

## C. MSBA PSR Report Review and Response Document



**ATTACHMENT A  
MODULE 3 – PREFERRED SCHEMATIC REPORT REVIEW COMMENTS**

**District:** Town of Arlington  
**School:** Arlington High School  
**Owner’s Project Manager:** Skanska USA Building, Inc.  
**Designer Firm:** HMFH Architects, Inc.  
**Submittal Due Date:** July 11, 2018  
**Submittal Received Date:** July 11, 2018  
**Review Date:** July 11–August 1, 2018  
**Reviewed by:** A. Waldron, K. Brown

**MSBA REVIEW COMMENTS**

The following comments<sup>1</sup> on the Preferred Schematic Report 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.

**3.3 PREFERRED SCHEMATIC REPORT**

Overview of Preferred Schematic 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"/>
3.3.1 Introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.2 Evaluation of Existing Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.3 Final Evaluation of Alternatives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.4 Preferred Solution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.5 Local Actions and Approval Certification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> 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.

**3.3.1 INTRODUCTION**

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
1	Overview of the process undertaken since submittal of the Preliminary Design Program that concludes with submittal of the Preferred Schematic Report, including any new information and changes to previously submitted information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Summary of updated project schedule, including				
	a) Projected MSBA Board of Directors Meeting for approval of Project Scope and Budget Agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Projected Town/City vote for Project Scope and Budget Agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Anticipated start of construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Target move in date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Summary of the final evaluation of existing conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Summary of final evaluation of alternatives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Summary of District's preferred solution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	A copy of the MSBA Preliminary Design Program project review and corresponding District response	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**MSBA Review Comments:**

5) The OPM RFS indicated the Town's targeted total project budget for this project at \$150 - \$200m, and the Preliminary Design Program ("PDP") submittal indicated a project budget ranging from \$287m - \$293m. This submittal indicates a preferred solution with total project cost of \$308 million. Clarify the District's intent regarding the project budget. Note that for the following Project Scope and Budget submittal, a proposed total project cost that exceeds the District's stated total project budget will be considered incomplete. MSBA will not forward for consideration a proposed Project Scope and Budget recommendation to its Board of Directors if the project cost exceeds the District's budget. Please acknowledge.

**Acknowledged.**

The District's \$308m preferred option has a total construction cost of \$573/sf and a total project cost of \$742/sf. This is notably higher than the typical cost of recently approved MSBA new high school projects. The MSBA encourages the District and its consultants to further review the proposed project to confirm that the underlying factors leading to the higher costs provide sufficient benefit to warrant the added costs and where possible adjust the proposed design to reduce costs in the subsequent Project Scope and Budget phase of the Feasibility Study.

As noted elsewhere in this review, the District's preferred option is currently 115,166 gsf over MSBA space guidelines. Using the \$573/sf construction cost noted above, this totals \$66m worth of construction. Some or all of this additional area (and associated soft costs) may be considered

*ineligible for reimbursement. Acknowledge that the District understands the impact this potentially ineligible additional square footage has on the total project budget, and the District's share of the project cost.*

**Acknowledged.**

**The Project budget includes cost for some unknowns both for site and the building itself. Additionally, there is currently a premium for the sustainability items that will need to be reviewed against the overall budget. The goal at the PSR phase was to have the budget be all inclusive as it is understood that the Project Scope and Budget cannot exceed this value as noted.**

*The summary indicates that the District intends to use the Construction Manager at Risk delivery method. Refer to the "Additional Comments" section below for reimbursement information.*

*No further review comments for this section.*

**3.3.2 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	A narrative of any changes resulting from new information that informs the conclusions of the evaluation of the existing conditions and its impact on the final evaluation of alternatives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	If changes are substantive, provide an updated Evaluation of Existing Conditions and identify as final. Identify additional testing that is recommended during future phases of the proposed project and indicate when the investigations and analysis will be completed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**MSBA Review Comments:**

*1) MSBA notes that all costs associated with abatement of contaminated soil from any source, including treatment of pumped groundwater, and abatement of underground storage tanks, vaults and transformers must be itemized in the cost estimates for the following Schematic Design submittal as ineligible for MSBA reimbursement.*

**Acknowledged.**

*2) The PDP submittal noted a list of recommended further explorations including a Phase II assessment. In response to these comments, provide a schedule of any further anticipated environmental assessments.*

**Additional Geotechnical and Geo-environmental investigations are scheduled to occur in three time periods: August 2018 additional test pits, borings and soil sampling will be taken within the existing buildings. During Schematic Design additional test pits, borings and soil sampling are anticipated to occur but are not yet scheduled. These investigations are intended to better understand the unknown subsurface soil characteristics and foundation conditions under the oldest portions of the existing buildings (Collomb and Fusco- where no drawings exist for these**

buildings) and to verify soil characteristics and foundations under later portions of the existing buildings (where some design drawings exist for these buildings).

These explorations are intended to further inform the foundation design and to better characterize the extent of soil contamination. This will further inform costs and develop scope associated with foundations and soil management.

In Design Development additional borings and soil sampling are anticipated to be taken to better map the profile of the existing fill depths across the front (south side) of the site so as to provide more detail as to the depth of the required RAPs across the extent of New Building footprint.

*The Hazardous Materials Identification Study provided a preliminary abatement cost estimate for this project totaling \$4.4m, including \$780,000 for abatement of flooring and flooring mastic. MSBA notes that all costs associated with the removal of asbestos containing flooring and ceiling tiles must be itemized in the cost estimates in the following Schematic Design submittal as ineligible for MSBA reimbursement.*

**Acknowledged.**

*No further review comments for this section.*

**3.3.3 FINAL EVALUATION OF ALTERNATIVES**

Include at least three potential alternatives, with at least one renovation and/or addition option. Include the following for each alternative where appropriate:

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	An analysis of each prospective site including:				
	a) Natural site limitations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Building footprint(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Athletic fields	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Parking areas and drives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Bus and parent drop-off areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Site access and surrounding site features.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Evaluation of the potential impact that construction of each option will have on students and measures recommended to mitigate impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Conceptual architectural and site drawings that satisfy the requirements of the education program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	An outline of the major building structural systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The source, capacities, and method of obtaining all utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	A narrative of the major building systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
7	A proposed total project budget and a construction cost estimate using the Unifomat II Elemental Classification format (to as much detail as the drawings and descriptions permit, but no less than Level 2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Permitting requirements and associated approval schedule	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Proposed project design and construction schedule including consideration of phasing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Completed Table 1 – MSBA Summary of Preliminary Design Pricing spreadsheet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**MSBA Review Comments:**

*1c) As noted in the PDP review, MSBA notes potentially ineligible site scope proposed for this project (refer to the MSBA website “Policies Forms & Guidelines / Site Cost Allowance Guidelines” for additional information). Categorically ineligible site costs include all costs associated with athletic stadiums, spectator amenities such as concession stands, press boxes, and/or toilet facilities for outdoor athletic facilities. The District’s preferred option includes a new toilet facility building and existing concessions building adjacent to the existing Pierce Athletic Field. These spaces are not included in the proposed space summary. Describe the extent of renovations to the concessions building (if any) and where the scope of this work for these structures are included in the cost estimate. Confirm that all costs associated with these structures and associated utilities will be itemized in the following Total Project Budget submittal as ineligible for MSBA funding.*

**It is currently not anticipated that there is any scope for the existing concessions building. The costs for the New Toilet Facility is included in the estimate: see the “Alternative 6A: Main Construction Cost Summary” page.**

**Confirmed that these costs will be itemized and it is acknowledged that these costs are ineligible.**

*2) The submittal notes that the Early Childhood Education (“ECE”) program and the Menotomy Preschool would be temporarily relocated during construction into the Pierce Elementary School and a Town owned ‘Parmenter’ building. Given that there is existing space in the District to house these programs, describe the Town’s discussions regarding permanently using those existing spaces rather than constructing new facilities for these spaces in the high school project. In addition, confirm that all costs associated with renovating the temporary Parmenter space, any potential temporary modular classrooms, and all other swing space costs will be itemized in the cost estimates and total project budget for the following Total Project Budget submittal as ineligible for MSBA reimbursement.*

**The ECE and the Preschool programs currently exist at the High School in an insufficient quantity and type of spaces suitable for the needs of this program. As indicated in the Educational Program, the enrollment in these programs is expected to increase and therefore additional Classroom and support spaces are required in the New Building program. The temporary swing space proposed for these programs are only adequate to support these programs at their current size and so would**

not accommodate the future program needs, Additionally, as indicated in the Educational Program, these programs serve the High School students in the Child Development Program requiring that these programs coexist at the High School.

**It is Confirmed that costs associated with the temporary relocations of these programs will be itemized for the Total Project Budget Submittal.**

*4) The structural narrative does not describe additional load associated with the proposed green roofs and photovoltaic systems. Confirm that this will be included in the following submittal.*

**Confirmed. Page 6 of the Structural Narrative lists a design load for photovoltaic systems. A design load for the proposed green roofs will be included in the following submittal.**

*6) The Mechanical narrative notes the use of radiant heating/cooling systems in select areas of the building, including under slab PEX piping distribution. However, the structural narrative notes that in the upper levels floor construction 'conduit, or other, similar embedded items should not be placed in the concrete slab on steel deck construction.' Clarify and confirm that these are not conflicting requirements.*

**The use of underslab PEX piping distribution at upper-level slabs will impact the proposed structural floor slab system in that a topping slab would be required over the structural slab. Use of this piping system for upper-level floors will be reviewed in the Schematic Design Phase to assess the cost/benefit impacts.**

*7) Confirm that the construction cost estimates provided in the submittal include the costs associated with the targeted Net Zero level of energy efficiency, most notably (but not limited to) any related systems such as the geothermal system and/or any PV array systems that may be installed as a part of this project, etc. In the following Project Scope and budget submittal, provide itemized costs associated with these system, and any cost analysis or cost/benefit analysis regarding these systems associated with this targeted energy goal.*

**The cost estimate includes a "Sustainability Cost Premium" for Net Zero sustainability goals. (located in the estimate on the "Main Construction Cost Summary" page). These costs will be further developed and will be itemized in the Project Scope and Budget submittal.**

**The determinizations of which energy efficiency strategies will be pursued will be reviewed/developed within the Schematic Design Phase via continued working sessions with the AHS Building Committee Sustainability subcommittee and via energy modeling and cost/benefit analysis.**

*8) The submittal notes that a zoning variance may be required for the local height limitation requirements, potentially as an exempted project under the Dover Amendment. In the response to this review, describe any proposed scheduling milestones regarding this approval. Tasks related to this approval should be included in future project schedules.*

**A review of the height variance will be conducted with the appropriate Town Departments within the early months of the Schematic Design Phase (Fall 2018). The proposed Building is anticipated to have a height that is the same or possibly lower than the existing building.**

*9) Provide any updates regarding the potential use of the existing Minuteman Career and Technical High School in Lexington as swing space for the Arlington High School project as presented in the PDP submittal. If this opportunity is considered further following the Preferred Schematic Report, the*

*design team should provide scheduling information for both projects that show that the Minutemen building is available for use during the appropriate phases of the Arlington High School project.*

**The cost impact of the use of the Minuteman H.S. is being conducted by the District with input from the project team to determine the viability of further pursuing this as an option for swing space. Preliminary discussions were held with Minuteman at the start of Feasibility. At this time there is no agreement between the District and Minuteman. Further discussions will be held in the coming months. The project is proceeding with the assumption that Minuteman is not available until such time that there is an agreement. The District and Project team will keep the MSBA aware of any and all of these discussions. .**

*10) The Preliminary Design Pricing spreadsheet shows a total gsf for the Preferred Option 6A at 415,400, while the submitted space summary for the same option shows 415,292 gsf. Verify the proposed building area for the subsequent Project Scope and Budget submittal. Please confirm.*

**The gsf of 415,292 indicated in the Space Summary is the proposed building area.**

*No further review comments for this section.*

### 3.3.4 PREFERRED SOLUTION

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	Educational Program				
	a) Summary of key components and how the preferred solution fulfills the educational program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Design responses including desired features and/or layout considerations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Proposed variances to, and benefits of, any changes to the current grade configuration (if any) and a related transition plan – <i>Not Applicable</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Preferred Solution Space Summary				
	a) Updated MSBA Space Summary spreadsheet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Itemization and explanation of variations from the initial space summary (and MSBA review) included in the Preliminary Design Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Preliminary NE-CHPS or LEED-S scorecard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Conceptual floor plans of the preferred solution, in color that are clearly labeled to identify educational spaces	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
5	Clearly labeled site plans of the preferred solution including, but not limited to:				
	a) Structures and boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Site access and circulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Parking and paving	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Zoning setbacks and limitations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Easements and environmental buffers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Emergency vehicle access	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g) Safety and security features	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	h) Utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	i) Athletic fields and outdoor educational spaces (existing and proposed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Site orientation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	An overview of the Total Project Budget and local funding including the following:				
	a) Estimated total construction cost	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Estimated total project cost	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Estimated funding capacity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) List of other municipal projects currently planned or in progress	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) District's not-to-exceed Total Project Budget	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Brief description of the local process for authorization and funding of the proposed project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g) Estimated impact to local property tax, if applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Completed MSBA Budget Statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	Updated Project Schedule including the following projected dates:				
	a) Massachusetts Historical Commission Project Notification Form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) MSBA Board of Directors meeting for approval to proceed into Schematic Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) MSBA Board of Directors meeting for approval of project scope and budget agreement and project funding agreement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Town/City vote for project scope and budget agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Design Development submittal date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Provide the following Items	Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
f) MSBA Design Development Submittal Review (include required 21-day duration)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) 60% Construction Documents submittal date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) MSBA 60% Construction Documents Submittal Review (include required 21-day duration)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) 90% Construction Documents submittal date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) MSBA 90% Construction Documents Submittal Review (include required 21-day duration)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Anticipated bid date/GMP execution date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Construction start	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Move-in date	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
n) Substantial completion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**MSBA Review Comments:**

*1a) The proposed design is described as being made up of four houses in two distinct wings; one for STEAM programs and the other for the Humanities programs, with limited and specific spaces for interdisciplinary collaborative education (e.g. in maker spaces, specialized labs, etc.). Describe how the high school could transition into a more fully integrated / collaborative program if, in the future, the departmentally based approach is no longer the preferred approach. Describe the extent of professional development planned for transitioning the staff members to this new facility, and if that transition will start before the new building is complete.*

**The classroom floors in each wing are designed with a mix of classroom spaces and around a shared neighborhood space. Science labs are spread across multiple floors. This means that the creation of interdisciplinary units or programs could be accommodated in the different wings in various combinations.**

**Our staff has been engaged in visioning, study, capacity building, and experimentation with the new building in mind for the past 5 years. We have referred to this as the Future Building process. This is reflected in the detailed Educational Program. This will serve as the basis for planning and preparing for use of the new building.**

**Examples of capacity and program building that target or will be supported by the new space include:**

- 1. Daily and weekly Advisory Program**
- 2. Creation of the Harbor/Shortstop Program in the Library Learning Commons**
- 3. Creation of the Mill Brook Evaluation and Transition Program off site**

4. Opening of the Interdisciplinary Maker Space in the old Woodshop
5. Development of the Smart Lab in the Library Learning Commons
6. Development of the shared CADD/Digital Media Lab
7. Creation of the Interdisciplinary Design Thinking Certificate
8. Creation of the Interdisciplinary Global Competency Certificate
9. Experimentation in World Languages with immersive technology such as Cafe Parissien, virtual reality, and international videoconferencing

*As noted in the PDP review, the submittal states that the 3,300 nsf Compass program and 2,700 nsf Millbrook program are consolidations of spaces not currently located at the existing high school. Describe where these programs are currently located, and why these programs are better served by being relocated as a part of the proposed high school project. Confirm that these are the only programs proposed to be relocated to this school and provide the same information for any other proposed program that is also not currently located at the existing high school.*

**Per our response to this question in the PDP Review Response:**

**Millbrook Program is located at 731 Massachusetts Avenue and it is a priority to co-locate this high school Special Education program at the high school because it requires consistent, adequate space (currently located in a church basement). Also, the distance from the high school creates coordination challenges and hinders student transitioning to the high school. Compass Program currently operates and serves elementary and middle school students in increasing numbers, and it is a District priority and responsibility to continue to serve this population at the high school and 18-22 levels rather than send out of district.**

**It is confirmed that these are the only programs proposed to be relocated to this school.**

*1b) In the PDP review, the MSBA asked if the District has considered using the expanded stage as the instrumental space for certain performance programs rather than the expanded band, choral rooms and a larger auditorium. No response was given. Please respond.*

**The band and chorus currently make use of the stage for full rehearsals, as their current spaces do not accommodate their entire programs well. This use places pressure on the use of the auditorium space, requiring: the musical program to plan around set building and drama rehearsals; the drama program to plan around risers and music rehearsals; and the school as a whole to limit uses of the auditorium when the stage is filled with risers, chairs, music stands, sets, or other program equipment. Band and Chorus rehearse regularly, so specialized spaces for these programs are necessary.**

**In addition, the creation of medium-sized gathering/rehearsal spaces for band and chorus will help to make up for the loss of large multipurpose rooms like Old Hall and The Pit.**

*In the following Project Scope and Budget submittal, the design team should provide any updates regarding re-use of items from the existing building that the District or community may find iconic or locally significant. Please confirm.*

**Confirmed.**

*2a) The educational program notes a 'Engineering Project Room' as part of the 'Makerspace Suite' as well as an adjacent 'CADD Lab'. The Engineering Project Room appears to be a different space than the CADD Lab based on review of the space summary. Confirm and describe how these two spaces are different, if they are redundant, and if they will be staffed and operated independently. Additionally, provide anticipated scheduling and utilization information for this Makerspace suite and the Smart Center as it appears that these areas do not typically have scheduled classes.*

**Our current Makerspace is housed in the old Vocational Woodshop. It comprises the Woodshop, Wood Storage, Engineering Room, Project Room, Spray Booth, and storage spaces. It is staffed by a Makerspace Teacher who teaches 2 classes and keeps the facility open during the day. The Engineering room is used for clean assembly and houses the CNC laser cutter.**

**The CADD lab currently shares a crowded space with our Digital Media Lab. It is shared by our CADD Teacher and Digital Media Teacher. In a corner space, we have crowded two 3D printers, a plotter, and two photographic printers.**

**In the new Suite, the CADD Lab will house the computer stations for design and for operating the digital devices located in the Makerspace. The Engineering Room would include, but not be limited to clean digital fabrication devices such as a CNC laser cutter, plotter, and 3D printer. The room labeled Maker Space/ Wood Shop would house the traditional woodworking and metal working tools that create dust and noise. These spaces will be supervised by both the Maker Space Teacher and the CADD Teacher.**

*The PDP review noted that the space summary includes many specialized SPED programs totaling roughly 21,000 nsf (not including the 16,600 nsf Menotomy Pre-School which is now included in the "Other" category). These specialized programs are in addition to the more standard SPED programs that would total about 17,000 nsf for a project with this population. MSBA requires additional explanation to substantiate the need for the increase over the existing SPED programs in terms of space requirements and staffing, and the need for more than 14,000 nsf of SPED area (totaling approximately 22,000 gross area) in excess of MSBA guidelines. The revised Educational Program suggests that Compass, Millbrook and LABBB Collaborative are exclusive full-day programs serving approximately 38 students.*

*MSBA also notes that each of these programs include various administrative offices for roughly 40 staff totaling approximately 16 staff offices, eight 250 nsf quiet rooms, and multiple conference rooms and other support spaces. MSBA encourages the District to consider the potential to share common*

*administrative spaces and support spaces (e.g. quiet rooms, counseling rooms, testing rooms, conference rooms, etc) between SPED programs.*

*Please note that all costs associated with building area beyond that included in the guidelines for auditorium and health and physical education spaces, and town spaces will be the sole responsibility of the District. The MSBA will determine the ineligible construction costs based on the net area of the ineligible spaces multiplied by the grossing factor of the proposed building times the total construction cost. The ineligible OPM and Designer costs will be prorated based on the net ineligible areas as a percentage of the total net building area. Refer to the attached MSBA policy memo dated November 2, 2016 “Staff Recommendation for policy revisions to allow for auditorium and gymnasium spaces in excess of the MSBA Space Summary Guidelines at the district’s sole expense” and Attachment B for additional information.*

*Before MSBA determines eligibility of these spaces for reimbursement in the following Project Scope and Budget phase of the Feasibility Study, the MSBA requests the District to continue to look for ways to make the building as efficient and cost-effective as possible.*

*Refer to “Attachment B” for more detailed review comments.*

**Programs have been developed at Arlington High School to support students who require additional support to meet their learning and emotional-social needs.**

**The Workplace Program is designed for students who are not attending the regional vocational high school but may enter directly into the workforce at graduation. The Harbor and Shortstop Program is designed for students who have found the increasing demands of adolescence in a high achieving, high performing community has led to physical and mental fatigue, requiring repeated and/or lengthy hospitalizations for both physical and psychiatric treatment. This type of programming is not available in many area high schools and we believe these programs and offerings are crucial to creating a safe and supportive school environment for all students.**

**The need for confidential spaces to meet with students and providers is part of the programming. While it may seem more efficient to share these spaces across all programs, we also have to account for the frequency of use in each of these spaces. It’s not unusual for multiple students from various programs to require a space where they can de-escalate, utilize self-soothing strategies, or simply refocus. In order to respect the dignity and privacy of these students it would not be realistic to have a line waiting outside for their use or even be practical in the case when a student may be demonstrating externalizing behaviors and “acting out”. In attempting to create a therapeutic milieu consistent with the principles of many of the private school placements where our students are currently placed, we need to have adequate and accessible spaces for calming and reflection activities.**

**There are currently no designated special education conference rooms in the high school This means that IEP meetings are often “double booked” with other meetings taking place in the high school requiring team chairs to search for spaces to hold federally and state mandated team meetings, as well as trying to find meeting space for families, providers, community agencies, and various stakeholders who work with us as collaterals in supporting student needs. Again, it is not unusual for an educational team meeting to have up to fifteen people in the room for several hours. Therefore, other meetings with families or Systems of Care providers cannot take place**

simultaneously. With over 150 eligible students at the high school, the need for two conferences seems well justified.

AHS continues to make a concerted effort to keep Special Education students and services in district. The result has been the growth of programming and the need for program space to accommodate programs that may not exist in other high school buildings.

The Compass Program is based on the projected needs of students currently in the district. When these students reach high school age, they will need specialized programming and program space, or we would anticipate the families seeking out of district placements. AHS is committed to serving these students in a least restrictive environment within the high school. Since the students in this program require instruction in activities of daily living, a functioning kitchen and other appropriate life-skills learning spaces are required for the success of this program.

The Mill Brook Program currently exists off-site because we do not have appropriate program space on campus. We have regular need for transition and evaluation services because of the high prevalence of students brought to Arlington through DCF as well as students with discipline and social-emotional challenges. While the Mill Brook Program is currently located off-site, this is not an ideal arrangement because of the inefficiency of staff traveling between the high school and the program. Additionally, it has been a challenge over the past ten years to find an appropriate location for the program off-site. The program has moved four times in the last ten years and the current location is temporary. Another unintentional consequence is the messaging it sends about these students' membership in the high school, when they have no interaction with general education peers or educators.

We have designed the program spaces to be adjacent to each other vertically to allow for sharing of staff and program spaces as student needs change and evolve. At the same time, the program spaces are designed to be integrated into the building as a whole, so that they are not isolated by creating a large suite. The goal is to have them centrally located and discreetly accessed.

The LABBB Program exists at Arlington High School because of Arlington's program responsibility and commitment as a member of the LABBB Collaborative. The middle school program is housed at Ottoson Middle School. Each of the five members of the Collaborative provide dedicated program space consistent with the needs of the individual programs. The Department of Elementary and Secondary Education encourages districts to collaborate on providing special education programs that each district would otherwise find cost prohibitive for the number of students in their districts requiring a particular program.

While the current number of students in the AHS LABBB program is 21, these students require 3 classrooms to maintain class sizes of 8 to 10 students due to the intensity of needs as well as the level of individual/small group instruction that is required. Additionally, the program requires a dedicated Occupational Therapy/Sensory room and a multi-purpose room for a nursing station, life-skills instruction, shared office space for the nurse, speech and language pathologist, occupational therapist, BCBA, as well as space to hold team meetings and to provide a "think and

return"/cool down area. The square footage in the plan aligns with the current square footage of the program.

3) The District has indicated intent to achieve the 2% additional reimbursement through the MSBA Green School Program. However, the submittal indicates 9 points in the Energy & Atmosphere "Optimize Energy Performance" category (using USGBC LEED-V4) which does not meet the 2% level of achievement by exceeding the current MA state energy code by at least 20% (although the mechanical narrative confirms the goal of exceeding the current energy code by 20%).

If the District intends to receive the 2% additional reimbursement, the District must provide a revised scorecard indicating that intent either in response to this review or in the following submittal. Refer to MSBA Project Advisory #41 "Update to the MSBA's Sustainable Building Design Policy" for more information. Acknowledge and confirm the District's intent and that the proposed project will be designed to meet or exceed the criteria set forth in project Advisory #41.

**It is the District's intent to receive the additional 2% reimbursement.**

In further review of the LEED points, we have revised the scorecard to 10 YES/2 MAYBE/4 NO for the Optimize Energy Performance Credit. As it is not yet known what the final electric vs gas/fossil fuel energy usage of the building will be, we do not want to over commit points for this credit. Depending on the exact energy type mix used in the building, it is still possible for the energy savings to meet the threshold of 20% better than MA code with a LEED point score of 10 (24% LEED cost savings based on ASHRAE 90.1 2010) for the Optimize Energy Performance Credit. **A Revised LEED Scorecard is included in the Response.**

4, 5) The submittal noted anticipated student enrollment increases in the District. For the following Project Scope and Budget submittal, indicate potential areas of future expansion or additions in the proposed floor plans and site plans. Describe how the proposed building will be designed to accommodate potential additions while minimizing any required alterations to future existing construction.

**The design will accommodate future expansion with a provision for extending the STEAM wing footprint to the east with a potential for up to 12 classrooms (3 per floor). The abutting egress stair, structural framing and MEPFP systems will be designed to accommodate this future expansion. The ground improvement system (RAPs) will be installed in this area to allow for this future expansion.**

5b, f) The MSBA understands that the site circulation configuration at preferred schematic phase is still under development; however, note the following issues for further consideration in the schematic design phase:

- Verify that emergency vehicles will have access to all exterior portions of the building.

**Emergency Vehicles will have access to all exterior portions of the building.**

- Confirm that the loading area will be provided with adequate delivery truck and refuse truck space and turn-around areas, refuse & recycling dumpster locations, raised loading areas, adequate equipment and material access routes from the loading area to the kitchen and custodial storage areas, support staff and kitchen staff parking, etc.

**Confirmed.**

6f) The submittal notes that the Town will seek a debt exclusion override vote following Town Meeting in "...either June or September 2019." Note that the District has 120 days from the date of the MSBA Board's approval of the Project Scope and Budget to secure the required local funding authorizations. The current project schedule shows that Board approval date to be April 10, 2019 and a resulting 120 date expiration date of August 8, 2019. Confirm that the District intends to secure funding for this project within 120 days of the MSBA Project Scope and Budget approval date.

**Confirmed. The District is currently targeting a vote for June 2019.**

7a) The previous submittal includes a letter from the Massachusetts Historical Commission ("MHC") dated April 19, 2018 in response to a Project Notification Form submitted by the Designer that described the project as potentially demolishing some or all of the existing building. The MHC letter states that the existing Arlington High School is not included on any state or federal historic inventories or registers, and that "no further review by the MHC is required...." In response to this review, provide any updates regarding ongoing community outreach and public support for the District's preferred new construction option that will result in the demolition of the 1914 Fusco and 1938 Collomb buildings.

**The District intends to have numerous Community Forums tailored to concerns expressed regarding demolition of the existing buildings throughout the Schematic Design phase.**

7c) The provided schedule indicates that the anticipated MSBA Board of Directors meeting for Project Scope and Budget approval is April 8, 2019. Note that the 2019 Board of Directors Meeting schedule has recently been posted on the MSBA website. The date of the April 2019 meeting is April 10, 2019. Please acknowledge.

**The overall project schedule will be updated as noted.**

7m,n) In the following Project Scope and Budget submittal, provide a revised project schedule that includes all milestones noted in Module 4, including move-in and substantial completion dates. Please confirm.

**Confirmed.**

No further review comments for this section.

**3.3.5 LOCAL ACTIONS AND APPROVALS**

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	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Signed Local Actions and Approvals Certification(s):				
	a) Submittal approval certificate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	b) Grade reconfiguration and/or redistricting approval certificate - <i>Not applicable</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Provide the following to document approval and public notification of school configuration changes associated with the proposed project:				
	a) A description of the local process required to authorize a change to the existing grade configuration or redistricting in the district	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) A list of associated public meeting dates, agenda, attendees and description of the presentation materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Certified copies of the governing body (e.g. School Building Committee) meeting notes showing specific grade reconfiguration and/or redistricting, vote language, and voting results if required locally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) A certification from the Superintendent stating the District's intent to implement a grade configuration or consolidate schools, as applicable. The certification must be signed by the Chief Executive Officer, Superintendent of Schools, and Chair of the School Committee.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**MSBA Review Comments:**

*No review comments for this section.*

**Additional Comments:**

- *The MSBA issues project advisories from time to time, as informational updates for Districts, Owner's Project Managers ("OPM"), and Designers in an effort to facilitate the efficient and effective administration of proposed projects currently pending review by the MSBA. The advisories can be found on the MSBA's website. In response to these review comments, confirm that the District's consultants have reviewed all project advisories and they have been incorporated into the proposed project as applicable.*

**Confirmed.**

- *The MSBA offers the following information to assist the District and its Owner's Project Manager in completing the total project budget template that is required as part of its Schematic Design Submittal:*
  - *The District must include negotiated costs for OPM and Designer fees for the remainder of the project as part of their Total Project Budget. The fees must be listed separately by the applicable line items that are included in the MSBA's Total Project Budget Template. In response to these review comments, confirm that the District and its consultants will negotiate fees for the remainder of the project that are to be included in the District's Schematic Design documents to the MSBA.*

**Confirmed.**

- *The PSR indicates the District is targeting MSBA approval of its proposed project scope and budget at the April 2019 board meeting. The District's reimbursement rate for calendar year 2019 is unknown at this time. The MSBA will forward this information to the District of its reimbursement rate when it is available. Note that the MSBA updates district reimbursement rates annually and applies the reimbursement in effect at the time the MSBA Board of Directors approves a district's proposed project scope and budget. The reimbursement rate is established based on statutory requirements and information provided by the Departments of Revenue and Elementary and Secondary Education.*
- **Maintenance (0-2) - 1.61%.** *This value is based on MSBA review of district provided materials regarding routine and capital maintenance programs during Eligibility Period at which time the value is finalized.*
- **CM@Risk (0 or 1) – 1.00%.** *Because the District received an invitation into Eligibility Period before January 1, 2017, it would be eligible to conditionally receive one incentive point subject to the approval of the Office of the Inspector General for the District's use of the Construction Manager at Risk construction delivery method for the Proposed Project and that the District actually used that construction delivery method for the Proposed Project.*
- **Newly Formed Regional School District (0-6) –** *The District is not a newly formed or expanded regional school district as a result of working with the MSBA, therefore these incentive points do not apply.*
- **Major Reconstruction or Reno/Reuse (0-5) –** *The District's preferred solution is for new construction therefore these incentive points do not apply.*
- **Overlay Zoning 40R & 40S (0 or 1) –** *Refer to Module 4, appendix 4E to review documentation requirements and to determine if this incentive point may be applicable. Note that the proposed project must be located within the smart growth zoning district to comply with this additional incentive, and required authorizations must be documented prior to MSBA approval of the District's proposed project scope and budget to be eligible to receive this incentive point.*
- **Overlay Zoning 100 units or 50% of units for 1, 2 or 3 family structures (0 or 0.5) –** *Refer to Module 4, appendix 4E to review documentation requirements and to determine if this incentive point may be applicable. Note that required authorizations must be documented prior to MSBA approval of the District's proposed project scope and budget to be eligible to receive this incentive point.*
- **Energy Efficiency – “Green Schools” (0 or 2) –** *The PSR indicates the District's intent to achieve the 2% additional reimbursement through the MSBA Green School Program, refer to additional comments above. Note that, subject to the District's intention to meet certain energy efficiency sustainability requirements for the Proposed Project, the MSBA will provisionally include two (2) incentive points, however if the District does not ultimately qualify for some or all of these incentive points the MSBA will adjust the District's reimbursement rate, accordingly.*

**This will be incorporated into the current DRAFT of the total project budget for inclusion into the Schematic Design Submittal.**

**End**