not have any of the more contemporary kinds of technology instruction facilities that benefit students at high schools with updated facilities. For example, despite the school's large size, there is no dedicated maker space, even though the school has many students likely to be interested in using such a facility. A single regular classroom is jammed with all the equipment used by a robotics course and two extracurricular robotics teams, as well as the school's 3-D printers and other design equipment. This over-crowded space does not allow school-owned equipment to be used to its full potential by students. For the future, LHS aims to have amounts of computer design and robotics equipment commensurate with the school's size, housed in facilities such as laboratories and maker spaces to make these resources fully available to students both during and outside the school day.

DESIGN CONSIDERATIONS (MATHEMATICS):

- Mathematics classrooms sufficient for 32 mathematics teachers (29.4 FTE), with a preference that every full-time teacher have their classes in one classroom.
- Academic support room(s) for mathematics with appropriate furnishings that are conducive to collaboration (for example, tables and whiteboards)
- 5 appropriately-equipped classrooms dedicated to Computer Science.
- 2 additional Technology classrooms to provide all students with sufficient exposure to technology learning in order to address and comply with the Massachusetts Digital Learning and Computer Science standards.
- Dedicated maker space(s) sufficient for a school of this size

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- Dedicated robotics space
- Ample usage space and safe storage space for robotics equipment, 3-D printers, laser cutters, and other design equipment
- Outdoor spaces that can be used flexibly for projects and testing maker-space creations

General Classroom Spaces

- Collaborative spaces for students and educators that double as presentation spaces
- Spaces that are large enough for co-teaching different groups in the same space, or facilitating simultaneous activities
- Large whiteboards on as many classroom walls and other walls as possible, in keeping with contemporary recommendations about making teacher and student thinking visible (see for example *Building Thinking Classrooms in Mathematics* by Liljedahl), though not at the expense of windows and other natural-light features. In math classrooms, include graphing grids on the whiteboards in several locations per room.
- A standard technology setup in every classroom, with wireless technology features for making teacher presentations and student work visible, including document cameras and display technology for sharing any teacher or student screen so the whole class can see.
- Appropriate and sufficient power outlets for charging computers and graphing calculators.
- Technology in classrooms to support hybrid teaching and learning (visualizers, auto-tracking cameras, interactive control boxes, charging stations and carts)
- All spaces should be equally accessible for those with disabilities. For example, all classrooms should be able to accommodate someone who's hearing-impaired.
- Tables/furniture with wheels (and brakes) so things can be easily rearranged as needed
- Storage for classroom materials - markers, protractors, paper, erasers, books, etc.

Office and Adult-Facing Features

- Desk space for each teacher, administrative assistant, and department head
- Flexible work space for teachers (desks that can be sitting or standing)
- A private space with a phone for teachers to make phone calls to parents.
- A conference room for teachers to meet with parents, do math placements, etc.
- A space for teachers to work quietly together, with enough space to accommodate all teachers in the department. Also, adjacent bathrooms, as well as a space for more collaborative work for faculty/students, photocopier in a separate space from desks,

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- etc.
- Storage space for office supplies, teaching supplies, textbook inventory, and departmental book library (currently several hundred books)
 - Modest staff kitchen
 - Faculty bathrooms on each floor that are accessible for staff (ease of use while teaching)
 - Mother's room with fridge and soundproofing to account for the sound of a pump

PERFORMING ARTS

Current Staffing

The Performing Arts Department currently has:

- 6.8 FTE worth of teachers
 - Six 1.0 FTE teaches
 - One 0.2 FTE orchestra teacher who also teaches at the middle and elementary schools
 - One 0.2 FTE vocal teacher who is a vocal coach supporting our chorus program
 - One 0.2 FTE drama teacher who teaches one class (for FY 25)
 - One 0.2 FTE teacher who is also the K-12 Performing Arts Coordinator (0.8 FTE)
- 1.53 FTE Administrative Assistants
 - One 10 month employee at 37.5 hours a week
 - One 10 month employee at 20 hours a week
- 1.0 K-12 Performing Arts Coordinator (0.2 Teaching and 0.8 Administration)
- 1.0 K-12 Performing Arts Assistant Coordinator (0.2 Teaching and 0.8 Administration)

For more information, please click [here](#).

Current Program, Delivery & Future Educational Activities

Lexington High School has continued to provide an exceptionally rich and robust program of studies that enables students the opportunity to access a curriculum that is rooted in expansive STEM and Humanities programming, as well as students' interests, passions, and social-emotional needs. The LHS Performing Arts Department has a long tradition and widespread reach of engaging an extremely high number of students from diverse backgrounds. We are consistently recognized as one of the nation's premiere public high school performing arts programs providing an exceptionally robust curriculum that has been a model for performing arts programs across the nation. Somehow these accolades are possible

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despite the significant physical constraints of the current building. We look forward to the kinds of opportunities and experiences that we will be able to provide our students in the future when the current limitations are addressed.

In terms of rehearsal and performance spaces, the three (3) concert bands, three (3) orchestras, and five (5) choruses meet in rotation between two (2) classroom spaces that were outfitted in LHS' old technical education spaces. The rehearsal halls are small in size with ceilings that are quite low, resulting in compacted sound that is musically inappropriate and also unhealthy for one's ears, due to decibel thresholds. Along with this, with the high number of students that we have in each ensemble, the rooms cannot adequately fit all of the students, chairs, instruments, stands, and other equipment required for effective instructional and rehearsal practices. Music storage of both equipment and repertoire is a major issue, as the instrument lockers are in desperate need of being replaced (most of which are in disrepair), and additional space is needed to house the rest of the high number of instruments our students play (both school- and student-owned). Many range well above \$10,000.00 per instrument, so secure space is necessary. Ideally, we would need four (4) adequate rehearsal halls (i.e., Band, Orchestra, Chorus, Jazz) with adjustable acoustical panels and ceilings with heights of at least 26 feet. These rooms will need access to the exterior of the building for loading and unloading equipment as well as direct access to the auditorium stage. Along with this, there should be a large separate storage area for appropriate and adequate storage of instruments (e.g. enough lockers and lockers large enough to hold our biggest pieces of equipment). Right now, our locker storage poses safety risks in terms of the actual storage unit, as well as the overage of equipment needed to be stored, as equipment just cannot get housed anywhere.

Currently, we have four (4) practice rooms that are located well away from the band and orchestra/chorus rooms, making it difficult to supervise students and for students to access in general. While the rooms vary in size, there is only one room that can fit more than four (4) people at a time. This makes it difficult for students to work collaboratively in chamber music settings (quintets, quartets, instrumental choirs, small chamber choirs) and also in sectionals (by instrument type). By having more adequate practice room space with some spaces a bit larger to accommodate 5-10 people, students would be able to work more independently and collaboratively, which has been somewhat impossible to do with our current configuration.

While the LHS Auditorium can seat approximately 1000 audience members, the stage, pit orchestra area, wingspace, and line sets are inadequate for a program this large. The stage itself needs to be expanded and should include more expansive, authentic wing space that can house automated line sets and winches, enabling us to appropriately prepare for musical concerts and dramatic arts productions in a safe way. Currently, the stage is not large enough (both in length and in depth) to fit all students in a given ensemble. The wing space is pretty much non-existent, posing safety concerns with equipment and access to egresses. We need an attached, well ventilated, and large prop/building shop with appropriate sized doors (floor to

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ceiling) that will enable equipment and sets to easily be maneuvered from prep areas to the stage. We do have a prop/costume storage space; however, its set up poses many safety issues, and it is not large enough to handle the kind of work that needs to be done for productions. While we do have a pit orchestra, it is exceptionally narrow, making it extremely difficult for instrumentalists to perform during productions and is only accessible when the front of the stage is removed, thereby reducing the space on the actual stage itself during musical productions. The sheer quality of the stage in the auditorium poses safety concerns in general due to its deteriorated nature. The future rehearsal spaces should be directly “attached” or at least within direct access to the auditorium and stage areas.

LHS has a Black Box Theater located upstairs in the main building, away from the auditorium and the rest of the performing arts spaces. The space is just a double sized classroom with a carpet and painted black walls. There are windows that have curtains for a more enclosed feeling, but light can still come through. While this is adequate as a classroom space, we are lacking the kind of dramatic arts space to produce small scale productions and presentations. Ideally, the black box theater would be a true, theater in-the-round, with perimeter seating for an audience. Right now we are very limited in terms of the number of audience members who can attend our improv shows and festival productions as the seating takes up the performance space. Again, this type of space would be ideal for small dramatic arts productions, as well as small musical presentations. For example, we have an extensive jazz program, and we have difficulty finding space for them to hold their many jazz evenings for both our large jazz ensembles, as well as our smaller jazz combos.

As we work to further expand and diversify our performing arts course offerings at LHS outside of just performance based ensembles and dramatic performances, we are lacking an instructional space that can accommodate non-performing arts courses in music theory, music production, recording, and engineering, piano keyboard, guitar, ukulele classes, modern band classes, steel drum ensembles and handbell choirs, composition and arranging, and music related humanities classes in an effective way. Our current space limits enrollment to 15 students per class. We also lack the technology to provide an even more meaningful learning experience. By having a MIDI-style set-up or advanced DAW system, our students would be provided a technological environment that caters to the needs of the context within which they work - especially if their objectives exist outside of traditional performing ensembles (chorus, band, orchestra, and jazz). This type of technology would also enable these spaces to double as recording studios for our instrumental and choral students to record tracks for all of the festivals and adjudications in which they take part and for formative assessments of their musical progress in general.

In terms of teacher preparation spaces, right now, our music teachers work in a small space between the band and orchestra/chorus rehearsal spaces (this area used to be technology/automotive education) in a cubicle style set up. The space also doubles as sheet

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music, uniform, concert attire, and miscellaneous storage for the entire music department. There is a small office that is used outside of the Black Box theater for our drama teacher and there is one small space near the auditorium for our technical theater director. In an ideal situation, we would have appropriate, adequate, and usable workspace for our teachers to work independently and collaboratively. Having teacher workspaces attached to their designated rehearsal spaces would be a positive - though many teachers do teach in multiple locations throughout the day.

In general, having a Performing and Visual Arts Center set up would work the most effectively for our department. We have seen this done with other schools where this is a designated arts center that is attached to the school, however, can be closed off from the rest of the school should events take place after school hours - this includes third party rentals and community events. Right now community members need to enter LHS directly and then navigate their way to the performing arts areas. Again, all rehearsal halls, practice spaces, the auditorium, black box theater, music classrooms, scene and prop shops, instrument and theater storage, dressing rooms, recording spaces, and multi-use spaces would be centralized together within the footprint of the school. The performing and visual arts spaces could also be integrated together where visual arts could have a permanent art gallery integrated into the entrance to the performing arts/auditorium areas.

While there are so many priorities to be considered when building a new high school, here in Lexington, the performing arts program is an extremely important and foundational part of the curriculum across the school district and the community itself. This is a community that not only appreciates, but truly *values* the arts, providing an exceptionally high-quality and well-rounded education for its students. Outside of our non-performing classes, approximately 1,000 students participate in our ensembles, which is nearly half of the entire population of Lexington High School. As our program has been recognized on a national and global level, having such resources and adequate spaces to work within will strengthen the support and development of our students in the best ways possible.

DESIGN CONSIDERATIONS (PERFORMING ARTS):

- ~~It would be extremely beneficial to have a Performing (and Visual) Arts Center as a standalone (but attached) structure accessible to the rest of the school, but can be closed off to the school as needed especially when it's being used for performances after school hours and for third party and community rentals.~~
- Collaborative spaces for students and educators to double as presentation spaces
 - Mix use spaces for performance (small stages, recording studios, etc.) integrated throughout the building (i.e. cafeterias, etc.)

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- Technology in classrooms to support hybrid teaching and learning (visualizers, integrated interactive white boards, auto-tracking cameras, interactive control boxes, charging stations and carts)
- ~~Four (4) appropriately sized dedicated large ensemble rehearsal and performance spaces as part of an integrated Performing Arts Center with high ceilings for Band, Orchestra, Jazz, and Chorus, with adjustable acoustical panels and ceiling heights of at least 26 feet. There should be NO permanent risers built into the floors.~~
 - ~~These instrumental rehearsal spaces must be large enough to fit upwards of 100+ students in an ensemble WITH instruments. Because of this, instrument lockers should be placed in a different area.~~
 - ~~The chorus rehearsal hall could work as another dramatic arts space if it were expanded into a double sized room. This space must fit upwards of 300 vocalists at one time. Additionally having mirrors placed in the rehearsal space helps with the curricular aspects of vocal health and technique.~~
 - ~~These rooms will need access to the exterior of the building for loading and unloading equipment.~~
 - ~~Each of these rooms should have audio recording capability integrated into the space.~~
 - ~~Each of these rooms must have direct and easy access to the auditorium and stage.~~
- ~~The rehearsals spaces should have a plumbed sink and cleaning area for our instrument maintenance including mouthpieces and sanitation.~~
- ~~Two (2) music classroom spaces to support music technology, recording, and audio engineering as well as MIDI and DAW integrated workstations with full sized keyboards. The classroom should be able to fit no less than 25 stations. We are looking for one large space (double classroom) that can be converted into recording space, modern band and music making areas. A second additional space would support such classes as music theory, composition and arranging, and dramatic arts classes.~~
- At least 10 soundproof practice rooms located near Band, Orchestra, Jazz, and Chorus rooms. Practice rooms must fit between 4 - 10 students (non-modular units) with wired technology for recording.
- Adequate music storage for our growing ensembles, with space for chairs, instruments, and music stands, sheet music, uniforms, amplifiers and jazz equipment, etc. with easy access to outside loading areas
 - Ideally there would be a large instrument storage locker room to house student and large school owned instruments in an easily accessible way.
 - There would be another space for uniforms, amplifiers, jazz equipment, etc.
 - There would be a separate space for sheet music storage to support music for five choruses, three concert band, three orchestras, two jazz bands, and a myriad of jazz combos
- A Black Box Theater, a true “theater in the round” with ample perimeter seating (that can also be flexible in how its set up), which will be a dedicated dramatic arts space to produce small scale productions and musical presentations.
 - Will be outfitted with full technical capabilities of lighting and sound

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- The staging in this area should be the same size as the stage in the auditorium.
 - The Black Box Theater must be outfitted with an appropriate sized tech booth and tech area for lighting, sound, and technical direction
- Dance rehearsal space (opportunities for dance/creative movement curriculum to expand); space should mimic the footprint of the stage, so it can be used as a second rehearsal space for large productions (space could be a swing space for community dance/yoga classes)
- The auditorium could be stadium seating or stadium seating with a balcony - ideally would be able to continue fitting 1,000 people.
 - It must integrate a fully housed tech booth for lighting, sound, and technical direction.
 - Adjustable acoustical paneling will enable the acoustics of the space to be changed - we are aiming for sound that works for dramatic and music ensemble performances (dead for microphoned performances, but with sliding acoustical panels to bring ring and vibrance to the space for acoustic performances)
- The stage itself needs to be expanded and include more expansive true wing space that can house automated line sets and winches, enabling us to appropriately prepare for musical concerts and dramatic arts productions in a safe way.
 - The stage needs to be able fit at least 150 instrumentalists at one time and upwards of 250 chorus students at one time.
 - The staging would also have automated staging built into the staging infrastructure
 - The technical aspects would include automated line sets, winches, lighting and sound with a full (not half) fly system
 - Acoustical shells on stage and lighting permanently installed via line sets - this means they can be maneuvered around and slid out for dramatic arts productions, etc.
 - The addition of a piano locker is necessary for our grand piano.
- The performing arts space should have dressing and green room areas attached to the auditorium spaces that have integrated audio for monitoring productions. These rooms should be large enough to fit upwards of 15 students at a time.
- A generously sized sunken pit orchestra (seating of 35-45 people), making it easier for instrumentalists to perform during productions - accessible by tunnel or through hydraulic lift
- An attached, well-ventilated large prop/building shop (double/triple height ceilings) that will enable equipment and sets to easily be maneuvered from prep areas to the stage - ideally with floor to ceiling sized doors or garage doors. The size of the space should mirror the size of the stage
 - The space should also have dust collection and/or exhaust fans for adequate and safe cleaning
- An additional costume construction space would also need to be created and be large enough to store all costumes for productions

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- Teacher workspaces (offices) either integrated into the rehearsal spaces (band, chorus, jazz, orchestra, respectively) or in a collaborative work environment (a suite of teacher offices). Workspaces for 7 teachers must be provided.

PHYSICAL EDUCATION, HEALTH & WELLNESS

Current Staffing

The PE, Health & Wellness Department currently has 15 teachers, including eight (8) Physical Education teachers, one (1) Adapted Physical Education teacher, four (4) Health Education teachers, and two (2) K-12 Prevention Specialists based at LHS staff. The leadership model consists of one K-12 PE, Health & Wellness Assistant Department Head, and one K-12 PE, Health & Wellness Department Head. For more information, please click [here](#).

Current Program, Delivery & Future Educational Activities

Vision: Our philosophy and vision is encapsulated in our mission Statement - “Purposeful Movement, Healthy Decisions, Strategies for Life”. As a department our goal is to support students achieve both physical and health literacy through a combination of lifelong learning through physical activity, exercise, & sport while supporting students in making health conscious decisions, meeting challenges, and participating in positive behaviors.

The 9-12 program at LHS has a strong foundation but the space limitations impact our ability to collaborate with other departments to the level that we envisioned. There are many opportunities where inter departmental collaborative opportunities can occur with the availability of the desired spaces. Collaboration opportunities with the Science department in such areas as Anatomy and Physiology, Biomechanics, Kinesiology and Neuroscience as it relates to the teen brain and addiction/decision making are all examples of potential opportunities to promote the notion of a “well rounded ” education experience. Without the available space and updated facilities, these opportunities will not be realized. It is also noted that the extra curricular athletics program also works closely with the department in sharing and utilizing these facilities and the department will continue collaborative conversations with the Athletic Department to ensure that an optimal level of facilities are considered for the new building. The Athletic Department also receives a number of requests from school clubs to use an activity area; however, due to space limitations none of these requests can be accommodated to date.

The Gymnasium is currently too small to accommodate some of the study units and the existence of a large soffit running through the middle of the gym impacts the ability to deliver effective curriculum in some activity units along with having an impact on after school sports

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such as the volleyball and basketball programs. The **Fitness Center** space is a converted space that has approx ten concrete support columns throughout the room and this greatly impacts the safety of students who need to be mindful of these obstructions along with the space that is available to effectively run the desired classes and accommodate the after school sports teams. The **Yoga/Dance Studio** is also a converted printing space that has limitations due to size which require lesson modifications and space expansion in order to safely teach some of the more dynamic performance based units of study.

The **Athletic Training** room also doubles as a classroom and due to the current size of the room we have had to restrict the class sizes of both the CPR and Sports Medicine classes to a maximum of 18 students thus impacting the number of students who have access to these classes each year. As a follow up the size of the AT room is totally inadequate to accommodate the after school sports teams in order to effectively, evaluate, treat and rehabilitate the numerous sports injuries which are treated in the room every school year (3000+ visits per three seasons) which is a potential health and safety issue. As licensed healthcare professionals the Athletic Training staff, would be able to provide a much higher level of cost effective (free) injury care with the appropriate level of facilities in place.

Health Education classes require safe and private spaces to allow students to speak with the health education staff when personal issues are part of the conversation. Furthermore some of the units require intervention and support from the two social workers in the department and the need for a private welcoming space is optimal to support student emotional health.

The department coordinates our **School Health Advisory Council (SHAC)**, a school and community partnership with significant student participation. SHAC resources support programs that promote better health for our school community and the Town of Lexington which includes students, families, community agencies, organizations and school personnel. Space is limited and often inadequate for the work of the council and sub committees. Running meetings at the high school has afforded greater accessibility for all students to participate. Space constraints at the high school make it difficult to assure student access to all meetings. ([LPS SHAC Report](#))

SHAC, our prevention program and town agencies have co-sponsored frequent and ongoing Teen/Adult dialogues over the years. These events provide opportunities to engage large numbers of students, parents/adult caregivers and community partners in the district and department's ongoing DEI efforts. Current space at the high school prevents us from fully implementing this program. Dialogue nights draw large numbers of students and families averaging up to 400+ attendees. These events are facilitated by trained student leaders recognizing that cross generational dialogue requires conscious effort. Conversations reflect the work of the district and State efforts in "creating an equitable environment for all", respecting diversity and human civil rights of all.

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The **Prevention Program** continues to experience challenges with regard to having a permanent and proper space to support the student-led peer leadership programs along with all other associated student activities including SADD (Students Against Destructive Decisions) club, SHAC meeting space and the Teen/Adult dialogue events. Currently the program does not have the space available to support the ability to effectively plan and support the student facing K-12 elements of the program. Current student participation is well over 300 trained high school students each year.

The Lexington Public Schools PE, Health and Wellness **Prevention Program** provides free and confidential information, counseling, and support to students and their families for any alcohol or drug related questions or problems. In the district's efforts to continue to reduce exclusionary practices and suspensions and to maximize restorative practices and educational opportunities the prevention program provides intervention, assessment, and education to students who violate the LPS code of conduct substance use policies as an alternative to suspension. Space constraints often make it challenging to provide a confidential space to hold associated meetings with students and families ([see The Prevention Program Diversion Services](#)).

DESIGN CONSIDERATIONS (PHYSICAL EDUCATION & WELLNESS):

- Collaborative spaces for students and educators to double as presentation spaces
- Technology in classrooms to support hybrid teaching and learning (visualizers, auto-tracking cameras, interactive control boxes, charging stations and carts)
- With the current configuration, the department is the most separated group at the high school, divided between the Humanities and World Language building. This configuration has not provided for any meaningful collaborative opportunities between the PE, Health Education and Prevention groups and the new building will provide the dept. with the up to now unavailable opportunity to do more interdisciplinary work in the new building with the vision being that the dept. will be located in the same area.
- Indoor Facilities: A model similar to the Lincoln/Sudbury Regional High school could be considered for the basis of the PE design.
- ~~A main gymnasium which would also host varsity after school games, a second gymnasium which could also sub varsity games with limited spectator facilities.~~

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- A dance/yoga studio along with a Fitness Center in addition to the planned retention of the Field House.
- A separate wrestling (for Athletics) room should also be planned as this is normal to common practice in most new school construction projects.
- This level of facility design is needed due to the current and future trend of typically 5-6 PE classes occurring simultaneously which involves 120-150 students. All of these facilities would be in full use during the winter months, and it should also be noted that the department collaborates with the LABBB program to provide PE/activity facilities when possible, but on a limited basis due to the current space limitations. The wrestling room proposal will be explained further in the Athletics Dept. submission but would fit into the PE/HE/Prevention footprint.
- Collaborative spaces for students and educators to double as presentation spaces.
- Classrooms designed for auditory learners.
- ~~At least two (2) dedicated yoga/dance studio class spaces, with secure storage for yoga equipment, appropriate sprung floor, mirrors.~~
- Installed sound system in yoga/dance rooms.
- ~~Two (2) all purpose studio rooms for CPR, Athletic Training, presentations, alternate class space for special PE projects.~~
- AirPlay in all classrooms.
- Private 1:1 spaces that Health Education Teacher and Prevention Social Workers can meet with students (separate from our offices).
- Common meeting space for Health Education and PE Teams to collaborate.
- ~~Four (4) Health Education classrooms that allow for innovative, interactive, and flexible activities student participation.~~
- Chairs for students that help with sensory needs in the classroom and general sensory issues.
- One idea is to connect the new building to the existing fieldhouse and put PE & Health spaces along this corridor.
- Laundry room for equipment maintenance and sanitary purposes.
- Multiple two (2) gymnasias/multi purpose spaces for the expansive PE offerings (e.g., fencing, volleyball, yoga, and rollerblading).
 - On average, there are 5-6 classes per block scheduled and current space is inadequate to effectively teach classes separately. An additional gym would provide the classroom space to effectively deliver curriculum to all students along with having an updated Fitness Center and Yoga/dance studio.
 - Gymnasium #1 would double as the venue for all of the after school sports events (basketball, volleyball games, etc.) with bleachers to facilitate spectators.
 - Gymnasium #2 would not require the same sizing or footprint, as it would only

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require minimal spectator accommodations similar to the Hastings and Estabrook gymnasias.

- Locker spaces for securing student valuables during class.
- Locker spaces for non-binary students.
- Offices that can adequately accommodate up to 10 physical education teachers.
- Offices that can adequately accommodate up to six (6) health education teachers.
- Offices that can adequately accommodate two (2) Prevention Specialists.
- Offices that can adequately accommodate two program leaders who are based at LHS.
- After school sports separate space needs (e.g., coaches' offices, team rooms, etc.) should be discussed with the Athletic Director to determine the needs of this program.
- Adaptive Physical Education offers one of the few fully inclusive APE programs in the district and will continue to do so, as it has been a successful and effective model that benefits all of our students who participate in this program. The department does not anticipate requiring any specialized space for this program as the areas described in this submission will meet the needs of our student population.
- Athletic Training (AT) spaces are inadequate in size to serve the student Sports Medicine needs. While the space is primarily used for the after school sports program, we also see the AT room space, as an opportunity for students to pursue Sports Medicine and Exercise Physiology units of study, using a coordinated scheduling approach.
- A Lifeskills swing space that can be a multipurpose area for Wellness enrichment programs, and those that allow for partnerships with our Food Services team to provide electives such as nutrition, medicine, food preparation, and fundamental cooking skills is an example of an interdisciplinary opportunity.
- See below as a possible concept on design possibilities with the PE/HE/Prevention and Athletics spaces to the left of the sample plan.



SCIENCE

Current Staffing

The Science Department currently has 30 teachers, one (1) administrative assistant, and a Science Department Head. For more information, please click [here](#). After the failed override of 2006, LHS science teacher assignments have been imbalanced, with some teaching 3 or 4 classes, depending upon their course level. A newly bargained, more equitable system (commonly referred to as “4 vs. 5”), necessitates a change in workload for some in the Science Department, which will be factored into future assignments.

Current Program, Delivery & Future Educational Activities

The goal of the LPS Science Department is to inspire all students to experience wonder and appreciation for the natural and designed world, and to prepare them for success as students, scientists, and global citizens. We hope to inspire all students to experience wonder and appreciation for the natural and designed world, and to prepare them for success as students, scientists, and global citizens.

Over the last six years, the Science Department has been forced to modify the Science Building and spaces available based on our current building’s structural limitations. We have added a modular classroom, converted a collaborative student support space into a classroom, and converted a Biology room into a Chemistry room. Even with these modifications, all of our classrooms use at least 6/8 teaching blocks, and 50% use at least 7/8 teaching blocks, which means that all teachers share classrooms. The pressure on these shared spaces, combined with the lack of available space during the school day, minimizes the lab experiences that we are able to offer, as teachers must set up and breakdown labs for different classes and coordinate the use of equipment, lab spaces, and supplies, all within the allotted five (5) minutes of passing time.

Currently, there are (6) classrooms dedicated to the required 9th grade Environmental Earth Science (EES) course, focusing on climate change, water, and the human impact on Earth’s resources. Of these six (6) classrooms, only three (3) have a lab space associated with them, resulting in unequal access of opportunity for approximately half of our 9th graders. Our students’ access to Science labs depends largely upon the particular section to which they are randomly assigned. Our EES teachers go above and beyond to eliminate this inequity by switching rooms so that all students have a chance to have authentic lab experiences.

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We currently offer a robust four discipline Science curriculum that includes: (1) Environmental Earth Science (EES); (2) Biology; (3) Chemistry; and (4) Physics. Due to limited classroom space, we offer a limited amount of electives: full year robotics, and semester electives of the following: Robotics/Engineering, Marine Science, Scientific Research Methods, Physics of Resonance. We plan to offer 2 new electives to students next year: Introduction to Engineering and Biotechnology. We have had to turn students away in each of the last two years due to a lack of space and teacher availability to run these electives. Additional classroom and lab space will allow us to increase the electives that we can offer, opening our students to a world of new opportunities for budding young scientists.

Our efforts to address and narrow equity gaps in Science have included merging the CP2/CP1 courses and eliminating our CP2 9th grade class using Universal Design Principles (UDL). Educators also have begun to align the Next Generation Science Standards (NGSS), as it applies to the grade 8 to grade 9 transition. The Science Department will continue to develop the vertical alignment and articulation of those skills through various disciplines this year. We are hampered by a lack of space for teachers to support all learners in this effort. There is a need for breakout spaces that could be in our classrooms or in an adjoining space, and could include opportunities for project based learning, long term inquiry based projects, and/or co-teaching.

Ideally, to support our work on the Next Generation Science Standards (NGSS) and our LPS vision for authentic learning experiences, we would have a lab preparation space dedicated to the preparation of materials and inquiry-based learning experiences. This dedicated lab space could support both teachers and students in authentic learning experiences, where they could pursue their interests and passions. We have a strong history and participation in the [Massachusetts Science & Engineering Fair](#), empowering our students to "ask tough questions, and problem solve using science and engineering practices." The lack of adequate lab space creates inequalities for students who are not able to work on a project at home.

Program delivery is impacted by a critical shortage of Science Labs, which forced us to invest funds to temporarily convert Environmental Earth Science (EES) classrooms to Chemistry and Biology Labs. All Science classes are lab-based and additional time is allotted in the schedule for labs. There are limitations to offering EES, as there are only six (6) classrooms, three (3) of which contain wet labs, necessitating the relocation to alternate spaces. There are three (3) prep rooms for Physics, and an additional three (3) prep areas are inaccessible due to their locations within classrooms or offices. The prep areas are small, essentially closet-sized, limiting the number of staff who can prepare and store labs in those spaces. ~~Currently, there are 23 classrooms; fifteen (15) Wet Labs; six (6) Biology Labs; six (6) Chemistry Labs; and three (3) EES Labs that must swap spaces whenever there is a Wet Lab rotation between the twenty seven (27) sections. Given these realities, there is a need for the following:~~

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- ~~Four (4) additional learning spaces for Physics and Engineering, ideally these would be located off centralized open concept maker space~~
- ~~Three (3) additional EES labs for courses & electives~~
- ~~Two additional Wet Labs Total for Biology courses and electives~~
- ~~Two additional Wet Labs Total for Chemistry courses and electives~~
- ~~Three additional lab prep spaces~~
- ~~Independent and long term project storage accessible to each discipline~~

Over the last five years, the LHS Science Department has been forced to make stop-gap modifications to the Science spaces available based on our current structural limitations in the building. We have added a modular classroom, converted a collaborative student support space into a classroom, and retrofitted a Biology room into a Chemistry room. Even after this series of modifications, we still lack enough space to engage in the kind of Science education that our students need today. All of our classrooms are in use at least 6/8 teaching blocks, and all teachers currently share classrooms. These challenges, coupled with the lack of open space during the school day, diminish our ability to offer authentic lab experiences, as teachers have to set up and breakdown labs for different classes, coordinating the use of equipment, lab spaces, and supplies—and all within a brief five (5) minute window of passing time.

A New Teacher-Designed Science Sequence

Our current Science sequence creates indisputable opportunities for some students and limits opportunities for others. A concern for our educators is that the required Science courses do not necessarily lend themselves to the development of budding young scientists who will be faced with solving the contemporary challenges of our time, including climate change and global stewardship of the earth.

The LHS Science educators are working together to develop a recommendation to determine an appropriate Science sequence for our students. The Science teachers hope to increase opportunities for students to explore beyond the traditional classes. This recommendation from Science teachers will articulate the sequence and structure of a 9-12 Science program designed to serve all students. The Science Department hopes to finalize a recommendation that will be submitted to the Principal and Director of Secondary Education for feedback and approval, and then on to the Superintendent of Schools. Any Superintendent-approved changes in the Science sequence also will be reviewed by the School Committee Secondary Education Liaisons and then the full School Committee.

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As noted in the educational visioning of 2017, there is no graduation policy in the Lexington Public Schools, and none has existed for the past 30 years. A lack of policy contributes to what some educators perceive to be an organizational ambiguity that exists regarding the sequence of the Science courses. To address this concern, the Superintendent and School Committee have developed [collaborative goals for 2023-2025](#). We are in the process of working on goals to adopt a new graduation policy, and the recommended changes to the Science sequence will be incorporated within the new policy, along with any other approved pedagogical or curricular shifts from the other departments.

DESIGN CONSIDERATIONS (SCIENCE):

Storage & Teacher Prep Spaces

- Dedicated office spaces and desks for all Science staff that allows for collaboration outside of classrooms or prep and storage space. The spaces should include a large collaborative table, white board, and cabinets that fit binders in them.
- Custom shelving and storage cabinets for interestingly shaped lab equipment.
- Proper chemical storage rooms (organic and inorganics) with proper ventilation and in proximity to one another.
- Deionized water in Biology and Chemistry prep spaces. If possible, it would be beneficial to have this built into faucet instead of separate from sink.
- Independent and long-term project space and storage accessible to each discipline.
- Chemical hoods in storage room. These chemical hoods must be of good quality and accessible to students from both sides and not with the prep space.
- Prep space between every classroom.
- A “Dumbwaiter” transport system between floors, so chemicals do not need transportation in the halls and up the stairs.
- Shelving for chemicals must to have a lip on it and start at the floor, with no cabinet underneath.
- Office and desk space for each teacher, along with appropriate shelving, a file cabinet, etc.

LHS Physical Grounds & Plant

- Charging stations for electric vehicles.

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- Space considerations to be located in proximity to the PE/Wellness area for increased collaboration, as well as shared use of each department's facilities to increase access to classroom experiences.
- Pond ecosystem (similar to the current one outside of the LHS Science building) for hands-on outdoor experiences.
- Greenhouse space and native plant species in landscaping.
- Observatory and telescope.
- Areas to showcase student work and awards in all halls.
- Meditation/quiet relaxation room for staff.
- Bathrooms on all floors and multiple staff bathrooms.
- Planetarium.
- Staff lunch room.
- Air conditioning and heat in all classrooms.
- Wider hallways/stairs for easy travel.
- As much natural light as possible in each room.
- Outdoor tables, a pavilion, and a space for students and staff, so they can enjoy the fresh air and not feel like they are locked inside.

General Space Considerations

- Collaborative spaces for students and educators to double as presentation spaces, designed better than just an empty classroom or office. Perhaps a pod around which six classrooms are centered, similar to elementary set up merged with a public library meeting room concept.
- Small group meeting spaces/conference rooms/hallway spaces.
- Technology in classrooms to support hybrid teaching and learning (visualizers, auto-tracking cameras, interactive control boxes, charging stations and carts)
- Office space for everyone to be together to collaborate.
- One key for all classroom doors, separate from prep room spaces, offices, and bathroom.
- Moveable tables, furniture, standing desks, etc. Consider high top lab desks and student tables that are high tops for flexible seating (with stools) or standing.

SPECIAL EDUCATION

Current Staffing

The Special Education Department at LHS currently has 34 Special Educators, 4.5 Speech Language Pathologists, 4 Social Workers, 2.6 Evaluation Team Supervisors, 2.5 School Psychologists, 2 Transition Counselors, 1 Transition Coordinator, 1 BCBA, 1 Occupational Therapist, 39 Paraprofessionals (12 IAs, 19 SIAs, 8 SSIs), 2 Administrative Assistants and a Special Education Supervisor. For more information, please click [here](#).

Current Program, Delivery & Future Educational Activities

The Lexington Public Schools Strategic Plan States, “Everyone has a right to an excellent education, and it is our individual and collective responsibility to create learning opportunities and systems that are fair and just.” We are committed to providing access to an excellent education for all students. At this time we have the necessary personnel to achieve this vision, but we do not have appropriate facilities at Lexington High School to match that commitment.

Special Education teachers share classrooms and reclaimed spaces across the campus. As our student body has grown, so has the number of students with special needs and the number of special educators and support staff. Unfortunately, this expansion means that we are constantly redefining and recovering space often intended for a purpose other than small group instruction. These spaces imperfectly meet our students’ needs and displace other special or general education programming. We need more space that is well-designed and utilized for its intended purpose.

Currently, co-teaching efforts are somewhat hampered by our inability to fully implement a range of co-teaching strategies in small classrooms that lack breakout space. We need larger general education classrooms with access to breakout spaces that could also serve a range of purposes beyond co-teaching, including project based learning, creative I Block opportunities, scheduled advisory sessions, and restorative justice circles.

LHS has one classroom with a kitchen area. We currently have students with a wide range of specialized programming needs who require instruction in life skills, including meal preparation. With the only kitchen area located inside a classroom that has students in it for most of the day, other students have very limited access, which impacts our ability to help them develop essential skills. In order to address these skills, the students require access to a kitchen. This could be a shared well designed, accessible kitchen that would be scheduled by special educators, untethered to a classroom, and with a dining area to allow programming for social skills, meal etiquette, and meal preparation.

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Some students with intensive special needs remain eligible for special education after graduation until they turn 22. These students require intensive transition services with specialized programming not currently offered through LHS due in large part to space constraints. At present, there simply is nowhere to cite a program that requires 1) a location away from most classrooms and with a direct exit from the building to an accessible parking area to give students ready access to the community. 2) a large kitchen with expansive accessible counter areas to learn and implement meal/food preparation skills, to stage small business production, and to prep for a small cafe. 3) an adjacent small cafe and school store to address vocational skills. 4) a laundry area to teach basic life skills and with the potential for vocational instruction 5) two breakout spaces for small group instruction and 6) proximity to accessible restrooms. With these elements in place we provide the opportunity for students to act as active agents in their own learning. "Learning is authentic and connected to the real world, allowing students to apply knowledge and skills in context."

Facility constraints at Lexington High School significantly limit our ability to offer a wide variety of course and programming options to satisfy State and local requirements and meet the needs of all Lexington HS learners. Federal law mandates a "Free and Appropriate Education" (FAPE) for all students in their "least restrictive environment." One visit to the Lexington HS wing that houses 120 +/- LABBB Collaborative students (students with disabilities from school systems across the Commonwealth) would confirm that the high school facility impedes our ability to provide students with the most appropriate education in their least restrictive environment.

Students with disabilities who are medically fragile are in inadequate spaces that offer little in the way of privacy. Small classrooms have only enough room for the students, themselves, and not the mobility equipment that they need to be successful. Often it is the case that the students' mobility equipment must be stored outside of the classroom, which presents many challenges for them. These limitations put enormous and undue pressure on our staff, whose responsibility it is to ensure that safety and well-being of our students. Another challenge for students with disabilities in the Intensive Learning Program (ILP) is that they do not have access to the in-house educational opportunities their families desire related to transitional programming that is required by the State.

The Department of Elementary and Secondary Education (DESE) recently revamped the State's accountability system and the Massachusetts Comprehensive Assessment System now emphasizes "college and career readiness." While there are a number of course offerings at LHS to prepare students for the college experience, few career readiness opportunities exist. Given our current space limitations at Lexington HS, we are unable to offer vocational courses of any kind. In the Town of Lexington, there are a number of community experts who would enrich the lives of our students if given the opportunity to mentor. Unfortunately, we are unable

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to offer valuable mentoring experiences, college and career advising, and internships/externships due to space limitations.

DESIGN CONSIDERATIONS:

- Collaborative spaces for students and educators to double as presentation spaces.
- Space for a Transition Program for students ages 18-22 who are currently educated out of district.
- Close proximity between van drop-off and learning space for students who require 1:1 and/or physical support to the Transition Program (e.g., ILP3).
- Adequate HVAC-controlled space for anticipated growth of program numbers (e.g., 20+ students in ILP3). ILP3 numbers at the middle school are rapidly increasing each year, and as those students matriculate to the high school, they will require ample space for 1:1 learning with limited distractions.
- Consider proximity to other students with loud vocal behaviors, space available for students to spread out and learn in a quiet space, an area with an adjoined kitchen/laundry area, private student restrooms.
- Daycare.
- Close proximity between service provider offices and program classrooms, ensuring coverage by other providers and a quick BCBA response to students in crisis.
- Sensory “lounge” for development of self-regulation and leisure skills, or for students who need to decompress.
- Three (3) areas for students to gain access to practicing functional life skills activities, including: (1) a kitchen; (2) laundry machines; and (3) simulated checkout/inventory shelving.
- Approximately 6-10 small offices for staff paperwork and consult or parent meetings.
- ~~Approximately six (6) small offices for student evaluation.~~
- Approximately eight (8) rooms to accommodate <12 for small group or Resource classes with private offices attached to rooms for phone calls and private conversations/meetings with teacher/student/counselors, etc.
- Multiple faculty bathrooms on all floors.
- Student bathrooms for all genders on all floors.
- Increased number of water bubbler/bottle fill stations.
- Shared suite for Language Learning Program pullout classes with more than five (5) small classrooms, study rooms, staff work/meeting areas, offices for additional professionals, including Speech Language Pathologists, Reading Teachers, Social Workers, etc.
- Teacher lounge and shared office space that can be used for collaboration, planning meetings, virtual meetings, and consults.

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- Adequate natural light for students with sensory needs who respond negatively to fluorescent/LED light.
- ~~A Therapeutic learning Program (TLP Space) located in an area of the campus with lower traffic and noise, perhaps at the end of a hallway. This program requires a self contained layout within the school which includes a small lobby or entryway with desks and seating and attached space of at least two (2) small offices, two (2) small study spaces, a small conference room, and four adjacent classrooms dedicated strictly to this program.~~
- Sound-proof rooms for areas in which counseling and therapeutic services are delivered.
- Sound attenuation in rooms that support larger resource rooms.
- At least three (3) dedicated classrooms, fitting up to 10 persons each, including appropriate technology, sound attenuation, and storage space for texts and manipulative materials, in which to provide reading services.
- ~~Dedicated spaces for students in the Developmental Learning Program (DLP), including two (2) classroom spaces that fit at least eight (8) students in each room, allowing for students with physical disabilities to easily navigate their surroundings.~~
- An office for teachers/support staff connected to the DLP classrooms with at least two (2) desks. A dedicated life skills space that students in this program have exclusive access to at all times (e.g., kitchen, laundry etc.). Also, first floor spaces for students who require assistance transitioning.
- ~~Five (5) private speech therapy offices, with one provider per office, to provide therapy and private student check ins. A conjoined space with a common area for large social groups would be best, with program specific Speech Language Pathologists (SLPs) in close proximity to program classrooms.~~
- Dedicated room for new breastfeeding mothers.
- Dedicated conference space with digital/virtual connections.
- A kitchen area that can be accessed for learning opportunities by all students, not just for program-specific needs.
- ~~A Garden/Farm space.~~
- Bright open windows.
- Storage spaces and bookcases in classes.
- Adequate parking for all staff separated from student and visitor parking.
- Functional climate control: air conditioning, heat, light and air filters for all spaces.
- ~~Dedicated spaces for students in Intensive Learning Program II for small group courses, including four (4) classroom spaces designated for core subject areas, including English, History, Mathematics, and Science. These spaces each must fit at least 10 students, and include an office for teachers/support staff connected to each of the classrooms. A dedicated office space for the program Social Worker will be~~

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~~connected and have an attached classroom for student de escalation and incidental social emotional support.~~

- Maker Space to integrate academics and kinesthetics.
- Common space for staff to interact, work, and stay connected to reduce splits between departments.
- Office space in the classroom, so staff who need to have a private conversation with a student can.
- Space for two (2) Transition Counselors, including two (2) small, private but connected offices with built-in bookshelves/storage (similar to current set up of Rooms 602 and 603). These spaces would allow staff to work privately with individual students, and these areas would be attached to a shared or connected larger classroom space, accommodating up 10-15 people for small group classes and presentations.
- Space for students who are using separate location/small group testing accommodations either within a classroom or testing center/room. It may include flexible room dividers/partitions for the room, etc.
- Space for life skills type classes such a culinary, woodshop, child development, clothing and design, which is an inclusive approach to education of students with varying academic skills.
- A full kitchen available to teachers to reserve for life skills lessons or special events with students.
- Windows that open and close in all spaces
- Handicap accessible classrooms, doors, etc.
- Similar space to current Room 217 Suite for Evaluation Team Supervisor (ETS's), Psychologists, and Administrative Assistants. Currently, eight (8) small offices with windows, one (1) conference room that holds up to 12 people, two (2) front offices with desks, a file room, additional storage, and a copy room.
- Re-creation of multiple spaces similar to what exists for ILP1. Open classrooms for resource room and social thinking group activities, with separate office spaces for Special Education teachers, Social Worker, and SLP clustered together and not spread through the first floor of a building.
- Tinted glass so that the sun doesn't create additional heat.
- Standing desks for students in classrooms, including general education classrooms and Special Education rooms.
- Mounted TVs around the school for announcements, club and sports announcements, encouraging school spirit and unification.
- Space for the whole school to gather for pep rallies, dances, etc.
- School store space.
- Consider adding vape detectors in all bathrooms.

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- Storage for advisors to clubs and activities to store materials and equipment.
- Adequate parking for all staff away during drop off/pick up.
- Separate parking for teachers without adding in buses, vans, or parent drop off.
- Doors that lock automatically during the day, and those entering must swipe an ID to enter the building or people need to be buzzed in from the main office only.
- Safety cameras in all hallways and open areas, both inside and outside.
- Sensory friendly chair options like chairs that rock, “spikey” chairs, etc.
- Sinks or handwashing stations inside classrooms.
- Dedicated testing space with enough capacity for Juniors and Seniors who need to arrange extended time and separate setting accommodations to support the way these accommodations are accessed in post-secondary schools.
- Easier access to color printers and laminators.
- Noise-canceling devices for hallway sound control when offices are too loud for testing and to ensure confidentiality in shared spaces.
- Flex office space for district-wide Special Education staff to complete testing.
- Shades that keep heat out from outside during warm days/keep rooms cool when it is hot and keep heat in during cold or winter days, diminishing glare on bright and sunny days.
- Coffee shop/cafe on campus that can be staffed by students as a vocational experience.
- Print shop on campus that can be staffed by students as a vocational experience.
- Secure doors and safe and coordinated traffic patterns for parents/caregivers when dropping off students
- Green (flora/fauna) in the school to increase mood and air quality.
- School pool for swim team, life guard training classes, swim lessons, and community use.
- As noted in the Performing Arts section, consider a recording studio as an outlet for creativity, music skill development, where students can make personal or collegiate records without cost.
- Small designated rooms for students who need to complete assessments in a quiet setting.
- Daycare available to staff in the district (and some space for the community), with opportunities for students who are interested in early childhood to work/learn about the field, volunteer/community service, and participate in paid work experience.
- A smaller auditorium/presentation space that fits 75-100 people that can be reserved by any department for larger presentations, meetings etc. Ideally, the space would have stadium style seating and tables that are easy to sit in by students and adults, such as the Film Lecture Hall at Newton North High School.

WORLD LANGUAGE

Current Staffing

The World Language Department currently has 24 teachers, 1 staff (an administrative assistant shared with the Math department), and a World Language Department Head. If possible, it would be helpful if the layout of the building reflects the sharing of assistants between departments. For more information, please click [here](#).

Current Program, Delivery & Future Educational Activities

In the world language department, we currently offer 7 different languages and have 18 classrooms shared by 24 teachers, with more teachers joining our program in the near future as the “4 vs. 5 phase-in plan” takes place. We strive to bring the people, products and practices indicative of diverse communities into the classroom space. When we share classrooms, we often lack sufficient word walls and wall space dedicated to multiple language(s)/cultures. Sharing classrooms also leads to not having all resources on hand when we plan and/or teach, as well as being constantly displaced by study halls, counselor seminars, and other meetings. It also impacts our school culture & community: Teachers have to find a suitable place to work when their classroom is in use; students or faculty who look for a teacher during the day may be unable to locate them; and it is rarely possible for a teacher to greet their students at the door and/or stay after class for a quick conversation or check-in, as the room needs to be occupied by another teacher/class in five minutes.

In the future, with flexible space and no space constraints, teachers see the opportunity for more creative, kinesthetic lessons that get learners out of their seats, moving, and speaking. Teachers could include activities like inner/outer circles or Flip Freeze Dance (recording videos in the target language on Flip, moving around the classroom, and responding to classmates' videos), and tasks for interpersonal communication. In our current small classrooms there is little room for learning stations, word walls, reading corners, “genius bars,” or group discussions. The limited space also makes it challenging to appropriately differentiate lessons or to hear one another when everyone is talking at the same time and in a language class, our priority is for learners to speak as much as possible and as often as possible!

We also see the benefit of a designated language lab rather than a mobile lab. However, If we don't have a designated world language lab in our future building, the classrooms need to be big enough for an effective mobile lab. With our current setup and space constraints, teachers and students cannot successfully use the DiLL mobile lab to record and listen because there is too much ambient noise when everyone is recording at the same time in a small space. Also, there are no wheelchair-accessible spaces in our current lab, which is a real problem.

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A guiding principle of an effective world language program is the ability to ask and support students to apply their language skills to practical uses outside of the classroom. In doing so they consider diverse perspectives, build empathy, and act collectively to contribute to strong communities. With appropriate space such as a meeting room, an auditorium and AV room, we could offer more students the shared experience of meeting and conferencing with native speakers from around the world and making global connections. Currently, when we have guest speakers, the learning experience only impacts one small group at a time which doesn't allow us to meet our program goals. This type of combined space would also be perfect for the screening of our Blue and Gold French and Spanish Film Festivals at the end of the year, making the enrichment opportunity available to all language students.

We also lack a functional, multi purpose space to celebrate our multiple exchange partnerships and our students. We currently use a kitchen/bathroom/workroom for our exchange celebrations and award ceremonies; this space is ill-suited for special events with invited dignitaries and community members. Moreover, the current staffroom is used by staff for many purposes, including: meeting with students, working when educators are displaced from their classroom, printing/photocopying, and eating/socializing. We need separate spaces to address these needs so that we can work productively, build a sense of community and collaboration, and promote a healthy work/life balance.

DESIGN CONSIDERATIONS (SPECIAL EDUCATION):

- Collaborative spaces for students and educators to double as presentation spaces
- ~~A room for 40-50 for guest speakers, virtual speakers, invited dignitaries and guests (exchanges) to engage students in intercultural communication.~~
- ~~A room for up to 3 classes of students to come together for interpersonal speaking, a movement based lesson, or other interdisciplinary project.~~
- ~~A testing space where students have an individual area where they have private space to think and work.~~
- ~~A mini auditorium for showing the language films at the Blue and Gold Film Festival.~~
- A library oriented space for our free voluntary reading programs.
- A kitchen for integrating the products and practices of multiple cultures.
- Multiple student-centered accessories, such as water filling stations, restrooms, and printers throughout the building.
- Storage spaces for books (bookroom/book storage), materials, chromebooks, chargers, laminators, office supplies etc.
- Several private spaces for mentoring conversations and one on one meetings
- Technology in classrooms to support hybrid teaching and learning (projectors, high quality audio, visualizers, auto-tracking cameras, interactive control boxes, charging

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stations and carts). WL needs to include not just Chromebooks (or laptop or tablets) charging and storage, but we need to consider access to microphones for recording, headphones for listening, and some amount of high quality cameras for recording our films and in non-film classes, skits.

- All classrooms should be equipped with hearing-impaired systems and as a rule have good acoustics for optimal listening conditions.
- Language lab/recording space that includes technology and areas for listening, speaking, viewing, and recording both audio and video.
- In classrooms, flexible and comfortable seating for various grouping and communicative activities. Seating should be able to adapt during a single class block to allow for different groups and partners. Seating should allow for easy movement around the space. All rooms should allow for wheelchair users.
- Classrooms dedicated for each teacher so they can personalize it with cultural material. (Or at least no sharing rooms across languages so that the cultural and linguistic materials are relevant to the learners).
- In-classroom space for quiet recordings or student conferences.
- A teacher only space with cubicles as well as collaborative spaces for prepping materials safeguarding and confidential materials (ed plans, assessments)
- Small rooms where teachers can meet in small groups (PLCs), teachers can conference privately with families or students, or teachers can make private phone calls.
- A kitchen for incorporating the food component into our teaching, for after school language and culture clubs and for staff usage.
- Large-scale wall space that is either cork or magnetic for display purposes as well as electronic (for image slideshows).
- As mentioned elsewhere in the Ed Plan, safety should be a priority throughout the building (e.g., doors built with lockdown safety in mind).
- 2 staff spaces. One dedicated to staff work and eating. Another area where teachers can collaborate with students.
- Kitchen area ONLY for teachers and space for eating.
- Working area for prepping separated from eating area and/or multiple purposes area.
- Café where we can purchase coffee/snacks - students could work there. This could also be an area where language-specific peer tutoring could happen under the supervisor of a language teacher (I saw this model at Newton North) - a kind of learning center for WL.
- Areas to display student work and language decor around the classrooms and in hallways near classrooms.
- Dean's office with space for an admin assistant area and staff mailboxes.
- A world language department head office with space for administrative assistant.
- White board technology that allows teachers to circulate around the room with their laptop and project.
- Teachers' private workstations.
- Logical numbering of rooms in the building.
- Ample gender-inclusive restroom facilities for students and faculty.

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- Multiple copiers and printers on each floor.
- Sound-proof classrooms so that we cannot hear each other's activities/audio/etc while others are testing, etc.
- WL Classrooms are located near one another so that it is easy to interact with colleagues.
- Thoughtful placement of windows and selection of window coverings.
- Cost effective, non fluorescent lights. Lighting that can be dimmed and brightened.
- Control of Air conditioning and heating in each room. Comfortable temperatures in all spaces regardless of the outside weather. Windows with screens to minimize bee invasions.
- Teachers should have a way to control student chromebook wifi access in the classroom.
- Hepa filters to manage air quality in anticipation of climate change related air quality variability.
- Staff access to bathrooms is limited, and there are long lines that make it extremely difficult to get to the bathroom within the five (5) minute passing period.
- Charging stations for electric vehicles.
- Wider hallways.
- Classroom storage space, particularly for headphones needed for differentiated classroom activities
- With the increase in insect-borne illnesses like EEE and West Nile Virus, as well as students with life-threatening allergies to bee stings, any windows that open should have screens.

PART VII. NON-TRADITIONAL SPACES

SCHOOLWIDE PROGRAMMING & SUPPORT

Academic Intervention

Current Staffing

LHS school-wide programming and interventions currently includes ten (10) teachers and one (1) Dean of Students. For more information, please click [here](#).

Current Program, Delivery & Future Educational Activities

LHS has six independent academic intervention programs, including ALPHA, METCO, and support in Math, Humanities, Science, and ELL. We are located in six separate offices across campus in three different buildings. This configuration does not allow us to collaborate with shared students and teachers as effectively and efficiently as possible. It also does not allow students to access a variety of supports with ease, as they are spread all over our campus. In addition to our teachers, we have an extensive peer-tutoring program that is housed in the math academic support room. As our peer tutoring program has grown significantly, we hope in the future to have a dedicated space for peer tutoring in an open and welcoming environment. We envision the space could be monitored by a 1.0 FTE Peer Tutoring Monitor, who would be able to schedule all peer tutors, take attendance for students dropping in for help, track community service hours for the tutors, and give passes to students to excuse them from their study halls when they attend peer tutoring during the school day.

Science, Math, METCO, and Humanities academic support blocks are offered to our general and special education populations as a Tier II intervention. We offer academic support for students whose academic needs cannot be met with regular classroom instruction and/or additional tier-one interventions offered by their general education teachers. The support classes are each capped at a maximum of 8 students per block, and we meet with students 1-2 times during our 6 day cycle. Students in any given support block could all be in different grades and different courses of concern—limiting the full group discussions and creating an environment that warrants small group or 1-1 support.

Once a student is placed in the academic support, academic support teachers check in with the student's referring general ed teacher roughly every six weeks in order to determine if the student is making progress toward their academic goals. Because the Learning Center is intended to be a time-limited intervention, most students are placed temporarily, based on teacher feedback about the student's performance in the gen ed classroom. Our main goal is to assist students in becoming independent learners.

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Alpha and ELL Support

The current locations of our support rooms also create discrepancies in the way the academic support blocks can be run. We have different sized rooms and varied staffing capabilities. For example, Humanities, Math, METCO, ELL, and ALPHA are run by staff members who are full time support teachers. By contrast, Science academic support is run by nine (9) different teachers, who use the academic support time to help balance their teaching loads due to discrepancies in teaching loads across the Science Department. The different model of oversight for Science academic support means that no single teacher coordinates efforts, which leads to inherent inconsistencies in oversight and access. A Dean and Science Department Head coordinate various aspects of the program. It also makes it hard for us to collaborate with the other members of the academic support team. We hope in the future to gain two additional teachers, which will enable us to dedicate one (1) Biology support teacher and one (1) Earth Science support teacher to cover the two greatest student support needs in our Science department. The 2.0 FTE will increase efficiencies and minimize the need to coordinate coverage for support blocks among nine (9) classroom teachers.

Our academic support rooms should be centrally located because it is easier for students to access a variety of supports if they are in one place. Having this student centered approach would allow us to seamlessly send students to another support room as needed without sending them across campus. The space needs to be desirable and approachable to students who are seeking out our help.

As teachers, we feel we do not need to have our support rooms located directly near our department offices because we can easily check in with classroom teachers during our planning time. The need for support rooms to be in one place is much greater, and puts the students' needs first. The collaboration and teamwork that is possible between support staff will give us leverage toward greater student success.

When considering a location for our support wing, we feel it needs to be visible and accessible to students (i.e. not at the dead end of a long hallway). It would be ideal if it was located near a staircase with a similar pod of counseling offices housed on the floor directly above/below our support rooms. Often there are students who need social emotional support from counseling as well as needing support academically. Having these services in close proximity would help students. We envision the support classrooms being near other quiet spaces such as the library, but away from loud spaces such as cafeterias.

Currently the METCO, ELL, and ALPHA support rooms double as an affinity space for those populations of students. Having this safe space to allow students to take academic risks and feel comfortable, and it is something that we feel needs to be maintained in a new building.

Their locations should be prioritized, ideally with access to other private offices, spaces, and/or

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egresses to maintain student safety and privacy as needed.

DESIGN CONSIDERATIONS (METCO):

- Collaborative spaces for students and educators.
- A dedicated area for all academic support intervention classrooms (Math, Science, Humanities, METCO, ALPHA, ELL)
- Large inviting support rooms with natural light, but still plenty of whiteboard space
- Table configurations that are conducive to collaboration (possibly furniture with wheels and locks)
- Technology and power sources to support the use of technology in the classroom
- All spaces should be equally accessible for those with disabilities. For example, all classrooms should be able to accommodate someone who's hearing-impaired.
- Storage for classroom materials - markers, protractors, paper, erasers, books, etc.
- An inviting common space outside of the support classrooms where monitored peer tutoring can take place
- Designated teacher bathroom and designated student bathroom located within support pod to ensure students are not gone for extended periods of time
- 2-3 desktop computers in peer tutoring space for students to use for printing assignments
- Copy machine/printer centrally located in pod for teacher/student printing
- whiteboards on wheels in the large open peer tutoring space AND/OR white board walls
- Two person pods that can be pre-booked by students or staff for phone calls or meetings or private conversations; Examples of office pods for a central space: <https://thinktanks.io/collections/modular-office-booths>.

Counseling and Social Work

Current Staffing

The Lexington Public Schools has 55 counselors and social workers in our elementary, middle, and high schools who provide prevention, intervention, and postvention programs and services to promote the mental health and wellbeing of all students.

Currently, there are 13 LHS counselors, 5 LHS Social Workers, 1 ALPHA teacher, 1 registrar, 1 assistant to registrar, 1 AP/SSD coordinator, 1 opportunities coordinator, 1 counseling secretary and 1 administrative assistant to the LHS/Assistant Director of Counseling who are overseen by one (1) LHS/Assistant Director of Counseling and one (1) K-12 Director of Counseling (office is currently located at Central Office). For more information, please click [here](#).

Current Program, Delivery & Future Educational Activities

The K-12 Counseling Department program is designed to:

- Align with national standards, including the American School Counselors Association National Model.
- Promote equitable access to an exemplary education for all students.
- Identify the knowledge and skills all students will acquire as a result of the PK-12 comprehensive counseling department program.
- Utilize student-centered and data-driven decision-making.
- Provide multiple tiers of support, moving progressively from universal prevention to intensive responsive services.
- Adhere to a systematic method for implementation.
- Incorporate collaboration between school personnel, families, and community members.

The Counseling Department program targets success in three major areas: learning, emotional and social development, and post-secondary planning. In collaboration with building-based administrators, school counselors and social workers focus their skills, time, and energy on providing direct and indirect services to students. This is accomplished through a variety of methods including individual and group counseling, classroom lessons, and school-wide initiatives

LHS has a variety of programs and services that are provided by counselors and social workers, including the following:

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- social emotional learning
- student needs assessment
- individual and group counseling
- behavior plans, strategies, coping tools
- progress monitoring
- conflict mediation between students, and between students and staff
- academic advising
- transition planning & support between levels & post-secondary planning
- self-assessment & career planning
- new student/family transition
- crisis response
- critical incident management
- consultation to staff
- staff professional development
- parent communication, consultation, and education
- referral to resources and supports
- coordination with outside service providers and community agencies
- reentry facilitation after hospitalizations/extended absences

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Town of Lexington & Community Partners

There are many town and community groups in Lexington that seek to support the development of the whole child. They recognize and appreciate that our youth need support at home and in the community, and that schools alone cannot provide all the support students need for emotional, psychological and social well-being.

The Town of Lexington Youth and Family Services works closely with school personnel to meet the mental health needs of Lexington residents. The schools are also supported by the Town of Lexington Public Health Department, Police, and Fire Departments to support the mental health, wellbeing, and safety of our youth and families.

Community partnerships include child welfare and behavioral health agencies that collaborate with the school counseling department staff to coordinate supports between school and these providers (e.g. Advocates Emergency Services, the Department of Children and Families, the District Attorney, the Department of Mental Health, Riverside Trauma Center, LYFS Inc., etc.).

The LPS participates in groups that bring school, town and community partners/stakeholders together, such as:

School Health Advisory Council

Forum for school personnel, community representatives, parents & students to support and advocate for a comprehensive school health program.

Lexington Community Coalition

A coalition of members representing the Town of Lexington, the Lexington Public Schools and community groups that seeks to address shared goals to support Lexington residents across the life span.

Lexington Asian Community Alliance

LACA is an alliance of the Chinese American Association of Lexington (CAAL), Indians of Lexington (IAL), and Koreans of Lexington (KoLex) which works in partnership with the district and community to advocate on behalf of, and offer parent workshops in support of, topics important to Asian American families and students.

Lexington Interfaith Community Association

The Lexington Interfaith Community Association (LICA), comprising clergy and religious leaders from most of the faith communities in the Lexington area. The Lexington Interfaith Clergy Association (LICA) comprises spiritual leaders from Lexington, Massachusetts area faith communities, representing the traditions of Christianity, Judaism, Hinduism, Islam, Unitarian Universalism, Buddhism and Sikhism.

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LYFS, Inc.

LYFS, Inc. is a non-profit organization that facilitates the Sources of Strength youth suicide prevention program and provides drop-in mental health support for youth. IV. Challenges and Unmet Needs

The scope of school-based mental health services is to provide support, tools, and strategies to maximize students' access to their educational program. Students with mental health challenges need outside of school treatment, such as therapy, medication, home-based services, emergency services, etc., in addition to the programs and services that can be provided at school. One challenge is connecting students with the necessary outside service providers to meet their mental health needs. Challenges include:

- long waiting lists
- insurance/costs
- availability of specialty areas (e.g. substance abuse, home-based services, crisis counseling)
- navigating the complex mental health systems
- stigma associated with mental illness and asking for help
- cultural or linguistic challenges in navigating the referral process, lack of translators
- lack of culturally competent service providers

Consideration should be given to additional ways of identifying students at risk. The Lexington Public Schools Youth Risk Behavior Survey (YRBS) indicates that 15% of middle school students and 17% of high school students reported anonymously that they had seriously considered suicide in the last 12 months. Our Lexington Public Schools Student Self-Injury & Suicide Ideation Response Protocol (SISIRP) data indicate that we have seen approximately 3% of students who were seriously considering suicide.

Some of our students are impacted by the unmet mental health and other needs of adults in our community. For example, of the 57 child abuse and neglect reports filed by the Lexington Public Schools during the last school year, 67% included allegations of physical abuse perpetrated by adult Lexington residents. Adult impacts include:

- mental illness
- domestic violence
- substance abuse

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- anger management and discipline
- financial strain
- unemployment
- resistance to counseling
- deportation
- parenting difficulty with firmness, limit setting, balance of activity and rest, sleep, supervision & monitoring

The Counseling Suite should be in a centralized location that is structured in a “spoke and wheel” model. The Counselor and Social Workers offices are connected to a College and Career Center, a Registrar, a Testing Coordinator, and a Health and Wellness Center, with a design similar to a higher education model to promote holistic approaches to addressing student needs. The Deans’ offices could connect to the suite to promote coordination with Counselors and Social workers.

The high school has an existing student support model that clusters the Dean/Counselor teams together. The cluster model provides a “home base” for students and student support teams. Goals of this model are to provide a smaller, more intimate feel on an expansive campus with a large student body, and to ensure that the Dean/Counselor teams are in close proximity throughout the school day, providing increased interactions and communication on behalf of students.

DESIGN CONSIDERATIONS (COUNSELING):

General Counseling Spaces

- Counselors, Social Workers, and Support Staff in a central location with both private offices and communal/shared flex spaces.
- Each Counselor/Social Worker requires their own office with a window and enough space to have small family meetings (3-4 people), with comfortable seating.
- Office doors should not open into hallways due to privacy concerns, but rather a waiting area. Space to wait for counselors should be welcoming, comfortable, and private.
- The Counseling Center would need classrooms and flex spaces to host seminars, groups, meetings, college visits, etc. Several spaces are needed.
- A minimum of two (2) conference spaces are needed for meetings, including Section 504 meetings and programming meetings.

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- Private spaces for student use (e.g., virtual meetings and calls to therapists/other providers.). These areas should have windows for visibility/safety, and these areas could double as phone rooms for staff without private spaces, as well as a quiet space to test.
- Storage for Counselor Seminars and group supplies, craft supplies, etc.
- An exit from the Counseling Center directly out of the building for privacy of exit during crisis.
- Library space for shared Counseling resources.
- Multiple relaxation/mindfulness/Zen/wellness/craft spaces for students to relax and access therapeutic resources, such as sand and trays, fidgets, coloring, bean bags, and sensory resources. These areas should have the ability to have low-light and should be attached or near the Counseling suite. Perhaps we could designate different rooms for different needs (e.g., an active space with punching bag; bike; low-sensory space with weighted lap blankets; low clutter, etc.).
- Bathroom in or nearby suite for students and staff.
- Access to water (e.g., sink, integrated bottle filler/fountain, etc.).
- Lunch/breakroom space with food storage, sink, etc for Counseling staff.

Alpha Program

- The Alpha Program is a therapeutic program for students returning from an extended school absence for psychiatric, medical, or other issues.
- This program needs a classroom space.
- Water bottle station.
- Conference Room space with the ability to house no fewer than 10 people.
- Kitchenette in the classroom with sink, running cold and hot water, cabinet space.
- Refrigerator and small kitchen appliances such as kettle, microwave, toaster, etc.
- Lots of electrical outlets to foster the use of non-fluorescent lights.
- Non-fluorescent overhead lights.
- A minimum of (3) three offices attached to the classroom for the Academic Coordinator and the Social Worker, as well as a swing space for student meetings with outside providers.
- Offices should be well lit with natural light.
- Offices should have windows, allowing fresh air to circulate.
- Attached gender neutral single use bathroom.
- A Sensory Room, located near or within the Counseling Department. Located near an accessible building exit and near nursing, if possible.

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- Social Worker office with external entrance/hallway-facing door for purposes of meeting with non-ALPHA students (e.g., perhaps one internal, one external). Handicap accessible and on the first floor.

College & Career Center

- College & Career Center (CCC) that connects to the Registrar/Testing Coordinator
- The CCC area should include work tables, plugs for computers, white boards, and book shelves for resources. If it is separate from the Counseling Suite, it should include 1-2 offices or small meeting rooms that can be closed off for presentations, meetings, etc. In other words, not just a common open space, but mostly open as a drop-in space for students.
- Space for virtual interviews.
- Potential after school dual enrollment course space.

Registrar Suite

- Registrar Suite: work space for the Registrar and the Assistant Registrar; perhaps the Opportunities Coordinator and AP Coordinator could be in the same suite.
- Locked Records Room for cumulative folders and student record storage.
- Small area for student work, where they can sit and fill out forms. The space could double as a space for special accommodations, such as school-day testing for the SAT.
- Storage for exams between delivery and test day and testing supplies.
- Easy access to usable flex space for testing on test days.
- Connectivity for a dedicated printer, copier, and fax.

School-Wide Testing

- Large space that can be utilized for our largest Advanced Placement exams, reducing interruption to school day. Consult collegeboard requirements regarding the size of the desk/table space required per student.
- Storage for exams between delivery and test day, including supplies for testing that will need to be locked.
- Small testing spaces that can double as private call spaces for staff with a need to make private phone calls, etc., that can be used for small group testing or for students who need to test in a separate space.
- Advanced Placement/Student Services Disability Coordinator to have a private office to discuss private matters, including financial assistance for exams and students with disabilities in need of accommodations for PSAT, SAT, AP, and ACT exams.

Community Service, Pathways & Internships/Externships

- Community service office space and activities area/storage area for crafts. A Space for students to work on school community service projects.
- Other opportunities for students, including jobs and enrichment. Space for resources, bulletin boards, and video monitors.
- Pet therapy space for training pathway and partnership for existing LHS STEPS Club.
- Washable services (sink), easy access to the outside, and a classroom with tile floor.
- A creative space to consult with mentors and experts in the community in the future.

School Health Services

Current Staffing

The LPS health offices employ 20 professional registered school nurses, with 3.9 FTE at Lexington High School, as recommended by state guidelines. Currently, one (1) Director of School Health Services oversees the nurses. For more information, please click [here](#).

Current Program, Delivery & Future Educational Activities

The Lexington Public Schools nurses use their expertise to support students in maintaining optimal mental and physical well-being. Our LHS nurses value compassionate, collaborative, culturally sensitive, and evidenced-based care, thereby enabling students to be healthy, safe, and successful learners.

School nurses play a key role in the daily management of mental health problems. Nurses are integral team members for mental health services care coordination. Nurses share critical information with families, providers, teachers and other staff to help the student move towards better health and learning in the classroom. The nurse does follow-up and helps determine if additional resources are needed.

All schools have at least one nurse available at all times when children are in school. LHS nurses conduct over 25,000 visits per year, and they provide a variety of interventions, including but not limited to: coping enhancement and reassurance; the administration of medication; behavioral health assessment; anxiety reduction; and Screening, Brief Intervention, and Referral to Treatment (SBIRT) Screening.

Nursing coordinates with counseling and Prevention Specialists to screen 1,100 students annually for substance use. They participate in Parent Academy, along with experts from the mental health field, offering parents timely and pertinent information on topics such as anxiety and stress. In collaboration with Counseling, nurses assist with the LPS Student Self-Injury Suicidal Ideation Response Protocol with outreach to vulnerable students.

For the past several years, vaccine clinics have been offered to all Lexington community members wishing to be inoculated against influenza and COVID-19. Additionally, in order to expedite a newcomer's entry into the high school, vaccine clinics are offered to all LPS students. The vaccine clinics are necessary, as the State's mandated vaccines often mean delays in school entry due to language barriers and other challenges, including the inability to secure a medical appointment due to the shortage of providers.

If possible, the LHS Nursing Office and the LHS Counseling Office should be located in close proximity to one another. The suite of nursing offices should include ample space for student

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exam rooms, private offices, and shared spaces to accommodate 50-100 people for health education assemblies, vaccination clinics, and other efforts.

DESIGN CONSIDERATIONS (NURSES):

- Two (2) large Exam/Treatment Rooms.
- Medication Room that are smaller and separate, including running water, ice maker, and medication refrigerator.
- Five (5) private offices with visibility for all nurses to see the waiting area.
- One (1) office for the Director of School Health Services with a separate entrance.
- Shared space for health education, health screenings, and vaccination clinics.
- One (1) storage room, large enough for all health supplies, wheelchairs, and extra pillows/cots.
- Three (3) bathrooms; at least one for students, and at least one for staff
- A student waiting area.
- A private consult room for up to six (6) people.
- Large resting area with enough space for up to nine (9) cots and a separate mindful quiet area.
- Staff/lunch room; nurses currently use the conference room.
- Automatic handicap door opener and main door handicap accessible.
- Water dispenser.
- Two entrances/exits; we only have one door now.
- Direct access to outside for sick student pickup.
- Windows.
- Hydraulic desks for all nurses.
- Built-in self-service station for bandaids, period products, etc.
- Built-in speakers for calming music
- Large 48 inch TV to show slides depicting health education/wellness/guided imagery .
- Health office near Counselors/Social Workers.
- Health office near cafeteria (or on the same floor), as many medications are administered during lunch time.

LEARNING COMMONS: LIBRARY, MEDIA CENTER & STEM SPACE

Lexington Public Schools is committed to the full utilization of technology to enhance student learning and staff instruction. Students enjoy exciting programs and systems that afford

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worldwide connectivity. Both stationary and portable computer labs, outfitted with state of the art equipment as well as a variety of educational and productivity applications and software, are available to students at all grade levels. In our schools, all instructional spaces are completely networked and have access to the Internet. All of the LPS school buildings have fully managed, robust wireless network to support teaching and learning.

Students in grades K through 12 are exposed to and naturally practice skills that are in the Massachusetts Digital Literacy and Computer Science Curriculum Framework. That document can be viewed [HERE](#).

The standards presented in the frameworks cover the following:

- Integrate practices necessary to successfully act in a technological world.
- Present coherent progressions of core concepts and practices from grades K to 12.
- Complement other MA Curriculum Frameworks and address core concepts in four key domains:
 1. Computing and Society
 2. Digital Tools and Collaboration;
 3. Computing Systems; and
 4. Computational Thinking.

Information literacy has transformed from simple reference resources to an ever-expanding variety of multimedia resources used as teaching and learning tools. The expansion of information today is rapid and requires that all students acquire critical thinking skills that enable them to learn independently. Furthermore, the sheer amount of information available to students necessitates that all learners have the appropriate skills to select, evaluate, and use information appropriately and effectively. The addition of space dedicated to STEM will allow students to explore conceptual understandings with various concrete materials— create visual models to deepen their growing knowledge and provide them the room to exercise voice and choice in how they demonstrate their growing proficiency in all areas of the curriculum.

DESIGN CONSIDERATIONS (LIBRARY):

- Media Centers and STEM spaces are crucial to developing these much-needed skills. For this reason, the Learning Commons should be in a central location easily accessible for classes to utilize.
- Open space for collaborative learning with room for more than one class at a time.

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- Storage space with outlets to charge various types of devices/robotics
- Access to an outdoor commons to extend real-world learning.
- Multiple circulation stations.
- Wireless access and infrastructure support for a continuously growing technology atmosphere.
- Built-in sound lift.
- Ensure heating and cooling systems provide the best learning environments and can withstand temperatures adequate for technology and literacy materials left in storage during seasonal breaks.
- Interactive projectors or platforms with accessibility for all students to participate.
- Technology-based safety measures for lock-downs, including PA System and phone.
- Space should provide ample cabinets (some with locking capabilities), sinks, large-flexible tables with seating for group work as well as smaller work areas.
- The space could be used to house materials including recycled materials, science equipment, robotic equipment, math manipulatives, math games, and other valuable materials.
- Mounted whiteboards and a projector, electrical outlets embedded on the flooring, a built-in sound lift, and a/v equipment with green screens.

OTHER SPECIALITY SPACES

Central Office Relocation to LHS

For the past year and a half, the Lexington community has been contemplating a permanent relocation of the Central Offices to the new or renovated high school. After a lengthy process that included the collaboration of various boards and committees, the community is in general support of a permanent relocation of Central Office to the new Lexington High School.

The LPS Central Office building is located at 146 Maple Street in a 46,000 square foot building that is in dire need of upgrades that are estimated to cost approximately \$16 million dollars. At the same time, the [Recreation Department reports](#) that there are more than 2,000 hours of unmet need in the community; therefore, a need exists to increase the number of playing fields in the community. Several years ago, the community discussed the possibility of creating new playing fields on the 146 Maple Street site, but it appears that there were no formal plans to do so were created.

We see the new arrangement as a win-win for our community. The new playing fields would enable our student athletes to be less impacted by playing time disruptions that happen during a school construction project than they might otherwise be without the new additional playing

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fields. The pandemic significantly interrupted the athletic opportunities for our students; therefore, it is our hope that we will be able to minimize further disruptions during the school construction process. Additionally, the demolition of the current Central Office building would create desirable cost avoidance, as we would no longer need to spend approximately \$16M for roof and window replacement of the current Central Office building, among other repairs.

Meetings and Resources

Throughout the past year and a half, there have been several planning meetings, including Master Planning Committee meetings, School Committee meetings, and joint meetings of the School Committee and the Select Board. To learn more about the work that has been done to date, please click the following links:

- [Central Office Space Utilization Study](#)
- [MPC Relocation of CO Memo 11-15-2022](#)
- [Central Office Relocation Ppt 03-14-2023](#)
- [Central Office Land Memo 5.15.23](#)

The Town of Lexington's budget is developed through a highly collaborative and public process that engages the [Select Board](#), the [School Committee](#), the [Appropriation Committee](#), the [Capital Expenditures Committee](#), the Town and School staff, and citizens. At our second Budget Summit of the year for FY25, we reached general consensus to support a potential relocation of Central Offices to Town-owned swing space on 173 Bedford Street, and then to the new or renovated high school. Budget Summit #2 was held on November 15, 2023; please [click here](#) to view a copy of the agenda and presentation.

Central Office Space Utilization Study

Last year, we completed a [space utilization study](#) of Central Office, which has given us valuable insight into the amount of space needed for CO now and in the future. An initial meeting was held on September 20, 2022, with architects from DRA, the Director of Public Facilities, the Assistant Superintendent for Finance and Operations, and the Superintendent of Schools. The purpose of the meeting was to review and discuss who is currently housed at Central Office and how much square footage is needed, should the Central Offices move to 173 Bedford Street temporarily at first, and then permanently to the new or renovated Lexington High School.

The positions that need to be part of Central Office were identified, along with those who might reasonably relocate to elsewhere in the district. The architects then conducted a thorough walk-through of the Central Office building, examining the space available to employees in the workplace. A second meeting was held with the architects on October 25, 2022, to review their recommended space-related needs and the appropriate square footage for CO

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employees. The architects then used the information from our discussion to refine the details in their space utilization study.

Here is information that we shared with members of the Master Planning Committee, who ultimately approved in concept the idea of moving the Central Offices to the new or renovated high school.

- The Town's 20-Year Capital Plan rates the current Central Office building an 'F' and estimates that costs to upgrade the building will be approximately \$16M. Roof windows, HVAC. As presented to the Select Board on November 14, 2022, the capital plan that includes costs can be viewed [here](#).
- The Town's 20-Year Capital Plan rates the 173 Bedford building an 'F' and cost estimates indicate an upgrade to the building will be approximately \$6M for renovations, which would include elevator, sprinklers, HVAC.
- The Central Office building at the Old Harrington School is approximately 46,637 square feet; 173 Bedford is approximately 16,397 square feet. We learned from this process that the current square footage of the Central Office is approximately twice the size of the space that we need, and, if desired, we can fit temporarily fit into the 173 Bedford Street building.
- If we were to incorporate 17,000 square feet to relocate CO it may cost approximately the same as the estimated upgrades needed at the old Harrington School (current estimate is \$16M). A crude estimate for 17,000 square feet at \$925 per square foot would be approximately \$16 million.
- Further refinements to the square footage needed at the new/renovated high school could be achieved in a variety of ways. First, employees currently housed at Central Office are direct service providers who could be relocated to schools. The added square footage could be further refined to approximately 10,000 square feet, if some of the operations that are currently housed at the Central Office could be added into the high school design plans, where they are more appropriately placed. For example, we want to create more career-oriented opportunities for interested students. Students could help run the Tech Hub, the Print Shop, and Central Registration (or a New Family Welcome Center), and we would like to remove these operations from the Central Office and place them within the high school itself.
- A temporary relocation of the Central Office to 173 Bedford Street is possible. There are future determined needs for the use of 173 Bedford Street that potentially limit any long-term stay.

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- Many years ago, the Recreation Department was told the the Central Office building would be demolished and new ballfields would be constructed, but there was no plan put in place to ensure this happened. Recreation (and the many LHS students they serve) will be significantly impacted during the construction of a new or renovated high school.
- Recreation indicates that there are approximately 2,000 hours per year of unmet recreation needs in Town. Recreation is trying to proactively address anticipated needs now, as there are no lights on many of the fields. Additionally, there is no parking and three fields at Lincoln Park are end-of-life and replacements are anticipated in 2025, 2026, and 2027.
- The total costs for demolition of the Central Office, and installation of new fields is in the range of \$5M - \$8M. The cost estimate for the deconstruction of the CO building is approximately \$1.5M. The Recreation Director indicates costs for the two multiuse fields with lights would be in the range of \$3.6M - \$6.1M, depending on the plan.
- The police station is scheduled for completion in March or April of 2024, and the deadline for everyone moving back is June 1st. Construction could happen in April to July 2026, if everything goes according to plan.

Advantages to Central Office at Lexington High School

In his memo, Mr. Levine indicates that the advantages to a Central Office location near the high school should be examined. Here are a few thoughts:

- The proximity of the Superintendent's Office next to the largest school in the district where approximately one third of our students reside may be desirable in terms of safety.
- Central Office currently includes Central Registration, designed to meet the needs of families new to Lexington. Many of these families are coming from other countries and English may not be their first language. Easy access to school services is important for newcomers; a Central Office that is closest to our largest campus may provide some benefits for these families.
- Community Education is part of Central Office and could take advantage of the shared public spaces in the new high school building, including the auditorium for special events.
- The Print Shop currently housed in the CO building could be relocated to the high school, providing students with hands-on learning opportunities.

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- More professional learning and collaborative opportunities may be available.

Article 97 Considerations

Central Office at 146 Maple Street currently sits on property that is part of the new Harrington Elementary School site, located next door. The property upon which the Central Office building is located was submitted in the MSBA plans as part of the new Harrington Elementary School site; therefore, it is anticipated that the new ball fields would remain as part of the new Harrington Elementary School site.

We will continue to more thoroughly investigate these issues and contemplate the associated pros and cons. A decision of this magnitude needs broad stakeholder input, and we will do whatever is best for the community. We are perfectly content to stay right where we are in the Old Harrington School as is and without any capital investments—and we are willing to move to 173 Bedford Street temporarily or permanently if that is what makes the most sense. If an exploration of an addition to a new Lexington High School is desirable, that works, too. I look forward to our continued collaboration, as we work together to figure out the best recommended course of action.

Additional Specialty Spaces for Consideration

Throughout this document much attention has been given to the need for creating spaces throughout the building to promote student and staff health and well-being. ***The Rock Room*** is one such space, and it is where high school students go to relax and unwind.

There is a sizable portion of the high school population for whom the current experiences offered do not meet their needs. We refer to these students as “kids in the middle” who could greatly benefit from career exploration and more hands-on learning. Many of these students attend Minuteman High School, but a good 50-60 students do not, and we are challenged by providing them the kinds of learning opportunities that they need to be engaged and successful. Opportunities that create hands-on learning are few and far between, and we have discussed the benefit of adding into the high school a new ***Daycare***, and relocating from the Central Office at 146 Maple Street the following services: the ***Tech Hub*** (which could become a new Tech Hub), the ***Print Shop***, and a new ***Family Welcome Center*** (to replace the current Central Registration). Students could be given more agency in their learning by exploring learning opportunities, including early childhood education, and they could help operate a Technology Help Desk, the Print Shop, and the new Family Welcome Center, where they could earn community service hours or credentials for being student ambassadors to newcomers.

Although perhaps it is too soon to discuss the site plans for a new or renovated school, since that happens after the Feasibility Study is complete, we did want to flag for you another idea that is being discussed in the community. The proposal is to develop an ***Asphalt Bike Park***

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Pump Track, as a recreational amenity that could be part of the new high school complex. There are benefits of an asphalt vs. dirt bike park. An asphalt pump track requires little to no maintenance. It does not require a wooded area and can be incorporated into a larger park or recreation complex together with sports fields, playgrounds and other recreational amenities.

These “pump parks” provide maximum inclusion and accessibility for the community, as all types of human-powered wheeled vehicles can use an asphalt pump track, including wheelchairs, scooters, push bikes, dirt bikes, inline skates, and skateboards. It would provide ideal opportunities for students in the LABBB program or those who take Adaptive Physical Education classes.

The site requirements are relatively manageable, with an area of 30,000 square feet. The ideal pump track area uses approximately 10,000 square feet. The cost estimates for a pump track, depending on the scope and features, is in the range of \$250-500K. A local benchmark is the Smith Field Pump Track in Allston, MA is an asphalt track built by Velosolutions, an international company. This company specializes in pump tracks and bike parks. Catherine Baker-Eclipse, Boston Parks and Recreation is the project lead. The budget for this project is \$350,000.

