REQUEST FOR DESIGNER SERVICES (RFS)

City of Worcester, MA
Worcester Public Schools
Bid # 8631-F6
Burncoat Senior High School

January 28, 2026

Invitation: The City of Worcester ("Owner") is seeking the services of a qualified "Designer" within the meaning of M.G.L. Chapter 7C, Section 44 to provide professional design and construction administration services for the Burncoat Senior High School in Worcester, Massachusetts. Selection of a Designer will be made by the Designer Selection Panel of the Massachusetts School Building Authority ("MSBA") in accordance with the MSBA's Designer Selection Procedures.

The Owner is seeking design services to conduct a Feasibility Study which will include the development and evaluation of potential alternative solutions and continue through the Schematic Design Phase of the preferred alternative initially. Subject to the acceptance of a Project by the MSBA and further subject to adequate funding authorized by the Owner, the contract between the Owner and the Designer may be amended to include continued designer services through design development, construction contract documents, bidding, award of construction contract(s), construction administration, final closeout and warranty period of the potential Project. (**See**: Designer Services Contract Amendment for Design/Bid/Build and Designer Services Contract Amendment for CM-at-Risk). A potential Project may include a renovation of the existing school, a renovation of and addition to the existing school and/or new construction.

The estimated construction budget for a potential Project may range from **$400 million to $525 million** depending upon the Preferred Schematic solution that is recommended by the Owner and accepted by the MSBA. The Fee for Basic Services will be negotiated.

MBE WBE and VBE/SDVOBE Participation Goals for the Designer Services Contract:

The Municipal Construction Affirmative Marketing Program (MCAMP) requires Municipalities to incorporate Minority Business Enterprise (MBE), Women Business Enterprise (WBE) and Veteran Business Enterprise (VBE)/Service-Disabled Veteran Business Enterprise (SDVOBE) goals into both their design and construction procurements for municipal contracts for the construction, reconstruction, alteration, remodeling, repair, or demolition of any public building by any city or town that includes funding provided in whole or in part by the Commonwealth, such as funding under the Massachusetts School Building Authority (MSBA), funding in any legislative appropriation, grant awards, reimbursements, municipal commitments to use state funds, and the like. To count towards participation, the business must be a Supplier Diversity Office (SDO) certified WBE, MBE or VBE/SDVOBE at the time of contract execution.

The MBE, WBE, and VBE/SDVOBE must be selected from those categories of work identified in Item F of this RFS or be assigned to tasks required under Basic Services as specifically set forth in the Contract for Designer Services as amended. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their separate MBE, WBE, and VBE/SDVOBE participation goals. Consultants to the prime Designer can team within their disciplines in order to meet the separate MBE, WBE, and VBE/SDVOBE participation goals but must state this relationship on the organizational chart (Section 6 of the application form).

Applications from MBE, WBE, and VBE/SDVOBE firms as prime designers are encouraged. Where the prime Designer is an SDO certified MBE, WBE, and VBE/SDVOBE, the Designer must bring a reasonable amount of participation by a firm or firms that hold the certification which is not held by the prime Designer on the project.

MBE,WBE and VBE/SDVOBE Participation Goals for the Designer Services Contract:

1. MBE Participation Goals: 5.7%
2. WBE Participation Goals: 10.6%
3. VBE/SDVOBE Participation Goals: 3.0%

For additional information on Designer qualifications see Sections E. and F. in this RFS.

A. Background:

The Worcester School Committee, chaired by the City of Worcester's Mayor, is the legislative and policy-making body charged with supervision of the Worcester Public School System (the "WPS"). The City of Worcester Public School District is comprised of four quadrants including: Doherty (Q1), Burncoat (Q2), North (Q4) and South (Q3), each with elementary and secondary schools serving grades K-12. WPS also has the Technical High School serving all four quadrants.

The Burncoat Senior High School, 179 Burncoat Street, is one of three high schools serving grades 9-12, within the Burncoat Quadrant, built in 1964. The current enrollment is 1,153 students. The building is a brick structure located on three floors and has a total square footage of 144,388. Typical interior wall finishes are exposed, glazed and painted block walls, painted wallboard, and exposed concrete. The roof is tar and gravel.

The Burncoat Middle School, 135 Burncoat Street, which is adjacent to the high school, serving grades 7-8 and was built in 1952. The current enrollment is 675 students. The building is a masonry structure, comprised of three floors and has a total square footage of 122,652. Typical interior wall finishes are like that of the high school. The roof was fully replaced in 1999 with EPDM – rubber membrane.

Both the high school and middle school are located on the same 38.9-acre parcel that includes the building, athletic facilities, and all parking lot facilities. There are no known site conditions that would impact the potential project.

As a result of a collaborative analysis with the MSBA of enrollment projections and space capacity needs for the Burncoat Senior High School, the City of Worcester acknowledges and agrees that the design of alternatives, which may be evaluated as a part of the feasibility study for the Burncoat Senior High School, shall be based in accordance with the following:

Burncoat Senior High School Grade 9-12 Enrollment	Burncoat Senior High School consolidated with Burncoat Middle School Grade 7-12 Enrollment

1,400 students	2,125 students

Both Schools have been placed on warning status by the New England Association of Schools and Colleges (NEASC) for facilities deficiencies. The schools do not have space for new or expanded programs, as cited by NEASC.

B. Project Goals and General Scope:

On or about February 13, 2023, the Owner submitted a Statement of Interest (Attachment A) to the MSBA for Burncoat Senior High School. The MSBA is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects. The MSBA's grant program is discretionary, and no city, town, or regional school district has any entitlement to any funds from the MSBA. At the April 30, 2025, Board of Directors meeting, the MSBA Board voted to issue an invitation to the Owner to conduct a feasibility study for this Statement of Interest to identify and study possible solutions and, through a collaborative process with the MSBA, reach a mutually-agreed upon solution. The MSBA has not approved a Project and the results of this feasibility study may or may not result in a Project approved by the MSBA.

It is anticipated that the feasibility study will review the problems identified in the Statement of Interest at the Burncoat Senior High School in addition to other concerns including, but not limited to:

- The conditions of the existing facilities include energy efficiency of the building envelope; existing spatial, acoustic, and thermal conditions; efficiency and age of mechanical, electrical, and plumbing equipment, and fixtures.
- Building accessibility.
- Presence of hazardous materials.
- Vehicular and pedestrian site access.
- Existing site conditions include differential elevations, limiting recreational space, athletic fields, and parking facilities.
- Existing site geological features include the presence of ground water and ledge.
- Evaluation of existing utilities: water, gas, and electrical service.

The Feasibility Study shall include a study of all alternatives and contain all information required by 963 CMR 2.10(8) and any other applicable rules, regulations, policies, guidelines and directives of the Authority, including, but not limited to, a final design program, space summary, budget statement for educational objectives, and a proposed total project budget. The Schematic Design shall include, but not be limited to, the information required by the Authority's Feasibility Study Guidelines, including, but not limited to, a site development plan, environmental assessment, geotechnical assessment, geotechnical analysis, code analysis, utility analysis, schematic building floor plans, schematic exterior building elevations, narrative building systems descriptions, US Green Building Council's LEED for Schools Rating System (LEED-S) scorecard, outline specifications, cost estimates, project schedule and proposed total project budget.

Project objectives under consideration by the Owner include:

- Identification of community concerns that may impact study options including, but not limited to, the proximity of the school to the residents it serves, after hour's use of the facility, and cost.
- Identification of specific milestone requirements including analysis of existing buildings, utilities, site conditions, vehicular and pedestrian site access, access swing space for current occupants, and analysis of potential on site energy production and conservation.
- Identification of alternate sites.

- Minimizing the life cycle cost of facility operations as it relates to future operational budgets including a reduction in daily operating costs through low maintenance, durable finishes, materials, and construction details; optimal energy efficiency of mechanical, electrical, and plumbing fixtures and equipment; on-site energy production; and building siting.
- US Green Building Council's LEED for Schools Guidelines (LEED-S) Rating System.
- Construction Manager-at-Risk Delivery Method.

C. Scope of Services:

The required scope of services is set forth in the MSBA's standard Contract for Designer Services (Contract), a copy of which is attached hereto and incorporated herein by reference. If the Owner decides to proceed with the Project beyond the Schematic Design Phase and when the project delivery method is decided (Design/Bid/Build or Construction Manager at Risk), the Contract will be amended accordingly. Copies of Designer Services Contract Amendments for Design/Bid/Build and Construction Manager at Risk are also attached hereto and incorporated herein by reference. The Designer's Basic Services consist of the tasks described in the Contract for Designer Services as amended including all investigative work (to the extent provided for in the Contract), feasibility study, schematic design, and, at the Owner's option, design work, preparation of construction documents, bidding period administration, construction administration, and other related work reasonably inferred in the opinion of the Owner and the Authority as being necessary to meet the project's stated scope and goals.

This RFS will be appended to and become part of the Contract for Designer Services. Any Designer selected as a result of this RFS will be required to execute the Contract for Designer Services and applicable amendment that are attached hereto.

Basic Services are defined in Article 7 of the Contract in Attachment B.

Extra and reimbursable expenses are defined in Articles 8 and 9 of the Contract in Attachment B.

D. Project Schedule:

Work under this RFS is divided into the Project Phases as listed in Article 7 of the Contract as amended and as may be augmented in this RFS. Each Project Phase will consist of one or more required submissions, and may include site visits, meetings with the Owner, Owner's Project Manager, the Authority and others, and other tasks as described.

The milestone dates listed below are estimates only. Actual dates may vary depending upon the agreed upon solution, the extent of required document revisions, the time required for regulatory approvals, and the construction contractor's performance. Such variances will not, in and of themselves, constitute a justification for an increased Fee for Basic Services.

Milestone	**Projected Date**
Designer Contract Executed	**April 2026**
MSBA Board of Directors Meeting – Preferred Schematic Report Approval	**February 2027**

MSBA Board of Directors Meeting -
Project Scope and Budget Approval ..... **October 2027**

Feasibility Study Agreement expiration ..... **October 30, 2027**

Local Project Funding Authorization..... **January 2028**

Construction Start .....**Spring 2029**

Substantial Completion of Construction.....**Spring 2032**

Move-In ..... **Fall 2032**

E. Minimum qualifications:

Selection will be made by the MSBA Designer Selection Panel in accordance with the Authority's Designer Selection Procedures, attached hereto as Attachment E. The Respondent must certify in its cover letter that it meets the following minimum requirements. Any Respondent that fails to include such certification in its response, demonstrating that these criteria have been met, may be rejected without further consideration. To be eligible for selection, the Designer must meet **all** of the following qualifications.

1. Be a qualified Designer within the meaning of M.G.L. Chapter 7C, Section 44, employing a Massachusetts registered architect responsible for and being in control of the services to be provided pursuant to the Contract.
   **Please refer to M.G.L. Chapter 7C, Section 44 for the definition of Designer. In M.G.L. Chapter 7C, Section 44, "registered" means registered in the Commonwealth of Massachusetts.*

2. The Massachusetts registered architect responsible for and in control of the services to be provided has successfully completed the Massachusetts Certified Public Purchasing Official Program ("MCPPO") seminar "Certification for School Project Designers and Owner's Project Managers" as administered by the Office of the Inspector General of the Commonwealth of Massachusetts at the time of application, and must maintain certification by completing the "Recertification for School Project Designers and Owner's Project Managers" seminar every three years thereafter. Proof of recertification or registration in the next recertification seminar for which space is available must be provided.

3. Applicants shall subcontract with VBEs, SDVOBEs, MBEs and WBEs, as required by the State Funded Municipal Construction Affirmative Marketing Program General Guidelines. Applicants must include a reasonable representation of VBEs, SDVOBEs, MBEs and WBEs that meet or exceed the SDO participation goals established by the District for this Project.

F. Selection Criteria:

In evaluating proposals, the Owner and Designer Selection Panel will consider the members of the proposed design team either as Basic or Extra Services. Identify those member(s) of the proposed design team who will be responsible for the following categories of work: (Firm's name, individual's name and professional registration or license number, as applicable, must be listed in the application for each category of work, as well as whether the firm is SDO certified as an MBE/WBE/VBE/SDVOBE.

1. ***Architecture***
2. ***Educational Programming***

3. ***Civil Engineering***
4. ***Landscape Architecture***
5. ***Structural Engineering***
6. ***Fire Protection Engineering***
7. ***Plumbing Engineering***
8. ***HVAC Engineering***
9. ***Electrical/Lighting***
10. ***Data/Communications***
11. ***Environmental Permitting***
12. ***Geotechnical Engineering***
13. ***Geoenvironmental Engineering***
14. ***Hazardous Materials***
15. ***Cost Estimating***
16. ***Kitchen/Food Service Consultant***
17. ***Laboratory Consultant***
18. ***Acoustical Consultant***
19. ***Specifications Consultant***
20. ***Library/Media***
21. ***Technology Consultant/Audio Visual Consultant***
22. ***Theatrical Consultant***
23. ***Sustainable/Green Design/Renewable Energy Consultant***
24. ***Code Consultant***
25. ***Accessibility Consultant/Universal Design Consultant***
26. ***Traffic Consultant***
27. ***Furniture, Fixtures and Equipment Consultant***
28. ***Site Surveying***
29. ***Security Consultant***

**** N.B. –**

Applicants must address each category of work listed above in their application whether it is to be performed by in-house staff or by sub-consultant(s).

The members of the team for each of the categories of work listed above must be identified including the firm's name, individual's name and professional registration or license number, as applicable, as well as whether the firm is SDO certified as an VBE, SDVOBE, MBE and/or WBE.

Failure to address <u>each</u> category may result in the elimination of the applicant from consideration on this project.

Applicants should not list any consultants other than those for the categories of work listed above.

The VBE/SDVOBE/MBE/WBE enterprises must be selected to perform services addressing the categories of work listed above or be assigned to tasks required under Basic Services as specifically set forth in the Contract for Designer Services as amended. Consultants other than those proposed for the categories of work listed above or required to perform Basic Services may not be used for purposes of meeting VBE/SDVOBE/MBE/WBE requirements. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their VBE/SDVOBE/MBE/WBE goals. Consultants to the prime Designer can team within their disciplines in order to meet the VBE/SDVOBE/MBE/WBE goals but must state this relationship on the organizational chart (Section 6 of the application form).

The Owner and Designer Selection Panel will consider the following additional criteria in evaluating proposals:

1. Prior similar experience best illustrating current qualifications for the specific project.
2. Past performance of the firm, if any with regard to public, private, DOE-funded, and MSBA funded projects across the Commonwealth, with respect to:
    a. Quality of project design.
    b. Quality, clarity, completeness and accuracy of plans and contract documents.
    c. Ability to meet established program requirements within allotted budget.
    d. Ability to meet schedules including submission of design and contract documents, processing of shop drawings, contractor requisitions and change orders.
    e. Coordination and management of consultants.
    f. Working relationship with contractors, subcontractors, local awarding authority and MSBA staff and local officials.
3. Current workload and ability to undertake the contract based on the number and scope of projects for which the firm is currently under contract.
4. The identity and qualifications of the consultants who will work on the project.
5. The financial stability of the firm.
6. The qualifications of the personnel to be assigned to the project.
7. Geographical proximity of the firm to the project site or willingness of the firm to make site visits and attend local meetings as required by the client.
8. Additional criteria that the MSBA Designer Selection Panel considers relevant to the project.

G. Proposal requirements

Persons or firms interested in applying must meet the following requirements:

1. Applicants must have an up-to-date Master File Brochure on file at the Massachusetts School Building Authority.

2. Applications shall be on "Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated July 2016)" as developed by the Designer Selection Board of the Commonwealth of Massachusetts. Applications (one original and **five (5) hard copies**, and two (2) digital copies in PDF format on separate USB flash drives) must be received on or before **11:00 AM, February 25, 2026**. Each electronic application file submitted in response to the RFS is to be no greater than 25MB. Applications must be completed using no smaller than the same font size as in the application (10 font Arial Narrow). Applications should be printed double-sided and spiral bound on the left short edge, landscape orientation, in order that the pages lie and remain flat when opened. Applications should not be provided with acetate covers. Applications must not exceed 100 pages, 50 sheets double-sided, from cover to cover. This page limitation is inclusive of the cover, cover letter, tab sheets and response to section 10 of the application. Electronic links to supplemental information are prohibited.

3. Applications must be accompanied by a concise cover letter that is a maximum of two pages in length. A copy of the cover letter should be attached to each copy of the application. The cover letter must include the certifications as noted in Section E of this RFS. (A copy of the MCPPO certification should be attached to the cover letter as well as any SDO letters.)

4. Applicants may supplement this proposal with graphic materials and photographs that best demonstrate design capabilities of the team proposed for this project subject to the page limitations as set forth in section 10 of the Standard Designer Application Form.

5. Proposals shall be addressed to:

Name	***Mr. Jeremy C. Flansburg, Assistant Purchasing Director***
	City of Worcester
	Purchasing Department
Address	***455 Main Street, Worcester, MA 01608***
Phone Number	***(508) 799-1220***
Email	***flansburgjc@worcesterma.gov***
Fax #	***(508) 799-1203***

6. Proposals must be clearly identified by marking the package or envelope with the following:

Burncoat Senior High School – Designer Services
"Name of Applicant"

7. All questions regarding this RFS should be addressed exclusively in writing, via email, to:

Name	***Mr. Jeremy C. Flansburg, Assistant Purchasing Director***
	City of Worcester
	Purchasing Department
Address	***455 Main Street, Worcester, MA 01608***
Phone Number	***(508) 799-1220***
Email	***flansburgjc@worcesterma.gov***
Fax #	***(508) 799-1203***

H. Pre-Proposal Meeting

All interested parties are encouraged to attend a briefing session at Burncoat Senior High School, 179 Burncoat St, Worcester, MA 01606 scheduled for **February 4, 2026 at 3:00 PM**.

I. Withdrawal

Applicants may withdraw an application as long as the written request to withdraw is received by the Owner prior to the time and date of the proposal opening.

J. Public Record

All responses and information submitted in response to this RFS are subject to the Massachusetts Public Records Law, M.G.L. c. 66, § 10 and c. 4, § 7(26). Any statements in submitted responses that are inconsistent with the provisions of these statutes shall be disregarded.

K. Waiver/Cure of Minor Informalities, Errors and Omissions

The Owner reserves the right to waive or permit cure of minor informalities, errors or omissions prior to the selection of a Respondent, and to conduct discussions with any qualified Respondents and to take any other measures with respect to this RFS in any manner necessary to serve the best interest of the Owner and its beneficiaries.

L. Rejection of Responses, Modification of RFS

The Owner reserves the right to reject any and all responses if the Owner determines, with the approval of the MSBA's Designer Selection Panel, that it is in the Owner's best interests to do so. This RFS does not commit the Owner to select any Respondent, award any contract, pay any costs in preparing a response, or procure a contract for any services. The Owner also reserves the right to cancel or modify this RFS in part or in its entirety, or to change the RFS guidelines. A Respondent may not alter the RFS or its components.

ATTACHMENTS:

Attachment A: Statement of Interest

Attachment B: Designer Base Contract v February 2025(1)

Designer Contract Amendment CM-R v February 2025(1)

Designer Contract Amendment DBB v February 2025(1)

Designer Base Contract Exhibits v February 2025(1)

Attachment C: Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated July 2016)

Attachment D: Enrollment Letter and Enrollment Certification

Attachment E: MSBA Designer Selection Procedures

Attachment F: Certifications

End of Request for Designer Services

ATTACHMENT A

Statement of Interest

Worcester Public Schools
Worcester, Massachusetts

Facilities Management Department

Dr. John E. Durkin Administration Building
20 Irving Street
Worcester, Massachusetts 01609-2493

Tel. (508) 799-3151
Fax (508) 799-3144
bedardj@worcesterschools.net

James Bedard
Facilities Director

June 21, 2021

Ms. Diane Sullivan
Mass. School Building Authority
40 Broad Street, Suite #500
Boston, MA 02109

Dear Ms. Sullivan:

Please note the attached package, which includes the following:

- **Closed Schools Information Document** (submitted & signed online)
- **Core Statement of Interest** (submitted & signed online):
  - **Burncoat High School**
- **Vote Documentation Letter** (from the Mayor of Worcester)
- **School Committee Meeting Minutes** (detailing the School Committee's vote)
- **City Clerk's Order Document** (detailing the City Council's vote)
- **Back-up Document** (NEASC Report)

Could you please send me an e-mail confirming receipt at BedardJ@worcesterschools.net? I appreciate all of your help. If you need anything further, please do not hesitate to contact me at 508-799-3151. Thank you.

Sincerely,

J. M. Bed

James Bedard
Worcester Public Schools
Facilities Director

Cc: File

Massachusetts School Building Authority

School District Worcester

District Contact

TEL

Submission Date 6/21/2021

Closed Schools Information

Closed Schools

Question 1: Has the district sold, closed, or otherwise removed from service a school in the last 10 years?

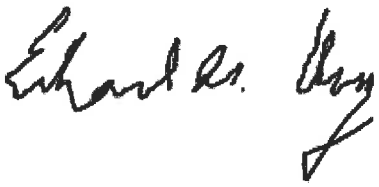
No

Question 2: Does the district have any plans to sell, close, or otherwise remove from service a school in the next 10 years?

No

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this Closed Schools formation are true and accurate and that this Closed Schools Information has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Closed Schools Information to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Closed Schools Information that may be required by the Authority.

Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
Edward M. Augustus Jr.	Joseph M. Petty	Maureen Binienda
City Manager		
		
(signature)	(signature)	(signature)
Date	Date	Date
6/14/2021 7:54:00 AM	6/11/2021 3:31:50 PM	6/14/2021 3:03:36 PM

* Local Chief Executive Officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.

Massachusetts School Building Authority

Next Steps to Finalize Submission of your FY 2021 Statement of Interest

Thank you for submitting your FY 2021 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete**. The District is required to mail all required supporting documentation, which is described below.

VOTES: Each SOI must be submitted with the proper vote documentation. This means that (1) the required governing bodies have voted to submit each SOI, (2) the specific vote language required by the MSBA has been used, and (3) the District has submitted a record of the vote in the format required by the MSBA.

- **School Committee Vote:** Submittal of all SOIs must be approved by a vote of the School Committee.
  - For documentation of the vote of the School Committee, Minutes of the School Committee meeting at which the vote was taken must be submitted with the original signature of the Committee Chairperson. The Minutes must contain the actual text of the vote taken which should be substantially the same as the MSBA's SOI vote language.
- **Municipal Body Vote:** SOIs that are submitted by cities and towns must be approved by a vote of the appropriate municipal body (e.g., City Council/ Aldermen/Board of Selectmen) in addition to a vote of the School Committee.
  - Regional School Districts do not need to submit a vote of the municipal body.
  - For the vote of the municipal governing body, a copy of the text of the vote, which shall be substantially the same as the MSBA's SOI vote language, must be submitted with a certification of the City/Town Clerk that the vote was taken and duly recorded, and the date of the vote must be provided.

ADDITIONAL DOCUMENTATION FOR SOI PRIORITIES #1 AND #3: If a District selects Priority #1 and/or Priority #3, the District is required to submit additional documentation with its SOI.

- If a District selects Priority #1, Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of the school children, where no alternative exists, the MSBA requires a hard copy of the engineering or other report detailing the nature and severity of the problem and a written professional opinion of how imminent the system failure is likely to manifest itself. The District also must submit photographs of the problematic building area or system to the MSBA.
- If a District selects Priority #3, Prevention of a loss of accreditation, the SOI will not be considered complete unless and until a summary of the accreditation report focused on the deficiency as stated in this SOI is provided.

ADDITIONAL INFORMATION: In addition to the information required above, the District may also provide any reports, pictures, or other information they feel will give the MSBA a better understanding of the issues identified at a facility.

If you have any questions about the SOI process please contact the MSBA at 617-720-4466 or SOI@massschoolbuildings.org.

Massachusetts School Building Authority

School District Worcester

District Contact TEL:

Name of School Burncoat Senior High

Submission Date 6/21/2021

SOI CERTIFICATION

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

- ☑ The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.
- ☑ The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.
- ☑ The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for any portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.
- ☑ The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students and that the facility for which the SOI is being submitted does not serve a solely early childhood or Pre-K student population.
- ☑ After the district completes and submits this SOI electronically, the district must mail hard copies of the required documentation described under the "Vote" tab, on or before the deadline.
- ☑ The district will schedule and hold a meeting at which the School Committee will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is required for cities, towns, and regional school districts.
- ☑ Prior to the submission of the SOI, the district will schedule and hold a meeting at which the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is not required for regional school districts.
- ☑ On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The District will use the MSBA's vote template and the vote will specifically reference the school and the priorities for which the SOI is being submitted. The minutes will be signed by the School Committee Chair. This is required for cities, towns, and regional school districts.
- ☑ The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline. This is not required for regional school districts.
- ☑ The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation in a format acceptable to the MSBA. If Priority 1 is selected, your SOI will not be considered complete unless and until you provide the required engineering (or other) report, a professional opinion regarding the problem, and photographs of the problematic area or system. If Priority 3 is selected, your SOI will not be considered complete unless and until you provide a summary of the accreditation report focused on the deficiency as stated in this SOI.

LOCAL CHIEF EXECUTIVE OFFICER/DISTRICT SUPERINTENDENT/SCHOOL COMMITTEE CHAIR
(E.g., Mayor, Town Manager, Board of Selectmen)

Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
Edward M. Augustus Jr.	Joseph M. Petty	Maureen Binienda
City Manager		
		
(signature)	(signature)	(signature)
Date	Date	Date
6/14/2021 7:47:31 AM	6/11/2021 3:31:33 PM	6/14/2021 3:06:01 PM

* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.

Massachusetts School Building Authority

School District Worcester

District Contact TEL:

Name of School Burncoat Senior High

Submission Date 6/21/2021

Note

The following Priorities have been included in the Statement of Interest:

1. ☐ Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
2. ☐ Elimination of existing severe overcrowding.
3. ☑ Prevention of the loss of accreditation.
4. ☐ Prevention of severe overcrowding expected to result from increased enrollments.
5. ☑ Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
6. ☐ Short term enrollment growth.
7. ☑ Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
8. ☐ Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

SOI Vote Requirement

☑ I acknowledge that I have reviewed the MSBA's vote requirements for submitting an SOI which are set forth in the Vote Tab of this SOI. I understand that the MSBA requires votes from specific parties/governing bodies, in a specific format using the language provided by the MSBA. Further, I understand that the MSBA requires certified and signed vote documentation to be submitted with the SOI. I acknowledge that my SOI will not be considered complete and, therefore, will not be reviewed by the MSBA unless the required accompanying vote documentation is submitted to the satisfaction of the MSBA.

SOI Program: Core **Potential Project Scope:** Potential New School
Is this a Potential Consolidation? NO

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI: 2021 Burncoat Senior High

Is this part of a larger facilities plan? YES

If "YES", please provide the following:
Facilities Plan Date: 11/15/2017
Planning Firm: SMMA, 1000 Mass Avenue, Cambridge, MA 02138

Please provide a brief summary of the plan including its goals and how the school facility that is the subject of this SOI fits into that plan:

This document is a comprehensive plan evaluating 28 of Worcester's oldest schools on a myriad of issues and concerns. A.M. Fogarty of Hingham, MA evaluated the replacement/upgrade costs of such items as: fire alarms, electrical panels, plumbing needs, and structural integrity. SMMA evaluated the schools' environment as it relates to best teaching practices and strategies for future school department needs.

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 12 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 17 students per teacher

Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District? NO

Does the District have related report(s)/document(s) that detail its facilities, student configurations at each facility, and District operational budget information, both current and proposed? NO

If "NO", please note that:
If, based on the SOI review process, a facility rises to the level of need and urgency and is invited into the Eligibility Period, the District will need to provide to the MSBA a detailed Educational Plan for not only that facility, but all facilities in the District in order to move forward in the MSBA's school building construction process.

Is there overcrowding at the school facility? NO

If "YES", please describe in detail, including specific examples of the overcrowding.

Has the district had any recent teacher layoffs or reductions? NO

If "YES", how many teaching positions were affected? 0
At which schools in the district?
Please describe the types of teacher positions that were eliminated (e.g., art, math, science, physical education, etc.).

Has the district had any recent staff layoffs or reductions? YES

If "YES", how many staff positions were affected? 99
At which schools in the district? Systemwide (Could only enter two-digit quantity above.)
Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

Due to the COVID-19 pandemic and a full remote-learning model, the district laid off 108 crossing guards and 200 school nutrition employees. The district has returned to in-person instruction and has recalled all of these employees.

Please provide a description of the program modifications as a consequence of these teacher and/or staff reductions, including the impact on district class sizes and curriculum.

N/A

Please provide a description of the local budget approval process for a potential capital project with theMSBA. Include schedule information (i.e. Town Meeting dates, city council/town council meetings dates, regional school committee meeting dates). Provide, if applicable, the District's most recent budget approval process that resulted in a budget reduction and the impact of the reduction to the school district (staff reductions, discontinued programs, consolidation of facilities).

The Worcester Public Schools FY22 budget represents total spending for the Worcester Public Schools from all sources of $477,340,938, a $48.8 million or 11.4% increase from the FY21 adopted budget level of $427,7980,255, reflecting implementation of the Student Opportunity Act funds and federal COVID-relief related funding within the district. The

adopted budget reflects a collaborative effort with school and district leadership teams to develop resource allocations for schools using a data-driven, needs-based assessment resulting in additional personnel, instructional materials, and technology improvements to the schools. The budget process is based on a Seven Point Financial Plan for Advancing Student Achievement and Program Sustainability that relies on long-term resource allocation strategies and allows individual school councils and instructional leadership teams to create templates for future school-based accountability and resource planning. Concurrently, the District Administration has made numerous budget presentations and solicited valuable input from parent groups, students, local business leader roundtables, civic and community leaders, and concerned citizens.

General Description

BRIEF BUILDING HISTORY: Please provide a detailed description of when the original building was built, and the date(s) and project scopes(s) of any additions and renovations (maximum of 5000 characters).

Burncoat High School was constructed in 1964. The school has a current enrollment of approximately 1,153 students in grades 9-12. The facility is approximately 144,000 square feet situated on the 39 acres of the Burncoat High-Middle Schools complex parcel. The aging infrastructure fails to support the educational program and the mission of Burncoat High School. The school has been placed on warning status by the New England Association of Schools and Colleges (NEASC) for facilities deficiencies. The school does not have space for new or expanded programs, as cited by NEASC.

The building is unable to expand existing programs, has outdated systems and classrooms, and there is a significant need for performing arts spaces and a single, larger cafeteria.

TOTAL BUILDING SQUARE FOOTAGE: Please provide the original building square footage PLUS the square footage of any additions.

144388

SITE DESCRIPTION: Please provide a detailed description of the current site and any known existing conditions that would impact a potential project at the site. Please note whether there are any other buildings, public or private, that share this current site with the school facility. What is the use(s) of this building(s)? (maximum of 5000 characters).

The facility is located on a 38.9-acre parcel, shared with a similarly-aged middle school complex with parking lot and athletic facilities, and there are no known site conditions that would impact potential project.

ADDRESS OF FACILITY: Please type address, including number, street name and city/town, if available, or describe the location of the site. (Maximum of 300 characters)

Burncoat High School, 179 Burncoat Street, Worcester, MA 01606

BUILDING ENVELOPE: Please provide a detailed description of the building envelope, types of construction materials used, and any known problems or existing conditions (maximum of 5000 characters).

The building is a brick structure located on three floors. The exterior brick work of the school is aged and is showing signs of wear and tear. The sills and mortar are deteriorating. The window system in the school is original to the school. The single-pane window system is extremely inefficient and is causing significant heat loss and strain on the heating system. It is having difficulty trying to maintain a comfortable temperature throughout the heating season. Many of the windows do not operate properly and are, in many cases, fixed shut.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS? NO
Year of Last Major Repair or Replacement:(YYYY) 1964
Description of Last Major Repair or Replacement:
Original to construction.

Roof Section A
Is the District seeking replacement of the Roof Section? YES
Area of Section (square feet) 127853
Type of ROOF (e.g., PVC, EPDM, Shingle, Slate, Tar & Gravel, Other (please describe)
Tar & Gravel

Age of Section (number of years since the Roof was installed or replaced) 36
Description of repairs, if applicable, in the last three years. Include year of repair:
Complete roof replacement in 1985.

Window Section A
Is the District seeking replacement of the Windows Section? YES
Windows in Section (count) 763
Type of WINDOWS (e.g., Single Pane, Double Pane, Other (please describe))
Single-pane, aluminum clad, hopper-style windows.
Age of Section (number of years since the Windows were installed or replaced) 57
Description of repairs, if applicable, in the last three years. Include year of repair:
Windows are original to construction. Please note the following window counts: upper level has 529; lower level has 234; total is 763 windows.

MECHANICAL and ELECTRICAL SYSTEMS: Please provide a detailed description of the current mechanical and electrical systems and any known problems or existing conditions (maximum of 5000 characters).

Mechanical: The original boiler room was designed with 6 Burnham V11 boilers in order to provide heat to the Burncoat Middle School, as well. The structure's mechanical systems underwent a major renovation in May 1998. This upgrade included installing Variable Air Volume retrofit kits (VAV), Variable Frequency Drives (VFD), Upgraded Pump Motors, Freeze Protection Pumps, Replacement Coils, Replacement Dampers, Smoke Detectors, Automatic Temp Controls, and the six boilers were replaced with three new Burnham V11 boilers that supplied heat to the High School only. Of these three, one is functioning, one is not functioning, and the third was replaced with a Raypac boiler (summer of 2016). During the last few years, the HVAC system has been outfitted with upgraded controls through the energy management initiative between the City, WPS, Honeywell, and ABS. The upgrades have performed well up to this point and should continue to perform at optimal efficiency once the control issues have all been sorted out for another decade or more. However, the failure to replace the main Air Handler Units (AHU) in 1998 have left an exposure for failure at any time.

The hot water distribution piping is original to the facility and requires constant maintenance. We experience frequent leaks. A failure in this distribution system would cause major heat loss throughout the facility. The numerous zone-based building pumps are in need of constant repair and maintenance.

Electrical: The main electrical system in the building is original and becoming aged. The subpanels are approaching capacity based on the increased need for technology in all areas of the building. There are not enough outlets in the classrooms and common areas to satisfy the needs of the school.

The electrical backup generator is outdated and significantly undersized to handle all of the needs of the building. There is not enough equipment wired to the generator to protect the facility in the event of a power outage.

The fire alarm panel is the original panel that is well beyond its life expectancy. Replacement parts are extremely hard to find and becoming more and more difficult to obtain. If any one of the components in the fire alarm system fails, it would cause a complete system failure.

The clock/bell/phone/intercom system is requiring a lot of maintenance to maintain. The system is outdated and in dire need of replacement.

Boiler Section 1
Is the District seeking replacement of the Boiler? YES
Is there more than one boiler room in the School? NO
What percentage of the School is heated by the Boiler? 100
Type of heating fuel (e.g., Heating Oil, Natural Gas, Propane, Other)
Natural Gas

Age of Boiler (number of years since the Boiler was installed or replaced) 23
Description of repairs, if applicable, in the last three years. Include year of repair:
Complete replacement in 1998; six boilers were replaced with three new Burnham V11 boilers that supplied heat to the High School only. Of these three, one is functioning, one is not functioning, and the third was replaced with a Raypac boiler (summer of 2016).

Has there been a Major Repair or Replacement of the HVAC SYSTEM? YES
Year of Last Major Repair or Replacement:(YYYY) 1998
Description of Last Major Repair or Replacement:
Please see Mechanical and Electrical Systems section (above).

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? YES
Year of Last Major Repair or Replacement:(YYYY) 1998
Description of Last Major Repair or Replacement:
Please see Mechanical and Electrical Systems section (above).

BUILDING INTERIOR: Please provide a detailed description of the current building interior including a description of the flooring systems, finishes, ceilings, lighting, etc. (maximum of 5000 characters).

The school has narrow hallways throughout the building that makes it difficult for students to move between course periods without significant safety concerns. The school's cafeteria is too small for all students to eat in fewer lunch periods which have a significant impact on the school's flexibility for scheduling students for specialized enrichment classes. The majority of the flooring throughout the facility consists of VCT tile, as well as carpeting in various offices and library spaces. The vast majority of ceiling material consists of a drop-ceiling system containing 2X2 drop-in ceiling tiles. Various mechanical and storage spaces consist of hard plaster ceilings. Lighting system consists of switch-operated recessed and surface-mounted florescent mounting without automated controls. Typical interior finishes are exposed, glazed and painted block walls, painted wallboard, and exposed concrete.

PROGRAMS and OPERATIONS: Please provide a detailed description of the current grade structure and programs offered and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc. (maximum of 5000 characters).

Burncoat High School is a grade 9-12 school offering a traditional comprehensive high school program of studies that include 17 Advanced Placement courses, a small number of elective courses, and one technical area, Automotive Technology. Additionally, Burncoat High School is a Magnet School for the fine and performing arts for the city of Worcester and as of the 2019-2020 school year, houses the Hanover Insurance Advanced Academy for the Arts. As such, courses in music, (instrument and vocal performance, theory, composition) are offered, as are courses in dance, theater, visual arts digital media. However, the now 57-year old facility does not meet the educational needs of 21st-century learners, significantly limiting the components of each of our programs that can be offered to students and in turn limiting their post-secondary opportunities in these fields.

Beginning with students who entered the 9th grade in 2013, the current requirements necessary to graduate from Burncoat High School were replaced by the state high school graduation requirements called Mass Core. The adoption of these new requirements mean that significantly more students need to be enrolled in science, the arts, career and technical courses, and wellness-based courses. The current facility cannot handle this expansion. To be able to meet these new demands, we will need significantly dedicated course instructional spaces for each area.

EDUCATIONAL SPACES: Please provide a detailed description of the Educational Spaces within the facility, a description of the number and sizes (in square feet) of classrooms, a description of science rooms/labs including ages and most recent updates, a description of the cafeteria, gym and/or auditorium and a description of the media center/library (maximum of 5000 characters).

Classrooms: The school has 57 classrooms for 99 teachers, meaning that many teachers are required to travel from classroom to classroom through the course of the day losing valuable instructional time to transition. Classrooms within the school are very similar, in both form and function, as they were when the building was constructed 57 years ago. Typical classrooms range in size from 400-600 sq. ft. However, there are larger classroom spaces, primarily in areas where Industrial Arts classes were previously taught, and much smaller spaces, not initially intended to serve as classrooms within the building. Most of our classrooms still have the original chalkboards in them, though over the past few years some have been retrofitted with white boards and a very few have permanent electronic white boards with ceiling-mounted projectors. As previously stated, the classroom infrastructure remains as it was upon construction leading to frequent and fairly significant issues around heating, cooling and communication. The heat in classrooms throughout the building, despite the efforts of the building-based custodial crew and system-based tradesmen, is inconsistent throughout the school. In some areas, rooms are so hot that the floor units must be covered to prevent the room temperature from becoming unbearable. In other places, rooms can become so cold as to be unusable. Communication to classrooms is accomplished through an antiquated intercom system, no classroom has access to an outside telephone line and no teacher has an individual voice mail box.

Science Labs: There are currently 7 classrooms dedicated to the 10-member science department. In the summer of 2010, the city of Worcester conducted a significant renovation of one of the chemistry lab/classrooms bringing it up to a standard appropriate for AP Chemistry. However, the other 6 lab classrooms have over the years become seriously outdated and do not function properly for the courses taught within them. More specifically, we have a chemistry lab where neither the gas nor water function at the lab benches, where there is not a functional fume hood or emergency eyewash or shower station. Similar conditions exist in each of the lab classrooms where biology and physics are taught. The result is that our students in each of these areas are not able to conduct the type of experiments taking place in the modern up-to-date labs in schools across the state and nation putting them at a significant disadvantage in terms of college and career readiness.

Beyond the sciences and traditional classroom spaces we have a significant need to upgrade the facilities and instructional spaces where our fine arts education takes place. Currently, because of a lack of space, we are forced to use areas for fine arts instruction that were never intended for such a purpose. For example, our AP studio art class takes place in a converted cafeteria, all of our choral classes are taught in a space that was previously a print shop, and our strings teacher has no option but to rehearse his ensemble in a cafeteria.

As the fine arts magnet school for the city of Worcester, the school attracts students from every part of the city who are interested in pursuing arts education throughout high school and beyond. This program has been in existence for 34 years and has produced artists who have performed on screen and stage and become renowned performers, artists, and designers throughout the world. But each year we go without having a facility that properly supports these endeavors, it becomes more difficult for the students we have to be prepared to compete with their peers emanating from appropriately-equipped high schools.

The school is in grave need of a facility in which the fine and performing arts can be instructed in the most modern, up-to-date studios, theaters, and rehearsal rooms so as to provide our students with the best opportunity to compete in both post-secondary education opportunities and career fields within their chosen discipline.

Finally, beyond the tremendous need in our instructional spaces, it is important to note that the design of the school is such that there are upwards of 50 doors that lead to the exterior of the building. It is my understanding that the intent of this design was to allow for the exterior spaces to be available to students and staff throughout the day and to provide for multiple entry and exit points in a free-flowing manner. However, in this post-Columbine era, the reality of this design is that it poses a potential threat to the safety and security of students and staff.

CAPACITY and UTILIZATION: Please provide the original design capacity and a detailed description of the current capacity and utilization of the school facility. If the school is overcrowded, please describe steps taken by the administration to address capacity issues. Please also describe in detail any spaces that have been converted from their intended use to be used as classroom space (maximum of 5000 characters).

School is at capacity, but is not overcrowded.

MAINTENANCE and CAPITAL REPAIR: Please provide a detailed description of the district's current maintenance practices, its capital repair program, and the maintenance program in place at the facility that is the subject of this SOI. Please include specific examples of capital repair projects undertaken in the past, including any override or debt exclusion votes that were necessary (maximum of 5000 characters).

The Worcester Public Schools performs maintenance work in all of its school buildings, primarily utilizing in-house personnel. The scope of work ranges from routine maintenance through emergency repairs, as well as findings through various code inspections. Worcester Public Schools uses an electronic maintenance work order program for all of its work order submission, tracking, and documentation. Capital projects, preventative maintenance, and various other facility infrastructure improvements are prioritized and performed based on need and available funding. The City of Worcester engages the services of a third party to continue its comprehensive energy conservation program. This program includes the replacement of capital equipment in various school facilities; examples include: lighting, chillers, controls, and various other energy conservation-related equipment.

Priority 3

Question 1: Please provide a detailed description of the "facility-related" issues that are threatening accreditation. Please include in this description details related to the program or facility resources (i.e. Media Center/Library, Science Rooms/Labs, general classroom space, etc.) whose condition or state directly threatens the facility's accreditation status.

Currently, and as a result of the decennial visit in May of 2009 and the most recent Collaborative Conference Visit in October of 2018 of the New England Association of Schools and Colleges Commission on Public Secondary Schools, Burncoat High School has an accreditation status of "Warning."

The implications of Burncoat High School having been so labeled are potentially significant for our students, staff and community. For our students, their school being labeled as a school with an accreditation status of Warning with the potential, unless significant remediation is to take place, of the status becoming lost is significant in that it could impact college admittance and qualification for scholarship. Hence, through no fault of their own, Burncoat High students could possibly be denied access to institutions of higher education of their choosing and the financial support that so many of our students need and deserve.

In terms of our staff, the fact that Burncoat High has an accreditation status of "Warning" with the potential of loss of accreditation significantly undermines their hard work and dedication they have to educating our students with the goal of preparing them to be career and/or college ready upon graduation.

Lastly, our school community deserves better than to have their local high school labeled with an accreditation status of Warning. They deserve to have a school within their community in which they can be confident is going to provide their children with the greatest opportunity to obtain a 21st-century education that prepares them for either college or career upon graduation.

Library Media Center: Library Media Center: In June of 2016, the library was updated by the **AbbVie Heart of America Library Re-design Grant**. Due to this grant, we were able to update the library media center tremendously to reflect the current needs of our students and staff. The grant was not able to increase the square footage of the library however, but it completely updated the interior, changed the flow of the space to allow for group interaction, provided brand new seating and tables, lounge chairs, increased the technology, amped up the electricity and wireless capability to accommodate the new technology, and most importantly infused our library with $15,000 in new library books and on-line curricular databases. Unfortunately, the floor adhesive is failing and tiles have to be replaced. The library was also awarded another $1,000 from the **N.E.A. Read Across America Grant** to purchase the most recent **Young Adult Library Association Best Books of the Year** to help promote reading among our students and provide them with current materials.

The interior of the library has been completely redesigned into a contemporary open-air concept which allows for communication and collaboration among students and teachers. With a brand new soothing color paint scheme, window treatments, and matching brand-new modern furnishings it has become a totally different and inviting space. The design of the room allows for multiple classes to work at the same time but with different goals. It has also become a prime location for staff meetings and teacher professional development seminars from all over the city. It is now the best room in the building.

There are four distinct sections to the library now; a computer area with 30 updated desktop computers with a mounted wireless projector and whiteboard for instruction, along with brand new student computer tables and chairs; a classroom area with 6 rolling tables with 6 seats at each, as well as a teacher desk to monitor students along with a whiteboard for instruction; the third area is the reading/lounge area with 4 club chairs on a beautiful rug, and 6 hassocks for additional seating; the fourth area is the brand new circulation desk area for check-out

and information with the library media specialist.

Technology-wise, the grant increased our amperage in the room to withstand the demand. We now have a mobile cart of 30 brand new laptops, an additional mobile cart of 30 iPad IIIs and 20 iPad minis. Also, we have a mobile smart television that can also be used as a projector. The library is equipped with 4 wireless routers to hold all internet traffic without an issue. Each classroom has been wired with its own wireless router as well. We hope to foster and develop a 1:1 technology plan for our students and staff in the future.

In preparing for this grant, the library media specialist weeded thousands of outdated books to make way for current nonfiction and fiction books. Our current average copyright has increased markedly. In conjunction with our annual library budget and additional grant money from the N.E.A., we can further increase our holdings to represent a more current repository of updated materials. Our library has new mobile shelving units which can be moved throughout the room. Our books are organized by genre and are clearly labeled throughout the library for student and staff perusal and use. Additionally, our library website provides students and staff with 24/7 access to curricular databases, card catalog, and most recently online check out of ebooks and audio. Students can download the mobile library app for free to access online materials or simply use materials from any laptop or desktop.

Our seating capacity has increased from 65 to 80 within the media center. However, the connecting computer lab, which is part of the library, increased that by another 43 seats bringing us up to a total of 123.

Science Labs: At Burncoat High School, there are currently 7 rooms for the 10-member science department. In the summer of 2010, the city of Worcester conducted a significant renovation of one of the chemistry lab/classrooms bringing it up to a standard appropriate for AP Chemistry. However, the other 6 lab classrooms have over the years become seriously outdated and do not function properly for the courses taught within them. More specifically, we have a chemistry lab where neither the gas nor water function at the lab benches, where there is not a functional fume hood or emergency eyewash or shower station. Similar conditions exist in each of the lab classrooms where biology and physics are taught. The result is that our students in each of these areas are not able to conduct the type of experiments taking place in the modern up-to-date labs in schools across the state and nations putting them at a significant disadvantage in terms of college and career readiness. Additionally, shifting standards within multiple science curriculums required far greater opportunities for students to participate in hands-on activities with relative frequency, activity our current facility just does not support.

Beyond the sciences and traditional classroom spaces, we have a significant need to upgrade the facilities and instructional spaces where our fine arts education takes place. Currently, because of a lack of space, we are forced to use areas for fine arts instruction that were never intended for such a purpose. For example, our AP studio art class takes place in a converted cafeteria, all of our choral classes are taught in a space that was previously a print shop, and our strings teacher has no option but to rehearse his ensemble in a cafeteria. As the fine arts magnet school for the city of Worcester, Burncoat High School attracts students from every part of the city who are interested in pursuing arts education throughout high school and beyond. The program at Burncoat has been in existence for 34 years and has produced artists who have performed on screen and stage and become renowned artists and designers throughout the world. But, each year that we go without having a facility to properly support these endeavors, it becomes more difficult for the students to be prepared to compete with their peers emanating from appropriately-equipped high schools. Burncoat High School is in grave need of a facility in which the fine and performing arts can be instructed in the most modern, up-to-date studios, theaters, and rehearsal rooms to provide our students with the best opportunity to compete in both post-secondary education opportunities and career fields within their chosen discipline.

Finally, beyond the tremendous need in our instructional spaces, it is important to note that the design of Burncoat High School is such that there are upwards of 50 doors that lead to the exterior of the building. It is my understanding that the intent of this design was to allow for the exterior spaces to be available to students and

staff throughout the day and to provide for multiple entry and exit points in a free-flowing manner. However, in this post-Columbine era, the reality of this design is that it poses a potential threat to the safety and security of students and staff.

Classrooms: Burncoat High school has 57 classrooms for 99 teachers, meaning that many teachers are required to travel from classroom to classroom through the course of the day losing valuable instructional time to transition. Classrooms within the school are very similar, in both form and function, as they were when the building was constructed 57 years ago. Typical classrooms range in size from 400 sq. ft. to 600 sq. ft. However there are larger classroom spaces, primarily in areas where Industrial Arts classes were previously taught, and much smaller spaces, not initially intended to serve as classrooms within the building. Most of our classrooms still have the original chalkboards in them, though over the past few years some have been retrofitted with white boards and a very few have permanent electronic white boards with ceiling-mounted projectors. As previously stated, the classroom infrastructure remains as it was upon construction leading to frequent and fairly significant issues around heating, cooling and communication. The heat in classrooms throughout the building, despite the efforts of the building-based custodial crew and system-based tradesmen, is inconsistent throughout the school. In some areas, rooms are so hot that the floor units must be covered to prevent the room temperature from becoming unbearable. In other places, rooms can become so cold as to be unusable. Communication to classrooms is accomplished through an antiquated intercom system, no classroom has access to an outside telephone line and no teacher has an individual voicemail box. Additionally, though nearly every classroom is equipped with at least one computer, very few classrooms have more than one or the capability of supporting more than one.

Priority 3

Question 2: Please describe the measures the district has taken to mitigate the problem(s) described above.

Library Media Center: The Burncoat High School received the Abbvie Heart of America Library redesign grant, which provided a full renovation of the library. Unfortunately, the floor adhesive is failing and tiles have to be replaced; Facilities staff have made some repairs with limited resources.

Science Labs: The District updated one of the existing science labs with local funding. However, the remaining six labs remain outdated for space and inadequate laboratory furnishings.

Classrooms: Due to the fact that Burncoat High school has 57 classrooms for 99 teachers, the teachers have had to travel from classroom to classroom through the course of the day losing valuable instructional time to transition.

Priority 3

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem(s) identified.

Currently, and as a result of the decennial visit in May of 2009 of the New England Association of Schools and Colleges Commission on Public Secondary Schools, Burncoat High School has an accreditation status of "Warning."

The implications of Burncoat High School having been so labeled are potentially significant for our students, staff and community. For our students, their school being labeled as a school with an accreditation status of Warning with the potential, unless significant remediation is to take place, of the status becoming lost is significant in that it could impact college admittance and qualification for scholarship. Hence, through no fault of their own, Burncoat High students could possibly be denied access to institutions of higher education of their choosing and the financial support that so many of our students need and deserve.

In terms of our staff, the fact that Burncoat High has an accreditation status of "Warning" with the potential of loss of accreditation significantly undermines their hard work and dedication they have to educating our students with the goal of preparing them to be career and/or college ready upon graduation.

Lastly, our school community deserves better than to have their local high school labeled with an accreditation status of Warning. They deserve to have a school within their community in which they can be confident is going to provide their children with the greatest opportunity to obtain a 21st-century education that prepares them for either college or career upon graduation.

Please also provide the following:

Name of accrediting entity (maximum of 100 characters):
New England Association of Schools and Colleges (NEASC)

Current Accreditation Status: Please provide appropriate number as 1=Passed, 2=Probation, 3=Warning, 4=Lost:
3

If "WARNING", indicate the date accreditation may be switched to Probation or lost: 9/1/2020

If "PROBATION", indicate the date accreditation may be lost:

Please provide the date of the first accreditation visit that resulted in your current accreditation status.:
9/20/2009

Please provide the date of the follow-up accreditation visit: 3/12/2014

Are facility-related issues related to Media Center/Library? If yes, please describe in detail in Question 1 below.:
YES

Are facility-related issues related to Science Rooms/Labs? If yes, please describe in detail in Question 1 below.:
YES

Are facility-related issues related to general classroom spaces? If yes, please describe in detail in Question 1 below.: YES

Are facility-related issues related to SPED? If yes, please describe in detail in Question 1 below.: YES

Are facility-related issues related to support spaces? If yes, please describe in detail in Question 1 below.:
YES

Are facility-related issues related to "Other"? If yes, please identify the other area below and describe in detail in Question 1 below.: NO

Please describe (maximum of 100 characters).:

- Current Status: Warning as of 09/2009; confirmed as recently as 06/2016.
- Accreditation Visits: Initial visit 9-20-09; follow-up visit 3-12-14; next visit scheduled for December 2021.

Priority 5

Question 1: Please provide a detailed description of the issues surrounding the school facility systems (e.g., roof, windows, boilers, HVAC system, and/or electrical service and distribution system) that you are indicating require repair or replacement. Please describe all deficiencies to all systems in sufficient detail to explain the problem.

Mechanical: The original boiler room was designed with 6 Burnham V11 boilers in order to provide heat to the Burncoat Middle School, as well. The structure's mechanical systems underwent a major renovation in May 1998. This upgrade included installing Variable Air Volume retrofit kits (VAV), Variable Frequency Drives (VFD), Upgraded Pump Motors, Freeze Protection Pumps, Replacement Coils, Replacement Dampers, Smoke Detectors, Automatic Temp Controls, and the six boilers were replaced with three new Burnham V11 boilers that supplied heat to the High School only. Of these three, one is functioning, one is not functioning, and the third was replaced with a Raypac boiler (summer of 2016). During the last few years, the HVAC system has been outfitted with upgraded controls through the energy management initiative between the City, WPS, Honeywell, and ABS. The upgrades have performed well up to this point and should continue to perform at optimal efficiency once the control issues have all been sorted out for another decade or more. However, the failure to replace the main Air Handler Units (AHU) in 1998 have left an exposure for failure at any time.

The hot water distribution piping is original to the facility and requires constant maintenance. We experience frequent leaks. A failure in this distribution system would cause major heat loss throughout the facility. The numerous zone-based building pumps are in need of constant repair and maintenance.

Electrical: The main electrical system in the building is original and becoming aged. The subpanels are approaching capacity based on the increased need for technology in all areas of the building. There are not enough outlets in the classrooms and common areas to satisfy the needs of the school.

The electrical backup generator is outdated and significantly undersized to handle all of the needs of the building. There is not enough equipment wired to the generator to protect the facility in the event of a power outage.

The fire alarm panel is the original panel that is well beyond its life expectancy. Replacement parts are extremely hard to find and becoming more and more difficult to obtain. If any one of the components in the fire alarm system fails, it would cause a complete system failure.

The clock/bell/phone/intercom system is requiring a lot of maintenance to maintain. The system is outdated and in dire need of replacement.

Plumbing: The distribution piping in the school is original. Minimal areas of piping have been completely replaced and many patch-type repairs have occurred instead. We have major isolation valves that are continuously failing to hold and operate properly requiring the entire facility to be shut down to make repairs. The aged feed and waste lines are becoming high maintenance due to leaks, blockages, and breakages.

Plumbing fixtures in many of the science labs do not work properly or are shut off completely.

Eye wash stations need to be installed in many areas of the school.

Window System: The window system in the school is original to the school. The single-pane window system is extremely inefficient and is causing significant heat loss and strain on the heating system. It is having difficulty trying to maintain a comfortable temperature throughout the heating season. Many of the windows do not operate properly and, in many cases, are fixed shut.

Exterior Walls: The exterior brick work of the school is original to construction and is aged & showing signs of wear and tear. The sills and mortar are deteriorating.

Priority 5

Question 2: Please describe the measures the district has already taken to mitigate the problem/issues described in Question 1 above.

The District continues to provide maintenance and support of the facility in an effort to maintain a safe and welcoming environment that also provides for reasonable teaching and learning. The District continues to make temporary enhancements to the facility until more long-term remedies can be determined.

The District has upgraded electrical and data wiring over a period of time in order to accommodate new technology initiatives that have been implemented at the school. Although these enhancements have not been robust to integrate state-of-the-art technology throughout the entire school, efforts have been made to introduce new technology for student learning.

The District was also able to use local funds to replace one of the existing seven science labs, which allows for one classroom to have up-to-date furnishing and equipment. In other science labs, the District has made a number of temporary cosmetic improvements to the school, including the replacement of science lab counter tops and faucets.

To improve the energy-efficiency of the school, the district has installed more efficient lighting, providing for more consistent lighting within the classrooms. In addition, the District has recently weatherized and re-caulked windows providing short-term measures for the highly-inefficient window system.

Finally, the District has used local funds to improve common areas of the school, including student locker replacement and selective floor covering replacement & painting.

Priority 5

Question 3: Please provide a detailed explanation of the impact of the problem/issues described in Question 1 above on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

Each of the areas highlighted in Question 1 have a direct impact on the school's educational program that prevents Burncoat High School from delivering a high quality 21st-century teaching and learning opportunity. These issues are as follows:

Mechanical: The HVAC system is inconsistent at best. Frequently as a result of room temperatures that can be in the high forties to low fifties, we are forced to relocate classrooms for periods of time (sometimes because of lack of available space) to areas that are not meant nor are properly equipped for instruction. Additionally, because of the significant temperature variations that can exist from room to room, students will need to wear a heavy jacket or sweater (which is in violation of our dress code policy and school safety measures) for the sake of staying warm, only to have to shed layers upon entering other rooms where temperatures are warmer. However, the opposite is also true. Periodically, we have classrooms where heat that cannot be controlled drives temperatures into the mid to high 80's, leading staff to take such measures as blocking floor heating vents with boards & books or opening exterior doors where they exist for the sake of ventilation. Clearly, neither of these situations lend themselves to an appropriate educational environment. The covering of vents in an effort to quell the heat also blocks the flow of fresh air into the classrooms, leading to stagnant air within the rooms. Of greater concern is the fact that, despite policies to the contrary, teachers have felt it necessary at times to leave open an exterior door for the sake of cooling very hot rooms and potentially jeopardizing the safety of those within the classroom and the school. In this post-Columbine, Newtown educational era, this is clearly a significant issue that needs to be addressed.

Electrical: The lack of an updated electrical system within the building hampers the educational process by limiting the amount of technology that can be used within certain classroom spaces. An updated system would allow for a significant increase in our ability to infuse instructional technology into our classrooms, providing our students with the 21st-century educational experience they need and deserve.

Plumbing: The impact of identified plumbing issues on the school's ability to deliver instruction primarily manifests itself in the fact that, in a number of our science laboratories, the aged condition of the plumbing and fixtures have necessitated shutting them down. Thus making the conducting of experiments within these classrooms all but impossible leaving our students at a significant educational disadvantage when compared to their peers hailing from schools appropriately equipped to deliver 21st-century education.

Window System: Along with the many issues that exist with the HVAC system, the single-pane window system, which is original to the school, is highly-inefficient and contributes significantly to the temperature regulation issues we have within many of our instructional spaces. Additionally, because of concerns relating to the composition of the window caulking, broken windows are frequently left covered by plywood for months on end giving the school the look of an abandoned building. The single-pane window system is completely inadequate to keep the heat consistent in the facility. The heating system cannot keep classrooms warm and, in many cases, students have to be relocated on a regular basis.

Priority 5

Question 4: Please describe how addressing the school facility systems you identified in Question 1 above will extend the useful life of the facility that is the subject of this SOI and how it will improve your district's educational program.

The systems identified in this Statement of Interest are critical components to the facility. By upgrading and renovating these components, as well as the facility as a whole, the District and the school will be able to provide a valuable 21st-century learning environment for many years to come.

Please also provide the following:

Have the systems identified above been examined by an engineer or other trained building professional?: NO

If "YES", please provide the name of the individual and his/her professional affiliation (maximum of 250 characters):

The date of the inspection:

A summary of the findings (maximum of 5000 characters):

Priority 7

Question 1: Please provide a detailed description of the programs not currently available due to facility constraints, the state or local requirement for such programs, and the facility limitations precluding the programs from being offered.

There are a number of programs that are either not currently available or the operation of which is significantly hampered because of the obsolete nature of the facility at Burncoat High School. Specifically, the condition of the facility impedes the delivery of instruction across all curricular areas and among all segments of the student population. Question 3 will provide in depth detail of the issue.

Priority 7

Question 2: Please describe the measures the district has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

The District continues to provide maintenance and support of the facility in an effort to maintain a safe and welcoming environment that also provides for reasonable teaching and learning. The District continues to make temporary enhancements to the facility until a more long term remedies can be determined.

The District has upgraded electrical and data wiring over a period of time in order to accommodate new technology initiatives that have been implemented at the school. Although these enhancements have not been robust to integrate state-of-the-art technology throughout the entire school, efforts have been made to introduce new technology for student learning.

The District was also able to use local funds to replace one of the existing seven science labs which allows for one classroom to have up-to-date furnishing and equipment. In other science labs, the District has made a number of temporary cosmetic improvements to the school, including the replacement of science lab counter tops and faucets.

To improve the energy efficiency of the school, the District has installed more efficient lighting, providing for more consistent lighting within the classrooms. In addition, the district has recently weatherized and re-caulked windows providing short-term measures for the highly inefficient window system.

Finally, the District has used local funds to improve common areas of the school, including student locker replacement, and selective floor covering replacement and painting.

Priority 7

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

CLASSROOMS: The school has 57 classrooms for 99 teachers, meaning that many teachers are required to travel from classroom to classroom through the course of the day losing valuable instructional time to transition. Classrooms within the school are very similar, in both form and function, as they were when the building was constructed 57 years ago. Typical classrooms range in size from 400 sq. ft. to 600 sq. ft. Most of our classrooms still have the original chalkboards in them, though over the past few years, some have been retrofitted with whiteboards and a very few have permanent electronic white boards with a ceiling-mounted projector. As previously stated, the classroom infrastructure remains as it was upon construction leading to frequent and fairly significant issues around heating, cooling and communication. The heat in classrooms throughout the building, despite the efforts of the building-based custodial crew and system based tradesmen is inconsistent throughout the school. Communication to classrooms is accomplished through an antiquated intercom system, no classroom has access to an outside telephone line and no teacher has an individual voicemail box.

SCIENCE LABS: There are currently 7 rooms for the 10-member science department. In 2010, the District conducted a significant renovation of one of the chemistry lab/classrooms bringing it up to a standard appropriate for AP Chemistry. However, the other 6 lab classrooms have over the years become seriously outdated and do not function properly for the courses taught within them. More specifically, we have a chemistry lab where neither the gas nor water function at the lab benches, where there is not a functional fume hood or emergency eyewash or shower station. Similar conditions exist in each of the lab classrooms where biology and physics are taught. The result is that our students in each of these areas are not able to conduct the type of experiments taking place in the modern, up-to-date labs in schools across the state and nations, putting them at a significant disadvantage in terms of college and career readiness.

ARTS & PHYS ED: Beginning with students who entered the 9th grade in 2013, the current requirements necessary to graduate from Burncoat High School were replaced by the state high school graduation requirements. The adoption of these new requirements means that significantly more students will need to be enrolled in science, the arts, career and technical courses, and wellness-based courses. The current facility cannot handle this expansion. To be able to meet these new demands, we will need significantly-dedicated course instructional spaces for each area. The needs that exist in the arts and sciences have been previously addressed in this document, as have the significant needs of the library media center.

Additionally, our physical education space is in no way either sufficiently or appropriately equipped to instruct a meaningful comprehensive wellness program. The current facility was clearly developed to meet the needs and trends of the time which focused primarily on competitive team sports and not on individual fitness and wellness, as is fast becoming the focus of our program. Spaces within our wellness facility need to be developed to meet this need, along with appropriate, functioning changing & shower facilities for our male and female students. The school currently offers a comprehensive program of fine arts education.

ARTS MAGNET PROGRAM: As has been previously stated within this document Burncoat High School is the fine and performing arts magnet school for the city of Worcester and, as of the 2019-2020 school year, houses the Hanover Insurance Advanced Academy for the Arts. As such students from throughout Worcester come to Burncoat High School specifically to pursue their chosen discipline within the arts with the hope and expectation

of further pursuit at the post-secondary level and beyond. This being the case, our current facility does not support the work that needs to be done in support of these students artistic pursuits.

Arts magnet students have the opportunity to effectively major in their choice of the fine arts field, which includes, dance, music instrumental and/or vocal), theater, drawing, painting or ceramics and digital media arts. However, despite the fact that many of our students have gone on to higher education and career to pursue their chosen fields, the facilities in which these courses are taught are inadequate.

SPECIAL NEEDS: The school has a significant high needs special education population, in fact Burncoat High School currently houses the only high school level district-based program for students on the autism spectrum referred to as the COAST program. Each of these programs serves a distinct population of students, each of which requires distinct but disparate facility needs. However, none of the spaces within our current facility were ever designed with the unique needs of these students and programs in mind and as such, the program inhabits spaces that do not represent an optimal learning environment.

REQUIRED FORM OF VOTE TO SUBMIT AN SOI

REQUIRED VOTES

If the SOI is being submitted by a City or Town, a vote in the following form is required from both the City Council/Board of Aldermen **OR** the Board of Selectmen/equivalent governing body **AND** the School Committee.

If the SOI is being submitted by a regional school district, a vote in the following form is required from the Regional School Committee only. FORM OF VOTE Please use the text below to prepare your City's, Town's or District's required vote(s).

FORM OF VOTE

Please use the text below to prepare your City's, Town's or District's required vote(s).

Resolved: Having convened in an open meeting on _____, prior to the closing date, the _____ *[City Council/Board of Aldermen, Board of Selectmen/Equivalent Governing Body/School Committee]* of _____ *[City/Town]*, in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated _____ for the _____ *[Name of School]* located at _____ *[Address]* which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future

_____

_____

_____

_____

_____

_____ ; *[Insert a description of the priority(s) checked off on the Statement of Interest Form and a brief description of the deficiency described therein for each priority];* and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the City/Town/Regional School District to filing an application for funding with the Massachusetts School Building Authority.

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
Edward M. Augustus Jr.	Joseph M. Petty	Maureen Binienda
City Manager		
		
(signature)	(signature)	(signature)
Date	Date	Date
6/14/2021 7:47:31 AM	6/11/2021 3:31:33 PM	6/14/2021 3:06:01 PM

* Local Chief Executive Officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.

CITY OF

Worcester
MASSACHUSETTS

JOSEPH M. PETTY
MAYOR

City Hall • Room 305
455 Main Street
Worcester, MA 01608-1892

Office: 508-799-1153
Fax: 508-799-1156
mayor@worcesterma.gov

June 10, 2021

Christine E. Nolan
Associate General Counsel
Massachusetts School Building Authority
40 Broad Street, 5th Floor
Boston, MA 02109

Dear Ms. Nolan:

It has come to my attention that your office requires a letter concerning the recently-submitted **CORE Program Potential New School** and **Repair/Project** Statement of Interest (SOI) for the school listed directly below and its respective selected priorities.

1. **Burncoat High School**: Priority 3- Prevention of the loss of accreditation; Priority 5- Energy conservation; and, Priority 7- Obsolescence.

As Chair of the Worcester's City Council and School Committee, I attest that when the respective votes were taken, those voting were aware that they were voting to submit the school for the listed priorities.

Respectfully Submitted,

Joseph M. Petty
Chairman, Worcester City Council
Chairman, Worcester School Committee

Cc: Ms. Binienda
Mr. Bedard

For the motion: Miss Biancheria Mrs. Clancey, Mr. Foley, Ms. McCullough, Mr. Monfredo, Ms. Novick, Mayor Petty 7

Against the motion: 0
7

The motion carried.

gb #1-128 - Administration
(April 14, 2021)

To accept the Teaching Gardens Network Grant in the amount of $5,000.

On a roll call, the vote to approve the item was as follows:

For the motion: Miss Biancheria Mrs. Clancey, Mr. Foley, Ms. McCullough, Mr. Monfredo, Ms. Novick, Mayor Petty 7

Against the motion: 0
7

The motion carried.

gb #1-129 - Administration
(April 15, 2021)

Helen A. Friel/
Assistant to the
Superintendent/
Clerk of the
School
Committee
6-3-21

To authorize the Administration to resubmit a Statement of Interest to the Massachusetts School Building Authority for Burncoat High School (district priority project) for major renovation or replacement for 2021.

On a roll call, the vote to approve the item and to forward it to the City Council to be placed on its agenda for approval was as follows:

For the motion: Miss Biancheria Mrs. Clancey, Mr. Foley, Ms. McCullough, Mr. Monfredo, Ms. Novick, Mayor Petty 7

Against the motion: 0
7

The motion carried.

Committee Chairperson _____ Date 6/10/21

cm2021may17124714

CITY OF WORCESTER

ORDERED: That

The City Council of the City of Worcester hereby accepts and approves the Statements of Interests for the following as approved by the Worcester School Committee at their May 6, 2021 meeting.

Burncoat High School (district priority project) for major renovation or replacement.

BE IT FURTHER ORDERED: That

The City Manager be and is hereby requested to approve the same Statement of Interest and authorize the Superintendent of the Worcester Public Schools to resubmit for submission to the Massachusetts School Building Authority.

In City Council **June 8, 2021**

Order adopted by a yea and nay vote of Ten Yeas and No Nays

A Copy. Attest:

Nikolin Vangjeli
City Clerk

New England Association of Schools and Colleges

Commission on Public Secondary Schools

Report of the Visiting Committee for Burncoat High School

Worcester, Massachusetts
May 3-6, 2009

Dr. W. Scott Brown, Chair
Alyson Geary, Assistant Chair
William P. Foley, Principal

New England Association of Schools and Colleges, Inc.
209 Burlington Road, Bedford, MA 01730-1433

TEL 781.271.0022
FAX 781.271.0950

www.neasc.org

STATEMENT ON LIMITATIONS

THE DISTRIBUTION, USE, AND SCOPE OF THE VISITING COMMITTEE REPORT

The Commission on Public Secondary Schools of the New England Association of Schools and Colleges located in Bedford, Massachusetts considers this visiting committee report of Burncoat High School to be a privileged document submitted by the Commission on Public Secondary Schools of the New England Association of Schools and Colleges to the principal of the school and by the principal to the state department of education. Distribution of the report within the school community is the responsibility of the school principal. The final visiting committee report must be released in its entirety within sixty days (60) of its completion to the superintendent, school board, public library or town office, and the appropriate news media.

The prime concern of the visiting committee has been to assess the quality of the educational program at Burncoat High School in terms of the Commission's Standards for Accreditation. Neither the total report nor any of its subsections is to be considered an evaluation of any individual staff member but rather a professional appraisal of the school as it appeared to the visiting team.

TABLE OF CONTENTS

INTRODUCTION

The New England Association of Schools and Colleges (NEASC) is the oldest of the six regional accrediting agencies in the United States. Since its inception in 1885, the Association has awarded membership and accreditation to those educational institutions in the six-state New England region who seek voluntary affiliation.

The governing body of the Association is its Board of Trustees which supervises the work of six Commissions: the Commission on Institutions of Higher Education (CIHE), the Commission on Independent Schools (CIS), the Commission on Public Secondary Schools (CPSS), the Commission on Technical and Career Institutions (CTCI), the Commission on Public Elementary and Middle Schools (CPEMS), and the Commission on American and International Schools Abroad (CAISA).

As the responsible agency for matters of the evaluation and accreditation of public secondary school member institutions, CPSS requires visiting committees to assess the degree to which the evaluated schools meet the qualitative Standards for Accreditation of the Commission. Those Standards are:

Teaching and Learning Standards
- Mission and Expectations for Student Learning
- Curriculum
- Instruction
- Assessment of Student Learning

Support of Teaching and Learning Standards
- Leadership and Organization
- School Resources for Learning
- Community Resources for Learning

The accreditation program for public schools involves a threefold process: the self-study conducted by the local professional staff, the on-site evaluation conducted by the Commission's visiting committee, and the follow-up program carried out by the school to implement the findings of its own self-study and the valid recommendations of the visiting committee and those identified by the Commission in the Follow-Up process. Continued accreditation requires that the school be reevaluated at least once every ten years and that it show continued progress addressing identified needs.

Preparation for the Evaluation Visit - The School Self-study

A steering committee of the professional staff was appointed to supervise the myriad details inherent in the school's self-study. At Burncoat High School, a committee of 15 members, including the principal, supervised all aspects of the self-study. The steering committee assigned all teachers and administrators in the school to appropriate subcommittees to determine the quality of all programs, activities, and facilities available for young people. In addition to faculty members, the self-study committees included students, parents, and central office professionals. The self-study of Burncoat High School extended over a period of 12 school months from March 2008 to March 2009. Public schools evaluated by the Commission on Public Secondary Schools must complete appropriate materials to assess their adherence to the Standards for Accreditation and the quality of their educational offerings in light of the school's mission, learning expectations, and unique student population. In addition to using the Self-study Guides developed by a representative group of New England educators and approved by the

Commission,Burncoat High School also used questionnaires developed by The Global Institute at Endicott College to reflect the concepts contained in the Standards for Accreditation. These materials provided discussion items for a comprehensive assessment of the school by the professional staff during the self-study.

It is important that the reader understand that every subcommittee appointed by the steering committee was required to present its report to the entire professional staff for approval. No single report developed in the self-study became part of the official self-study documents until it had been approved by the entire professional staff.

The Process Used by the Visiting Committee

A visiting committee of 15 evaluators was assigned by the Commission on Public Secondary Schools to evaluate Burncoat High School. The Committee members spent four days in Worcester, Massachusetts, reviewed the self-study documents which had been prepared for their examination, met with administrators, teachers, other school and system personnel, students, and parents, shadowed students, visited classes, and interviewed teachers to determine the degree to which the school meets the Commission's Standards for Accreditation. Since the evaluators, represented public schools, central office administrators, and retired educators diverse points of view were brought to bear on the evaluation of Burncoat High School.

The visiting team built its professional judgment on evidence collected from the following sources:

- review of the school's self-study materials
- 36 hours shadowing 15 students for a half day
- a total of 10 hours of classroom observation (in addition to time shadowing students)
- numerous informal observations in and around the school
- tours of the facility
- individual meetings with 36 teachers about their work, instructional approaches, and the assessment of student learning
- group meetings with students, parents, school and district administrators, and teachers
- the examination of student work, including a selection of work collected by the school

Each conclusion on the report was agreed to by team consensus. Sources of evidence for each conclusion drawn by the visiting committee appear in parenthesis in the Standards sections of the report. The seven Standards for Accreditation reports include commendations and recommendations that in the team's judgment will be helpful to the school as it works to improve teaching and learning and to better meet Commission Standards.

This report of the findings of the visiting committee will be forwarded to the Commission on Public Secondary Schools which will make a decision on the accreditation of Burncoat High School.

Overview of Findings

Although the conclusions of the visiting committee on the school's adherence to the Commission's Standards for Accreditation appear in various sections of this report, the committee wishes to highlight some findings in the paragraphs that follow. These findings are not intended to be a summary of the report.

Teaching And Learning At Burncoat High School

The school climate at Burncoat High school is a welcoming, positive, and safe one for student learners, a place where diversity is truly treated as a strength and a source of school pride. A sense of pride, respect, and familial relationships predominates in the student culture. This is due in no small measure to the positive professional culture modeled by a faculty that is dedicated, upbeat, supportive, hard-working, and caring. The faculty and the administration work overtime to build personal relationships with students to combat the generally fragmented and impersonal experience associated with the structure and organization of high school.

Likewise, a sense of mission and positive administrative leadership have permeated BHS in the past two years, adding momentum to the teaching and learning effort. The learning expectations in the BHS Mission are playing a prominent role in instructional decision-making, and teacher morale and mutual support are strong; more students are actively engaged in the lesson; and teachers are using a growing array of assessment strategies compared to two years ago. Teachers appreciate the accessible, communicative, and consistent school principal and the entire administrative team which is strongly supportive of a safe and orderly school climate and the teaching and learning mission.

While teachers are attentive to the learning expectations in the mission and are collegial in disposition, most are still teaching in isolation and collaborating only informally and sporadically. Teachers have as yet made only token use of the school-wide rubrics to assess student progress on the BHS Learning Expectations, and no assessment system to gather and analyze data on student performance on the school-wide learning expectations has been developed. Although teachers use a good variety of assessment strategies, there is still a need to increase the use of formative assessments, peer assessment, and student self-assessment to improve student achievement and promote higher order thinking skills. The emphasis on higher order thinking skills more common in upper level courses is very teacher dependent in most other courses, and more can be done to differentiate instructional strategies across the curriculum. In helping classroom teachers address these needs, some department heads demonstrate more proactive leadership than others. Moreover, teachers at Burncoat currently lack sufficient collaborative time during the school day and training in the use of formal protocols with which to collaboratively improve instruction and assessment strategies based on student performance data.

While Burncoat High School continues to serve many struggling students in the demographically diverse and disadvantaged north side of Worcester, it benefits from some unique developments. The recently established ninth grade teams have improved personalization of teaching and learning for students transitioning into Burncoat and have

paved the way for expansion of teaming into the tenth grade. The Arts Magnet school-within-a-school energizes BHS on several levels and brings into the school family, student talent from around the city. Also, Burncoat High School has successfully engaged a variety of agencies from business, industry, universities, and other off–campus partners to improve learning for its students. Finally, the teachers at Burncoat often dip into their own pockets to purchase learning materials for their students in the face of on-going budgetary shortfalls.

Support For Teaching And Learning At Burncoat High School

When it comes to meeting the needs of its staff and student body and accomplishing the school mission, Burncoat High School suffers from chronic resource deprivation. This has been the case for years, both in terms of annual operating needs and in relation to infrastructure inadequacy.

While Burncoat has worked aggressively and successfully to enlist the resources and involvement of local educational institutions and area businesses in support of the school, this in no way can compensate for the fundamental failure of the city of Worcester to adequately fund the annual operating budget and infrastructure improvements needed by the school. The annual operating budgets continually fall short of providing enough textbooks and instructional supplies, to the degree that in many cases students do not have personal copies of books to take home and must work only with classroom sets. Many of the textbook titles are seriously out-of-date, lacking current information in the content area. Further, teachers sometimes feel constrained to spend their own money to provide instructional materials for their students. Lab courses in particular lack sufficient quantities of instructional supplies. Perhaps the most striking example of fiscal inadequacy in the operating budgets is the absence of any on-going plan to replace chalkboards with white boards. While the rest of the high school world has gone that route for some time, Burncoat High school is still "chalk city," a condition which also presents dust issues for classroom computers, peripherals, and students. Also, the availability of easels and easel paper for whole class and small group learning activities does not exist.

The work of teachers and students at Burncoat High School is plagued with chronic space problems as well. Because of a shortage of classroom space, many teachers lack their own teaching station and are compelled to travel from room to room. Consequently, more than a few classes are held in rooms that are not outfitted for the particular content area of the lesson. In any given period, it is nearly impossible to find an open classroom in which to hold a meeting, parent conference, or collaborative planning session. While recently expanded, the Library Media Center remains a narrow, overcrowded space, far too small to meet the needs of a school of over 1,100 students. While well-led and well organized, the LMC is "jammed" with computers, computer cords, and peripherals, making physical movement tricky at best and unsafe for equipment at worst. Further, the overall school space problems cause the LMC to be closed for testing whenever large scale testing takes place.

And yet, the most striking infrastructure failure at Burncoat High School is the woeful lack of technology to support the school mission and address 21st century learning needs.

The school lacks enough up-to-date computer stations for the size of its staff and for the size of its student body. Up-to-date instructional software and computer peripherals are in short supply. One searches far and wide to find an electronic whiteboard anywhere. The woeful state of technology is especially harmful in the Burncoat's math and science courses where 21st century learning is usually heavily dependent on them. BHS also needs more readily available technical support to keep all its limited computer-based resources operating effectively.

While the city has expanded and renovated parts of the 45-year-old building over the years, the facility remains inadequate and in many respects obsolete in meeting the needs of 21st century learners. Sciences labs are decades out of date. The library media center is simply a double-size classroom. Problems remain around HVAC, handicapped accessibility, building security and access, and safety issues. The building lacks its own auditorium and must use the adjacent middle school to meet the needs of its city-wide arts magnet school and to provide nursing services for its students.

The aging infrastructure's failure to support the educational program and the mission of Burncoat High School is detailed elsewhere in this report. Suffice it to say here that continued failure by the city of Worcester to provide the necessary infrastructure and adequate annual operating funds for Burncoat High School will jeopardize a 21st century education for its students and raise questions about the continued accreditation of Burncoat High School.

SCHOOL AND COMMUNITY PROFILE

The Community

Burncoat High School is in Worcester, Massachusetts. Worcester is often referred to as the "Heart of the Commonwealth" as it is located in central Massachusetts. The city sits on a series of hills overlooking the Blackstone River. Lake Quinsigamond marks its eastern boundary. Worcester is the state's second-largest city after Boston and an important manufacturing, insurance, transportation center, and future site of Bio-tech research. Worcester is an inland port of entry for foreign commerce and major interstate highways (the Massachusetts Turnpike/Interstate 90, offers direct connection to the city and Interstate 290/190 run through Worcester). Rail lines traverse the city, including MBTA commuter rail service between Boston and Worcester at the historic and renovated Union Station. In addition, a direct connection between Interstate 290 and Route 146 to Providence, Rhode Island and T.F. Green Airport is now available.

Worcester is noted for its fine educational and cultural facilities. Among the institutions of higher education are Assumption College, Becker College, Clark University, College of the Holy Cross, Massachusetts College of Pharmacy and Health Sciences, Quinsigamond Community College, University of Massachusetts Medical Center, Worcester Polytechnic Institute and Worcester State College.

As of 2007 the population in Worcester as estimated by the census bureau is 175,500. This is a decline of 1.6% from the last census. The median household income in Worcester is $35,623. The per capita income is $18,614. Twenty-four percent of the population lives below the poverty line. The city's population has remained relatively constant. At the same time the number of foreign-born residents has risen to 20% of the total population. Immigration added to the population at the same time the city lost native-born residents. Another indicator of the impact of the foreign-born population is seen in the data on residents who speak a language other than English at home (age 5 and older) which is 28%. More than two-fifths (45.5%) of those persons have admitted to speaking English less than very well. Manufacturing jobs have continued to decline. Eighty-eight percent of the labor force is now employed in the service-providing sector. In 2006, 39% of the jobs in Worcester were in the education and health service fields. Many of the new jobs created in the health care industry in the future will require an associate's degree or higher. According to the Massachusetts Department of Labor and Workforce Development, statewide jobs for more skilled workers will increase faster than jobs for less skilled workers. Low unemployment (MA 5.3%), high labor force participation, and job growth are key indicators of the health and stability of a local economy.

Worcester Public Schools' revenue in 2007 totaled $276,799,371. The largest proportion, $165,279,336 (59.9%) comes from Chapter 70 state aid. The city's tax revenue from property taxes was $180.6 million; the amount allocated to schools was $96.9 million (53%) of property tax dollars. The per-pupil expenditure for 2007 was $11,965 compared to the state average of $11,210.

There are 44 public schools in Worcester, which include 33 elementary schools, four middle schools, and seven high schools. Total enrollment in the district is 22,786. Total enrollment in public secondary schools and public vocational is 7,016. The Abby Kelly Foster Charter School has a population of 1,426. There are five private high schools in Worcester, three private middle schools, and five private elementary schools. Burncoat has seven elementary and two middle schools that are feeder schools for Burncoat High. Approximately 21% of high school age students attend non-public schools. This school year (07-08) is the first year that Worcester has participated in school choice. Burncoat has two school choice students enrolled and two students have opted to leave the district under the school choice plan. In the 2006-2007 school year Worcester sent 262 students out of district at a cost of $1,415,060. In fact, Worcester has suffered one of the largest losses of revenue due to school choice, losing $10,422,065 since the program's inception.

The School and the Students

Burncoat High is a comprehensive high school (grades 9 through 12) which attracts students from the Worcester district with its magnet programs. Burncoat High has become a minority/majority school. Burncoat's minority population is now at 57.3%. For the 2007-2008 school year the total enrollment was 1,211. The breakdown by gender is 606 male and 605 female. The enrollment by race/ethnicity is 17.0%, African-American; 4.0%, Asian; 35%, Hispanic; 0.6%, Native American; 42.7%, White; 0.7%, Multi-Race, Non-Hispanic. For 36.1% of the population their first language is not English, and 11.9% are Limited English Proficient (LEP).

The Burncoat population reflects the following: 54.6% are low-income, 23% are special education, 14% are in bilingual/ESL/ELL classes, and 48% take upper level courses. Burncoat offers three levels of classes: Advanced Placement, Honors and College.

The results of the spring 2007 MCAS test show the following percentage of students at each performance level compared to the state average:

English Language Arts

- Advanced/Above Proficient 12%, State 23%
- Proficient 48%, State 51%
- Needs Improvement 31%, State 21%
- Warning/Failing 9%, State 4%

Mathematics

- Advanced/Above Proficient 29%, State 43%
- Proficient 27%, State 29%
- Needs Improvement 26%, State 19%
- Warning/Failing 18%, State 9%.

The Burncoat 2007 SAT scores show the following results compared to national averages: Writing 458, National 494, Math 456, National 515.

Every five weeks, parents are notified by mail of their child's overall performance via interim reports.

Burncoat has a seven period block schedule with one rotating block period per day.

Currently Burncoat has ninth grade teams and beginning the 2008-09 school year, teachers on these teams will have common planning time that can be utilized for teacher meetings or parent meetings.

A recent initiative has been established to improve classroom instruction. At Burncoat an instructional leadership team has been initiated.

The student attendance rate for 2006-07 was 90.7%. Student retention rate for 2006-07 was 9.76%. Student drop-out rate is 5.0%. Worcester has had a policy of long-term suspensions from the district school but offers an alternative placement at a Worcester Public School sanctioned site. Burncoat has eight students on long-term suspension. Burncoat had 583 in-house suspensions and 673 out of school suspensions for 2006-07.

The percentage of members of the senior class who graduated in 2005-06 was 78.25% and for 2006-07 it was 79.18%. The destination of Burncoat High School graduates breaks down to the following: 24% four-year private school, 20% four-year public college, 1% two-year private college, 30% two-year public college, 6% other post-secondary, 9% work, 2% military, and 8% unknown.

There are 93 teachers at Burncoat High with a teacher attendance rate of 94%. The percentage of teachers licensed in their teaching assignment is 94.1%. The total number of teachers in core academic areas is 69. The percentage of teachers identified as highly qualified is 86.4%. The student/teacher ratio is 16 to 1. Burncoat has many special academic programs including the following: AP courses, National Honor Society, Virtual High School, MCAS after school, Math Team, 9th Grade Transition Program, Literacy Classes, AVID, Violence Prevention/Anger Management, Visual and Performing Arts Magnet Programs and Evening High School.

Burncoat High School engages in several Community Partnerships: College of the Holy Cross, Quinsigamond Community College, YMCA Minority Achievement, Dynamy Program, Spartacus Program, Latino Education Institute, Junior Achievement partnered with Assumption College, North Worcester Business Association, Hanover Insurance Group, Assumption College, Worcester Art Museum, Worcester Center for Crafts, and Nypro Systems. The Worcester Art Museum conducts a program in conjunction with our Arts Magnet program that integrates hands-on work at the Art Museum with the curricula needs at Burncoat High. Holy Cross, in addition to the professional development relationship to train future educators, has provided a large base of student volunteers who assist with tutoring. There are two chamber music concerts held per year at the Brooks Music Theater on campus. Students are permitted to take college courses at Quinsigamond Community College, Assumption College, and Holy Cross College. All

of these schools participate in our summer College Connections Program for juniors and seniors who have not passed the MCAS. Students get three hours of class training and three hours of an internship at the college.

TEACHING AND LEARNING STANDARD

Mission and Expectations for Student Learning

The school's mission statement describes the essence of what the school as a community of learners is seeking to achieve. The expectations for student learning are based on and drawn from the school's mission statement. These expectations are the fundamental goals by which the school continually assesses the effectiveness of the teaching and learning process. Every component of the school community must focus on enabling all students to achieve the school's expectations for student learning.

1. The mission statement and expectations for student learning shall be developed by the school community and approved and supported by the professional staff, the school board, and any other school-wide governing organization.

2. The school's mission statement shall represent the school community's fundamental values and beliefs about student learning.

3. The school shall define school-wide academic, civic, and social learning expectations that:
   - are measurable.
   - reflect the school's mission.

4. For each academic expectation in the mission, the school shall have a targeted level of successful achievement identified in a rubric.

5. The school shall have indicators by which it assesses the school's progress in achieving school-wide civic and social expectations.

6. The mission statement and the school's expectations for student learning shall guide the procedures, policies, and decisions of the school and shall be evident in the culture of the school.

7. The school shall review regularly the mission statement and expectations for student learning using a variety of data to ensure that they reflect student needs, community expectations, the district mission, and state and national standards.

Conclusions

The Burncoat High School Mission and Expectations for Student Learning document was developed and approved during the period from September 2007 – March 2008. Under the leadership of a twelve-member faculty mission and expectations committee the proposed document underwent several reviews and revisions, including faculty input and the incorporation of values and expectations expressed in the mission statement of the Worcester School District. After further review and approval by the BHS Site Council which included parents and students, the faculty formally adopted the document on March 8, 2008. In the end process the school faculty chose to adopt the Worcester Public Schools Mission and Expectations verbatim as the BHS Mission and Expectations for Student Learning. Although the action would be effectively redundant, there is no recorded date upon which the Worcester School Committee approved the document. In sum, the BHS Mission and Expectations for Student Learning were properly developed and approved by the professional staff and stakeholder representatives of the school. *(self-study, mission committee, mission documents)*

Burncoat High School's adoption verbatim of the district mission commits it to the school district's values and beliefs around a healthy and safe learning environment, all students learning at high levels, students being productive citizens and lifelong learners, and the importance of preparation for a hi-tech world. These values and beliefs were developed and vetted in a district-wide process prior to the BHS mission dialogue and endorsed by that process. As a result, the mission and expectations for student learning of Burncoat High School reflect the fundamental values and beliefs of the school community and the governing school district. *(self-study, mission documents, mission committee)*

Burncoat High School has also adopted the five expectations for student learning of the Worcester Public Schools as its own, to wit: BHS students are expected to become effective readers, communicators, problem-solvers, and users of technology, as well as active members of the school community. The four academic expectations and the one civic/social expectation all derive from, and support the values in, the school mission. Further these learning expectations, while avoiding the proliferation that undermines school focus, directly and indirectly support the development of higher order thinking skills and many of the skills requisite for success in the 21st century. While the Burncoat school-wide expectations are supported by rubrics which render them conducive to measurement, departmental ownership of the school-wide rubrics and expectations is at this stage informal, and consequently rubric use by teachers is sporadic. *(mission documents, rubric documents, self-study)*

Assessment of the four academic expectations in the Burncoat High School Mission Statement is supported by school-wide rubrics, one each for reading, writing, oral communication, problem-solving, and application of technology. The introductory information at the beginning of each rubric contains the skill subsets that further define each school-wide expectation for student learning. The four-level rubrics are framed analytically and describe the skill elements for individual student performance on a scale

of "Ineffective, Somewhat Effective, Effective, and Very Effective." The third level, "Effective," is equated with proficiency, the targeted level of successful achievement. To date, the school-wide rubrics are in limited use, largely determined by teacher discretion, although the administration promotes more frequent use. Currently, there is no school-wide vehicle or protocol overseeing the implementation of school-wide rubrics or the harvesting of data around student performance on the BHS Expectations for Student Learning. *(rubric documents, mission committee, self-study)*

Burncoat High School has identified being an active community member as its sole civic/social expectation for student learning and has created two rubrics to assess that learning expectation: one to assess good citizenship and one to assess contributing positively to school and community. While the two rubrics contain somewhat overlapping behavioral descriptors and data indicators related to those descriptors, neither provides a scale for assessing performance, whether individual student performance or school-wide performance. Also, no assessment protocol has yet been developed to collect and analyze data gleaned from implementation of the rubrics. In fact, the school acknowledges that these rubrics have not even been used yet. Consequently, Burncoat High School cannot yet determine whether it is meeting the school-wide civic/social expectation in its mission because it is not yet systematically measuring the school's progress on the data indicators. *(rubric documents, mission committee, administrators, self-study)*

Just completing its first year of operation, the Burncoat High School Mission Statement is now emerging as the driving force for school-wide program and policy decisions. The mission statement and school-wide expectations are widely publicized throughout the school and are featured in the program of studies, in teacher manuals, and on the classroom walls. However, the school is still waiting for the district-wide technology staff to replace the obsolete mission statement with the new one on the school's website. Mission Monday engages representatives of the faculty and various segments of the student body in a weekly reading of the mission statement. Course proposals, curricular changes, and MCAS data are now reviewed in the context of the school mission and expectations as decisions are made. The 2008-09 silent reading initiative in particular focuses upon one of the BHS Expectations for Student Learning. Moving forward, the school plans to review its handbooks, policies, and procedures more thoroughly in light of the new school mission. In particular, to promote access to the BHS Expectations for Student Learning, students and parents need a program of studies booklet which links each course offering to the specific school-wide expectations that are featured in each course. *(self-study, mission committee, school publications, administrators)*

The development of the latest school mission statement and expectations for student learning did include a careful review of community expectations and the district mission as well as some consideration of state and national standards. Subsequently, Burncoat High School has placed an increased emphasis on the use of MCAS data and technology data in evaluating school progress in meeting student needs. The next mission review is scheduled for the 09-10 school year and should feature student performance data assessed with the use of the BHS school-wide rubrics. That will be indispensable to any comprehensive and informative review of the BHS Mission and Expectations for Student Learning. *(mission committee, self-study, administrators)*

Commendations

1. The adoption of highly focused, skill-oriented BHS Expectations for Student Learning

2. The adoption of analytical rubrics to support and assess student and school performance on the expectations for student learning

3. The strong community and faculty consensus around common values and beliefs in support of student learning

4. The strong commitment of the school and school district leadership to skill-oriented learning expectations and related data analysis

Recommendations

1. Confirm formal adoption of the BHS Mission and Expectations for Student Learning by the Worcester School Committee

2. Post the new mission and expectations for student learning prominently on the school website

3. Ensure that the mission review process includes data gleaned from student performance using the school-wide rubrics

TEACHING AND LEARNING STANDARD

Curriculum

The curriculum, which includes coursework, co-curricular activities, and other school-approved educational experiences, is the school's formal plan to fulfill its mission statement and expectations for student learning. The curriculum links the school's beliefs, its expectations for student learning, and its instructional practices. The strength of that link is dependent upon the professional staff's commitment to and involvement in a comprehensive, ongoing review of the curriculum.

1. Each curriculum area shall identify those school-wide academic expectations for which it is responsible.

2. The curriculum shall be aligned with the school-wide academic expectations and shall ensure that all students have sufficient opportunity to practice and achieve each of those expectations.

3. The written curriculum shall:
   - prescribe content;
   - integrate relevant school-wide learning expectations;
   - identify course-specific learning goals;
   - suggest instructional strategies;
   - suggest assessment techniques including the use of school-wide rubrics.

4. The curriculum shall engage all students in inquiry, problem-solving, and higher order thinking as well as provide opportunities for the authentic application of knowledge and skills.

5. The curriculum shall:
   - be appropriately integrated;
   - emphasize depth of understanding over breadth of coverage.

6. The school shall provide opportunities for all students to extend learning beyond the normal course offerings and the school campus.

7. There shall be effective curricular coordination and articulation between and among all academic areas within the school as well as with sending schools in the district.

8. Instructional materials, technology, equipment, supplies, facilities, staffing levels, and the resources of the library/media center shall be sufficient to allow for the implementation of the curriculum.

9. The professional staff shall be actively involved in the ongoing development, evaluation, and revision of the curriculum based on assessments of student

Conclusions

The Burncoat High School faculty adopted its mission statement on March 8, 2008. The statement incorporates expectations in effective reading, writing, communicating, problem-solving, and technology usage. Each department has informally identified academic expectations for which it assumes the primary responsibility for monitoring progress. These expectations are widely displayed throughout the school and in classrooms, and they have been incorporated into the students' quarterly report card, mandating that each student receive a written grade in the content area as well as a numerical assessment of his or her effectiveness in reading, writing, communicating, problem-solving, and technology use. However, the expectations are not yet the driving force for the curriculum. All teachers and faculty members know the mission's wording and its expectations, but most students do not understand the meaning, purpose, use, and impact of the mission wording and its expectations. Faculty members and administrators must continue to make explicit connections for the student body between skills/knowledge and the mission statement. In turn, this process will help students achieve the content expectations in each subject. *(self-study, students, department heads, student work, observations, teachers, administrators)*

Some curriculum guides are not yet aligned with the Burncoat Mission and Expectations. Content area mission, vision, and philosophy statements do not explicitly express the academic and civic goals of the school's mission in full. However, with the exception of the technology goal, curriculum objectives do provide students sufficient opportunity to achieve some of the school-wide expectations. Because the curriculum guides were written prior to the adoption of Burncoat's mission, however, reviewing and updating them must be done. As a result, there is no way to tell if BHS is adequately supporting each learning expectation for all students at all levels. *(self-study, curriculum guides, curriculum committee meeting)*

The written curriculum explicitly provides content, course-specific learning expectations, and course-specific goals while suggesting instruction strategies, assessment technique, and the use of course-specific rubrics. Despite variations in format, they are adequate in their purpose and organization. Most faculty members use the district content-area written curriculum as a standard resource and organizing principle. Overall, they are foundations for consistency of instruction, facility of assessment, and clarity of student expectations and are open for editing and refinement in the future. *(self-study, teachers, curriculum guides)*

Burncoat's curriculum guides are "living documents" that are clear, focused, and flexible. The curriculum aims to engage students in higher order thinking, problem-solving and authentic application. These goals are explicitly addressed in the vision and philosophy statements for each content area. There is a program of writing across the curriculum (including research papers, essays, journals, reflective pieces, analysis, narrative and summary styles) that demonstrates attention to academic and personal skills. However, student shadowing and class visits show that there is a significant number of classrooms with passive learners not fully engaged in the lesson. The high expectations and educational practices described in the curriculum documents are not consistently

reinforced in classroom practices. In addition, opportunities for critical inquiry, higher order thinking, and authentic application increase with higher level course selection giving lower level students less opportunity to learn. Overall, Burncoat has a solid philosophical base regarding student inquiry which needs wider implementation across all course levels. *(teachers, self-study, student work, students)*

Integration of curriculum at Burncoat is appropriate in relation to state frameworks and the school's mission statement. There is alignment with state testing requirements and outlined in curriculum guidelines. The curriculum guides' mission and vision statements stress "activity based learning" and application of "principles of critical and creative thinking." Furthermore, the 9th grade team format reinforces teacher collaboration and, in turn, integration of curriculum. Expressed plans for a loop to 10th grade is under consideration. Standards addressing the five school-wide expectations are clearly written and reinforced through posted mission statements in hallways and classrooms. Each department has informal and shared responsibility for measurement of these expectations. The majority of Burncoat teachers demonstrates success in integrating curriculum guidelines in their classes. However, limitations on technology resources hinder the full achievement of Burncoat's mission statement goals. Evidence of severe technological lag is clear in classrooms and on student assessment. Although curriculum standards requiring critical and analytical thought are expressed in curriculum guidelines, emphasis on depth of knowledge is inconsistently practiced among teachers. Both the social studies department and automotive program are especially adept at emphasizing depth of knowledge through their curricula. Teachers say that insufficient time to cover material and restricted access to the media center are two reasons for this deficiency in other curriculum areas. Consequently, curriculum guides' missions and visions are not being met consistently. *(Endicott Survey, students, student work, teachers)*

Burncoat High School has a developed core of opportunities for students to extend learning beyond the campus. There is academic, community, and extracurricular learning available through school-wide offerings like dual enrollment at Quinsigamond Community College, gifted and talented programs at Holy Cross, Virtual High School course offerings, and Jobs for Bay State programs. Assumption College, Becker College, and Bay State College also offer courses available to Burncoat students. Departmental or teacher-specific opportunities like interships with Early Childhood and Food Services, connections to the New England Institute of Technology, and annual visits to Boston's Museum of Fine Arts and UMASS Medical Center demonstrate a commitment to off-campus experiences. Notably, the Junior Reserve Officer Training Corps (JROTC) and the Arts Magnet Program provide frequent community, state. and national opportunities. Burncoat does, however, lack an attention to global experiences for students. Also, since the writing of the self-study, the Teen Apprentice Program (TAP) has been cancelled as a result of city budget cuts. Teachers lament this loss and express hope that it will restart in the near future as it benefited Burncoat students. In general, students have many opportunities to extend learning beyond the classroom and normal course offerings, and as a result of this commitment, Burncoat is positioned to further its status and capabilities in offering off-campus learning. *(teachers, self-study, students, Endicott Survey, principal)*

The curriculum guides show little application or focus on interdisciplinary instruction, and the faculty does not have the planning time or space to realize effective curricular

coordination. While Burncoat High School has made significant strides in the design and development of its school-wide curriculum, aligning discipline-specific curricula with the Worcester Public Schools Curriculum and the Massachusetts State Frameworks, the Burncoat High School curriculum has not expanded beyond the discrete, independent discipline model to a more cross-curricular and interdisciplinary one. On an *ad hoc* basis, however, teachers do informally share materials with other disciplines. The ninth-grade program as well as the Advancement Via Individual Determination program (AVID) do stand as examples of curriculum crossing disciplines. Teachers report a clear and smooth articulation between the middle school curriculum and the high school, which is a result of monthly meetings between district curriculum liaisons and high school and middle school department heads. Consistently, teachers report a philosophy of teaching for depth rather than for breadth. With the constraints of limited planning time, the on-going development of Burncoat curriculum is restricted, however. Overall curriculum coordination is hindered by lack of time for teachers to meet and address curricular issues. *(self-study, student work, teacher interview, teachers, department leaders)*

Recent and previous budgetary constraints have impeded the implementation of key expectations in the school's mission and curriculum. Fortunately, Burncoat teachers have demonstrated that they are resourceful and resilient instructors. However, as a result of the city of Worcester's persistent budget shortfalls and insufficient allocations to schools, teachers and students work with a paucity of computers, printers, electronic whiteboards, academic software, overhead projectors, and DVD players. In combination with the absence of technological devices, there is insufficient classroom space and infrastructure to support their wide use. Specifically, the media center is woefully small for Burncoat's faculty and student population and lacks sufficient staffing. Furthermore, almost every classroom is booked each period, and some parts of the building do not have Internet accessibility. Additionally, some courses have only a class set of texts, prohibiting students from using books at home to reinforce their learning. The Worcester Public Schools mandated city-wide curriculum and individual school learning expectations require funding for the technology and equipment necessary to support the required 21st century curriculum. In light of this imperative, Burncoat High School has plans to design and develop a technology plan to address the school's technological deficiencies which over 60% of the faculty also reports as insufficient. Functioning, current, and sufficient technology assets are essential to the realization of the mandated learning and performance goals. *(observations, self-study, facility tour, student work, teachers, department leaders, Endicott Survey)*

Teachers, administrators, and guidance counselors formally and informally review data from MCAS (Massachusetts Comprehensive Assessment System), MAP (Measure of Academic Progress), and other test scores to determine student academic level placement, placement in enrichment programs, or placement in out-of-school programs. In faculty meetings, department meetings, and meetings with school liaisons, the faculty analyzes student performance. Yearly, the curriculum review committee assesses test results and identifies ways to improve academic outcomes. Currently, to better achieve regular, formal, and universal curriculum review, the curriculum coordinator is instituting committees specific to each discipline, thus broadening the teacher participation in curriculum development and review of performance data. The review of curriculum seems to take place regularly on a formal and informal basis, but the current practice may

not be as inclusive as necessary. *(self-study, teacher interviews, department leaders, teachers)*

Professional development activities are related to and supportive of the curriculum. In the 2007-2008 academic years, teachers as well as administrators had the option of 44 hours of professional development courses offered though the district as workshops or as in-house training. Additionally, there has been support for some regional and local workshops and conferences related to curriculum. Many teachers also take advantage of professional education offered by local colleges, universities, museums, and academic societies. In sum, although professional development opportunity hours are adequate, experiences do not always address the needs of teachers and curriculum. *(self-study, teachers, department heads)*

Professional development opportunities at Burncoat High School are offered through in-house training and off-campus programs. The administration's commitment to professional development manifests in a variety of activities and programs. Staff training in the Advancement Via Individual Determination (AVID) program and practices to enhance instruction for MCAS performance are part of the school-wide curriculum support plan. Moreover, training for teachers in advanced placement courses, participation in the Teaching American History Grant (TAH), and staff enrollment at Clark University, Holy Cross and Worcester State College are indicative of a staff eager to advance professionally and implement knowledge into their content and curriculum development. Burncoat staff members are informed of professional development through the Worcester Public Schools Central Office, via school e-mail, and through their department heads. Staff members are also encouraged to explore opportunities for their own off-campus development. According to the Endicott Survey data, only 55% of teachers affirmed that professional development supports the curricular process. *(teachers, principal, self-study, Endicott Survey)*

Commendations

1. A clear and focused curriculum philosophy
2. Well-developed district-wide curriculum guides for each content area that align with state frameworks
3. BHS faculty members' adherence to curriculum guides for planning, instruction, and assessment
4. A curriculum that provides a range of learning opportunities beyond the school campus
5. The authentic assessment activities emphasized in the curriculum of the engineering/tech and art departments
6. District-wide curriculum review process for on-going evaluation and revision of curriculum

7. Opportunities for BHS administrators and department representatives to participate in district-wide curriculum committees

Recommendations

1. Ensure that all teachers and departments take formal ownership of the BHS Expectations for Student Learning and formal responsibility for strategic implementation of the school-wide rubrics supporting those expectations
2. Ensure that students in courses at all levels are engaged in inquiry, higher order thinking and authentic application
3. Ensure that each curriculum area has identified the school-wide academic expectations for which they have assumed responsibility
4. Develop purposeful options for in-house professional development allowing teachers to select from a menu of programs best suited to their curriculum needs
5. Increase classroom teacher dedicated time for collaborative curriculum development
6. Ensure that all curriculum guides are aligned with the Burncoat mission and expectations
7. Ensure that all curriculum areas emphasize depth of understanding over breadth of coverage
8. Increase opportunities for students to participate in the Virtual High School program

TEACHING AND LEARNING STANDARD

Instruction

The quality of instruction in a school is the single most important factor affecting the quality of student learning, the achievement of expectations for student learning, the delivery of curriculum, and the assessment of student progress. Instructional practices must be grounded in the school's mission and expectations for student learning, supported by research in best practice, and refined and improved based on identified student needs. Teachers are expected to be reflective about their instructional strategies and to collaborate with their colleagues about instruction and student learning.

1. Instructional strategies shall be consistent with the school's mission statement and expectations for student learning.

2. Instructional strategies shall:

   - personalize instruction;
   - make connections across disciplines;
   - engage students as active learners;
   - engage students as self-directed learners;
   - involve all students in higher order thinking to promote depth of understanding;
   - provide opportunities for students to apply knowledge or skills;
   - promote student self-assessment and self-reflection.

3. Teachers shall use feedback from a variety of sources including other teachers, students, supervisors, and parents as a means of improving instruction.

4. Teachers shall be expert in their content area, knowledgeable about current research on effective instructional approaches, and reflective about their own practices.

5. Discussion of instructional strategies shall be a significant part of the professional culture of the school.

6. Technology shall be integrated into and supportive of teaching and learning.

7. The school's professional development program shall be guided by identified instructional needs and shall provide opportunities for teachers to develop and improve their instructional strategies.

8. Teacher supervision and evaluation processes shall be used to improve instruction for the purposes of enhancing student learning and meeting student needs.

Conclusions

At Burncoat High School, most instructional strategies implicitly support the school's mission statement and expectations for student learning. The emphasis on writing encourages students to become more effective communicators, and this has created a vehicle for discussion among department members. For example, the social studies teachers' use of primary source documents promotes reading and strengthens communication. The BHS Magnet for Visual and Performing Arts' emphasis on performance contributes to the students' enthusiasm to be active community members. In all content areas, students are encouraged to become effective readers. However, teachers need to be more explicit in making students aware of direct connections between classroom lessons and specific learning expectations in the school mission. The school is impeded is assisting students in achieving the academic expectation to "be familiar with the use of technology" due to limited availability of technology resources. As a result, Burncoat High School is prevented from fully supporting the achievement of the school-wide academic expectation regarding technology. (*teachers, student work, observations, self-study)*

The faculty at Burncoat High School is caring, generous, and dedicated to its students. Teachers demonstrate strong positive relationships and commitment to students as individuals and learners. In some classes with some teachers, assignments/activities connect learning to the student's own experience and involve assessment that includes opportunities for self-directed learning and peer evaluation; however, this personalized instruction and assessment is not consistent in classrooms throughout the school. Class size also needs to be smaller in many cases in order to allow more personalized instruction and to facilitate differentiated instruction. Teachers have high expectations for their students, but there is inconsistent communication of academic standards. A lack of varied teaching strategies and an emphasis on a traditional approach to teaching is not conducive to the engagement of students as active and self-directed learners. One exception to this is the Virtual High School which provides the opportunity for up to 25 students to pursue areas of study that are not offered as part of the regular curriculum. Students who enroll in AP and honors courses frequently have the opportunity to engage in higher order thinking skills to promote depth of understanding; however, there are fewer demands for higher order thinking skills in college prep courses. One notable exception is the Advancement Via Individual Determination (AVID) program which is designed to provide college prep students with the skills necessary to transition to a more academically challenging level. Ninth grade students and their teachers, including one inclusion teacher, are divided into three interdisciplinary teams. The teachers are provided with common planning time to collaborate and coordinate instruction. For other grades, there is no formal planning time, limiting teachers' opportunity to collaborate interdepartmentally. Students involved in the BHS Magnet for Visual and Performing Arts program have many opportunities to apply knowledge and skills by means of performances and competitions. The business department has developed partnerships with local businesses and banks, providing an opportunity for internships and involvement in the community. In some classes students are encouraged to self-assess by rewriting or revising. As a result of the lack of varied instructional strategies, many

students have limited engagement in the learning process. *(classroom observations, shadowing of students, student work, teachers)*

Teachers receive feedback from a variety of sources. Administrators observe their assigned faculty members yearly, prepare formal evaluations, and frequently make informal classroom visits. Department heads conduct classroom visits, observe their colleagues, and provide feedback to the individual teacher as well as their administrative supervisors. Additionally, all teachers submit weekly lesson plans to their department heads, giving department heads another means to provide feedback. Beginning teachers and teachers new to the building are assigned a mentor who can give further support and feedback regarding instructional practices. One of the most common means of teacher feedback is in the form of informal conversations with colleagues. Teachers also elicit feedback both formally and informally from their students as a means of improving their instruction. However, according to the survey data, only 26% of parents feels that they have an opportunity to provide feedback regarding instruction. Furthermore, teachers have expressed a need to create a method to request meaningful feedback from parents regarding their child's instruction. The varied feedback that teachers receive assists them with making instructional improvements. *(self-study, teachers, parents, Endicott Survey)*

Ninety-four percent of teachers at Burncoat High School is licensed in their teaching assignment and 99% is identified as highly qualified. Teachers meet within their departments to share information, attend workshops, and collaborate informally. Although there are effective instructional approaches in some classrooms, there are not significant professional development offerings to support teachers' efforts in their content area. Some teachers take advantage of summer institutes and leadership seminars offered, but there is no formal process to provide opportunities for teachers to reflect on their own practices. *(self-study, teachers, school documents)*

Departments hold monthly meetings, but, discussion of instructional strategies among faculty members generally takes place on an informal level. The three 9th grade teams have a common planning period, allowing them the opportunity to collaborate and provide more personalized instruction for individual students. The teachers of other grade levels do not have common planning time built into their schedules and must find opportunities to meet and discuss student work and instructional practices on their own time. For example, ESL teachers consult content area teachers so that their instruction supports and supplements what is taught in the content areas. The limited formal structure allocated for discussions and collaboration among teachers hinders such practices from becoming a significant part of the professional culture of Burncoat High School. *(self-study, teachers, teacher interviews)*

Despite the fact that the mission statement references preparing students for a technological world and one of the expectations for student learning emphasizes the use of technology, technology is not a priority at Burncoat High School. Many classrooms do not have computers, and those that do are non-functioning or outdated. There are computers and electronic white boards located in the library/media center, the Junior Reserve Officer Training Corps (JROTC) room, the Computer Assisted Design (CAD) room, and one dedicated computer lab for use by teachers and students. Two portable electronic white boards are available for classroom use, but there is no means to transport them safely to the lower level. Graphing calculators are used in math and physics classes

and geometry classes use Geometer's Sketchpad, but other technology systems are very inefficient and hardware and software support is extremely limited or non-existent. Teachers' use of technology is limited to word-processing and, in some cases, for grading. As a result of the absence of school computers, some teachers use their own computers in their classrooms, but these personal computers do not have access to the network. As a result, the use and application of technology cannot be integrated and supportive of teaching and learning. *(self-study, teachers, facility tour)*

Burncoat High School provides three days of professional development for staff members each year with a school-wide focus based on school and district instructional needs. Professional staff members have the opportunity to contribute input into what programs are offered as well as to present workshops or seminars. Measures of Academic Progress (MAP) training has instructed teachers on ways to access and interpret test results in order to make improvements in the area of instruction. All instructional staff members have received training in differentiated instruction designed to identify and encourage effective practices to meet the needs of students of all abilities. Another instructional strategy offering was Teaching English Language Learners (TELL) training which was designed for teachers of all content areas. This year, the in-house professional development activities have focused on answering open response questions. The Worcester Public Schools offers a variety of subject-specific professional development activities as well after school and during the summer. Most teachers are members of content specific professional organizations and are encouraged to attend local and state conferences in their field. While the focus of professional development is building-wide, the program does not always address the needs of specific subjects. *(self-study, school documents, school administrators)*

Teachers at Burncoat High School are evaluated using the district-wide evaluation plan. In the first four years, teachers are formally observed a minimum of twice each year and receive a formal written summative evaluation at the end of the year. Once teachers have attained professional status, every two years, they are observed a minimum of twice a year and receive a formal written summative evaluation. During the off-evaluation year, teachers participate in self-evaluations or peer evaluations. Resource teams provide support for teachers in need of professional assistance. The principal and the three assistant principals serve as administrative supervisors. The department heads observe classes and provide feedback to the administrative supervisors, but they are not evaluators. The evaluation process focuses primarily on fundamentals such as effective planning, classroom management, and instructional strategies but does not consider all aspects of what constitutes good teaching. Evaluators may not be knowledgeable about specific course content and may have a limited impact on improving instruction for the purposes of enhancing student learning and meeting student needs. In addition, the current sporadic follow-up to classroom observations does not ensure teacher improvement. As a result, the evaluation process is not always reliable to ensure improved instruction. *(self-study, teachers, principal)*

Commendations

1. A highly qualified and dedicated professional staff

2. The collegiality of the professional staff

3. The faculty's efforts to improve and enhance instruction despite the lack of technology and space

4. The well-developed instructional team approach for coordinating instruction for 9th grade students

5. The excellent personalization and instruction in the AVID program that leads to improved student achievement

6. The Magnet for Visual and Performing Arts that provides many opportunities for students to obtain knowledge and skills in authentic, performance-based ways

Recommendations

1. Provide time within the school day for formal collaboration within and among departments concerning instructional strategies

2. Develop formal protocols so that discussion of student work and instructional strategies and practices becomes a significant part of the professional culture of the school

3. Ensure student engagement and recognized high expectations in all college prep courses

4. Provide the technology necessary to support and enhance teaching and learning

5. Employ a variety of instructional strategies and practices to meet the needs of all students

6. Expand personalization of instruction and assessment strategies

7. Provide more opportunities for students to self-assess and self-reflect in all curricular areas

8. Provide time and resources for a strong professional development program that supports department instructional needs

9. Revise the evaluation process to ensure that it is effective in improving instruction and enhancing student learning

TEACHING AND LEARNING STANDARD

Assessment of Student Learning

Assessment is an integral part of the teaching and learning process. Its purpose is to inform students regarding their learning progress and teachers regarding ways to adjust the curriculum and instruction to respond effectively to the learning needs of students. Further, it communicates to the school community the progress of students in achieving the school's expectations for student learning and course-specific learning goals. Assessment results must be continually discussed to improve curriculum and instruction.

1. The school shall have a process to assess school-wide and individual student progress in achieving the academic expectations in the mission based on school-wide rubrics.

2. The school's professional staff shall use data to assess the success of the school in achieving its civic and social expectations.

3. For each learning activity, teachers shall clarify to students the relevant school-wide academic expectations and course-specific learning goals that will be assessed.

4. Teachers shall base classroom assessment of student learning on school-wide and course-specific rubrics.

5. Teachers shall use varied assessment strategies to determine student knowledge, skills, and competencies and to assess student growth over time.

6. Teachers shall meet collaboratively to discuss and share student work and the results of student assessments for the purposes of revising the curriculum and improving instructional strategies.

7. The school's professional development program shall provide opportunities for teachers to collaborate in developing a broad range of assessment strategies.

8. The school's professional staff shall communicate:

   - individual student progress in achieving school-wide academic expectations to students and their families;
   - the school's progress achieving all school-wide expectations to the school community.

ASSESSMENT

Conclusions

Burncoat High School has a newly adopted mission statement and learning expectations that are displayed in the hallways and in classrooms. Most teachers have introduced the mission statement in their classes, but, there has been very limited explanation as to how it relates to course expectations. Burncoat developed school-wide rubrics to assess both school-wide and individual student progress towards achieving academic expectations that include reading, writing, communication, problem-solving, and technology. These rubrics were introduced at the beginning of the 2008-2009 school year. During this first year, each department was to adopt a specific rubric for monitoring student achievement. However, Burncoat currently has no systematic process to manage data on the assessment of school-wide and individual student progress in achieving the academic expectations stated in the mission statement and to govern the use of school-wide rubrics. This process must be determined and widely explained to both faculty members and students so the full value of this system of assessment can be recognized. *(teachers, parents, student work, principal)*

Burncoat has "so called" rubrics for civic and social expectations, but these consist of a list of descriptive indicators without a rating scale. The school has collected some data on student involvement in civic and social activities, but there are no agreed upon data indicators to measure and analyze individual and school-wide progress in achieving civic and social expectations. Faculty and staff members, students, and parents do not clearly understand what the civic and social expectations entail or measure or why they are important. *(teachers, self study)*

For some learning activities, teachers provide students with teacher-generated checklist/grading scales that outline the requirements to successfully complete the activity. These tools help clarify how the assignment will be assessed, and they are aligned with course learning objectives. However, many of these tools do not directly align with the school-wide academic expectations for student learning, and students and teachers both do not easily relate the mission statement and student expectations to the course activity. The school must develop a policy that involves the use of the mission and expectations as related to curriculum and assessment, and, if necessary, provide professional development in the use of rubrics and the data that results in order to ensure that all teachers understand them. *(student work, teacher interviews, students)*

Use of course-specific rubrics is increasing among teachers at Burncoat High School. These rubrics are teacher-dependent and reflect the Massachusetts Curriculum Framework Learning Standards and exit outcomes for their curricula. These rubrics also convey assessment practices used in their classes. However, at present, there is no common format for the rubrics within content areas. Moreover, within the departments, the same course-specific rubrics are not being employed by all teachers who teach the same course, and there is limited use of school-wide rubrics. Among those teachers using the rubrics, there is inconsistency in how they are used to assess student achievement in meeting the academic expectations, and there is no process to harvest the data for feedback for revision. Teachers have not been given adequate training in utilizing the school-wide rubrics to assess whether students are effective readers, writers,

communicators, or problem-solvers. While some courses such as CAD (computer assisted design) consistently utilize technology, the implementation and assessment of the technology rubric in most disciplines is seriously compromised because of the lack of technology available throughout the school. *(student work, teachers, students, self-study)*

Students have an array of opportunities to demonstrate their skills and progress. The teachers at Burncoat High School employ a variety of assessments to determine student competence in a given subject area. Examples of assessment tools include pen and pencil tests, portfolios, journals, labs, projects, oral and/or written presentations, research papers, and performances. Most of the assessment is summative, however, and there is limited usage of formative assessment, self-assessment, and peer assessment tools. The assessment tools are not consistently personalized, nor do they aim to measure depth of knowledge. The lack of different forms of formative assessment limits teachers' ability to track student growth over time and student recognition of assessment as a learning tool. *(student work, teacher, students)*

Teachers do not meet formally to share student work and the results of student assessment for the purpose of curriculum revision and improving instruction. With the exception of the ninth grade teams, teachers do not have common planning time built into the schedule limiting formal collaborative discussions of results of student assessment for improvement in instructional strategies. Occasionally, monthly departmental meetings are used to discuss student work and common areas of concern. Some teachers utilize time after school to collaborate. The three professional development days during the school year do not provide teachers sufficient opportunities to develop assessment strategies nor time to examine student work for the purpose of improving curriculum and instruction. The district is currently in the process of designing common final exams in some select courses. Burncoat does use standardized test results including MAP (Measure of Academic Progress), MCAS (Massachusetts Comprehensive Assessment System), MEPA (Massachusetts English Proficiency Assessment), PSAT (Preliminary Scholastic Aptitude Test), ACT (American College Testing), and SAT (Scholastic Aptitude Test) to analyze student performance, track learning trends, plan improvement strategies, and target necessary instructional changes. Data is available for teachers and counselors to analyze student performance, improve assessment strategies for instructional practices, and provide student support and class placement; however, formal opportunities are rarely provided for teachers to make use of this data. Burncoat teachers are collegially disposed to collaborate for instructional purposes but do not systematically collaborate on examining assessment data. *(teachers, principal, department heads)*

The district provides a menu of professional development offerings throughout the school year; summer professional development has included some training in assessment strategies such as developing and implementing rubrics, portfolio assessment, creative assessment techniques and using test data. However, on the school level, there have not been sufficient professional development offerings for teachers in developing a broad range of assessment tools for their specific content areas.

Burncoat uses a variety of resources to inform students, parents, and the local school community of the learning expectations and student progress. The parent teacher open house at the beginning of the school year provides parents with course syllabi and overview of learning expectations, but no other formal opportunity is provided for

parents and teachers to meet to discuss student performance. Communication with parents for student progress is provided through interim progress reports and quarterly report cards. This year, the quarterly report cards include an NEASC comment code that matches the academic school-wide rubric adopted for assessment in each discipline. However, the process of assessing and coding is not clear to faculty members, students, and parents. To make such assessments meaningful Burncoat High School must develop a vehicle by which it can report the student progress in achieving the school-wide expectations. *(teacher, parents, principal, students)*

Commendations

1. Use of school-wide rubrics by some teachers
2. Implementation of a variety of assessments to determine student performance in many classes
3. Establishment of common planning time for ninth grade teams that can be utilized for work on common assessments
4. Extensive use of analysis of standardized test results by administration, guidance personnel and teachers
5. Faculty willingness to shift to rubrics that are analytically framed to lead to detailed feedback of student performance
6. The nascent effort by Burncoat High School in creating common final examinations

Recommendations

1. Implement a system to gather data and measure school-wide and individual student progress in achieving the academic expectations stated in the mission statement using school-wide rubrics
2. Develop a protocol to assess and analyze individual and school-wide progress in achieving identified civic and social expectations
3. Standardize rubrics within specific course and content areas
4. Ensure that all teachers for each learning activity clarify to students the school-wide academic expectations and course-specific goals that will be assessed
5. Develop and implement a plan to ensure that all teachers base classroom assessment of student learning on school-wide and course-specific rubrics

6. Provide more building-based professional development opportunities to train teachers in assessment strategies including formative assessment, self-assessment, and measurement of depth of knowledge

7. Build common planning time into the schedule for formal collaboration on student assessment results to improve instructional strategies in content areas

8. Correlate final examination content for all courses with multiple teachers

9. Develop and implement a system that clearly communicates to parents and students the individual student performance on each of the school-wide learning expectations using school-wide rubrics

10. Establish more formal opportunities for parent-teacher communication to discuss student performance

11. Provide tools for teachers to assess technology expectations across the curriculum

12. Develop a protocol or vehicle to report results of individual and school-wide progress in achieving identified civic and social expectations

COMMISSION ON
PUBLIC SECONDARY SCHOOLS

SUPPORT STANDARDS

LEADERSHIP AND ORGANIZATION

SCHOOL RESOURCES FOR LEARNING

COMMUNITY RESOURCESFOR LEARNING

SUPPORT STANDARD

Leadership and Organization

The way in which a school organizes learning for students, fosters leadership, and engages its members has a profound effect on teaching and learning. The professional culture of the school must be characterized by thoughtful, reflective, and constructive discourse about decision-making and practices, which supports student learning and well-being.

1. The school board and superintendent shall ensure that the principal has sufficient autonomy and decision-making authority to lead the school in achieving the mission and expectations for student learning.

2. The principal shall provide leadership in the school community by creating and maintaining a shared vision, direction, and focus for student learning.

3. Teachers as well as administrators other than the principal shall provide leadership essential to the improvement of the school.

4. The organization of the school and its educational programs shall promote the school's mission and expectations for student learning.

5. Student grouping patterns shall reflect the diversity of the student body, foster heterogeneity, reflect current research and best practices, and support the achievement of the school's mission and expectations for student learning.

6. The schedule shall be driven by the school's mission and expectations for student learning and shall support the effective implementation of the curriculum, instruction, and assessment.

7. Meaningful roles in the decision-making process shall be accorded to students, parents, and all members of the school staff to promote an atmosphere of participation, responsibility, and ownership.

8. Each teacher shall have a student load that enables the teacher to meet the learning needs of individual students.

9. There shall be a formal, ongoing program through which each student has an adult member of the school community in addition to the school guidance counselor who personalizes each student's educational experience, knows the student well, and assists the student in achieving the school-wide expectations for student learning.

10. The professional staff shall collaborate within and across departments in support of learning for all students.

11. All school staff shall be involved in promoting the well-being and learning of

students.

12. Student success shall be regularly acknowledged, celebrated, and displayed.

13. The climate of the school shall be safe, positive, respectful, and supportive, resulting in a sense of pride and ownership.

14. The school board shall support the implementation of the school's mission and expectations for student learning.

LEADERSHIP AND ORGANIZATION

Conclusions

The school board and superintendent provide sufficient autonomy and authority to lead the school in achieving the mission and expectations for student learning. Within the city-wide curricular and budgetary parameters, the principal of Burncoat High School (BHS) enjoys autonomy and authority in running his building. Specifically, the school board and superintendent allow flexibility in establishing the BHS Program of Studies as well as the disciplinary policies and procedures governing student behavioral expectations. The principal provides leadership in the development of new proposals by participating in the monthly superintendent and principals' meetings and meeting weekly with the assistant principals and monthly with department heads regarding school improvements and implementation of programs that support the mission statement. However, budget constraints limit the principal's ability to maintain important student support services such as an appropriate number of guidance counselors. In less than two years, the BHS principal, with the help of his assistant principals, has established a

cohesive relationship with faculty and staff, dramatically improved the school climate, and increased faculty perception of safety. Faculty and staff members repeatedly praise his leadership. He employs many approaches to inform students and parents of school programs, policies, and activities including: a weekly memo to teachers, communication with the community through the Connect-Ed system, and maintaining an open door policy. In addition, faculty and staff members describe the principal and his assistant principals as "highly visible" and responsive. Many opportunities exist for faculty and staff members, parents, and students to voice their concerns to him. He meets monthly with the Instructional Leadership Team, department heads, Parents' SITE Council, and the Burncoat Booster Club. The two way flow of information between the faculty and the principal makes a positive contribution to the safety and academic goals of Burncoat High School. *(BHS administrators, teachers, central office personnel, self-study)*

The principal provides leadership in the school by creating and maintaining a shared vision, direction, and focus for student learning. In conjunction with the assistant principals, the principal is responsible for teacher evaluations and guiding the faculty in attaining the mission statement goals. However, the teacher evaluation process currently lacks a connection to school improvement and professional development plans. The principal collaborates with the instructional leadership team to increase focus on student learning by attending Leadership Institute workshops with his administration team and department heads, and he promotes expectations and rubrics that are used system wide. The principal meets twice a month with the AVID Site Council, a collaborative, interdisciplinary site team designed to provide students' access to a rigorous curriculum so that all AVID students have the opportunity and are prepared to attend a four-year college. Survey data reports that 81% of the faculty feels the principal provides a clear vision for the school community and 86% of the faculty feels comfortable bringing concerns to the principal. This indicates a noteworthy element of the principal's success in creating and maintaining a shared vision, direction, and focus for student learning. *(self-study, teachers, Endicott Survey)*

Teachers play an active role in student leadership and school improvement. Teachers dedicate time by coaching athletics, participating in BHS SITE Council, and managing committees such as the NEASC Steering Committee and the superintendent's advisory counsel. Faculty members participated as facilitators and participants in the recent reading grant, and the instructional leadership team as well as the district-wide focus on open-ended questions and differentiated instruction. Most, but not all department heads are active instructional leaders, reviewing teaching strategies, curriculum development, and assessment strategies. Guidance counselors inform students of the importance of their high school transcript, the rigor of courses, and the importance of extracurricular activities in a successful college search. Guidance arranges visits from college representatives, college field trips, and a financial aid night. The librarian provides students and teachers with guidance and materials to support all aspects of student achievement. Administrators share leadership with department heads and faculty members to provide a positive learning environment for students. *(self-study, teachers, administrators)*

In some aspects, the organization and structure of the educational program promotes the school's mission. Employing a team system for ninth-grade students for core academic classes supports the school mission and student expectations. Because there are three interdisciplinary ninth grade teams, teachers are able to use common planning time to

review student progress, contact parents, and to address student concerns. The enrichment electives show a commitment to providing students with opportunities to explore a variety of subjects such as family and consumer science, business, Computer Assisted Design (CAD), and courses in the industrial arts. Furthermore, the selection of advanced placement courses show a commitment to academic rigor and an awareness of the increasingly competitive college application process. The inclusion of special education students in mainstream courses complies with state regulations and individualized education plans (IEP) and demonstrates a commitment to the individual needs of students. In special situations such as science labs, team teaching provides another type of opportunity for special education student to join their non-disabled peers. To accommodate large student loads, the arts magnet program operates a modified eighth period schedule, offering evidence of a flexible schedule which is needs-driven. Furthermore, survey data indicate that 68% of BHS students reports that the current schedule provides ample access to needed courses and 80% of the BHS faculty reports that the current school schedule supports their professional and educational efforts. Although students in the tenth grade and above do not benefit from the team setting found in the ninth grade, the overall organization of the school and its educational programs promote the school mission. *(school handbook, teachers, Endicott Survey)*

All student grouping patterns do not reflect the diversity of the student body. The establishment of ninth-grade interdisciplinary teams allows staff members to address student needs early in their high school career and simultaneously fosters heterogeneity within the classroom. This grouping provides common planning time for ninth grade teachers and allows teachers to align their curriculum according to BHS expectations for learning. There is no teaming for grades ten through twelve, however. Although the self-study states that Measures of Academic Progress (MAP) and MCAS data are used to guide student learning, the use of such data has been limited to this year's open-ended questioning initiative. Special education students are grouped and mainstreamed according to their respective individual education program (IEP). Although BHS believes that all ethnicities and socioeconomic levels are represented, classroom observations contradicted this assertion. As the course level of academic rigor increases, class heterogeneity declines. This particular grouping pattern does not comply with the school's own mission and expectations for student learning. Nevertheless, attempts to create heterogeneous classrooms appear successful in the ninth grade and at the college level course of study. *(classroom observations, self-study, teachers, support staff)*

The bell schedule allows teachers time to implement lesson plans according to both student needs and curriculum instruction. The bell schedule allows for each class to meet daily, providing continuity from lesson to lesson. This schedule was adopted by the faculty to overcome a break in class meetings in the previous schedule caused by the rotating double period used for in-depth learning. The majority of teachers agrees the new schedule is more effective in providing continuity of instruction and assessment. The guidance department has also been relieved of some of its scheduling burden. It is not clear if the loss of the true double period has restricted the opportunity for some departments to implement curriculum effectively for in-depth learning. *(teachers, department heads, school leaders)*

The shared leadership between faculty, parents and students promotes a genuine atmosphere of participation, responsibility and ownership. There is a positive sense of

community at Burncoat High School. The faculty and staff attempt to share the responsibilities of leadership with parents and students to foster an atmosphere of participation and ownership within the school community. Parents take active roles in supporting student activities and goals by participating in clubs and organizations such as the SITE Council, Burnside Boosters, Save Our Fine Arts (SOFA), and ninth grade orientation. Students also have a meaningful role in the Burncoat community. Participation in the Burncoat Student Council and the larger Central Massachusetts Student Council enables students to have a meaningful voice in school concerns. The superintendent's advisory committee provides a representative cross-section of the student body with direct access to the superintendent to express concerns and issues related to the school. *(parents, students, self-study)*

Less than 50 % of the faculty at Burncoat High School reports that their teaching load enables them to provide attention to individual students. A majority of students reports that teachers are available to spend one-on-one time with them if needed, however. While some classes exceed 30 students, most class sizes are under 25, with a typical load of around 100 students per teacher. Many honors and AP level classes approach or reach maximum capacity. The guidance department makes adjustments to class size by adding or removing course sections where needed. Despite the fact that the survey shows that most teachers' student load does not allow teachers to meet student demands, the load appears manageable at this time. *(students, Endicott Survey, self-study, teachers)*

Parents of BHS students indicate that a majority of teachers takes interest in their children's lives while fewer students express confidence that teachers care about their academic and personal lives. Reports of close and caring relationships between students and faculty members appear more prevalent than two years ago. No formal drop-out prevention or recovery mechanism appears to be in place. Although the self-study reveals that teachers act as informal mentors to students, there is currently no ongoing formal program in which an adult member of the school community assists the student in personalizing their learning experience and helping them reach school-wide expectations for learning. In the absence of such a mentoring program, there is no way to ensure that all students are receiving the academic, emotional, and psychological support needed to meet the learning and civic standards of the school. *(principal, parents, students)*

The professional staff has very limited formal time to collaborate within and across departments in support of student learning. Although department heads meet on a monthly basis to discuss curriculum implementation, there is no definite time reserved for teachers to fully review student learning and performance. With the exception of the curriculum issued by the school district to department heads, there is no current avenue for teachers to explore advances in student learning. The regular use of departmental and school-wide rubrics in conjunction with adjustments in the schedule to make time for teacher collaboration will allow the staff to more effectively address student learning. *(teachers, department leaders, student work)*

The school staff is involved in promoting the well-being and learning of students. Students report many teachers staying well past the end of the school day to ensure that students have needed help to learn required subject matter. Pupil services faculty members work closely together to assist students in need. Mediation is available for students with emotional and personal issues as well as those students in crisis. The

guidance department assists in academic problems. The department reports a major increase in responsibilities as a result of the loss of one guidance counselor. Although staffing in this area is clearly dedicated to student achievement and well-being, these departments are severely overloaded with clerical duties and hampered by the lack of basic technology. The loss of a guidance counselor and absence of a clerical position as well as the lack of basic technology such as additional phone lines and a fax machine hamper the guidance department's effectiveness. As a result, a comprehensive effort to assist student achievement and well-being exists but does not function effectively. *(student support staff, students, parents)*

The success of students is acknowledged at Burncoat High School. The principal regularly shares student accomplishments through the faculty bulletin and the use of school-wide announcements. Student artwork is displayed throughout the building, in some cases permanently. The JROTC program regularly recognizes student success by awarding trophies and plaques, some of which are displayed in common areas. Athletic achievements awards are well represented throughout the building. Home offices award student of the month and outstanding office aids. Student pictures are displayed inside the respective house offices. *(teachers, school leadership, self-study)*

The school climate appears safe, positive, and supportive of students and expresses a sense of pride and ownership. Although the facilities are old and quite worn in places, the common areas such as hallways and bathrooms appear relatively clean and free of student graffiti, an observation suggesting school pride and ownership among the student body. A large majority of students and teachers reports feeling safe in the Burncoat environment. Hallways are carefully monitored by teachers and administrators and the use of student backpacks and electronic devices is not allowed, all contributing to parents' report that they feel their children are safe during school hours. Faculty and staff members stand in the hallways during passing times, allowing for a safe and regular traffic flow, and few students are visible in the hallways during class periods. Student adjustment counselors, psychologist, nurses, guidance counselors, and the school safety officer carry out proactive and reactive measures which contribute greatly to student safety and academic achievement. While survey data collected one and one-half years ago revealed that only 22% of the students respects the faculty and 30% is proud of their school, significant progress has been made in the past two years under the new school administration. School climate is vastly improved and considerable mutual respect is evident along with increased pride in the cultural diversity of the student body. Although the multiple points of entry at BHS present a school security issue the student body feels safe, student-faculty relations are familial, and the school climate is very positive. *(teachers, parents, Endicott Survey)*

The school board's cooperative efforts to support, to create, and to implement the BHS Mission Statement and Expectations for Student Learning are representative of their commitment to the well-being of students at BHS. The board's mission statement focuses on students and the value of education by emphasizing the connection among students, parents, educators, and citizens. The school board has worked with the superintendent to develop a communications protocol committee which brings together law enforcement and juvenile justice agencies. While the school board works to understand and anticipate the many needs of BHS students, the school board and central office administration acknowledge a lack of adequate funds district-wide and recognize

the school's limitations in meeting the fundamental needs of a 21st century school. This lack of funds limits the realization of the high expectations for student achievement outlined in the school's own mission statement. *(school committee, central office administrators, facility tours)*

Commendations

1. The administrative team's ability to create a safe and orderly school climate in which the school can better meet expectations for student learning
2. The principal's innovative and effective leadership in light of inadequate resources
3. The principal and vice principal's consistent enforcement of student behavioral expectations
4. The successful creation of ninth grade teams to encourage personalization of learning
5. The effective work of adjustment counselors, guidance counselors, the nurse and the school psychologist to deal effectively with students in crisis and to respond proactively to at-risk students
6. The dedication of school personnel, parents, and community stakeholders to the growth and development of the students and a positive school climate

Recommendations

1. Expand efforts to increase heterogenity in courses at all levels
2. Increase minority student participation in honors and AP courses
3. Implement a formal ongoing program through which each student has a personal adult advocate in addition to the school guidance counselor
4. Strengthen school board effectiveness in procuring funds for educational improvements

SUPPORT STANDARD

School Resources for Learning

Student learning and well-being are dependent upon adequate and appropriate support programs and services. The school is responsible for providing an effective range of integrated resources to enhance and improve student learning and well-being and to support the school's mission and expectations.

All Student Support Services

1. The school's student support services shall be consistent with the school's mission and expectations for student learning.

2. The school shall allocate resources, programs, and services so that all students have an equal opportunity to achieve stated civic and social expectations.

3. Student support personnel shall enhance student learning by interacting and working cooperatively with professional and other staff and by utilizing community resources to address the academic, social, emotional, and physical needs of students.

4. All student support services shall be regularly evaluated and revised to support improved student learning.

5. There shall be a system for effective and ongoing communication with students, parents/guardians, and school personnel, designed to keep them informed about the types of available student support services and identified student needs.

6. Student records, including health and immunization records, shall be maintained in a confidential and secure manner consistent with federal and state law.

7. There shall be sufficient certified/licensed personnel and support staff to provide effective counseling, health, special education, and library media services.

Guidance Services

8. The school shall provide a full range of comprehensive guidance services, including:

- individual and group meetings with counseling personnel;
- personal, career, and college counseling;
- student course selection assistance;
- collaborative outreach to community and area mental health agencies and social services providers;
- appropriate support in the delivery of special education services for students.

Health Services

9. The school's health services shall provide:

- preventive health services and direct intervention services;
- appropriate referrals;
- mandated services;
- emergency response mechanisms;
- ongoing student health assessments.

Library Information Services

10. The library/information services program and materials shall be fully integrated into the school's curriculum and instructional program.

11. Library/information services personnel shall be knowledgeable about the curriculum and support its implementation.

12. A wide range of materials, technologies, and other library/information services that are responsive to the school's student population shall be available to students and faculty and utilized to improve teaching and learning.

13. Students, faculty, and support staff shall have regular and frequent access to library/information services, facilities, and programs as an integral part of their educational experience before, during, and after the school day.

14. The library/information services program shall foster independent inquiry by enabling students and faculty to use various school and community information resources and technologies.

15. Policies shall be in place for the selection and removal of information resources and the use of technologies and the Internet.

Special Education Services

16. The school shall provide special education services related to the identification, monitoring, and referral of students in accordance with the local, state, and federal laws.

SCHOOL RESOURCES FOR LEARNING

Conclusions

Burncoat High School Student Support Services have been developed and refined in response to students' needs and the goals expressed in the school's mission and expectations for student learning. Resources, programs, and services are allocated so that students have an opportunity to achieve the school's stated academic expectations for student learning and are allowed to participate in the educational program in a number of ways. The guidance department provides a wide range of services to all students although its effectiveness has been compromised by the recent cut of a counselor. The special education department services approximately 23% of the student body, and the recent addition of another special education teacher has facilitated that endeavor. The health center staff effectively serves student health needs. The media center personnel work diligently to provide those services required by a comprehensive high school. However, staffing levels are inadequate, as is the facility, the budget, and the availability of computers and other technology. Consequently, resource allocation does not

consistently support all students and all facets of the school mission. *(classroom observations, school support staff, self-study)*

Burncoat High School adequately personalizes the student educational experience by varying means, allocating programs and services tailored to enable all students to achieve the academic expectations for student learning. The school makes efforts to engage students in the educational program and services. Burncoat offers several programs for gifted students, such as an extensive advanced placement program, an honors program, access to Virtual High School, and several partnerships with local institutions, particularly College of the Holy Cross and Quinsigamond Community College. There are other programs to assist and challenge students exist as well. AVID support attempts to move students up a level or two to advanced level classes. The Air Force Junior Reserve Officer Training Corps is another organization that engages students. There is a number of offerings to provide academic support: COAST is a specialized approach to assist students on the autism spectrum; STEP is a class to assist students with severe emotional or behavioral problems. Guidance provides a number of services as well and is assisted by local college student volunteers who provide tutoring services. The health services provide childcare for student parents, allowing them to continue their schooling. There is, however, no advisor or mentoring program which could further the personalization of the students' education, support student achievement, and improve home/school contact to mitigate the drop-out rate. *(panel presentation, self-study, school resources committee).*

Guidance counselors, school nurses, special education teachers, and paraprofessionals work cooperatively with each other and with other faculty members to address the academic, social, emotional, and physical needs of students. Counselors share important information with the staff in order to help all students succeed. The librarian works collaboratively with all departments to assist in research projects and provide instruction as appropriate. The health center provides prevention health services and training in relevant issues such as blood borne pathogens. Social and emotional support is provided by the guidance department and the school's adjustment counselors in conjunction with regular education teachers. These school departments often work with or refer to community agencies. Counselors and nurses refer to outside agencies as required for issues such as eating disorders and family dysfunction. The school's library media specialist utilizes outside agencies and libraries regularly to procure material not in the Burncoat library. Students also have the opportunity to receive additional academic support. There is The Community College Connection and Upward Bound sponsored by Clark University. Holy Cross provides tutors during the academic day and maintains an after school program for those students seeking extra help. These are just a few of the programs available to students in the community that contribute to the effort to ensure student success. *(staff and faculty members, parents, panel presentation)*

There is no formal evaluation system for the various support services. There is anecdotal evidence from teachers and administrators that the health center services are effective, but there's no comprehensive evaluation process based on data. Guidance counselors are evaluated individually, and there is anecdotal evidence that the department is effective, but there is no data-supported program evaluation process. Special education teachers are observed by a department head and evaluated by administrators, but the evaluation of the overall effectiveness of the department is lacking. The state authorities audit special

education services and compliance, but they report their findings to the central office. That is shared with teachers at monthly meetings. There is anecdotal evidence that the media center director is effective, given the resources she has to work with, and she too is evaluated. However, there is no formal evaluation of the effectiveness of the media center program. Thus, a complete system of program analysis would benefit all areas of student support services, particularly in view of the always tight budget restraints. *(principal, self-study, teachers)*

The Burncoat High School support services utilize a number of effective and continuous communications systems with students, parents/guardians, and school personnel designed to keep them informed about the types of available student support services and about student needs. Information regarding various student support services is distributed at the annual open house for incoming freshmen. Career workshops, college applications, and financial aid workshops are held every year. Course selection information is provided to students, but there is no course selection handbook available for students to bring home. The special education department has regular contact with parents to discuss progress with their students' individualized education plans. Updates are sent home as required. There is a "Know-Your-School" night held in October. The health center distributes health and wellness information that they create as well as information from the city and state regarding issues such as vision, immunizations, and teen pregnancy. "Connect Ed" is a communication system that allows the principal to contact all families via telephone to inform them of important events or issues. These announcements are often made in Spanish as well as English. *(teachers, parents, self-study)*

Student records are maintained in a confidential and secure manner consistent with federal and state law. Current academic records are kept in locked files in the house offices. This information is also available on a secure data management site. Records of graduates are kept in locked files in the main office. Medical files are kept in the health suite, and IEPs are kept in locked files in the house offices as well as in secure databases online. However, file cabinets are often left unlocked resulting in a potential compromising of confidentiality. *(teachers, principal, self-study)*

In general, Burncoat High School has been able to provide sufficient certified/licensed personnel in the areas of school support staff. The health center has a full-time registered nurse and a full-time registered nurse practitioner. These professionals, in conjunction with a full-time secretary/receptionist allow the health services center to function smoothly, adequately meeting student needs. There are four certified guidance counselors, two certified adjustment counselors, one school psychologist assigned to Burncoat part-time, and a full-time talent search advisor, all of whom do an admirable job of providing a myriad of services which focus on assisting students. However, the recent loss of a guidance counselor to budget cuts has severely impacted their workload, counselor to student ratio, and effectiveness. It is particularly important to provide a bi-lingual guidance counselor to assist the large percentage of Spanish speaking students. The special education department has 15 certified special education teachers and 20 instructional aides who provide support in the classroom. Almost half of the special education teachers, however, are in self-contained classrooms. The staff members following students to regular education classrooms are stretched to the limit and have been unable to provide classroom support to all who need it. An additional special education teacher or multiple instructional assistants are essential to meet all students'

needs. The media center staff consists of one certified media director and one aide who may or may not remain assigned there. Despite the assistance provided by student assistants, this is inadequate. There are two computer labs that require supervision; frequent visits from teachers and their classes requiring assistance or instruction from the librarian, and the routine student visits that require attention. It is difficult for two people to provide these services or supervision adequately when one of the computer labs is in a separate room. In addition, the librarian is responsible for computers and audiovisual equipment in the school. Such staff shortages make it difficult to deliver adequate student services to a challenging urban environment of broad cultural diversity. *(parents, principal, teachers)*

Burncoat High School provides a full range of guidance services. In addition to providing academic counseling, including course selection and post-high school planning, counselors serve on individual education planning committees for their assigned students. Guidance counselors utilize the Missouri Model for a Comprehensive Guidance Program in an effort to create systematic developmental guidance programs. Counselors offer ninth grade seminars, tenth grade career exploration seminars, eleventh grade career and college workshops and twelfth grade seminars throughout the year. They serve on student support teams and attend 504 and IEP meetings. They help to proctor AP, PSAT, and MCAS exams. Additionally, they and the school adjustment counselors make and maintain relationships with and make referrals to outside agencies as the need arises in the areas of substance abuse, eating disorders, depression, and pregnancy among others. An educational talent advisor serves as a representative of the Colleges of Worcester Consortium, Inc. This person is responsible for identifying and assisting low income and/or first generation students to meet the standards for college admission. This person also assists students in the application process and in navigating the financial assistance process. The services provided are extensive. The loss of a guidance counselor causes additional stress to the hard working personnel who attempt to provide services to students of diverse cultures while dealing with an exorbitant counselor to student ratio. *(teachers, parents, students)*

The school's health services are well-served by the Burncoat High School Health Center located in the middle school. It works in conjunction with the Great Brook Valley Health Center. The facility consists of a reception area, two nurses' offices, two examination rooms, a lab, an office for the nurse practitioner, and two other rooms each containing two beds. Additionally, there are two adjustment counselors housed in the health services area. Health services personnel see students regularly for routine ailments, complaints, and illnesses. Additionally, they provide physical exams for new students and athletes. The nurse practitioner provides appropriate immunizations at no cost. Personnel also handle the following required annual screenings: scoliosis, visual, hearing, and posture. They also make referrals to the school adjustment counselor or appropriate agencies for issues such as depression, substance abuse, physical abuse, eating disorders, and others. The school's health services are an integral partner with teachers in trying to ensure student success. *(teachers, principal, self-study)*

Burncoat High School Library Media Services provides an active program using with-in and out-of-house materials that are fully integrated in the curriculum. The full-time librarian interviews and surveys the students and faculty for needs. Then, using extremely limited funds, she provides for the various studies in the school. She created

and instructs classes on writing and a research course in all subject areas. In conjunction with the other librarians in the Worcester City School District, she recently wrote a grant that provided a substantial amount to enable her to make a significant upgrade on research materials for the school in all curricula as well as a electronic white board and one laptop. However, because of the small size of the library and the lack of availability of space, since the library is closed for MCAS and on-line MAP testing for approximately ten weeks out of the school year, the materials are not as accessible for integration into all courses as they should be. The use of the library as a testing area limits the integration of the library into curriculum and instruction. *(teachers, support staff, self-study)*

The library media specialist (LMS) at Burncoat High School makes extraordinary efforts to be knowledgeable and supportive of the curriculum. When she has the financial opportunity to purchase materials, she will contact the department heads and faculty members soliciting recommendations on needed materials. Because of space constraints, she requires the faculty to reserve the library computers, the library at large, and the attached computer lab. She has a list of print and non-print materials of interest to the students, faculty members and administrators that support the various curricula. If the material is not in the library, she will retrieve the material personally from the local Worcester City Libraries or through interlibrary loan using Central Massachusetts Regional Library System (CMRLS). She instructs students on research strategies using the databases available to libraries employing certified school library media specialists. The library provides a curriculum on research and thesis writing and book censorship and assists student and faculty members' research retrieval. The library media personnel are very knowledgeable about and supportive of the curriculum. *(teachers, students, department leaders)*

Burncoat High School Library houses the majority of school-wide available laptop computers (25), library and computer-lab desktop computers (55), SMARTBoards (3), portable televisions with VCR/DVD, and overhead projectors. The librarian maintains an independent library website with links to the school website, the school automated library catalog, and the various databases available through the Massachusetts Board of Library Commissioners and CMRLS. As much as possible, the materials are kept up to date including pleasure reading, periodicals, reference, audio books, DVDs, and videos supporting the curriculum. Interlibrary loan is strongly depended upon. Students, faculty members and administrators are all encouraged to utilize and recommend materials. Much of this is done with uncertain funding and an uncertain guarantee of information assistance from paraprofessionals. Periodical offerings are limited and uncertain as well. Additional website accessibility; technological aid, repair, and availability; and funding for current materials are unsure. The library and computer lab are unavailable for the equivalent of one quarter of the school year. There are no other computer labs or in-class or mini-labs available in the school for 1,200 students. Thus, there is not an acceptable range of materials, technologies, and other library/information services available to students and faculty to improve teaching and learning. *(classroom observations, teachers, self-study)*

The library hours provide the students and faculty members with additional access time, opening an hour early before school (6:30 in the morning) and closing an hour after school often after 2:30 – 3:00 p.m. Through a grant in the past, three used to be

additional hours on Saturdays once a month from 8a.m. to noon. Transportation is an issue, however. School bus transportation limits the length of after school stays to a much shorter time. The librarian is able to distribute Worcester City Bus passes allowing students from across the city to take advantage of the extended hours, but the number of tickets is finite. The librarian and 'loaned' assistant collaborate to facilitate full use of the library and labs as much as possible, but they have little recourse when MCAS and MAP testing is being done. When available, the library and adjacent computer lab willingly host several classes at once becoming dangerously crowded with students and furniture proving too small for sometimes up to 135 students. The library space and time inadequacy provides only limited support to the students, faculty, and support staff as part of their school day. *(teachers, survey information, students, teacher interviews)*

The Burncoat High School Library/Information Services program provides unlimited access to materials through membership to the Massachusetts Board of Libraries System, CMRLS, and the local school library website. Locally, the library distributes pamphlets that invite and instruct students and faculty members on use of the resources available. The librarian takes advantage of classroom projects to instruct classes on the wide variety available to them using a hands-on educational approach. Although time and space may be limited periodically, the LMS takes advantage of every opportunity to foster independent learning and create lifelong learner and information seekers. The library, though limited in size and time, adequately attempts to foster independent and lifelong learners. *(students, teachers, department leaders)*

The library has policies created for selection and removal of information but is still waiting for approval from the Worcester Public Schools. It has Use of Technology and Internet policies and a form that students, faculty, and staff must sign. *(teachers, self-study)*

Burncoat High School provides a full range of special education services related to the identification, monitoring, and referral of students in accordance with local state and federal laws. A student referral can be made by a parent, teacher, guidance counselor, or student. Referrals typically go through the student support services program to the special education department. Student referrals, evaluations, and development of the IEP follow applicable state and federal regulations, as does the implementation of student services. While there are several teachers and students assigned to resource rooms for content area instruction, there are some teachers and aides who work with students who are included in regular education classrooms. There is little common planning time to allow regular education and special education teachers to collaborate on lessons and instruction. However, regular education teachers consider the advice of the special education teachers in making modifications to instruction and assessments. Despite the lack of team-taught classes, teachers make considerable effort to provide for the education of all students in the least restrictive environment possible. *(classroom observation, teachers, school resources committee)*

Commendations

1. The substantial services offered by the library media specialist to support the faculty and support the curriculum despite inadequate facility and inadequate funds

2. The comprehensive health services available to Burncoat students

3. The opportunity for students to benefit from the varied community resources

4. The effective deployment of the guidance staff, consisting of guidance counselors, adjustment counselors, a talent search person, and a psychologist

5. The extraordinary efforts of the special education teachers in addressing the needs of students in a culturally diverse and economically challenged environment

6. The specialized programs and services utilized to address student needs

7. The extraordinary efforts to inform parents and engage them in school matters

8. The ability of the staff to responsibly utilize the limited resources

Recommendations

1. Ensure that staffing is optimal to provide essential services in the media center

2. Ensure that the staffing of special education is optimal to provide support for inclusion students

3. Ensure the staffing is optimal in the guidance department to serve all students and particularly the Spanish speaking students

4. Establish an advisory system with a curriculum and professional development for advisors or other equivalent to further personalize the educational experience for all students and reduce the drop-out rate

5. Cease using the library media center for standardized testing, which undercuts access to LMC resources for the entire student body

6. Ensure that all student support services are evaluated and revised on a regular basis to support student learning and the school mission

SUPPORT STANDARD

Community Resources for Learning

Active community and parent participation, facilities which support school programs and services, and dependable and adequate funding are necessary for the school to achieve its mission and expectations for student learning.

1. The school shall engage students and families as partners in each student's education and shall encourage their participation in school programs and parent support groups.

2. The school shall foster productive business/community/higher education partnerships that support student learning.

3. The school site and plant shall support and enhance all aspects of the educational program and the support services for student learning.

4. The physical plant and facilities shall meet all applicable federal and state laws and shall be in compliance with local fire, health, and safety regulations.

5. Equipment shall be adequate, properly maintained, catalogued, and replaced when appropriate.

6. A planned and adequately funded program of building and site management shall ensure the appropriate maintenance, repair, and cleanliness of the school plant.

7. There shall be ongoing planning to address future programs, enrollment changes, staffing, facility, and technology needs as well as capital improvements.

8. The community and the district's governing body shall ensure an adequate and dependable source of revenue to provide and maintain appropriate school programs, personnel, services, facilities, equipment, technological support, materials, and supplies for student learning.

9. Faculty and building administrators shall have active involvement in the budgetary process, including its development and implementation.

COMMUNITY RESOURCES FOR LEARNING

Conclusions

Buncoat High School (BHS) engages parents in the students' education while encouraging parent participation and support through various community events. The BHS Spring Open House for incoming freshmen, Know Your School Night, the AVID (Advance Via Individual Determination) program for underachieving students, and The Beacon school newspaper which highlights various student work, inform families of activities and testing schedules. BHS is proud of its award-winning magnet school for the visual and performing arts. The booster club is very supportive of athletics at BHS. Two BHS adjustment counselors provide family to school support through home visits and other community liaison activities. Parent involvement at the school appears to vary depending on the event. One recent event that produced a high degree of parent involvement and success through its endeavor was the *Beetle Battle* fundraising effort which produced a high community turnout while raising a net total of $4,000. Also, Connect-Ed is an automated phone system used to inform and encourage families to

attend school events. This information is conveyed almost exclusively in English, however. The system has been used sparingly for the 1/3 of the school population whose native language is Spanish. Although the school attempts to engage parents by providing a lot of information and opportunities, there is still room for growth in parent involvement. *(self-study, principal, teachers)*

BHS fosters ongoing partnerships with businesses in the community and the area colleges in the greater Worcester community. It fully takes advantage of the Worcester Consortium Talent Search Program that provides a member to facilitate and assist families and students with the college application process. Hanover Insurance Company is the major sponsor of the AVID program where students and parents work collaboratively and sign a contract with Assumption College to support all of the AVID requirements. BHS has developed numerous partnerships with local businesses providing opportunities for its students to participate in internships or clubs during or after school and in the summer. Business partnerships include McDonalds, Target, Price Chopper, Wild Willy's, and Southgate Nursing Home. Other partnerships available are the Student Program for Urban Development (SPUD), a robotics club supported and supervised by Worcester PolyTech Institute (WPI). The robotics team is a member of the science initiative, For Information and Recognition of Science and Technology (FIRST). UMASS BioTech hosts a summer research program, and the Junior ROTC provides students with an alternative for involvement in school and community activities. Over the years, BHS has built a strong foundational relationship with the College of Holy Cross through the use of a dedicated teacher liaison who provides support to Burncoat students enrolled in the program. Both institutions are committed to the success of this program for the high school and college students involved. These college students are actively involved in the academic growth of BHS students. Currently, the partnerships provide many opportunities for BHS students to be productive members of the community. *(self-study, parents, panel presentation)*

The school site and plant does not adequately support or enhance all aspects of the educational programs or support services for student learning. Although the students and staff report that they feel safe at school, the inadequate space leads to overcrowded halls, cafeteria, and in some cases, classrooms. The lack of space forces the nurse to share the middle school health center. There is no space available for large group meetings, and the middle school auditorium is not available for daily use. A shortage of classrooms leads to an excessive amount of class sharing, so that teachers lack personal space for class preparation. The facilities are outdated (built in 1964), and the absence of a specific improvement plan creates a less conducive learning environment. Science labs are obsolete and ill-equipped for students. The lack of library space limits the number of classes able to use its services each period. A vision for a building addition to accommodate the overcrowded population and lack of general space would help to rectify the current limitations. While the three lunch waves help to decrease the overcrowding in the undersized cafeterias, teaching and learning are interrupted in classes where they're split by the second lunch wave. Also, the weight room is not accessible to female students as it is located in the boys' locker room. The gym divider has not worked for seven years and is in desperate need of repair. Additionally, the shower in the boys' locker room must be made operable since BHS serves as an emergency shelter for the city of Worcester. Despite the current facility's limitations, the faculty continues to offer a number of valuable educational opportunities to its students. With a new auditorium

and more classroom space, BHS, which is a magnet school for the arts, would have an opportunity to share with the community the pride it has in this program. Despite all attempts to do so, the present facility simply can no longer support the total mission of the school. *(self-study, faculty tour, custodians, teachers)*

The physical plant and facilities meet many but not all federal and state laws and are not fully in compliance with local fire, health, and safety regulations. BHS has a district-wide inspection plan that is conducted every July where all fire, health, and safety equipment is certified by the respective local departments. The emergency generator is tested, and the results are documented weekly by the head custodian in order to maintain proper working condition. However, some classes, science labs, and the school library seem to violate the fire and safety codes regarding overcrowding. The school is not handicapped compliant according to ADA regulations. All ramps violate the pitch ratio and lack handrails. The school has no elevator. Efforts have been made to accommodate particular students needing to access a particular area of the school, such as a recent renovation to make a bathroom handicapped accessible. The school complies with the immediate needs of the building to accommodate students. As a result, BHS is not readily conducive to the teaching and learning of handicapped students and is uncomfortably crowded for all others. *(self-study, facility tour, buildings and grounds administrators)*

The school is neither adequately equipped, nor properly maintained. However, equipment is adequately catalogued and is usually replaced when appropriate. All audio/visual (AV) equipment is catalogued by the school librarian. Each item is bar coded by the automation system. AV equipment is replaced according to need and budget. Maintenance is performed on equipment as needed, or it is discarded if it is found to be beyond repair. There is a system by which the librarian, department heads, and classroom teachers conduct an annual inventory to ensure accountability and proper maintenance of these items. This report is shared with the head custodian, the instructional technology (IT) coordinator, and the assistant principal in regards to all classroom or workspace needs as well as computer issues at the end of the school year. The absence of a district capital plan for technology for the purpose of purchasing new and replacing old computers does not support the district's mission and expectations for the use of technology in the classroom. Also, because of budget cuts, the technology liaison is shared by five different schools and is available one day each week to service and repair items. The principal reports that he is available as needed, however. The teacher's resource room is inadequately equipped with updated computer technology. Although current equipment is adequately catalogued and maintained, the lack of updated equipment in the teachers' resource room limits teaching and learning material research. *(self-study, teachers, observations)*

The custodial plan is inadequately funded for building and site management and does not ensure the appropriate maintenance, repair, and cleanliness of the school plant. The school does not have an adequate funding source for maintenance requests. Repairs are completed on an as-needed basis according to the priority of safety issues. The school has adopted a maintenance request system by which repair requests are not addressed in a timely manner due to budget constraints. It has been reported that a lack of cleanliness is a major concern among the members of the faculty and student body. However, there is a monthly evaluation of building cleanliness report submitted by the principal to the quadrant manager. Additionally, BHS is commended for a timely replacement of an

essential piece of equipment. For example, a broken auto lift in the automotive shop was recently replaced. The budget is neither adequate nor sufficient to support the upkeep of the aging facilities. The custodial schedule of two staff members during the day and three at night is inadequate for a building of this size. The combination of these issues has a negative impact on the morale of teachers and students. *(self-study, teachers, students, observation, facility tour)*

The district currently fails to address future programs, staffing, facility, and technology needs. The district has a formal plan to address future staffing needs, the overcrowding of BHS, and the facility upgrades that are necessary to provide technology for the 21st Century. However, it has yet to be implemented with the exception of wireless technology in the library/media center. Also, school's largest program, the magnet school for dance, voice, theater, and art must plan, organize, and fundraise a significant portion of its budget. Teaching and learning in the classroom is negatively impacted by the district's failure to plan effectively and to provide sufficiently. *(self-study, central office administrators)*

The community and its governing body do not provide an adequate, dependable source of revenue to provide and maintain appropriate programs, personnel services, facilities, equipment, technological support, materials, and supplies for learning for BHS. The current budget does not provide adequate staffing to maintain academic programs at BHS. The special education department and the ELL and TBE departments are experiencing a growing population of students and are in need of additional instructional staff. The science department lacks sufficient updated textbook resources. The principal is allotted a specific amount of funds for his school's programs and facilities then asks the department heads for a prioritized list of needs. His decision on how to spend the money is then based on the most important needs first. The faculty needs an additional guidance counselor, a library/media assistant, and at least one additional guidance counselor due to the high student to staff ratio for an urban setting. A guidance clerical secretary is needed to support the staff. The district should develop a comprehensive plan to address facility issues such as overcrowding at BHS by means of an addition where there is an auditorium, guidance office with conference rooms, a library, and improved physical education area. Additionally, phones are not available to teachers and guidance counselors, leading to loss of confidentiality. The current facilities may be utilized as additional classroom space. The faculty notes a need for an in-house technology committee to address the immediate needs of the staff at BHS as well as to act as a liaison with the district IT department. The school needs to update technology in the classrooms as quickly as possible. The superintendent's office allocates monies to the principal's budget based on a set formula for high schools. It is currently $63 per student with additional funds being allocated specifically to the magnet school. An effort should be made by the school to generate community support for additional space at BHS. The district's inability to provide an adequate and dependable source of revenue to BHS prevents its continued growth in these areas. *(self-study, principal, teachers, classroom observations, facility tour, survey responses)*

Faculty and building administrators are not actively involved in the budgetary process. The building principal has a very limited role in the budgetary process as it is developed at the central office. District priorities dictate the allocation of these funds. The principal accepts requests from the department heads for items based on needs from their teachers,

but the librarian does not have a formal protocol to make budget requests. The principal then prioritizes these requests by needs. It appears that the use of data regarding student learning needs is not considered in the budget development by central office personnel. *(self-study, principal, department chair)*

Commendations

1. The utilization of the local colleges and their involvement within the school setting

2. The role of the adjustment family counselors' proactive outreach into the community

3. The strong sense of neighborhood community pride fostered by school community relations

4. The spacious, well-developed outdoor site for the athletic facilities for athletics and physical education

Recommendations

1. Develop and implement a comprehensive plan to remedy shortcomings that undermine the school site and plant's ability to support and enhance all aspects of the educational program including remedies for:
   - Insufficient classroom spaces to support curriculum and instruction
   - Overcrowded halls, cafeteria, and library media center
   - The lack of adequate spaced to support the delivery of nursing/health services
   - The lack of an auditorium or equivalent area for large group meetings and/or to support the school's art magnet programs
   - Obsolete science laboratories that impede the delivery of effective curriculum and instruction
   - The lack of sufficient library space for whole class use of the library
   - The inoperable gym divider that impedes the delivery of effective PE curriculum and instruction
   - Plumbing and electrical serves in need of significant repair

2. Ensure that the school facilities meet all provisions for handicapped accessibility and gender equity and school safety by providing remedies for the following shortcomings:
   - Lack of handicapped accessibility to all areas of the facility
   - Lack of accessibility to the facilities of the weight room for both male and female students
   - Inoperable showers in the boys' locker room

3. Conduct a needs assessment and develop and fund a long-term technology plan that fully supports the school's curriculum and instruction as regards the purchase of equipment, provision of personnel, and maintenance of equipment

4. Adequately fund the district plan for building maintenance to ensure sufficient personnel, supplies, and equipment appropriate for maintenance, repair and cleanliness of the school plant

5. Fund and implement plans to ensure sufficient staffing, facility, and technology needs to ensure ongoing support through public funds of teaching and learning at Burncoat High School

6. Provide an adequate and dependable source of revenue to enable the school to maintain appropriate school programs, personnel, services, facilities, equipment, technological support, materials, and supplies for student learning, specifically addressing the following:
   - Adequate staffing to preserve reasonable class sizes and honor class size limits
   - Appropriate personnel to serve the needs of English Language Learners and bi-lingual education
   - Sufficient updated textbooks and supplies to support science curriculum and instruction
   - Sufficient clerical services in guidance to allow guidance personnel to focus on professional endeavors
   - Sufficient access to telephones in areas that provide confidentiality

7. Develop a budgeting process that actively involves faculty and building administrators in budget development and implementation

8. Provide sufficient technology in computer labs to fully support curriculum and instruction

9. Provide sufficient classroom technology to support teaching and learning, such as electronic whiteboards, computers and peripherals, calculators and computer projection

FOLLOW-UP RESPONSIBILITIES

This comprehensive evaluation report reflects the findings of the school's self-study and those of the visiting committee. It provides a blueprint for the faculty, administration, and other officials to use to improve the quality of programs and services for the students in Burncoat High School. The faculty, school board, and superintendent should be apprised by the building administration yearly of progress made addressing visiting committee recommendations.

Since it is in the best interest of the students that the citizens of the district become aware of the strengths and limitations of the school and suggested recommendations for improvement, the Commission requires that the evaluation report be made public in accordance with the Commission's Policy on Distribution, Use, and Scope of the Visiting Committee Report.

A school's initial/continued accreditation is based on satisfactory progress implementing valid recommendations of the visiting committee and others identified by the Commission as it monitors the school's progress and changes which occur at the school throughout the decennial cycle. To monitor the school's progress in the Follow-Up Program, the Commission requires that the principal of Burncoat High School submit routine Two- and Five-Year Progress Reports documenting the current status of all evaluation report recommendations, with particular detail provided for any recommendation which may have been rejected or those items on which no action has been taken. In addition, responses must be detailed on all recommendations highlighted by the Commission in its notification letters to the school. School officials are expected

to have completed or be in the final stages of completion of all valid visiting committee recommendations by the time the Five-Year Progress Report is submitted. The Commission may request additional Special Progress Reports if one or more of the Standards are not being met in a satisfactory manner or if additional information is needed on matters relating to evaluation report recommendations or substantive changes in the school.

To ensure that it has current information about the school, the Commission has an established Policy on Substantive Change requiring that principals of member schools report to the Commission within sixty days (60) of occurrence any substantive change which negatively impacts the school's adherence to the Commission's Standards for Accreditation. The report of substantive change must describe the change itself and detail any impact which the change has had on the school's ability to meet CPSS Standards. The Commission's Substantive Change Policy is included in the Appendix of this report. All other substantive changes should be included in the Two- and Five-Year Progress Reports and/or the Annual Report which is required of each member school to ensure that the Commission office has current statistical data on the school.

The Commission urges school officials to establish a formal follow-up program at once to review and implement all findings of the self-study and valid recommendations identified in the evaluation report. An outline of the Follow-Up Program is available in the Commission's *Accreditation Handbook* which was given to the school at the onset of the self-study. Additional direction regarding suggested procedures and reporting requirements is provided at Follow-Up Seminars offered by Commission staff following the on-site visit.

In closing, the visiting committee wishes to express its deep appreciation for the hospitality, warmth, and courtesy extended so graciously by the students, parents, teachers, and administrators associated with Burncoat High School. Moreover, the hard work and the quality of the self-study conducted by the faculty and staff at Burncoat High School was extremely helpful and contributed greatly to the completion of the visiting committee's work.

APPENDIX A

NEW ENGLAND ASSOCIATION OF SCHOOLS & COLLEGES
Burncoat High School
May 3-6, 2009

VISITING COMMITTEE

Dr. W. Scott Brown
LEARN Reg. Ed. Service Center
44 Hatchetts Hill Road
Old Lyme, CT 06371

Catherine Doherty
Chelsea High School
299 Everett Avenue
Chelsea, MA 02150

Roberta Fulton
Westbrook High School

Alyson Geary
Hopkinton High School
90 Hayden Rowe Street
Hopkinton, MA 01748

Luis Macedo
Hudson Public Schools
69 Brigham Street
Hudson, MA 01749

Katy Kwong
Malden High School

156 McVeagh Road
Westbrook, CT 06498

Wendy Adamczyk
Haddam-Killingworth High School
95 Little City Road
Higganum, CT 06441

Kathleen Share
Mt. Greylock Regional High School
1781 Cold Spring Road
Williamstown, MA 01267

Geri Lyn Ajemian
Littleton Public Schools
P O Box 1486, 32 Shattuck Street
Littleton, MA 01460

Darren Hayden
Masuk High School
1014 Monroe Turnpike
Monroe, CT 06468

Stephen Bickford
265 Flanders Road
Stonington, CT 06378

77 Salem Street
Malden, MA 02148

Craig Perrier
Billerica Memorial High School
35 River Street
Billerica, MA 01821

Charlene Clinton
Andover High School
80 Shawsheen Road
Andover, MA 01810

Alan Cron
Milton High School
25 Gile Road
Milton, MA 02186

Jonathan Harder
Cromwell High School
Donald Harris Drive
Cromwell, CT 06416

APPENDIX B

NEW ENGLAND ASSOCIATION OF SCHOOLS & COLLEGES

Commission on Public Secondary Schools

SUBSTANTIVE CHANGE POLICY

Principals of member schools must report to the Commission within sixty (60) days of occurrence of any substantive change in the school which has a *negative impact* on the school's ability to meet any of the Commission's Standards for Accreditation. The report of a substantive change must describe the change itself as well as detail the impact on the school's ability to meet the Standards. The following are potential areas where there might be negative substantive changes which must be reported:

- elimination of fine arts, practical arts, and student activities
- diminished upkeep and maintenance of facilities
- significantly decreased funding
- cuts in the level of administrative and supervisory staffing
- cuts in the number of teachers and/or guidance counselors
- cuts in the number of support staff
- decreases in student services
- cuts in the educational media staffing
- increases in student enrollment that cannot be accommodated
- changes in the student population that warrant program or staffing modification(s) that cannot be accommodated, e.g., the number of special needs students or vocational students or students with limited English proficiency
- identification by the state as an underperforming school
- takeover by the state
- inordinate user fees

ATTACHMENT B

Designer Base Contract v February 2025(1)

Designer Contract Amendment CM-R v February 2025(1)

Designer Contract Amendment DBB v February 2025(1)

Designer Base Contract Exhibits v February 2025(1)

CONTRACT FOR DESIGNER SERVICES
(BASE CONTRACT FOR DESIGN BID BUILD OR CM at RISK PROJECT)

This Contract is made as of this _____ day of _____ in the year _____ between
(day) (month) (year)

the _____, _____
(Owner) (street)

_____, Massachusetts , _____
(City) (State) (Zip Code)

hereinafter called "the Owner" and _____
(Designer)

_____

_____, _____, _____, _____
(street) (city) (State) (Zip Code)

hereinafter called the "Designer" for the Designer to provide the designer services required to complete the Basic and Extra Services described herein at _____
(name/description of Project)

_____

_____

_____

The Designer is authorized to perform the services required by this Contract through the Feasibility Study Phase and, pending receipt of a written Approval to proceed from the Owner, through the Schematic Design Phase. At the Owner's option, the Designer may be authorized to perform services for subsequent design phases and/or the Construction Phases and Completion Phase, at which time a mutually agreed upon amendment to this Contract will be executed between the Owner and the Designer. If the Owner elects to construct the Project using the CM at Risk ("CM-R") construction delivery method pursuant to M.G.L. c. 149A, this Contract shall be amended using the Authority's Standard Amendment for CM-R, as it may be amended from time to time by the Authority. If the Owner elects to construct the Project using the Design-Bid-Build ("DBB") construction delivery method pursuant to M.G.L. c. 149, this Contract shall be amended using the Authority's Standard Amendment for DBB, as it may be amended from time to time by the Authority.

For the performance of the services required under this Contract for the Feasibility Study Phase and the Schematic Design Phase, and excluding those services specified under Articles 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, and 8.3, the Designer shall be compensated by the Owner for Basic Services in accordance with the Payment Schedule included as Attachment A.

Designer's Project Architect/Engineer: _____

The Subconsultants to provide services, either as Basic or Extra Services, to the Designer under this contract may include the following, as identified on the RFS:

	Name of Firm	Name of Principal	SDO Cert.
Educational Programming			
Civil Engineering			
Landscape Architecture			
Structural Engineering			
Architecture			
Fire Protection Engineering			
Plumbing Engineering			
HVAC Engineering			
Electrical/Lighting/			
Data/Communications			
Environmental Permitting			
Geotechnical Engineering			
Hazardous Materials			
Cost Estimating			
Kitchen/Food Service Consultant			
Laboratory Consultant			
Acoustical Consultant			
Specifications Consultant			
Library/Media/Audio Visual Consultant			
Technology Consultant			
Theatrical Consultant			
Sustainable/Green Design/Renewable Energy Consultant			
Code Consultant			
Accessibility/Universal Design Consultant			
Traffic Consultant			
Furniture, Fixtures, and Equipment Consultant			
Site Surveying			
Security Consultant			

IN WITNESS WHEREOF, the Owner and the Designer hereby agree to the terms of the Contract and have caused this Contract to be executed by their respective authorized officers or other authorized representatives.

OWNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date _____

DESIGNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date _____

TABLE OF CONTENTS

ATTACHMENT D LETTER OF INTERNAL CONTROL (DESIGNER)
ATTACHMENT E LETTER FROM CPA ON INTERNAL CONTROLS
ATTACHMENT F FORM OF DESIGNER CONTRACT AMENDMENT

ARTICLE 1: DEFINITIONS

All terms that this Contract defines may be used with or without initial capital letters. Other terms, abbreviations and references are defined as they appear herein. Words and abbreviations that are not defined in the Contract Documents but which have recognized technical or trade meanings are used in accordance with those meanings.

APPLICABLE LAWS – All applicable laws, statutes, ordinances, by-laws, codes, rules and regulations, of the Commonwealth of Massachusetts, its political subdivisions, and the Federal Government are applicable to the Project.

APPROVAL – A written communication from the Owner approving the work of the current Phase, as identified on Attachment A, or authorizing the Designer to proceed to the next Phase or approving the scope and compensation for either Extra Services or Reimbursable Expenses.

AUTHORITY – Massachusetts School Building Authority or its authorized representative, created by St. 2004, c. 208.

BASIC SERVICES – The scope of services to be provided by the Designer under this Contract, unless the Contract is otherwise terminated pursuant to Article 12, as described in Article 7 of this Contract, and as it may be amended pursuant to Article 18.4.

CERTIFICATE OF FINAL COMPLETION – The certificate prepared by the Designer and approved by the Owner to the effect that the Work has reached Final Completion.

CERTIFICATE OF SUBSTANTIAL COMPLETION – The certificate prepared by the Designer and approved by the Owner to the effect that the Work has reached Substantial Completion.

CHANGE ORDER – A written instrument prepared by the Designer and signed by the Owner, Owner's Project Manager, Contractor or CM at Risk, and Designer, stating their agreement on a change in the Construction Contract Documents, including, but not limited to, a change in the Contract Sum and/or Contract Time, and/or any other specification in the Construction Contract Documents.

COMMISSIONING CONSULTANT – A person or firm engaged by the Authority to provide building commissioning services, including advisory services during design, construction, construction completion, and post occupancy.

CONSTRUCTION CONTRACT DOCUMENTS – The Construction Contract Documents consist of the Owner-Contractor or Owner-CM at Risk Agreement, Advertisement, Instructions to Bidders, Bidding Documents, Contract Forms, Conditions of the Contract, Drawings, Plans, Technical Specifications, all addenda issued prior to execution of the Construction Contract, and

other documents approved after execution of the Owner-Contractor or Owner-CM at Risk Agreement relating thereto.

CONSTRUCTION MANAGEMENT AT RISK or CONSTRUCTION MANAGEMENT AT RISK SERVICES or CONSTRUCTION MANAGEMENT AT RISK DELIVERY METHOD or CM at RISK DELIVERY METHOD - A construction method described in M.G.L. c. 149A wherein a Construction Management at Risk firm provides a range of preconstruction services and construction management services which may include cost estimation and consultation regarding the design of the building project, the preparation and coordination of bid packages, scheduling, cost control, and value engineering, acting as the general contractor during the construction, detailing the Trade Contractor scope of work, holding the trade contracts and other subcontracts, prequalifying and evaluating Trade Contractors and subcontractors, and providing management and construction services, all at a Guaranteed Maximum Price, which shall represent the maximum amount to be paid by the public agency for the building project, including the cost of the work, the general conditions and the fee payable to the Construction Management at Risk Firm.

CONSTRUCTION MANAGER AT RISK, CONSTRUCTION MANAGEMENT at RISK FIRM or CM at RISK – The individual, corporation, partnership, sole proprietorship, joint stock company, joint venture or other entity with whom the Owner has contracted pursuant to M.G.L. c. 149A, §§ 6 & 7, to provide Construction Management at Risk Services.

CONTRACT – This Contract, inclusive of all Attachments, between the Owner and the Designer; all written amendments to this Contract; and all Approvals issued pursuant to this Contract.

CONTRACTOR OR GENERAL CONTRACTOR – The person or firm with whom the Owner has contracted pursuant to M.G.L. c. 149, §§ 44A-44M to perform the construction for this Project.

CONTRACTOR APPLICATION AND CERTIFICATE FOR PAYMENT – The form prescribed by the Owner which contains the Contractor's or CM at Risk's application or requisition for periodic or final payment for Work performed in accordance with the Construction Contract Documents and the Designer's certificate for payment as approved by the OPM and the Owner.

DESIGNER – The individual, corporation, partnership, sole proprietorship, joint stock company, joint venture or other entity identified as such on page one of this Contract performing architecture, landscape architecture, and/or engineering services under this Contract and which meets the qualifications set forth in M.G.L. c. 7C § 44.

DESIGNER SERVICES – The services to be performed by the Designer and its Subconsultants under this Contract, including developing and providing all data, designs, drawings, specifications, and estimates required for the Project.

DISTRICT – **see "OWNER."**

EXTRA SERVICES – Services requested by the Owner to be performed by the Designer, but

which are additional (or "extra") to the services performed as Basic Services.

FEASIBILITY STUDY AGREEMENT – The agreement between the Owner and the Authority that sets forth the terms and conditions pursuant to which the Authority will collaborate with the Owner in conducting a feasibility study, which agreement shall include the budget, scope, and schedule for the feasibility study.

FEE FOR BASIC SERVICES – The fee to be paid to the Designer for satisfactorily performing the Basic Services required under this Contract, exclusive of the compensation to which the Designer may be entitled pursuant to Articles 8 (Extra Services) and 9 (Reimbursable Expenses).

FINAL COMPLETION – The Work has been completed in accordance with the Construction Contract Documents and the educational specifications, schematic plans and drawings, and the Project Funding Agreement approved by the Authority.

FINAL DESIGN PROGRAM – A description of the programmatic, functional, spatial, and environmental requirements of the Project in written and graphic form indicating the scope of work and design requirements of the Project.

FINAL REQUEST AND CERTIFICATE FOR REIMBURSEMENT- The form prescribed by the Authority which contains the certification of the Designer, OPM, and the Owner that the Project has reached Final Completion.

GENERAL LAWS – The Massachusetts General Laws as amended, including any rules, regulations and administrative procedures implementing said laws.

GUARANTEED MAXIMUM PRICE or GMP - The agreed total dollar amount for the Construction Management at Risk services, including the cost of the Work, the general conditions, and the fees charged by the Construction Management at Risk firm.

GUIDELINES AND STANDARDS – Documents published by the Authority including regulations and procedures that supplement the tasks of Designers contracting with Owners for projects receiving any funding from the Authority, as they may be amended from time to time by the Authority.

MATERIALS – The designs, drawings, project manual specifications, and other materials prepared by the Designer as defined in Article 16.1.

MBE/WBE/VBE/SDVOBE – A minority business enterprise (MBE), a women business enterprise (WBE), a veteran business enterprise (VBE), or a service-disabled veteran-owned business enterprise (SDVOBE) certified by the Supplier Diversity Office (SDO), in accordance with M.G.L. c. 7 § 61(n) and the State Funded Municipal Construction Affirmative Marketing Program “MCAMP.”

NOTICE TO PROCEED – The written communication issued by the Owner to the Contractor or CM at Risk authorizing him to proceed with the construction contract and establishing the date for commencement of the contract time.

OWNER – The entity identified as such on page one of this Contract, or its authorized representative, that is the owner of the property that is the site of the Project, or has or will have exclusive control over the site for at least the duration of the useful life of the school facility that is the subject of the Project, and is responsible for administering this Contract.

OWNER-CONTRACTOR AGREEMENT or OWNER – GENERAL CONTRACTOR AGREEMENT – The contract between the Owner and one or more General Contractors and/or goods or services providers for construction of a whole or part of the Project, including approved change orders.

OWNER-CM at RISK AGREEMENT – The contract between the Owner and the CM at Risk, including, but not limited to, the GMP Amendment, for the provision of Construction Management at Risk Services for the Project**.**

OWNER'S PROJECT MANAGER or OPM – The individual, corporation, partnership, sole proprietorship, joint stock company, joint venture or other entity with whom the Owner has contracted to perform the Project Management Services for this Project, and who meets the qualifications of M.G.L. c. 149, § 44A ½ and has been approved by the Authority.

PHASE – A distinct portion of the work of this Contract and its associated duration, as identified on Attachment A. Prior Approval to proceed for each Phase is required from the Owner.

PRINCIPALS – The owner(s) and/or officer(s) of the Designer or Subconsultant who are in responsible charge of the Project.

PROJECT – All work that pertains to the study, planning, programming, design, construction, reconstruction, installation, demolition, maintenance, and repair, if any, as described in the Project Scope and Budget Agreement and Project Funding Agreement.

PROJECT ARCHITECT AND/OR PROJECT ENGINEER – The individual designated by the Designer as its Project Architect or Project Engineer. Such Project Architect or Project Engineer shall be a registered architect, engineer, or landscape architect as required by the Request For Designer Services, shall be the person who shall oversee the performance of all services provided on the Project, and shall be certified in the Massachusetts Certified Public Purchasing Official Program as administered by the Inspector General of the Commonwealth of Massachusetts at the time of application.

PROJECT CONSTRUCTION BUDGET – The portion of the Total Project Budget that enumerates the cost of constructing the Project inclusive of all designed construction, demolition, and renovation work, all supportive and preparatory construction work required for the Project, the General Contractor or the CM at Risk and all subcontractors, suppliers, materials, equipment, general conditions, insurance, overhead, profit, and all other expenditures that are ordinarily considered as construction cost allocations. The Project Construction Budget includes the design contingency, bidding contingency, and price escalation contingency, as appropriate to the phase of the Project.

PROJECT FUNDING AGREEMENT – The Project Funding Agreement described in the 963

CMR 2.00 and executed by the Authority and the Owner.

PROJECT SCHEDULE – A complete list of all activities, time, and sequence required to complete the Project, as defined in the Project Scope and Budget Agreement or Project Funding Agreement.

PROJECT SCOPE AND BUDGET AGREEMENT – The Project Scope and Budget Agreement described in 963 CMR 2.00 and executed by the Authority and the Owner.

RECORD DRAWINGS – The drawings prepared by the Designer and its Subconsultants pursuant to Article 7.10.5 of this Contract which incorporate the design changes made during the construction period and which incorporate information on the marked-up prints, as-built drawings, and other data furnished by the General Contractor or CM at Risk and any subcontractors.

REIMBURSABLE EXPENSES – Costs and expenses incurred by the Designer that are reimbursable pursuant to the provisions of Article 9 of this Contract.

REQUEST FOR DESIGNER SERVICES or RFS – The written document appended hereto as Attachment B specifying various requirements including the project goals and general scope, project site, scope of services, submission requirements, schedule, and construction budget. In the event of any conflict between the terms and conditions set forth in this Contract and any provision(s) set forth in the RFS or other amendment hereto, the terms of this Contract shall control unless and until amended.

STANDARD OF CARE – The generally accepted professional standard of care ordinarily used by design professionals performing a similar scope of services in the same geographic area on projects of comparable size and complexity.

SUBCONSULTANT – The Subconsultants listed on page 1 and 2 of this Contract, together with any additional Subconsultants engaged by the Designer from time to time, which shall be an individual, company, firm, or business having a direct contractual relationship with the Designer, who provides services on the Project.

SUBCONTRACTOR – The person or entity having a direct contractual relationship with the Contractor, or CM at Risk who has the contract to perform the construction of the Project, except as otherwise specifically provided or required herein or by law. Subcontractor, when used, also means “Trade Contractor” except when otherwise specified.

SUBSTANTIAL COMPLETION – The Work, as evidenced by the Certificate of Substantial Completion, is fully complete or substantially complete so that the value of the Work remaining to be done is, in the estimate of the Owner, less than one percent of the original contract price, or the Contractor substantially completes the work and the Owner takes possession for occupancy, whichever occurs first.

TOTAL PROJECT BUDGET – A complete and full enumeration of all costs of the Project, as defined in the Project Scope and Budget Agreement or Project Funding Agreement.

TRADE CONTRACTOR – A subcontractor having a direct contractual relationship with a Contractor or CM at Risk to perform one or more so-called sub-bid classes of work listed in M.G.L. c.149, §44F, and any other sub-bid classes of work selected by the Owner for the Project in accordance with the provisions of either M.G.L. 149, §44F(1)(a) or M.G.L. c. 149A, §8(a).

WORK – The entire construction required to be furnished under the Construction Contract Documents. Work includes performing and furnishing any and all services, obligations, duties, responsibilities, labor, materials, equipment, temporary facilities, and incidentals necessary to complete the construction assigned to, or undertaken by the Contractor or the CM at Risk pursuant to the Construction Contract Documents.

ARTICLE 2: RELATIONSHIP OF THE PARTIES

2.1 The Owner's Project Manager shall act as an independent contractor of the Owner in providing certain project management services required for the Project except where the OPM is an existing public employee of the Owner as described in M.G.L. c. 149, § 44A1/2.

2.2 The Designer is solely responsible for providing the design for the Project and for performing in accordance with this Contract.

2.3 The Contractor or CM at Risk, as the case may be, shall be solely responsible for construction means, methods, techniques, sequences and procedures, the Contractor's or CM at Risk's schedules, and for safety precautions and programs in connection with the Project and for performing in accordance with the Owner-Contractor or Owner - CM at Risk Agreement. The Designer shall be responsible for the Designer's negligent acts or omissions but shall not have control over or charge of acts or omissions of the Contractor or CM at Risk, Subcontractors, or the agents or employees of the Contractor or CM at Risk or Subcontractors, the Owner's Project Manager, the Authority, or its Commissioning Consultant or other technical consultants.

2.4 Nothing in this Contract shall be construed as an assumption by the Designer of the responsibilities or duties of the Contractor or CM at Risk or the Owner's Project Manager. It is the intention of the parties that the Designer's services shall be rendered in a manner compatible with and in coordination with the services provided by the Owner's Project Manager and the Commissioning Consultant. It is not intended that the services of the Designer and the Owner's Project Manager or the Commissioning Consultant be competitive or duplicative, but rather complementary. The Designer shall be entitled to rely upon the Owner's Project Manager, Commissioning Consultant, and Contractor or CM at Risk for the proper performance of their obligations pursuant to their respective contracts with the Owner.

ARTICLE 3: RESPONSIBILITIES OF THE OWNER

3.1 The Owner shall have the right to approve the Designer's work.

3.2 The Owner shall designate an individual who shall have the authority to act on behalf of the Owner under this Contract and who shall be responsible for day-to-day communication

between the Owner and the Designer.

3.3 Upon satisfactory completion of services performed, the Owner shall make payments to the Designer as provided in Articles 6, 7, 8, 9, 10, and 11.

3.4 To the extent such data is available, the Owner shall furnish to the Designer existing surveys of the site, building plans, borings, test pits, structural, mechanical, chemical or other test data, tests for air and water pollution and for hazardous materials, photographs, reports and utility information. The Designer shall be entitled to reasonably rely upon the sufficiency and accuracy of the information furnished to the Designer under this Article 3.4 and under Article 4.11, provided that the Designer shall coordinate its services with the services of the Owner's consultants and shall notify the Owner in writing of any deficiencies in such data of which the Designer becomes aware.

3.5 Except as otherwise provided in this Contract, or when direct communications have been specially authorized, the Owner shall endeavor to communicate with the Contractor or CM at Risk and the Designer's consultants through the Designer about matters arising out of or relating to the Construction Contract Documents. The Owner shall promptly notify the Designer of any direct communications that may affect the Designer's services.

3.6 The Owner shall provide the Designer access to the Project site prior to commencement of the Work and shall obligate the Contractor or CM at Risk to provide the Designer access to the Work wherever it is in preparation or progress.

3.7 If the Owner requests the Designer to execute any certificates that are not readily available as of the effective date of this Contract, the proposed language of such certificates shall be submitted to the Designer for review at least 14 days prior to the requested dates of execution. The Designer shall not be required to execute certificates or consents that would require knowledge, services or responsibilities beyond the scope of this Contract.

3.8 The Owner shall deliver to the Designer in a timely manner written copies of all Approvals required by this Contract. If Approval is withheld, the Owner shall notify the Designer in a timely manner, in writing, as to why such Approval is being withheld.

3.9 The Owner shall not unreasonably withhold, delay, condition, or deny any approval, acceptance, or consent required under this Contract, including any Approval.

ARTICLE 4: RESPONSIBILITIES OF THE DESIGNER

4.1 The Designer shall perform the Designer Services in accordance with the requirements of this Contract, and in accordance with the Standard of Care. The Designer shall exercise due care and diligence in the rendition of all services under this Contract in accordance with such professional standards and shall exercise the Standard of Care to provide the services required under this Contract in conformity with all Applicable Laws.

4.2 The Designer shall be responsible for the Designer Services including any changes to such Services that may be required in accordance with this Contract. The Designer shall furnish appropriate competent professional services for each of the Phases in accordance with the

Standard of Care. Any changes, corrections, additions or deletions requested by the Owner and the Authority shall be incorporated into the design of the Project unless detailed objections thereto are issued in writing by the Designer, subject to Article 8.2.2. Nothing herein shall be construed as an assumption by the Owner or the Authority of the responsibilities or duties of the Designer.

4.3 The Designer Services shall be performed as expeditiously as is consistent with orderly progress of the work, consistent with the agreed upon project design schedule as established under Article 7.4.2 and as it may thereafter be amended by the parties from time to time. In the event of delays due to causes outside of the Designer's control, the project design schedule may be extended as necessary, and Designer's compensation may be equitably adjusted pursuant to Article 6.6 to the extent that Designer incurs additional direct costs caused by the delay. Time is of the essence for the duration of this Contract.

4.4 The Designer shall provide the scope of services required by this Contract, as described in more detail in Attachments A and B.

4.5 The Designer shall comply with the terms and conditions of all project agreements executed between the Owner and the Authority and any and all administrative directives issued by the Authority, now in effect or hereafter promulgated during the term of this Contract, without any additional compensation, that are applicable to Designer's Services under this Contract and that have been provided or are readily available to Designer prior to such Services being performed. The Owner shall reasonably compensate the Designer for complying with any term or condition of a project agreement executed between the Owner and the Authority or any administrative directive issued by the Authority, that was not provided to or was not readily available to the Designer prior to such Services being performed and that materially impacts the Designer's scope or other aspect of its Services, Fee, schedule, or any obligations and responsibilities under this Contract.

4.6 The Designer acknowledges the importance that the Owner attributes to the abilities and qualifications of the key members of the Designer's team, including Subconsultants, and the continuity of key members' participation in the services to be provided under this Contract. This Contract has been entered into in reliance on the Designer's representation that the individuals, consultants, assignments, and responsibilities will be maintained throughout the duration of this engagement. No substitution or replacement of individuals or change in the Subconsultants, listed on pages 1-2 of this Contract, shall take place without the prior written approval of the Owner, except when necessitated by causes beyond the Designer's control (such causes shall include if an individual leaves or is no longer associated with the Designer's firm). If the Designer proposes to replace one of the members of the Designer's team, the Designer shall propose a person or consultant with qualifications at least equal to the person or firm the Designer proposes to replace. The Owner shall have the right to approve any substitution or replacement or change in status for the persons or Subconsultants listed on page 1-2 of this Contract and such approval shall not be unreasonably withheld. At the request of the Owner, the Designer shall consult with the Owner to resolve any situation in which the Owner determines that a member of the Designer's team is failing to perform services in an acceptable manner to the Owner. The Owner shall have the right to direct the removal of any such person or consultant. The Owner shall work in good faith with the Designer to resolve any material problems identified by the Owner in writing regarding the performance of the Designer's obligations under this

Contract. No act or omission of the Owner made or permitted under this Article shall relieve the Designer of its responsibility for the performance of the services specified in this Contract.

4.7 The Designer shall compile and distribute a job directory which includes all names, addresses, phone numbers, and e-mail addresses of the representatives of the Designer and their Subconsultants. This shall be distributed upon commencement of the services and shall be updated and redistributed as project participants and/or contact information change.

4.8 The Designer shall employ, at all times, adequate professional and support personnel with requisite expertise and adequate numbers to assure the complete, timely performance of the obligations of the Designer. The Designer shall acquaint its employees and Subconsultants with all provisions of the General Laws governing public construction projects, including but not limited to, M.G.L. c. 149, M.G.L. 149A, and M.G.L. c. 30, that are relevant to the performance of Designer's obligations under this Contract. When directed by the Owner, the Designer shall fully cooperate with the Owner in obtaining the Criminal Offender Record Information (CORI) of the Designer and its employees and of any Subconsultants and their employees in accordance with the provisions of M.G.L. c. 71, § 38R, M.G.L. c. 6, §§ 167-178B (the so-called CORI Law), any other applicable law, and District policy. All contracts between the Designer and each Subconsultant shall include appropriate provisions requiring the Subconsultant to fully cooperate with the Owner in obtaining the Criminal Offender Record Information (CORI) of the Subconsultant and its employees as aforesaid. Designer shall also fully cooperate with Owner in obtaining any other out-of-state criminal record information, if applicable, pursuant to relevant state or federal laws.

4.9 The Designer shall be and shall remain liable to the Owner for all damages incurred by the Owner as a result of the failure of the Designer or its Subconsultants to perform in conformance with the terms and conditions of this Contract.

4.10 Design Within the Project Construction Budget

4.10.1 The Designer shall prepare cost estimates for the Project as described in Article 7 of this Contract or at more frequent intervals as required in Attachment B. Unless otherwise specified in Attachment B, the cost estimates shall be considered Basic Services, and the Designer is not eligible for any additional compensation for preparing the same. The format for cost estimates shall be in accordance with the requirements of the Authority.

4.10.2 The Designer shall produce a design for the Project meeting the requirements of the scope of work described in Attachment B to be constructed within the Project Construction Budget of the Total Project Budget, provided that the Designer shall be permitted to recommend to the Owner such adjustments to the Project's design, consistent with the Project Funding Agreement, as the Designer reasonably believes may be required to adhere to the Project Construction Budget. In the event the Designer's cost estimate for the Project (as reconciled in accordance with the provisions of this Contract) exceeds the Project Construction Budget, the Owner may require the Designer to revise the design, drawings and specifications to keep the cost estimate for the Project within the Project Construction Budget. The Designer shall not be entitled to extra compensation for making such revisions to contain costs

within the Project Construction Budget.

4.10.3 In a Project constructed pursuant to M.G.L. c. 149, §§ 44A-44M, if the Project Construction Budget is exceeded by the lowest bona fide, responsible bid by any amount, the Owner shall direct the Designer to review and compare the Project Construction Budget with the bids received to identify the variances. Upon completion of this review and submission of the Designer's report to the Owner and Authority, the Owner shall, with the approval of the Authority:

(a) direct the Designer to revise the Final Design Program, Project scope and quality as required to reduce the estimated construction costs to be within the Project Construction Budget, in accordance with Article 4.10.5 of this Contract; or

(b) give written approval to the Designer of an increase in the Project Construction Budget; or

(c) authorize rebidding of the Project within a reasonable time; or

(d) terminate this Contract in accordance with Article 12.3; or

(e) implement any other mutually accepted alternative that the Owner and the Designer may agree on.

4.10.4 In a Project constructed pursuant to M.G.L. c. 149A, the Designer shall be responsible for managing the design of the Project to stay within the Project Construction Budget. If the GMP proposal submitted by the CM at Risk exceeds the Project Construction Budget, the Designer shall review and compare the Project Construction Budget with the GMP proposal submitted by the CM at Risk to identify the variances. Upon completion of this review, if directed by the Owner, the Designer shall assist the Owner in negotiating a GMP within the Project Construction Budget in accordance with Article 7.7.9. If a GMP cannot be successfully negotiated between the Owner and the CM at Risk within the Project Construction Budget, the Owner shall, with the approval of the Authority:

(a) direct the Designer to participate with the Owner, OPM, and CM at Risk in design reviews and revise the design, including appropriate revisions to drawings and specifications, as necessary in order to reach an agreement on a GMP within the Project Construction Budget; in accordance with Article 4.10.5; or

(b) give written approval to the Designer of an increase in the Project Construction Budget and resume negotiating a GMP with the CM at Risk; or

(c) terminate this Contract in accordance with Article 12.3; or

(d) implement any other mutually accepted alternative that the Owner and the Designer may agree on.

4.10.5 (a) If the Owner chooses to proceed under Article 4.10.3(a) or 4.10.4(a), the Designer and its Subconsultants, without receiving additional compensation, except if fewer

than three bona fide, responsible bids were received (in the case of a Project constructed pursuant to M.G.L. c. 149, §§ 44A-44M) or (in the case of a Project constructed pursuant to G.L. c. 149A) if fewer than three bona fide, responsible Trade Contractors or so-called non-trade contractor bids for each category of work were received, or if 4.10.5(b) and/or (c) applies, shall cooperate in revising the designs, drawings and specifications as may be required to reduce or modify the quality or scope or both, of the Project so that they will comply with the Project Construction

Budget as approved at the conclusion of the Construction Documents Phase or as amended. Any changes to the educational program or the approved space summary shall be subject to the written approval of the Authority. Upon completion of these revisions, the Designer shall also be required to produce a revised cost estimate demonstrating that the estimated cost of the Project does not exceed the Project Construction Budget. Revising the designs, drawings, and specifications and updating the cost estimate shall be the sole obligation on the part of the Designer with respect to 4.10.3(a) or 4.10.4(a);

(b) If the Owner elects to proceed with revisions that significantly increase the complexity either of the Construction Contract Documents themselves or the Construction Administration Phase services that the Designer will have to provide, then the Designer shall be entitled to an equitable adjustment in its Fee to reflect the impact on its services;

(c) If the bid or proposal referenced in 4.10.3 or 4.10.4 above was submitted on a date that is more than three (3) months after approval of the Construction Contract Documents then such revisions shall be Extra Services.

4.10.6 The Designer must receive written approval of the Owner and the Authority before the Project Construction Budget shall be considered amended.

4.11 Additional Tests and Surveys: The Designer shall be responsible under Article 7 for reviewing the surveys, investigations, testing, and reports completed by the Owner and as provided under Article 3.4, and determining the types of additional or expanded surveys, investigations, or testing required for the Project. Additional or expanded surveys, investigations, or testing required for the Project shall be provided by qualified specialty Subconsultants as necessary. Both the types of services and the Subconsultants shall be approved by the Owner. See: Article 8.2.13 regarding Extra Services.

4.12 Commissioning Consultant: The Authority may engage the services of a Commissioning Consultant to provide building commissioning services, including advisory services, during design, construction, and post-occupancy of the Project. Commissioning activities may start from the Schematic Design Phase and continue through preparation of construction documents, bidding, construction, close-out, and warranty period.

The Designer and its Subconsultants shall collaborate with the Authority's Commissioning Consultant to develop design criteria to support the purposes of building commissioning and energy/resources conservation concepts as commonly understood and as prescribed by the Commissioning Consultant.

The Commissioning Consultant may review and provide input on the development of the design documentation, including but not limited to, design intent, basis of design, commissioning specifications, sequences of operation, and testing requirements as prepared by the Designer. Any changes, corrections, additions, or deletions requested by the Commissioning Consultant to which the Designer makes no objection shall be incorporated into the design of the Project as part of Basic Services.

ARTICLE 5: SUBCONSULTANTS

5.1 The Designer may engage Subconsultants, subject to the prior written approval of the Owner and subject to Article 9.3, in order to perform services under this Contract. If Subconsultants are engaged, the person responsible for, and in control of, the Subconsultant services to be provided must be professionally registered or licensed in Massachusetts in the necessary disciplines for the services if such registration or licensing is required under the applicable General Laws. The engagement of Subconsultants shall not in any way relieve the Designer from its duties and responsibilities for its work, including, without limitation, coordinating all Designer Services furnished under this Contract by the Subconsultants.

5.2 Upon request, the Designer shall provide the Owner with copies of its agreements with Subconsultants, including any amendments thereto and copies of the Subconsultant's applicable certificates of insurance.

5.3 No substitution of Subconsultants and no use of additional Subconsultants or assignment of services shall be made without prior written approval of the Owner, which approval shall not be unreasonably withheld.

ARTICLE 6: COMPENSATION

6.1 For the satisfactory performance of all services required pursuant to this Contract, excluding those services specified under Articles 8 and 9, the Designer shall be compensated by the Owner in the amounts specified in Attachment A as that Fee may be amended by written amendment to this Contract.

6.2 When the Designer receives payment from the Owner, the Designer shall promptly make payment to each Subconsultant whose work was included in the work for which such payment was received unless payment has been theretofore made. The Owner shall have the contractual right to investigate any breach of performance of a Subconsultant and to initiate corrective measures it determines are necessary and in the best interest of the Owner. All contracts between the Designer and its Subconsultants shall include a provision in which the Owner's rights to initiate corrective action shall be stipulated.

6.3 Payment Schedule

6.3.1 Payments for Basic Services shall be made monthly and, where applicable, shall be in proportion to services performed within each Phase. The amount of fees attributable to each Phase shall be as set out in the schedule in Attachment A. Payment for approved Reimbursable Expenses and/or Extra Services shall be made monthly upon receipt of an approved invoice from the Designer.

6.3.2 The Owner shall make payments to the Designer within 30 days of the Owner's

approval of an invoice from the Designer. The Owner's payment for any services provided under this Contract shall not be construed to operate as a waiver of any rights under the Contract or any cause of action arising out of performance of the Contract. The Owner shall not withhold payments to offset costs alleged to have been incurred by the Owner on account of allegedly negligent acts, errors or omissions unless the Designer agrees or has been found liable for specific amounts in a binding agreement or court judgment, or unless the Designer fails to maintain the professional liability insurance required under Articles 15.7.1 and 15.7.2. The Owner may withhold approval of invoice items the Owner reasonably believes have not been performed in accordance with this Contract, including adjustments to payment amounts in instances where required submittals to the Authority may be found to be missing or incomplete. If Owner and Designer continue to disagree, the disagreement shall be immediately submitted to mediation in accordance with Article 18.5(b).

6.4 Installment Payments During Construction Administration Phase:

6.4.1 During the Construction Administration Phase, the Designer shall be paid the Fee for Basic Services stipulated in Attachment A.

6.4.2 Payments to the Designer during the Construction Administration Phase shall be made in equal monthly installments for the duration of the Construction Administration Phase. The amount of each payment shall be determined by dividing 95% of the fee for the Construction Administration Phase, as stipulated in Attachment A, by the number of months between the Notice to Proceed and the scheduled issuance of the Certificate of Substantial Completion, as indicated in the Project Schedule approved by the Owner. The Designer shall be entitled to Extra Services in accordance with Article 8.3 if the Project is delayed beyond the 60-day period described in Article 8.3 for reasons beyond the control of the Designer.

6.5 Final Installment: The Designer shall be paid the unpaid balance of the fee for Completion Phase, as stipulated in Attachment A (as that fee may be amended), upon compliance with the following requirements:

6.5.1 Execution of the Final Request and Certificate for Reimbursement (such Certificate to be in the form developed by the Authority). In cases where a Certificate of Partial Release of Retainage is approved, the Designer shall be paid up to an amount commensurate with the percent of retainage released until a Final Request and Certificate for Reimbursement is approved; and

6.5.2 Delivery by the Designer to the Owner of the Record Drawings required by this Contract; and

6.5.3 Verification of payment to Supplier Diversity Office (SDO) Certified Subconsultants (MBE/WBE/VBE/SDVOBE) or Subconsultants identified on Attachment C and as required by Article 17.4; and

6.5.4 A written evaluation of the General Contractor or CM at Risk by the Designer from which the Owner shall be able to complete its submission of the Contractor

Evaluations as required by M.G.L. c.149 § 44D(7).

6.5.5 In the event the Designer is unable to comply with Articles 6.5.1 and 6.5.2 above due to reasons beyond the Designer's control, as determined by the Owner, Final Installment shall not be unreasonably withheld or delayed beyond 60 days after the date of Substantial Completion, provided that the Designer has complied with all other requirements.

6.6 Substantial Change

6.6.1 If there is a substantial change in the services described in Attachment B to be provided by the Designer under this Contract, the Designer and the Owner will mutually agree to a written amendment describing the services and an amended Fee for Basic Services to reflect the change and reasonable cost of such change. Such changes shall be designated on Attachment F and shall be executed by the Designer and the Owner.

6.6.2 Should the Designer and the Owner be unable to negotiate a mutually acceptable amendment to the Fee for Basic Services when there has been a substantial change in the specified services, the Owner shall unilaterally and promptly determine, in good faith and supported by a written explanation in sufficient detail, a reasonable maximum dollar amount for the services as amended and process payments to the Designer subject to said maximum amount, until an amendment to the Fee for Basic Services for such change is set by later agreement between the parties, provided, that the Designer's acceptance of such payments shall not be considered a waiver by the Designer of its right to pursue a claim for additional compensation related to the change in services, and provided that such disagreement shall be immediately submitted to mediation in accordance with Article 18.5(b). In no event shall the Designer stop work under this Contract due to a disagreement with the Owner regarding an amendment in the Designer's Fee for Basic Services, provided that the Owner complies with its payment obligations under this Article 6.6.

6.6.3 Notwithstanding the foregoing, the amendment to this Agreement described in Article 7.4.8 shall be negotiated and executed by both parties prior to the start of the subsequent Phase.

ARTICLE 7: BASIC SERVICES

7.1 The Designer shall discuss with the Owner and the Authority the requirements for each Phase before beginning work on that Phase. Basic Services include, but are not limited to, verification of existing record information including preparing measured drawings, details and general existing conditions, cost estimating, architecture, civil, sanitary, mechanical, electrical, plumbing, fire protection, structural, site planning and landscape architecture, basic environmental permitting, graphics, lighting design, acoustics, fire alarm, data and communication, educational programming, any specialty consultants for sustainable/renewable energy design (LEED-S/NE-CHPS), preliminary FF&E layouts, laboratory, library/media and kitchen space, specifications, elevator, theatrical, historical preservation, security, code compliance,

accessibility/universal design, energy evaluations, detailed cost estimates, and other design and consulting services incidental and required to fulfill project goals.

7.2 The Owner and the Authority will promptly review and approve the Designer's submittals. Upon completion of its review, the Owner shall promptly and in writing:

(a) approve the submittal as made; or

(b) approve that part of the submittal that is acceptable and reject the remainder; or

(c) reject the submittal; or

(d) require the Designer to submit additional information or details in support of its submittal.

7.2.1 The description of Designer Services required during the various Phases as described in Attachment B and hereinafter may include specification of the number of submittals the Designer will be required to make and estimate the approximate number of meetings that the Designer will be required to prepare for and attend during each Phase.

7.2.2 As a part of Basic Services, the Designer shall provide four copies of each submittal to the Owner, one hard copy and one electronic copy of each submittal to the Authority, and, if the Owner elects to proceed with the CM at Risk construction delivery method, one copy of each submittal to the CM at Risk. Drawings submitted to the Authority shall be reproduced at half full size. A graphic scale shall be placed upon all such drawings prior to construction documents phase submittals. If the Designer is required to make submittals in excess of the number specified or if the Designer is required to prepare for and attend meetings in excess of the number specified for a Phase, the Designer shall be entitled to compensation for Extra Services, provided, however, that the Designer shall not be entitled to such compensation if and to the extent the Owner or the Authority shall have reasonably determined that the additional submittals or the additional meetings were required due to either the Designer's lack of preparation, or other fault due to deficiencies or omissions in documents prepared by the Designer.

7.2.3 All document submittals shall be in the form of neatly bound printed material, and delivered to the location or locations as indicated by the Owner and Authority. One or more document submittal components may be submitted in an approved electronic format, subject to specific authorization by the Owner and/or Authority.

7.2.4 Electronic Submittals: The Designer shall submit electronic copies on compact disks, thumb drives, or other approved electronic storage devices for all required submissions of Deliverables called for by this Contract ("Electronic Submittals"). All Electronic Submittals shall be deemed to be Materials that are subject to all provisions of Article 16. The Electronic Submittals shall be provided in a format as approved by the Owner and Authority and as follows:

(a) All drawings shall be provided in PDF format or other industry-

standard format as approved by the Owner and acceptable to the Authority. Electronic file naming convention shall be acceptable to the Owner.

(b) All other documents shall be provided in PDF format, Microsoft Word, Excel, Project, or PowerPoint, as applicable to the particular submittal.

(c) All submittals shall be labeled identifying project name and number, file name, drawing title, software and release.

(d) The Owner reserves the right to require the Designer to provide all electronic media as may be required at any time during the duration of this Contract due to technology upgrades and/or changes to the electronic systems used by the Owner or Authority, provided that if such requirement demands that the Designer purchase new software or train existing employees for the application of media or software such costs shall be a Reimbursable Expense but only to the extent that such purchase of new software or training of existing employees is unique or exclusive to the particular requirements of the Owner or the Authority for this particular Project.

(e) The Designer's compliance with the terms of this Article shall be performed as part of the Basic Services under the Contract, and the Designer shall not receive any additional compensation for providing the Electronic Submittals, (including but not limited to conversions or copies of software), except as specified herein. The Designer shall not be responsible for any use of Electronic Submittals on hardware or software for which it was not intended.

7.2.5 In reviewing and preparing all documents for evaluation as part of the Feasibility Study, Schematic Design Phase, and/or any other design phase for which the Designer may be authorized, the Designer shall determine gross area and net areas in the following manner in order to maintain uniformity in computation and consistency of both gross and net square foot areas of buildings:

Gross Area: The area included within the outside faces of the exterior walls for all stories. Custodial areas such as janitor closets, building maintenance and building employees' locker rooms, circulation areas such as corridors, lobbies, stairs, and elevators, and mechanical areas such as those designated to house mechanical and electrical equipment, utility services, and non-private toilets shall be considered as part of the gross area, but not part of the net area.

Net Areas: In general, those areas which have a specific assignment and functional program use as determined by the facility, including, but not limited to, areas such as cafeterias, auditoriums, libraries, administrative and classrooms. These shall be measured from the inside finish of permanent outside walls to the inside finish of corridor walls, and to the inside finish of intermediate partitions.

7.3 Feasibility Study Phase:

7.3.1 The Designer shall familiarize itself with the Authority's Guidelines and Standards for feasibility studies that further specify the work to be performed by the Designer during this Phase and shall perform its Feasibility Study Phase services in accordance with such Guidelines and Standards and the provisions of this Contract. The Designer shall meet with the Owner to arrive at a mutual understanding of the requirements of the Feasibility Study. The Designer shall submit a proposed work plan including anticipated tasks and submittals.

7.3.2 The Owner is required to ascertain the Authority's input and approval throughout the study process; therefore, the Designer shall develop and prepare the documentation required by the Feasibility Study to assist the Owner in securing the Authority's concurrence and/or approval at the following milestones before proceeding to the next milestone (Note that some of the approvals to move to the next milestone require a vote of the Authority's Board of Directors):

(a) Preliminary design program;

(b) Budget Statement for Educational Objectives, as defined by 963 CMR 2.02;

(c) Development of alternatives to be studied; including cost estimates using the Uniformat II Elemental Classification format (to as much detail as the drawings and descriptions permit, but no less than Level 2);

(d) Preliminary evaluation of alternatives; including updated cost estimates using the Uniformat II Elemental Classification format (to as much detail as the drawings and descriptions permit, but no less than Level 2);

(e) Final Evaluation of Alternatives; including updated cost estimates using the Uniformat II Elemental Classification format (to as much detail as the drawings and descriptions permit, but no less than Level 2); and

(f) Recommendation to the Authority's Board of Directors of the preferred alternative that will be advanced to schematic design.

7.3.3 The Designer shall cooperate with the Owner and the Authority to define and develop a few reasonable, educationally sound, cost effective, and practical solutions for the Owner and Authority's evaluation that satisfy the Owner's educational program requirements that were provided by the Owner to the Designer. The alternatives considered shall address the following as a minimum:

(a) An examination and identification of potential alternatives to construction or renovation of a facility whether or not such alternatives are eligible for Authority reimbursement;

(b) One of the alternatives shall be an analysis of a code update/base repair option to document the potential use and value of the existing school facility and to be used as a benchmark for comparative analysis of all other alternatives;

(c) An analysis of school district student school assignment practices and an analysis of available space in other school facilities in the district;

(d) The utilization of under-utilized or vacant facilities potentially available for the proposed use for the Proposed Project;

(e) The lease, rental, or acquisition of existing buildings that could be made available for school use pursuant to M.G.L. c. 70B, §8;

(f) The use of regionalizing or tuition agreements with adjacent school districts pursuant to M.G.L. c. 70B, §8;

(g) A detailed and itemized cost estimate for each alternative;

(h) An evaluation of the environmental and cost impact of construction phasing on students and staff occupying a renovated building, and any relocation options or off-hour construction that may be required for each alternative;

(i) An evaluation of the existing conditions at no more than three sites, unless otherwise determined by the Authority, that shall include, but not be limited to, a geotechnical evaluation and soils exploration, and a Phase I Initial Site Investigation conforming to 310 CMR 40.00, performed by a licensed site professional; and

7.3.4 Feasibility Study submittals shall be provided pursuant to Article 7.2.2 and shall be subject to the written Approval of the Owner.

7.3.5 The Designer shall present and explain the Feasibility Study to the Owner and the Authority and at a local public meeting, if any such meeting is scheduled, or in conference.

7.3.6 The Designer shall meet with the Owner during this Phase in accordance with the agreed upon project work plan.

7.4 Schematic Design Phase

7.4.1 Upon receipt of an Approval to proceed to Schematic Design Phase, the Designer shall meet with the Owner to arrive at a mutual understanding of the requirements of the Final Design Program approved in writing by the Owner and the Authority.

7.4.2 The Designer shall submit a proposed design work plan pursuant to this Contract including anticipated tasks and submittals. The Designer shall also submit to the Owner a proposed schedule consistent with any Project Schedule included in the RFS (Attachment B) modified as required by any subsequent schedule changes or delays outside of Designer’s control. The schedule shall contain dates for submittals, deliverables, actions, milestones, design workshops, meetings and the critical path through all design service activities. It shall include time for the Owner's and the Authority's review and approval of submittals and for necessary submissions for permits in connection with the Project. The work plan shall also include a work plan schedule of values consistent with Attachment A, which shall be the basis for which

payments of the Fee for Basic Services within each Phase shall be made. The work plan schedule of values shall identify deliverables within each Phase and percentages of the phase fee payable upon completion of such deliverable. When approved by the Owner as provided in Article 7.4.8, the work plan schedule of values shall govern the timing of payments of the Fee for Basic Services upon completion of deliverables within each Phase and as each Phase progresses.

7.4.3 The Designer shall conduct the following: Prepare a preliminary evaluation of the Recommended Preferred Solution from the Feasibility Study, the Final Design Program, and Proposed Total Project Budget; collect and study all available drawings, reports, maintenance reports, and other existing data pertaining to the Project; conduct a thorough on-site review of conditions relating to the Project; assure that the "Recommended Preferred Solution" complies with all applicable codes and regulations, including any special design standards supplied by the Authority and its Commissioning Consultant; and meet with local building officials to identify and confirm applicable standards, codes and any project specific criteria.

7.4.4 The Designer shall develop the Recommended Preferred Solution to a full schematic design level. Schematic design level documentation shall be based on the Final Design Program, shall incorporate Owner and Authority comments and shall include each of the following, to the extent applicable to the Recommended Preferred Solution:

(a) Traffic Analysis – review the Traffic Study described in Article 3.4 and the impact of anticipated vehicular and pedestrian traffic, including impacts to existing infrastructure, to determine efficient and safe site access and make any recommendations as may be required to complete the project site design.

(b) Site Survey(s) and Environmental Assessment(s) – review the Site Survey(s) and Environmental Assessment(s) described in Article 3.4 and make any recommendations as may be required to complete the project site design.

(c) Geotechnical and Geoenvironmental Analysis – review the Geotechnical and Geoenvironmental Investigations and Reports described in Article 3.4 and make any recommendations as may be required to describe soil conditions, remediation requirements and appropriate foundation design as required to complete the project site design.

(d) Program Analysis - a space measurement analysis for the design which shall verify that the sum of all program floor areas plus all other floor areas equal the gross floor area of the Final Design Program.

(e) Code Analysis – determine the impact of all applicable federal, state, regional and local codes, regulations and ordinances, including a listing of permitting and other regulatory filing requirements. Develop design criteria and a written report to assure compliance with the Massachusetts Stretch Energy Code and the International Energy Conservation Code. Demonstrate compliance with

technical criteria as applicable for Project work scope.

(f) Utility Analysis – based on a review of the information provided in the Site Survey, determine the availability and capacity of all required building utilities. Provide soils analysis and preliminary design for on-site septic/sewage treatment facilities, if required.

(g) Massing Study – An analysis of the building's integration into its surroundings and neighborhood with drawings, models, or photographs.

(h) Building Information Modeling – creation of a Building Information Model and quality control documents.

(i) Built-in furniture and preliminary Furniture, Fixtures, and Equipment ("FF&E") layouts as shown in plans, elevations, and room data sheets.

(j) NE-CHPS or LEED-S Scorecard – pursuant to the Authority's Green Schools Program guidelines, complete a NE-CHPS or LEED-S for Schools Scorecard and describe sustainable design features and each high performance green school prerequisite and credit included in the proposed design and a plan for implementation or inclusion of any appropriate public utility energy conservation design programs.

(k) Security – consult with local emergency responders for input regarding building and site security design and operations.

(l) Accessibility - an analysis of the design's compliance with the Americans with Disabilities Act (ADA) and the Massachusetts Architectural Access Board requirements (MAAB).

(m) Building Systems Descriptions – describe in narrative and on schematic plans basic information relative to:

1. Building Structure - a written narrative of the design approach to the structural systems including discussion of the feasible options for foundations and superstructure as well as treatment of special situations such as unusual soils conditions or long spans.

2. Plumbing and HVAC - written narratives of the basic systems and proposed energy source(s) and a life cycle cost analysis pursuant to the criteria of M.G.L. c. 149 § 44(m). Provide schematic plans indicating basic distribution concepts and the location of major equipment items such as boilers, heat pumps, water heaters, cooling towers, chillers, air handling units, heat recovery units, exhaust stacks, building automation systems / building management systems, and special systems (e.g. fume exhausts, geothermal wells).

3. Fire Protection - written narratives of the basic systems and design criteria. Provide schematic plans indicating basic distribution concepts and the

location of major equipment items such as fire pumps, standpipes, and fire department connections.

4. Electrical (including power, lighting, communications, fire alarm, video/CATV, audio and visual, security/surveillance, and solar readiness) - written narratives of the proposed electrical and communications systems resources, needs, and proposed scope. Provide schematic plans indicating basic distribution concepts and the location of major equipment items such as switchgear, standby generator, and control centers/panels.

5. Information Technology - written narratives of the proposed information technology system resources, needs, and proposed scope. Provide schematic plans indicating basic distribution concepts, and location of major equipment items such as switches and hubs.

(n) Outline / Summary Level specifications in accordance with applicable CSI Divisions that clearly define the scope of construction, identify the sub-trades pursuant to M.G.L. c. 149 § 44F, establish the quality of materials, finishes, products, equipment and workmanship, and the special or unique conditions of construction.

(o) Project Schedule - provide a reasonable level of design-related input to the OPM such that the OPM can prepare a draft schedule for the proposed project for the Owner in the form of a graphic representation (Gantt Chart) of the duration of all tasks, activities and phases of the design and construction processes against the progression of time up to a proposed occupancy date. Dependencies between activities and tasks will be delineated. Individual tasks and activities will be rolled up to the major project milestones. Provide input to the OPM regarding priority actions and activities that may have a major impact on the schedule. The OPM, not the Designer, is responsible for preparing and maintaining the draft and updated project schedule document, except as it pertains to the project design schedule developed under Article 7.4.2.

(p) Construction Cost Estimate - in Uniformat II Level 3 format with aggregated unit rates and quantities supporting each item and the CSI MasterSpec format to Summary Level. If independent cost estimates are prepared for the Owner by the OPM in this or subsequent phases, then the Designer shall work with the OPM to resolve such any differences in a cost reconciliation process and shall involve any relevant parties in such process.

(q) Siting analysis of the proposed site design, including context, traffic and access, topographic and utilities recognition, based on a review of the existing conditions information provided in the surveys and studies as described in Article 3.4.

(r) Site Development Plan – site plan shall be based on a review of the information provided in the Site Survey, shown at a minimum scale of 1 inch equals 40 feet and include property lines with bearings and distances, building setbacks, site acreage, wetlands information, proposed and existing topography, proposed and existing buildings and site features, floor and roof elevations for all buildings, proposed and existing utilities and utility connections, and emergency equipment access.

(s) Schematic Building Floor Plans of all floors and roof at a minimum scale of 1/16" =1'-0" showing all elements of the building including overall dimensions, gross square footage of each floor and net square footage of each space, response to functional requirements of program, major and minor access, circulation, and room data sheets.

(t) Schematic Exterior Building Elevations for all sides and orientations indicating all exterior finishes and fenestration.

7.4.5 Schematic Design phase drawings, specifications, construction cost estimates and other submittals shall be subject to the written Approval of the Owner, which Approval shall not be unreasonably delayed, withheld, conditioned, or denied. Unless a lesser number is requested by the Owner, the Designer shall submit to the Owner for approval four (4) copies of schematic design drawings, specifications, cost estimates, and other submittals. One (1) additional copy shall be submitted to the Authority by the Designer. One (1) additional electronic copy shall be submitted to the Commissioning Consultant by the Designer.

7.4.6 The Designer shall present and explain the Schematic Design to the Owner, the OPM, the Authority, and at a local public meeting, if any such meeting is scheduled, or in conference.

7.4.7 The Designer shall meet with the Owner during the Schematic Design Phase in accordance with the agreed upon project work plan.

7.4.8 Prior to the issuance of an Approval to proceed to the Design Development Phase, the Designer and the Owner shall meet to finalize the design work plan, project schedule, and schedule of values described in Article 7.4.2. If necessary, they shall execute an amendment to the Contract to include all required modifications to govern the subsequent phases of the Designer's services.

7.4.9 <u>Construction Delivery Method Evaluation and Selection</u>

(a) The Designer shall assist the Owner in determining the appropriate construction delivery methodology for the Proposed Project. In providing such assistance, the Designer, in conjunction with the Owner's Project Manager, shall advise the Owner on the relative advantages and disadvantages associated with each of the construction delivery methods provided in M.G.L. Chapters 149 and 149A. The decision to pursue a particular construction delivery method shall be within the sole discretion of the Owner, subject to the approval of the Inspector General as provided in M.G.L. c. 149A, §4. The services provided by the

Designer in assisting and advising the Owner in its determination of the appropriate construction delivery methodology shall be included in Basic Services.

(b) If the Owner elects to construct the Project using the CM at Risk construction delivery method pursuant to M.G.L. c. 149A, and has obtained the approval of the Office of the Inspector General to do so, with the Approval of the Owner, this Contract shall be amended using the Authority's Standard Amendment for CM-R which includes Articles 7.5 through 7.10. If the Owner elects to construct the Project using the Design-Bid-Build ("DBB") construction delivery method pursuant to M.G.L. c. 149, with the Approval of the Owner, this Contract shall be amended using the Authority's Standard Amendment for DBB, which includes Articles 7.5 through 7.9.

7.5 INTENTIONALLY OMITTED

7.6 INTENTIONALLY OMITTED

7.7 INTENTIONALLY OMITTED

7.8 INTENTIONALLY OMITTED

7.9 INTENTIONALLY OMITTED

7.10 INTENTIONALLY OMITTED

ARTICLE 8: EXTRA SERVICES

8.1 General

8.1.1 Extra Services are those services requested by the Owner to be performed by the Designer, but which are additional (or "extra") to the services performed as Basic Services. Such services are not included in the Fee for Basic Services and shall be invoiced and paid for separately. Extra services shall not be deemed authorized until a written Approval is received from the Owner, which Approvals shall not be unreasonably delayed, withheld, denied, or conditioned.

8.1.2 The proposed cost, scope, and schedule of all Extra Services shall be presented and approved by the Owner, in writing, prior to the performance of any Extra Services.

8.1.3 Cost proposals for Extra Services shall be computed in accordance with Attachment A.

8.2 Unless specifically stated elsewhere and only with the prior written Approval of the Owner, the Designer shall perform any of the following services as Extra Services:

8.2.1 Substantially revising previously approved reports, drawings, specifications or other documents to address changes authorized or requested by the Owner, including substantial changes in its size, quality, complexity, design, Budget, and/or bidding method or bid packages, and changes in Applicable Laws;

(a) Notwithstanding the provisions of 8.2.2, revisions prepared by the Designer to

keep construction costs within the Project Budget that are required pursuant to Article 4.10 of this Contract to be without additional compensation, or to correct incorrect items for which the Designer has responsibility, shall not be Extra Services;

8.2.2 Preparing documents for separate bid packages or bidding alternates requested by the Owner, except for a reasonable number and extent of alternates to keep construction costs within the Project Budget which shall be Basic Services;

8.2.3 Revising Construction Contract Documents which have been initially submitted and approved in their final and complete form, if general bids (M.G.L. c.149) or subcontractor bids (M.G.L. c.149, 149A) for work required thereunder are not advertised based on such Construction Contract Documents within four months after initial submission;

8.2.4 Services in connection with rebidding if the need to rebid is not attributable to the Designer;

8.2.5 Attending meetings with the Owner, Owner's Project Manager, the Authority, Department of Labor and Workforce Development, the Office of Attorney General, the Office of the Inspector General, or the CM at Risk (if the project is constructed pursuant to M.G.L. c. 149A) in matters of dispute if attendance is required by the Owner, provided such dispute did not arise due to the fault of the Designer;

8.2.6 Furnishing other services in excess of Basic Services made necessary by the default or failure of performance of the General Contractor or CM at Risk or Subcontractors;

8.2.7 Providing consultation with respect to replacement of work damaged by fire or other casualty during construction;

8.2.8 Preparing change orders and supporting data in accordance with Article 10, or modifying the Construction Documents in response to an unreasonable amount of substitutions proposed by the Contractor or CM at Risk, or responding to unreasonable and excessive requests for information (RFIs) by the Contractor or CM at Risk, where such information is available from a careful study and review of the Construction Documents;

8.2.9 Assisting the Owner in litigation or claims arising out of the Owner-Contractor Agreement or Owner-CM at Risk Agreement, provided such litigation or claims did not arise due to the fault of the Designer;

8.2.10 Performing Construction Administration Phase services during a construction period extended beyond the additional 60 calendar day period, specified in Article 8.3;

8.2.11 Performing professional services which are not otherwise required under this Contract as Basic Services;

8.2.12 Providing services in connection with partial completion or partial systems

completion inspections at the time of Substantial Completion of the Work or of a project construction phase and/or separate bidding package due to delay by the Contractor or CM at Risk in completing the Work on schedule;

8.2.13 Additional Tests and Surveys: In the event that the Designer employs the services of a Subconsultant to provide additional or expanded surveys, investigations, or testing required for the Project as described in Article 4.11, the Designer shall employ such Subconsultants who have the professional liability insurance coverage described in Article 15.8.1 covering such services, to the extent that such insurance coverage is generally available to Subconsultants. The Designer shall, upon the Owner's written request, assign to the Owner the Designer's contractual right to pursue a claim against such Subconsultants. Such additional tests and surveys may include, but need not be limited to:

(a) Site surveys and environmental assessments;

(b) Structural tests and materials tests;

(c) Geotechnical and geoenvironmental investigations and reports, including existing hazardous material reports, boring tests, test pits, observation wells, testing and chemical analysis of site substrate conditions;

(d) Traffic studies; and

(e) Hydrant flow tests.

8.2.14 FF&E services not already provided in Article 7, Basic Services, in connection with providing detailed equipment schedules, cut sheets, specifications, procurement and installation of FF&E;

8.2.15 Presentation renderings, models, mock-ups, photographs and any other presentation materials;

8.2.16 Providing services related to identification, testing, or remediation of existing building hazardous materials;

8.2.17 Providing master planning services;

8.2.18 Providing specialized environmental permitting not already provided in Article 7, Basic Services;

8.2.19 Providing specialized foundation design not already provided in Article 7, Basic Services; and

8.2.20 Providing services in connection with Contractor, CM at Risk, or Bidder disputes or questions arising out of the bidding process, unless such protest is a result of an act or omission of the Designer. Such services include research and preparation for and appearance at bid protest hearings and similar proceedings.

8.3 Construction Phase Services Provided after the Original Construction Completion Date

8.3.1 If construction of the Work, or of a project construction phase and/or separate bidding package has not reached substantial completion within the original construction period (as set forth in the Owner-Contractor or Owner-CM at Risk Agreement and as agreed to by the Designer), there shall be added to said construction period a period of sixty (60) calendar days, during which period the Designer shall continue to provide Construction Administration Phase services for which no extra compensation shall be paid for the services described in Article 7.9 and 7.10.1 through 7.10.4 in a CM at Risk Project or for the services described in Articles 7.8 and 7.9.1 through 7.9.4 in a DBB Project.

8.3.2 If construction has not reached Substantial Completion after the 60 additional calendar days, the Designer shall thereafter be entitled to Extra Services compensation for providing the services described in Articles 7.10.3 (which are fully defined under Article 7.9.2) and 7.10.4 in a CM at Risk Project or for the services described in Articles 7.9.3 (which are fully defined under Article 7.8.2) and 7.9.4 in a DBB Project. The Designer may also be entitled to Extra Services compensation for tasks performed beyond the added sixty (60) calendar days period for tasks related to Article 7.9.1 (d) through (i) in a CM at Risk Project or 7.8.1(d) through (i) in a DBB Project. In any event, the Designer is required to identify and present the anticipated Extra Services contemplated under Article 8.3.2 in accordance with Article 8.1. In no event shall the Designer be entitled to any additional compensation on account of an extended construction period if and to the extent that a binding agreement or decision that results from a dispute resolution proceeding determines that the Designer's acts or inactions caused the construction period to be extended.

8.4 In the event of an emergency, the Designer may proceed to perform Extra Services as required to meet the emergency after obtaining the verbal approval of the Owner. The Designer shall provide a written report to the Owner as soon as possible after the emergency arises. This report shall describe the emergency and the Extra Services that were performed.

8.5 Invoices for Extra Services shall be accompanied by a breakdown listing the name, payroll title, date, number of hours by day, hourly rate and extended amount, per specified task of Extra Services performed. Hourly rates shall be in accordance with the Hourly Rate Schedule in Attachment A.

ARTICLE 9: REIMBURSABLE EXPENSES

9.1 For coordination and responsibility for the services, materials and costs described in 9.1.1 through 9.1.6, the Designer shall be reimbursed its actual costs and those of its Subconsultants, supported by invoices or receipts, plus 10%. The following are reimbursable expenses, when previously approved in writing by the Owner:

9.1.1 The cost of printing more than six (6) sets of design submittals for a CM at Risk project, or more than five (5) sets of design submittals for a project pursuant to M.G.L. c.149, or more than two electronic versions thereof per design submission

deliverable phase or sub-phase.

9.1.2 The related copying, postage, and handling services during a prequalification or bid period.

9.1.3 The cost of reproducing the mylar reproducibles of the construction drawings for use by the General Contractor or CM at Risk in preparing the record drawings.

9.1.4 Out of pocket expenses paid by the Designer such as filing fees, testing, and permit fees if such fees would be normally paid by the Owner.

9.1.5 LEED-S / NE-CHPS registration fees.

9.1.6 Other expenses deemed necessary or appropriate by the Owner in writing.

9.2 Non-Reimbursable Expenses: The Owner shall not reimburse the Designer or its Subconsultants for travel expenses, sustenance, telephone, copying, facsimiles, electronic mails, postage and delivery expenses, unless specifically required

9.3 The Designer shall not be entitled to compensation under this Article for the services of Subconsultants hired to perform Basic Services under this Contract.

ARTICLE 10: COMPENSATION AND RESPONSIBILITY FOR CHANGE ORDERS

10.1 The Designer shall be entitled to Extra Services compensation for preparing Change Orders initiated by the Owner except as provided in Article 10.3.

10.2 The Designer shall not be entitled to Extra Services compensation for preparing Change Orders to adjust the scope of construction work which arises from existing conditions for which unit prices have been specified in the Construction Contract Documents.

10.3 The Designer shall not be entitled to Extra Services compensation for preparing Change Orders necessary to address errors or omissions by the Designer.

10.4 Change Orders for which the Designer is not entitled to compensation are to be referred to as “no fee change orders.”

10.5 The fact that the Designer is not entitled to compensation for preparing a Change Order shall not limit any legal remedies which the Owner may have for recovering its additional costs necessitated by the Change Order.

ARTICLE 11: RELEASE AND DISCHARGE

11.1 The acceptance by the Designer of the last payment under the provisions of Article 6.5 or Article 12, in the event of termination of the Contract, shall in each instance operate as and be a release to the Owner and the Authority and their employees and officers from all claims of the Designer and its Subconsultants for payment for services performed and/or furnished, except for those written claims submitted by the Designer to the Owner with, or prior to, the last invoice.

ARTICLE 12: ASSIGNMENT, SUSPENSION, TERMINATION, NO AWARD

12.1 Assignment:

12.1.1 The Designer shall not assign or transfer any part of its services or obligations under this Contract (other than as specified in Article 12), without the prior written approval of the Owner. Likewise, any successor to the Designer must first be approved by the Owner before performing any services under this Contract. Such written consent shall not in any way relieve the Designer or their assignee from their responsibilities under this Contract. The Owner and the Authority shall have the right to approve any assignment or transfer or change in status for the persons or Subconsultants listed on pages 1-2 of this Contract and such approval shall not be unreasonably withheld. The Owner shall not assign this Contract without the written consent of the Designer.

12.2 Suspension:

12.2.1 The Owner may, at any time, effective upon fifteen (15) business days written notice to the Designer, suspend this Contract. If the Owner provides such written notice, the Designer shall be compensated for Services satisfactorily performed in accordance with the Contract terms prior to the effective date of such suspension; invoices for such Services shall be properly submitted but may be submitted after the date of such notice up to the effective date of suspension.

12.2.2 If a written notice of suspension issued pursuant to Article 12.2.1 lasts for more than ninety (90) consecutive calendar days, the Designer may, upon resumption of the Contract, be entitled to additional compensation for actual costs incurred due to such suspension provided that the suspension was not attributable to the Designer's fault.

12.3 Termination:

12.3.1 (a) By written notice to the Designer, pursuant to Article 13 Notices, the Owner may terminate this Contract effective on five (5) calendar days notice without cause. All compensation and reimbursement due to the Designer in accordance with the Contract terms, for services satisfactorily performed up to the date of termination, including proportionate payment for portions of the services started but incomplete at the time of termination, shall be paid to the Designer, provided no payment shall be made for services not yet performed or for anticipated profit on unperformed services.

12.3.2 (b) Pursuant to Article 13 Notices, the Owner may terminate this Contract effective on five (5) calendar days notice for cause, and no further payment shall be due to the Designer to the extent the Owner can reasonably identify damages in specific amounts for which the Designer is liable under this Contract; Owner shall pay other amounts otherwise due and owing to the Designer.

12.4 Suspension or Termination by Designer: The Designer may suspend or terminate this Contract by providing written notice to the Owner and the Authority, pursuant to Article 13 Notices, at the Designer's sole option, under the following circumstances:

12.4.1 If the Owner, within thirty (30) days following written notice from the Designer of any material default by the Owner under the Contract (including failure to pay in

accordance with the Contract), fails to cure such default; or

12.4.2 If, after the Designer has performed all services required during any Phase prior to construction and at least three (3) months have elapsed without the Designer receiving receipt of Approval to proceed with the next Phase of the Project, provided the delay was not the fault of the Designer. This provision shall not apply to a Designer who has received a notice of suspension pursuant to 12.2.

12.4.3 Upon a proper termination by the Designer, the Designer shall be compensated as provided in 12.3.1 above regarding termination without cause.

12.5 No Award of Owner-Contractor Agreement: If the Project is constructed pursuant to M.G.L. c. 149, §§ 44A-44M, and the Owner-Contractor Agreement is not awarded by the Owner within one hundred twenty (120) days after the receipt of general bids for the Project and the bids have not been rejected and the Project has not been suspended, the Designer shall be paid through the Bidding Phase as if a contract for construction were awarded according to the payment schedule provided in Attachment A. This Article 12.5 does not apply, however, if the Designer has been directed to perform design revisions pursuant to 4.10.2, for the purposes of bringing the design of the Project within the Project Construction Budget.

ARTICLE 13: NOTICES

13.1 Any notices required or permitted to be given hereunder shall be given in writing and shall be delivered (a) in person; (b) by certified mail, postage prepaid, return receipt requested; (c) by facsimile; or (d) by a commercial overnight courier that guarantees next day delivery and provides a receipt, and such notices shall be addressed as follows:

If to_[_____]_;

If to_[_____]__;

If to_[_____]___;

or to such other address as the Owner, Authority and Designer may from time to time specify in writing. Any notice shall be effective only upon delivery, which for any notice given by facsimile shall mean notice that has been received by the party to whom it is sent as evidenced by the confirmation slip that bears the time and date of request.

ARTICLE 14: INDEMNIFICATION

14.1 For claims arising out of or relating to negligent errors and omissions in the performance of professional services rendered by the Designer, the Designer shall indemnify and hold harmless the Owner and its officers and employees to the fullest extent permitted by law. This includes all claims, damages, liabilities, injuries, costs, fees, expenses, or losses, including, without limitation, reasonable attorney's fees and costs of investigation and litigation, whatsoever which may be incurred by the Owner to the extent caused by the negligence of, or the breach of this Contract by, the Designer, or a person employed by the Designer, or Subconsultant for whom the Designer is responsible under this Contract.

14.2 For all other claims, the Designer shall defend, indemnify, and hold harmless the Owner and the Authority and their officers and employees to the fullest extent permitted by law. This includes all claims, damages, liabilities, injuries, costs, fees, expenses, or losses, including, without limitation, reasonable attorney's fees and costs of investigation and litigation, whatsoever which may be incurred by the Owner or the Authority to the extent they result from the performance of its services, provided that such claims, damages, liabilities, injuries, costs, fees, expenses, or losses are attributable to bodily injury or death or injury to or destruction of tangible property and are caused by an act or omission of the Designer, or a person or Subconsultant for whom the Designer is responsible under this Contract.

ARTICLE 15: INSURANCE

15.1 The Designer shall obtain and maintain at its sole expense all insurance required by law and as may be required by the Owner and by the Authority under the terms of this Contract. The insurance required hereunder shall be provided at the sole expense of the Designer or its Subconsultant, as the case may be, and shall be in full force and effect for the full term of the Contract between the Owner and the Designer or for such longer period as required under this Contract.

15.2 All policies shall be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth of Massachusetts with a financial strength rating of "A" or better as assigned by A.M. Best Company, or an equivalent rating assigned by a similar rating agency acceptable to the Owner and the Authority.

15.3 The Designer, and any of its Subconsultants, shall submit to the Owner originals of the required certificates of insurance simultaneously with the execution of this Contract. Certificates of insurance evidencing the coverage required hereunder, together with evidence that all premiums for such insurance have been fully paid, shall be filed with the Owner and shall be made available to the Authority upon request. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles/self-insured retentions, and policy effective and expiration dates. The Designer shall submit updated certificates to the Owner prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage and said certificates shall be made available to the Authority upon request. Failure by the Designer to obtain and maintain the insurance required by this Article, to obtain all policy renewals, or to provide the respective insurance certificates as required shall constitute a material breach of the Contract and shall be just cause for termination of the services of the Designer under this Contract.

15.4 Termination, cancellation, or modification or reduction of coverage or limits by endorsement of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to the Owner and the Authority at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

15.5 The Designer or its Subconsultant, as the case may be, is responsible for the payment of any and all deductibles under all of the insurance required below. Neither the Owner nor the Authority shall be responsible for the payment of deductibles, self-insured retentions or any portion thereof.

15.6 Workers' Compensation, Commercial General Liability, Automobile Liability, and Valuable Papers

15.6.1 The Designer shall purchase and maintain at its own expense during the life of this Contract, or such other time period as provided herein, the following types and amounts of insurance, at a minimum:

(a) Workers' Compensation Insurance in accordance with Massachusetts General Laws, Chapter 152 (M.G.L. c.152). The policy shall be endorsed to waive the insurer's rights of subrogation against the Owner and the Authority.

(b) Commercial General Liability Insurance (including Premises/Operations; Products/Completed Operations; Contractual; Independent Contractors; Broad Form Property Damage; and Personal Injury) with a minimum limit of $1,000,000 per occurrence, $2,000,000 aggregate. The Designer shall maintain such insurance in full force and effect for a minimum period of one year after final payment and shall continue to provide evidence of such coverage to the Owner and the Authority. The Owner and the Authority shall be included as an additional insured in this policy. The policy shall be endorsed to waive the insurer's rights of subrogation against the Owner and the Authority.

(c) Automobile Liability Insurance (including owned, non-owned and hired vehicles) at limits of not less than $1,000,000 combined single limit per accident.

(d) Valuable Papers Insurance in an amount sufficient to assure the restoration of any plans, drawings, computations, field notes, or other similar data relating to the work covered by the Agreement between the Owner and the Designer in the event of loss or destruction while in the custody of the Designer until the final fee payment is made or all data is turned over to the Owner, and this coverage shall include coverage for relevant electronic media, including, but not limited to, documents stored in computer-aided design drafting (CADD) systems.

15.7 Professional Liability

15.7.1 The Designer shall maintain professional liability insurance covering negligent errors and omissions and negligent acts of the Designer and of any person or entity for whose performance the Designer is legally liable at all times while services are being performed under this Contract and for a period of six (6) years thereafter (as calculated in accordance with the terms below in this 15.7.2). The minimum amount

of such insurance shall be $2,000,000 per claim/$2,000,000 annual aggregate.

15.7.2 If the policy is in a "claims made" format, it shall include a retroactive date that is no later than the effective date of this Contract, and an extended reporting period of at least six years after the earlier of: (1) the date of official acceptance of the completed Project by the Owner; (2) the date of the opening of the Project to public use; (3) the date of the acceptance by the general contractor or the CM at Risk of a final pay estimate prepared by the Owner pursuant to M.G.L. chapter 30; or (4) the date of substantial completion of the Owner-Contractor Agreement or Owner-CM at Risk Agreement and the taking of possession of the Project for occupancy by the Owner, which requirement can be met by providing renewal certificates of professional liability insurance to the Owner as evidence that this coverage is being maintained.

15.8 Subconsultants

15.8.1 The Designer shall require by contractual obligation, and shall exercise due diligence to enforce, that any professional engineering or landscape architecture Subconsultant hired in connection with the services to be provided under this Contract shall, unless otherwise agreed in writing by the Owner, obtain and maintain all insurance required by law and as may be required by the Owner under the terms of this Contract, except that the limit of Subconsultant's professional liability insurance shall be not less than $2,000,000 per claim/$2,000,000 annual aggregate.

15.8.2 All professional liability policies obtained by Subconsultants shall be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth of Massachusetts with a financial strength rating of "A" or better as assigned by A.M. Best Company, or an equivalent rating assigned by a similar rating agency acceptable to the Owner and the Authority.

15.8.3 If the Subconsultant's insurance policy is in a "claims made" format, it shall include a retroactive date that is no later than the effective date of its contract with the Designer, and an extended reporting period of at least six (6) years after the earlier of: (1) the date of official acceptance of the completed Project by the Owner; (2) the date of the opening of the Project to public use; (3) the date of the acceptance by the General Contractor or CM at Risk of a final pay estimate prepared by the Owner pursuant to M.G.L. chapter 30; or (4) the date of substantial completion of the Owner-General Contractor Agreement or the Owner-CM at Risk Agreement and the taking of possession of the Project for occupancy by the Owner, which requirement can be met by providing renewal certificates of professional liability insurance to the Owner as evidence that this coverage is being maintained.

15.8.4 Other nonprofessional Subconsultants shall be required to maintain insurance in the types and amounts that they routinely carry in the course of their practice.

15.9 Liability of the Designer

Insufficient insurance shall not release the Designer from any liability for breach of its

obligations under this Contract. Without limitation, the Designer shall bear the risk of any loss if its valuable papers insurance coverage is insufficient to cover the loss of any work covered by this Contract.

15.10 Asbestos and Hazardous Materials

15.10.1 Unless otherwise provided in Article 8, the Designer shall have no responsibility for the discovery, presence, handling, removal or disposal of or for the exposure of persons to oil or hazardous materials in any form at the Project, including but not limited to asbestos-containing materials or other hazardous materials, as defined in MGL c.21E §2.

15.10.2 In the event that the Designer employs the services of a subconsultant to provide services related to either the testing for asbestos-containing materials or oil or hazardous materials or related to the specification of methods and procedures for the removal or remediation of such asbestos-containing materials or oil or hazardous materials, the Designer shall employ such Subconsultants who have liability insurance coverage covering such services, to the extent that such insurance coverage is generally available to Subconsultants. Upon the Owner's written request, the Designer shall assign to the Owner the Designer's contractual right to pursue a claim against such Subconsultants. Such services shall be paid for as provided in Article 8, Extra Services.

15.10.3 Certificates of insurance evidencing the coverage required hereunder, together with evidence that all premiums for such insurance have been fully paid, shall be filed with the Authority prior to the Authority making any payments to Applicant District. All policies shall contain a provision that coverages afforded by them will not be cancelled or amended until at least thirty (30) days prior written notice has been given to the Applicant District and the Authority .

15.10.4 All such insurance shall name the Authority and such other parties as the Owner shall require as additional insured parties with endorsements providing protection to the Authority as though separately issued and shall provide that such insurance is primary to any insurance carried by the Owner.

ARTICLE 16: OWNERSHIP OF DOCUMENTS

16.1 Unless provided otherwise by law, ownership and possession of all information, data, reports, studies, designs, drawings, specifications, materials, computer programs, documents, models, inventions, equipment, and any other documentation, product of tangible materials to the extent authored or prepared, in whole or in part, by the Designer pursuant to this Contract (collectively, the "Materials"), other than the Designer's administrative communications, records, and files relating to this Contract, shall be the sole property of, and shall vest in, the Owner and the Authority as "works made for hire" or

otherwise, provided that the Owner complies with its payment obligations under this Contract. The Owner and the Authority will own the exclusive rights, worldwide and royalty-free, to and in all Materials prepared and produced by the Designer pursuant to this Contract, including, but not limited to, United States and International patents, copyrights, trade secrets, know-how and any other intellectual property rights, and the Owner and the Authority shall have the exclusive, unlimited and unrestricted right, worldwide and royalty-free, to publish, reproduce, distribute, transmit and publicly display all Materials prepared by the Designer. The Owner and the Authority shall provide appropriate credit to the Designer, in terms agreed upon by the Designer, in any publicity about or plaque at the Project. The Designer shall have a license to publish and publicly display all Materials prepared by the Designer in its normal marketing and related professional and academic activities. The Designer shall have a license to use the typical or standard details and all other replicable elements of the Materials for this Project on other future projects. At the completion or termination of the Designer's services required pursuant to this Contract, copies of all original Materials shall be promptly turned over to the Owner and the Authority.

16.2 The Owner and the Authority agree to waive any and all claims against the Designer and, to the fullest extent permitted by law, to jointly and severally defend, indemnify and hold the Designer harmless from and against any and all claims, losses, liabilities and damages incurred by the Owner or asserted by any other entity or individual arising out of or resulting from any use of the Materials on other projects, modifications of the Materials made by the Owner or others and used on this Project, or any reuse or modification of the Materials or any of Designer’s designs, drawings and specifications. The Authority shall be a party to this Contract solely for the purposes of enforcing its rights and obligations under this Article 16.

ARTICLE 17: STATUTORY REQUIREMENTS

17.1 Agent for Service of Process: If the Designer's principal place of business is outside of the Commonwealth of Massachusetts, the Designer shall appoint an agent for the service of process as provided in M.G.L. c.227, §5. The power of attorney reflecting such appointment shall be filed with the Secretary of State as provided in M.G.L. c.227, §5. Copies of the power shall be provided to the Owner. There shall be no lapse in such agency for as long as the Designer may have potential liability.

17.2 Truth-in-Negotiations Certificate (M.G.L. c.7C, §51)

17.2.1 If the Designer's fee has been negotiated, the Designer must file a truth-in-negotiations certificate prior to execution of this Contract by the Owner. The certificate shall contain the following certifications:

(a) that wage rates and other costs used to support the Designer's compensation are accurate, complete, and current at the time of contracting; and

(b) that the Contract price and any additions to the Contract may be adjusted within one year of completion of the Contract to exclude any significant

amounts if the Owner determines that the fee was increased by such amounts due to inaccurate, incomplete, or noncurrent wage rates or other costs.

17.3 Certification Pursuant to M.G.L. c.7C §51 (d): In accordance with M.G.L. c.7C §51(d), the person signing this contract certifies, as a duly authorized signatory of the Designer, that the Designer has not given, offered, or agreed to give any person, corporation, or other entity any gift, contribution, or offer of employment as an inducement for, or in connection with, the award of this Contract; no Consultant to or Subconsultant for the Designer has given, offered, or agreed to give any gift, contribution, or offer of employment to the Designer, or to any other person, corporation, or entity as an inducement for, or in connection with, the award to the Designer or Subconsultant of a contract by the Designer; and no person, corporation, or other entity, other than a bona fide full-time employee of the Designer, has been retained or hired by the Designer to solicit for or in any way assist the Designer in obtaining this Contract upon an agreement or understanding that such person, corporation, or other entity be paid a fee or other consideration contingent upon the award of this Contract.

17.4 Minority-Owned, Woman-Owned, Veteran-Owned, and Service-Disabled Veteran-Owned Business Participation: Pursuant to M.G.L. c. 7C, § 6 and the State Funded Municipal Construction Affirmative Marketing Program the Designer shall subcontract with Minority Business Enterprises (MBE), Veteran Business Enterprises (VBE), Service-Disabled Veteran-Owned Business Enterprises (SDVOBE), and Women Business Enterprises (WBE), as certified by the Supplier Diversity Office (SDO); such participation goals shall be based on the Municipal Construction Affirmative Marketing Program administered by the SDO. If the Designer is an SDO-certified MBE, WBE, VBE, or SDVOBE the Designer must bring a reasonable amount of program participation goals for such businesses that hold the certification which is not held by the prime Designer on the project.

17.4.1 The Designer shall complete and submit at the time of contract execution a completed Participation Schedule which is attached to this contract as Attachment C in order to be in compliance with Article 17.4 above.

17.5 Accounting Requirements: The Designer shall cause to be maintained complete, accurate, and detailed records of all time devoted to the Project by the Designer and each Subconsultant employed by the Designer. The Owner, the Authority, and the Commonwealth's Inspector General may at all reasonable times audit such records that directly pertain to this Contract. On a Contract where the Fee for Basic Services exceeds $100,000 the Designer shall comply with M.G.L. c.30 §39R which requires the Designer to:

17.5.1 Maintain accurate and detailed accounts for a six-year period after the final payment;

17.5.2 File with the Owner annual audited financial statements or statements from their accountants that their reviews are consistent with state laws.

17.5.3 File with the Owner a statement of management on internal accounting controls on its letterhead as prescribed in Attachment D and a statement from an independent certified public accountant (CPA) on its letterhead as prescribed in Attachment E to this

Contract.

17.6 Revenue Enforcement and Protection Program (REAP): Pursuant to M.G.L. c. 62C §49A, the undersigned certifies under the penalties of perjury that to the best of his/her knowledge and belief that the firm and/or individuals in the firm are in compliance with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

17.7 Interest of Designer: The Designer hereby certifies that it is in compliance with the provisions of M.G.L. c. 268A whenever applicable. The Designer covenants that 1) neither he/she nor any member of the Designer firm presently has any financial interest and shall not acquire any such interest direct or indirect, which would conflict in any manner or degree with the services required to be performed under this Contract or which would violate M.G.L. Chapter 268A, as amended from time-to-time; 2) in the performance of this Contract, no person having any such interest shall be employed by the Designer; and 3) no partner or employee of the Designer firm is related by blood or marriage to any officer, official, or employee of the Owner.

17.8 Equal Opportunity: The Designer shall not discriminate in employment against any person on the basis of race, color, religion, national origin, sex, sexual orientation, age, genetics, ancestry, disability, marital status, veteran status, membership in the armed forces, presence of children or political beliefs. Each shall comply with all provisions of Title VII of the Civil Rights Act of 1964 and M.G.L. c.151B.

17.9 Certification of Non-Collusion: The signatory certifies under penalties of perjury that the Designer's proposal has been made in and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

17.10 Minority and Women Workforce Participation: Pursuant to M.G.L. c. 7C, s. 6 and M.G.L. c. 149, s. 44A(2)(G) the Designer shall be required to provide regular reports of the gender and race/ethnicity of employees engaged in work under this contract, for both prime and subconsultants, in the form and format required by the District, including but not limited to, by electronic reporting through the requested means and with the frequency required by the District.

ARTICLE 18: MISCELLANEOUS

18.1 Governing Law: This Contract shall be governed by the laws of the Commonwealth of Massachusetts.

18.2 Venue: Any suit by either party arising under this Contract shall be brought only in the Superior Court in the county where the Project is located. The parties hereto waive any argument that this venue is improper or that the forum is inconvenient.

18.3 Non-Waiver: Neither the Owner's review, approval, or acceptance of, nor payment for any of the services furnished under this Contract shall be construed to operate as a waiver

of any rights under the Contract or any cause of action arising out of the performance of the Contract.

18.4 Entire Agreement: This Contract represents the entire and integrated agreement between the Owner and the Designer and, except as otherwise provided herein, supersedes all prior negotiations, representations or agreements, either written or oral. This Contract may be amended only by written agreement signed by both the Owner and the Designer, and approved by the Authority, which approval shall not unreasonably be delayed, denied, conditioned, or withheld.

18.5 Dispute Resolution: If a dispute arises between the parties related to this Contract, the parties agree to use the following procedures to resolve the dispute: (a) Negotiation. A meeting shall be held between representatives of the parties with decision-making authority regarding the dispute to attempt in good faith to negotiate a resolution of the dispute; such meeting shall be held within fourteen calendar days of a party's written request for such a meeting; (b) Mediation. If the parties fail to negotiate a resolution of the dispute, they shall submit the dispute to mediation as a condition precedent to litigation and shall bear equally the costs of the mediation. The parties shall jointly appoint a mutually acceptable mediator; they shall seek assistance from an independent third party in such appointment if they have been unable to agree upon such appointment within thirty (30) days of the meeting just noted in (a) above; (c) Litigation. If the parties fail to resolve the dispute through mediation, then either party may file suit in accordance with Article 18.2; and (d) This Article of dispute resolution provisions shall survive termination of this Contract.

18.6 Waiver of Subrogation: (a) To the extent damages are covered by property insurance, the Owner and the Designer waive all rights against each other and against the General Contractor or CM at Risk, Subcontractors, consultants, agents, and employees of the other for damages caused by fire or other causes of loss, except such rights as they may have to the proceeds of such insurance as set forth in the Owner-Contractor Agreement or Owner CM at Risk Agreement. The Owner shall require of the General Contractor or CM at Risk, Subcontractors, Owner's Project Manager, consultants, Subconsultants, and agents and employees, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

(b) Nothing in this Contract shall create a contractual relationship with or create a cause of action in favor of a third party against the Owner or the Designer.

ATTACHMENT A

PAYMENT SCHEDULE

Payments shall be made in accordance with the provisions outlined in the Contract and with the following schedule:

Basic Services

Feasibility Study Phase.....

Schematic Design Phase.....

Design Development Phase.....

Construction Documents Phase.....

Bidding Phase.....

Construction Administration Phase.....

Completion Phase .....

TOTAL.....

Extra Services

Extra Services provided pursuant to Article 8 shall be compensated as determined by the Owner (a) by a lump sum fee agreed upon in advance in writing by the Owner and the Designer, or (b) on an hourly basis in accordance with the rate schedule set forth below for time expended, up to a not to exceed amount.

Hourly Rates:

ATTACHMENT B

REQUEST FOR DESIGNER SERVICES (RFS)

The District must use the MSBA's Designer RFS Template, which can be found here:

https://www.massschoolbuildings.org/building/team/dsp

ATTACHMENT C

PARTICIPATION SCHEDULE FOR DESIGNER CONTRACTS BY SDO CERTIFIED ENTERPRISES

This form shall be submitted to the Owner by the Designer upon execution of the Contract for Designer Services attached hereto.

Owner _____

Project No: _____

Name of Company	Description of Work	SDO Cert.	Dollar Value Participation
1._____	_____	_____	$_____
2._____	_____	_____	$_____
3._____	_____	_____	$_____
4._____	_____	_____	$_____
5._____	_____	_____	$_____
6._____	_____	_____	$_____

Dollar Value of MBE Commitment: $ _____

Dollar Value of WBE Commitment: $ _____

Dollar Value of VBE Commitment: $ _____

Dollar Value of SDVOBE Commitment: $ _____

Total Dollar Value Commitment: $ _____

Original Fee for Basic Services Amount $ _____

DESIGNER CERTIFICATION

The undersigned certifies under the penalties of perjury that (1) it intends to subcontract with the above listed firms for the identified work and dollar amounts and (2) certifies that he/she has read the terms and conditions of the Designer Contract with regards to SDO certified entities participation and is authorized to bind the Designer to the commitment set forth above.

Date _____

_____
Name of Architect/Engineer

_____
Authorized Signature

_____
Address

_____

City, State & Zip Code

ATTACHMENT D

M.G.L. c.30 §39R - INTERNAL ACCOUNTING CONTROLS
APPLIES TO CONTRACTS OF $100,000 OR MORE
SAMPLE LETTER TO BE PREPARED ON DESIGNER'S LETTERHEAD

Date

CEO
Owner
123 Reservoir Street
Enfield, MA 01234

RE: Enfield High School

Dear:

This Statement of Internal Accounting Controls is being submitted in accordance with Article 17.5.3 of the Contract for Design Services for the above captioned project. Please be advised that our firm, the Designer under the Contract, has a system of internal accounting controls which assures that:

1. transactions are executed in accordance with management's general and specific authorization;

2. transactions are recorded as necessary, to permit preparation of financial statements in conformity with generally accepted accounting principles, and to maintain accountability for assets;

3. access to assets is permitted only in accordance with management's general or specific authorization; and

4. the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Sincerely,

ATTACHMENT E

MGL c.30 §39R – INTERNAL ACCOUNTING CONTROLS
APPLIES TO CONTRACTS OF $100,000 OR MORE
SAMPLE LETTER TO BE PREPARED ON CPA's LETTERHEAD

CEO
Owner
123 Reservoir Street
Enfield, MA 01234

RE:

Dear

Please be advised that we have reviewed the Statement of Internal Accounting Controls prepared by the _____ in connection with the
Name of Designer
above-captioned project. This statement is required under M.G.L. c.30 §39R. In our opinion, representations of management are consistent with our evaluations of the system of internal accounting controls. In addition, we believe that they are reasonable with respect to transactions and assets in the amount which would be material when measured in relation to the firm's financial statements.

Sincerely,

(CPA)

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. _____

WHEREAS, the _____ ("Owner") and _____, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the _____ Project (Project Number _____) at the _____ School on _____. "Contract"; and

WHEREAS, effective as of _____, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:	Original Contract	After this Amendment
Feasibility Study Phase	$ _____	$ _____
Schematic Design Phase	$ _____	$ _____
Design Development Phase	$ _____	$ _____
Construction Document Phase	$ _____	$ _____
Bidding Phase	$ _____	$ _____
Construction Administration Phase	$ _____	$ _____
Completion Phase	$ _____	$ _____
Total Fee	$ _____	$ _____

This Amendment is a result of: _____

_____

_____

3. The Construction Budget shall be as follows:

Original Budget:	$ _____
Amended Budget	$ _____

4. The Project Schedule shall be as follows:

   Original Schedule: $_____

   Amended Schedule $_____

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date_____

DESIGNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date _____

7.5 CM at Risk Construction Delivery Method

7.5.1 CM at Risk Prequalification & Selection

(a) The Designer shall participate as a member of the Owner's CM at Risk Prequalification Committee and CM at Risk Selection Committee pursuant to M.G.L. c. 149A, §§ 5 & 6.

(b) The Designer shall, when authorized by the Owner, prepare for reproduction and distribution all project design documents, that are required for the solicitation and receipt of qualifications and proposals from CM at Risk firms pursuant to M.G.L. c. 149A, §§ 5(b) & 6(a). The Designer shall prepare all addenda (to include questions from CM at Risk firms and Designer responses), subject to the approval of the Owner. The Designer shall attend a pre-proposal conference, and existing site and building tour if either or both are to be scheduled, taking note of all questions asked. Relevant questions submitted in writing shall be answered by the Designer in conjunction with the OPM by means of written addenda to the RFQ or RFP described below, as required.

(c) As a member of the Owner's CM at Risk prequalification committee, the Designer shall review and evaluate in conjunction with the Prequalification Committee, the Statements of Qualifications received from CM at Risk firms on the basis of the evaluation criteria established in the RFQ and shall make appropriate recommendations regarding the selection of qualified CM at Risk firms to receive a request for proposals from the Owner in accordance with the provisions of M.G.L. c. 149A, § 5(f).

(d) As a member of the Owner's CM at Risk selection committee, the Designer shall review and evaluate the RFP's received from prequalified CM at Risk firms on the basis of the evaluation criteria included in the RFP. The Designer shall make appropriate recommendations regarding the evaluation and ranking of RFP's and the conducting of interviews, if any, in accordance with the provisions of M.G.L. c. 149A, § 6(d), and the applicable regulations and procedures promulgated by the Inspector General. If the Selection Committee elects to conduct interviews of the CM at Risk firms, the Designer shall participate in conducting interviews.

(e) As member of the Owner's CM at Risk Selection Committee, the Designer shall assist the CM at Risk Selection Committee in non-fee negotiations with the CM at Risk until the Selection Committee has reached an acceptable contract with one of the prequalified CM at Risk firms in accordance with M.G.L. c. 149A § 6(e).

(f) If, at any time, the Owner terminates the Owner-CM at Risk contract, the Designer shall continue to provide the Designer Services required under this Contract with any substitute CM at Risk procured by the Owner. If, as provided by law, the

Owner elects to proceed with the Project pursuant to the provisions of M.G.L. c. 149 (Design-Bid-Build), the Designer may continue to provide Designer Services pursuant to a mutually agreeable amendment to this Contract subject to the approval of the Authority.

7.5.2 Design Review for the CM at Risk Construction Delivery Method

(a) The Designer shall provide Designer Services in a manner consistent with the CM at Risk Delivery Method, as defined herein, in all Phases of the Project and shall work cooperatively with the CM at Risk, as well as the Owner, OPM, Commissioning Consultant and the Authority to achieve timely completion of the Project within the Project Construction Budget.

(b) Upon execution of the Owner-CM at Risk Agreement, the Designer shall:

1. meet with the Owner, the OPM and the CM at Risk to discuss issues and to establish procedures for efficient interaction in a cooperative and mutually supportive manner that will permit all parties to perform their contractual obligations. These procedures shall include, but not be limited to: arrangements for the collaboration and coordination between the Designer and the CM at Risk in the preparation and submission of all design phase documents to the Owner; arrangements for discussions concerning all design phase document submittals among the Owner, OPM, CM at Risk and Designer; and arrangements for frequent and productive interactions between the Owner, OPM, CM at Risk and Designer during all the design phases.

2. provide copies of the schematic design drawings, specifications, cost estimates and other submittals to the CM at Risk, to assist the CM at Risk in fulfilling its responsibilities to the Owner. The Designer shall consult with the CM at Risk and provide the CM at Risk with an opportunity to review and comment upon deliverables developed by the Designer during the Schematic Design Phase.

(c) The Designer shall attend and participate in meetings as necessary with the CM at Risk, the Owner and the OPM to resolve all issues.

(d) The Designer shall consult with the Owner, the OPM, and the CM at Risk regarding the sequence of delivery of design services; the selection of materials, building systems and equipment; alternative solutions recommended by the CM at Risk when design details affect construction feasibility, schedules, cost or quality; other value engineering comments and recommendations made by the CM at Risk; comments and recommendations concerning the design documents with respect to clarity, consistency, constructability,

maintainability/operability and coordination among the trades, coordination between the specifications and drawings, compliance with M.G.L. c. 149A for procurement, installation and construction, and sequence of construction, including recommendations designed to minimize adverse effects of labor or material shortages.

(e) The Designer may be required, as a part of Extra Services if previously agreed with the Owner, to prepare plans and specifications for discrete portions of the Work that can be incorporated into separate bid packages for the various Subcontractors who will construct the Project. Such contracts may be awarded concurrently with other contracts or individually, or at different points in time, which may result in the Designer completing portions of the design after commencement of construction of the Project and/or providing Construction Phase services before completion of all design phase services. The design for each separate bid package shall separately be subject to all requirements applicable to the various phases set forth in this Contract and shall be performed in a manner consistent with the provisions of the Project Funding Agreement, including, but not limited to, the Project Construction Budget and Project Schedule.

(f) The Designer shall consult with the CM at Risk concerning the ordering and delivery of products and assemblies and shall identify and describe any long lead products or assemblies that need to be priced and pre-ordered to meet the Project Schedule.

(g) The Designer shall identify and describe any multiple bid packages or fast-tracked construction that will be used and any separate bid packages that will be required.

7.6 Design Development Phase

7.6.1 The Designer shall provide the CM at Risk with an opportunity to review and comment upon design documents developed by the Designer during the Design Development Phase. The Designer shall work cooperatively with the CM at Risk throughout the Design Development Phase of the Project to obtain the benefit of the knowledge and experience of the CM at Risk with respect to design review, value engineering, constructability analysis, cost estimating, cost control, scheduling, coordination of bid packages, phasing, and other services and, with the approval of the Owner, the Designer shall thereupon incorporate recommended and mutually accepted changes into its design documents.

7.6.2 Upon receipt of an Approval to proceed to the Design Development Phase, the Designer shall meet regularly and as necessary with the Owner, the OPM, the CM at Risk and the Authority. This shall include meeting with the Owner, in accordance with the agreed upon project work plan the OPM and the CM at Risk during this Phase.

7.6.3 Upon receipt of an Approval to proceed to the Design Development Phase, the Designer shall update and refine items submitted during the Schematic Design Phase, and shall submit to the Owner, CM at Risk, and the Authority, on or before the date specified in the Project Schedule, and on the basis of the approved Schematic Design Phase Documents, the following deliverables as they are defined in this Article 7.6.3 and as they are further defined in Articles 7.6.4, 7.6.5, 7.6.6, 7.6.7, and 7.6.8:

(a) a list of all filings and permits within Designer's scope of services and professional expertise required to implement the design and a schedule of target dates for the procurement of such permits, which list and schedule shall be regularly updated during the term of this Contract;

(b) information and documentation within the technical expertise of the Designer and that is necessary for the Owner to file local basic zoning and environmental permits. The Designer, as Extra Services, shall provide information and documentation for the Owner to file Environmental Notification Forms, Environmental Impact Reports, and any other filings for permits that must be filed during the design development phase;

(c) soils exploration data, geotechnical and geoenvironmental reports, showing exploratory locations relative to siting of proposed structures, based on a review of the existing conditions information provided in the surveys and studies described in Article 7 Basic Services and Article 8 Extra Services;

(d) complete design development drawings; outline specifications indicating any filed sub-bid sections and sub-sub trades based on the cost of the work and other documents necessary to specify the size and character of the Project as to siting, landscape, architectural, structural, fire protection, plumbing, heating, ventilating and air conditioning, electrical, ADA/MAAB, product requirements, and other features;

(e) Creation of a Building Information Model and quality control documentation demonstrating, without limitation, coordination of: ceiling clearances, mechanical room size, and shaft sizes; specifications and drawings; filed sub-bid work or sections; scheduling; equipment and power; existing and new construction; and phasing;

(f) design development drawings which the Designer shall submit for review to the local building official;

(g) a life cycle cost analysis to determine which design decisions related to all energy and water consuming devices and overall building operation and maintenance are the most cost effective [M.G.L. c. 149, s. 44M];

(h) a construction cost estimate for the design in accordance with Article 7.6.7.;

(i) a space measurement analysis for the design verifying that the sum of all program areas in the Project plus all other floor areas in the Project equals the gross floor area of the Project;

(j) a written summary or summaries comparing the project design, as represented in the design development drawings, specifications and cost estimates with the Final Design Program requirements, and explaining any deviations in writing.

7.6.4 Design Development Drawing Requirements: The Design Development drawings shall illustrate and describe the refinement of the design of the Project to a level of detail that is customary and standard, establishing the scope, relationships, forms, size and appearance of the Project by means of plans, sections and elevations, typical construction details, and equipment layouts. Drawings shall delineate locations and elements of Work which may be proposed to be assigned to project construction phases and/or separate bidding packages. Documents shall include, but not be limited to, the following:

(a) Site and utility drawings showing;

1. Existing and proposed contours and locations of the proposed building or addition(s). Show entry level elevation and key exterior grades at perimeter. Indicate all retaining walls. Include benchmarks of site if survey is available.
2. All utilities existing and proposed, indicating location, elevation, composition and size e.g., manholes, sewers, hydrants, light standards, and geothermal wells. Include work by others, e.g., gas and electric utility providers.
3. Roads, laid-out parking areas, walks, recreation areas, terraces and other site improvements.
4. Building locations fixed and referenced from main survey baseline, if available.
5. Plant materials with preliminary schedule.

(b) Building drawings and other graphic and written requirements with floor plans showing: (minimum scale 1/8” = 1’0”);

1. building perimeter with exterior wall thicknesses and overall dimensions;
2. structural grid;
3. plan requirements of mechanical and electrical systems;
4. building core; elevators, stairs, shafts, toilet rooms;
5. interior partitions; appropriate thicknesses and dimensions to fix basic organizations; indicate fire separations, ratings;
6. door swings;
7. floor elevations;

8. built-in furniture and equipment; and
9. furniture layout concept drawings.

(c) Roof plans showing:

1. proposed systems type;
2. pitch and drainage patterns;
3. roof drains, gutters and scuppers;
4. skylights, stairs through roof, penthouses, major equipment, chimneys.

(d) Building sections: One transverse and one longitudinal section. Indicate floor to ceiling heights and floor-to-floor heights. Label all spaces;

(e) Building elevations showing:

1. full height elevations including roof structures, e.g., mechanical equipment, chimneys, and penthouses;
2. floor elevations, floor-to-floor heights, and overall height related to benchmarks on site plans;
3. all fenestration;
4. column centerlines;
5. principal finish materials indicating major control and expansion joints, and divisions of materials where required;
6. louver and equipment enclosure systems; and
7. exterior grades and topographical features in context.

(f) Full height wall sections for main elevations and at special conditions. Show foundation and perimeter treatment, wall construction including insulation and supporting structure, fenestration and mechanical penetrations, and floor construction;

(g) Interior elevations: Major spaces, e.g. library, lobby; and all typical spaces, e.g. classrooms;

(h) Reflected ceiling plans: show prototypical structural, fire protection, mechanical and electrical information for classrooms and major spaces, including lighting layouts with ceiling heights and material changes;

(i) Colored interior elevations and perspectives of major and typical spaces;

(j) Schedules:

1. finish schedule by room types;
2. door schedule by room;
3. window schedule;

4. equipment schedules, e.g., food service, instructional media.

(k) Structural Concepts:

1. Foundation plan showing sizes and locations of typical components.
2. Framing plans: typical floor framing, roof framing, special framing, show framing at major openings and sizes of members.
3. Column locations.
4. Preliminary details including floor and roof deck, statements as to methods of lateral bracing and how requirements of earthquake code will be met.
5. Details for special and/or incidental structural features, e.g. tunnels, connecting bridges and unique architectural features.
6. Connection to existing buildings at foundation and at key points at existing structure if applicable.

(l) Fire Protection: floor plans indicating wet or dry type systems, hose racks or cabinets and fire department tie-ins. Indicate whether a fire pump will be required and, if so, show location within the building. Show typical sprinkler head layout;

(m) Plumbing and sanitary systems: floor plans indicating locations of all plumbing fixtures and special features, and approximate location and size of all piping systems and principal items of equipment;

(n) Heating, Ventilating and Air Conditioning Systems;

1. Show locations and approximate sizes of piping systems, air handling systems, heat pumps, and principal items of equipment such as compressors or cooling towers.
2. Indicate space requirements of major equipment and their location in mechanical rooms and fan rooms. Major shafts.

(o) Electrical Systems;

1. Calculations showing total electrical load.
2. All services including those for special purposes shall be located and indicated.
3. Lighting shall be indicated as to type, location and intensities in foot-candles for each special and typical space.
4. Switchgear and emergency generator.
5. Fire alarm system drawings showing all initiation and signaling devices, control panels, annunciator panels, etc.
6. Security system drawings.
7. Communications drawings showing chases, major equipment locations and any special distribution requirements.

8. CATV/CCTV drawings showing chases, major equipment locations and any special distribution requirements.

9. Information Technology drawings showing chases, major equipment locations and any special distribution requirements.

7.6.5 Other Consultant's Drawings and Other Graphic and Written Requirements: For special consultants, e.g., kitchen, elevator, library, media room, equipment where appropriate, provide drawings that locate and define the scope of the work. Coordinate with other disciplines. Provide cuts of all major pieces of equipment.

7.6.6 Project Manual Requirements (Specifications):

(a) Outline Specifications that are to accompany Design Development Drawings shall be prepared to a level of detail that is standard and customary and shall include, but not be limited to, a comprehensive description of the Project and the materials proposed for use in the work. Do not provide full-length, 3 part format specification; however, the general scope shall be indicated by CSI MasterFormat as applicable to proposed construction.

1. The Design Development Outline Specification shall also include a comprehensive "BASIS OF DESIGN." The "BASIS OF DESIGN" shall be a narrative description of the Project and shall include all applicable architectural, civil, structural, mechanical and electrical programs and/or systems. Identify all proposed filed sub-bid categories.

2. Project Manual shall include a statement to define Work which is proposed to be included in separate construction phases and/or bid packages.

(b) The following is a list of items that shall at a minimum be identified or outlined in this Phase.

1. Site work; clearing, drives, walks, parking areas, fences, excavation, backfill, planting, and geothermal wells.

2. Footings; on earth, rock, piles, caissons, proposed bearing pressures, boring logs.

3. Foundation walls; type of concrete, reinforcing, type and extent of waterproofing.

4. Footing drains; type, disposal of drainage.

5. Exterior walls: superstructure, type, materials, brick type, alternate cladding, back-up materials, dampproofing material and extent, special features.

6. Roofs; types, vapor barrier, insulation, flashings, all materials.

7. Flashings; general types, all materials, weights, where each type is to be used.

8. Sheet metal; gutters, leaders, others uses, except flashings.

9. Windows; general types, materials, sub-frames, finish, glazing, screens.

10. Doors, exterior and interior; types.
11. Steps, exterior; including platforms and landings' materials.
12. Stairs, interior; including platforms, landings, walls, materials and finishes.
13. Framing; wood, concrete or metal systems in accordance with general design.
14. Partition construction related to room type;
15. Cabinet and casework; types and materials.
16. Food Service Equipment; types and materials.
17. Furring; lathing, plastering, materials and locations.
18. Insulation thermal; types, thicknesses, methods of application and locations.
19. Acoustical treatments; types, thicknesses, methods of application and location.
20. Interior finishes; materials for floors, walls, bases, wainscots, trim, ceilings, ceiling heights.
21. Fire Protection; standpipe systems, sprinkler systems, fire pumps and accessories.
22. Water supply; source; location of main to which connection will be made; type of pipe for service main; load requirements; load factors and pressures.
23. Sanitary sewers; sewage disposal system, pipe and other materials.
24. Storm sewers; storm drainage disposal system (institution or local facility), pipe and other materials.
25. Gas main; material, size, location. Interface with utility company.
26. Plumbing; systems such as wastes, vents, hot water, cold water, gas, air, oxygen, vacuum, main source of supply, materials for each, water heaters, pumps, thermal insulation fixture quality, all special features.
27. Heating, ventilating and air conditioning; type of heating and refrigeration plants, type and capacity of boilers, heat pumps, and cooling equipment, fuel, type of burners, fuel storage, heaters, feed water pumps and heaters, thermal insulation, type of heating medium, supply and return piping, radiation, unit heaters, radiant heating, principal air conditioning equipment types, special features, supply, return and exhaust ductwork.
28. Electric work; service connection, location, institution or public utility, overhead or underground, transformers including type and location, types of conduit and wiring, types of fixtures, location of main switchboard, radio, fire alarm, telephone, public address, emergency lighting and wiring, emergency or other generators, solar panels, special features, including Master TV, information retrieval and/or data processing system.

29. Elevators, dumbwaiters and platform lifts; capacities, speed, travel in feet, landings, operation, controls, platform sizes, machine type and location, car and entrance finishes, signals.

30. Other built-in equipment, types and materials.

31. Special features.

7.6.7 Construction Cost Estimate Requirements – The Designer shall provide a construction cost estimate in Uniformat II Level 3 and CSI Master Format 6-digit format to Level 3 and M.G.L. c. 149 § 44 (filed sub bid) format with aggregated unit rates and quantities supporting each item referenced in Article 7.6.6(b). The estimate cost shall be projected, to the mid-point of the construction period.

The Designer shall review its construction cost estimate in comparison with the detailed construction cost estimate, and any updated cost estimates, provided by the CM at Risk and/or OPM and shall work in good faith and in cooperation and coordination with the CM at Risk and/or OPM to reconcile any differences between the construction cost estimates, to clarify assumptions upon which the cost estimates are based and to address any concerns or questions with the cost estimates that are raised by the Owner, the OPM, the CM at Risk, or the Authority. If the Designer is unable to reconcile all differences between the two construction cost estimates with the CM at Risk, then the Designer shall provide a detailed explanation of the differences to the Owner. If, in any case, the agreed-upon, reconciled construction cost estimate exceeds the Project Construction Budget, the Designer shall cooperate with the Owner, the OPM, and the CM at Risk in identifying, specifying and recommending changes in materials, equipment, component systems and types of construction, or other adjustments in the scope or materials selections for the Project, including contingencies or alternative bid items, so as to facilitate revision of the design of the Project to reduce the cost of construction so as to comply with the authorized Project Construction Budget.

Cost estimate data shall be organized to identify elements of project work which may be proposed to be advanced under separate construction phases and/or separate bidding packages. When so proposed, estimates shall develop cost data relative to corresponding bidding and work execution dates established in project schedules.

7.6.8 Reports, drawings, specifications, cost estimates and other design development submittals shall be subject to the written approval of the Owner and the Authority. Unless a lesser number is requested by the Owner, the Designer shall submit to the Owner for approval four (4) copies of Design Development drawings, specifications, cost estimates, and other submittals. One (1) copy shall be submitted to the Authority by the Designer. The Designer shall submit to the CM at Risk one copy (1) of Design Development drawings, specifications, cost estimates and other submittals to assist the CM at Risk in fulfilling its responsibilities to the Owner.

7.6.9 The Designer shall present and explain the Design Development submittal to the Owner, the Authority, and at a local public meeting scheduled by the Owner, if any such meeting is scheduled or in conference.

7.6.10 The Designer and its Subconsultants shall collaborate with the Authority's Commissioning Consultant to develop design criteria which will support the purposes of building commissioning and energy/resources conservation concepts as commonly understood and as prescribed by the Commissioning Consultant.

7.7 Construction Documents Phase:

In addition to the requirements specified in the RFS (Attachment B), upon receipt of an Approval to proceed with the Construction Documents Phase of the Project from the Owner, the Designer shall do the following:

7.7.1 The Designer shall provide the CM at Risk with an opportunity to review and comment upon design documents developed by the Designer during the Construction Documents Phase. The Designer shall work cooperatively with the CM at Risk throughout the Construction Documents Phase of the Project to obtain the benefit of the knowledge and experience of the CM at Risk with respect to design review, value engineering, constructability analysis, cost estimating, cost control, scheduling, coordination of bid packages, phasing, and other services and, with the approval of the Owner, the Designer shall thereupon incorporate recommended and mutually accepted changes into its design documents.

7.7.2 The Designer shall meet regularly and as necessary with the Owner, the Authority, the OPM, the CM at Risk and the Commissioning Consultant. This shall include meeting with the Owner in accordance with the agreed upon project work plan (or more frequently if needed) during this Phase.

7.7.3 Based on the submittals approved in the Design Development Phase of the Project, the Designer shall update and refine the items previously submitted and shall submit the following to the Owner, the CM at Risk, and the Authority on or before the date and time specified in the Project Schedule:

(a) Construction documents progress submittals as follows:

1. a 60% Construction Documents Submittal, with deliverables as defined in Article 7.7.4;
2. a 90% Construction Documents Submittal, with deliverables as defined in Article 7.7.5;
3. a Final Construction Documents Submittal, with deliverables as defined in Article 7.7.6;
4. a Bid Documents Submittal, with deliverables as defined in Article 7.7.7

(b) As a part of each of the submittals required under Articles 7.7.4, 7.7.5, and 7.7.6, an updated work plan and recommended updates for incorporation into the Project Schedule by the OPM;

(c) As a part of each of the submittals required under Articles 7.7.4, 7.7.5, and 7.7.6, a report on the status of environmental, zoning, planning, building code, and ADA/MAAB approvals and permitting processes and a certified list of all required testing and all required permits identified in 7.6.3 (a).

(d) All submittals by the Designer shall be subject to the written approval of the Owner, which approval shall not be unreasonably delayed, withheld, conditioned, or denied. Unless a lesser number is requested by the Owner or is specifically provided hereinafter, the Designer shall furnish to the Owner for approval four (4) sets of the drawings, specifications, construction cost estimates and all other submittals. Unless a lesser number is specifically provided hereinafter, the Designer shall furnish one (1) sets of said drawings, specifications, construction cost estimates and all other submittals to the Authority and shall furnish one (1) set thereof to the CM at Risk. The Designer shall also furnish to the Owner, the Authority, and the CM at Risk electronic media copies of the foregoing drawings and documents in such form as may be required by the Authority.

7.7.4 60 Percent Construction Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a 60 % Construction Documents Submittal (60% CD Submittal), which shall include:

1. Construction Documents and other deliverables, as defined in this Article 7.7.4 and as further defined in Articles 7.7.3, 7.7.8, 7.7.9, and 7.7.10, advanced to a level of intermediate (60 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.

2. In instances where the Designer takes exception to the Authority's previous review comments on the Design Development submittal, a written statement explaining its position.

3. The Basis of Design that accompanied the Outline Specifications in the Design Development Phase shall be updated and expanded to include all proposed architectural, structural, fire protection, plumbing, mechanical, electrical, civil, and landscape design concepts for the Project.

4. A space summary, in the form and format prescribed by the Authority, that sets forth the current space calculations and totals and certifies that said space calculations and totals are in compliance with those previously authorized by the Authority in the Project Funding Agreement.

5. Keying of graphics shall be sufficient to allow a reviewer to make his or her way through the set.

6. A list of all drawings related to the Project.

7. A materials selection statement identifying typical interior and exterior surfaces and their materials.

8. A color theory statement indicating proposed paint colors and material selections for typical and special spaces and why they have been selected and how these selections relate to surrounding materials and colors.

9. Large scale plans of all mechanical and electrical spaces with major equipment indicated.

10. Project Manual, in CSI Master Format (full-length, current version), including all sections to be included in final technical specifications, developed to include a list of all materials in the building with their manufacturers. Identify all specifications sections which need to be filed sub-bid.

11. Identify all proposed bid alternates by inclusion in a project manual section to be titled "Alternates." Alternates shall be listed in sequence as approved by the Owner. Work required under bid alternates shall be described and/or drawn, as appropriate, to clearly define the design criteria and extent of work involved for implementation of the bid alternate. In each instance, the existing conditions and/or new design criteria for base bid work shall also be described and indicated in documents.

12. Code analysis: Provide a building code analysis. Any deviation from methods of compliance described in earlier submittals shall be indicated. Code analysis shall identify its preparer, code edition referenced, and include a comprehensive description of operative building code provisions, with floor plans showing fire separation types, area calculations, egress capacity for exits and exitways, and any special features required to comply.

(b) As a requirement of the 60% CD Submittal, and in accordance with the provisions of this paragraph and Article 7.7.10, the Designer shall provide a construction cost estimate prepared using the CSI MasterFormat 6-digit format to Level 3 and MGL c.149 §44F (filed sub-bid) format including quantities of all materials and unit prices of labor, equipment, and materials as well as a cost estimate for each item of work, for review by the Owner, the CM at Risk, and the Authority. The estimate cost shall be projected to the mid-point of the construction period.

The development of said construction cost estimate shall under no circumstances delay the timely submission of the remainder of the 60% CD Submittal.

7.7.5 90 Percent Construction Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a 90 % Construction Documents Submittal (90% CD Submittal), which shall include:

1. Construction documents and other deliverables as defined in this Article 7.7.5 and as further defined in Articles 7.7.3, 7.7.8, 7.7.9, and 7.7.10, advanced to a level of substantial (90 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.

2. A space summary, in the form and format prescribed by the Authority, that sets forth the current space calculations and totals and certifies that said space calculations and totals are in compliance with those authorized by the Authority in the Project Funding Agreement.

3. Interior Materials Color Boards, including samples of principal interior materials, labeled and mounted to indicate locations.

4. Final structural and energy design calculations.

5. A statement confirming that the Owner has been provided with structural design drawings, specifications, and calculations sufficient to enable execution of an independent structural peer review process, as defined in the Massachusetts Building Code, as amended (this requirement is applicable, to satisfy Authority requirements for all school construction projects having a floor area in excess of 10,000 square feet). The Designer shall have advised the Owner of this requirement in writing not less than sixty (60) days prior to delivery of the 90% CD Submittal, or earlier, as may be required for early (structural) bid packages, in order for the Owner to arrange for the services of an Independent Structural Peer Reviewer. Upon reaching 90 percent completion of construction documents or earlier as may be required for early (structural) bid packages, Designer's structural engineering consultant shall have reached a level of 100 percent completion of its construction documents to enable advancement of the independent structural peer review.

6. The Designer and its consultants shall fully cooperate with the Independent Structural Peer Reviewer in the process. The Designer shall obtain a copy of the Independent Structural Engineering Review report and submit same to the

Owner and the Authority at the time of completion of the remainder of the construction documents at the level of final completion.

7. In instances where the Designer takes exception to any of the Authority's 60% CD Submittal review comments, a written position statement explaining the Designer's position on its exceptions to said review comments.
8. Project Manual in CSI Master Format (full-length, current version), including all sections to be included in final technical specifications, developed to include a list of all materials in the building with their manufacturers. Identify all specifications sections which need to be filed sub-bid.
9. As a requirement of the 90% CD Submittal, and in accordance with the provisions of this paragraph and Article 7.6.9, the Designer shall provide a construction cost estimate prepared using the CSI Master Format 6-digit format to Level 3 and MGL c.149 §44F (filed sub-bid) format including quantities of all materials and unit prices of labor, equipment, and materials as well as a cost estimate for each item of work, for review by the Owner and the Authority. The development of said construction cost estimate shall under no circumstances delay the timely submission of the remainder of the 90% CD Submittal.

7.7.6 Final Construction Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a Final Construction Documents Submittal, which shall include:

1. Construction documents and other deliverables as defined in this Article 7.7.6 and as further defined in Articles 7.7.3, 7.7.8, 7.7.9, and 7.7.10, advanced to a level of final (100 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.

2. A final construction cost estimate, in accordance with the provisions of this paragraph and Article 7.7.10, based on 90% Construction Documents, including cost estimates for general conditions, overhead and profit, insurance, bonds, and all other items; and allowances expressed as percentage rates for design contingencies and construction contingencies and escalation to the mid-point of construction ; and other mutually agreed upon contingencies. The final construction cost estimate shall be prepared in the CSI MasterFormat to Level 3 and M.G.L. c.149, §44F (filed sub-bid) format and shall be complete with a single line description for each item with the detailed unit rate or item cost buildup provided in each case.

3. Complete construction drawings and specifications, certified by the

Designer as having satisfied the firm's quality control review process as previously confirmed with the Owner, in sufficient detail to permit fixed-price bids in open competition for construction of the Project when documents have been approved for issuance for bidding.

4. No later than at the 100% stage of completion of the final drawings and specifications, two (2) sets of the final drawings and specifications that shall be provided to the local building official to be signed and stamped "Approved" by the local building official; two (2) sets of plumbing drawings and specifications that shall be provided to the local plumbing inspector to be signed and stamped "Approved" by the local plumbing inspector; two (2) sets of the fire protection, HVAC, and electrical construction documents that shall be provided to the local fire official to be signed and stamped "Approved" by the local fire official; two (2) sets of the electrical construction documents that shall

   be provided to the local electrical inspector to be signed and stamped "Approved" by the local electrical inspector. Notwithstanding the foregoing, the Owner acknowledges that building officials, department inspectors, and fire officials have varying policies on approvals and submittal procedures, and the only obligation of the Designer in this regard is to promptly make the submittals described herein and assist the Owner or CM at Risk in receiving the approvals to the extent available.

5. At the 100 percent stage of completion of final drawings and specifications, a written summary comparing the final construction drawings and specifications and final estimated construction cost with the Final Design Program requirements and submittals made during the Design Development Phase and earlier in the Construction Documents Phase, explaining any significant deviations.

6. In instances where the Designer takes exception to any of the Authority's 90% CD Submittal review comments, a written position statement explaining the Designer's position on its exceptions to said review comments.

7. The Independent Structural Engineering Peer Review Report obtained from the Independent Structural Engineering Peer Reviewer referenced in Article 7.7.5(a)5. The Designer shall include a certification statement from the project structural engineer designer of record to acknowledge receipt of the Report and to indicate response actions pursuant thereto. The Designer shall also forward a copy of said Report to the Building Inspector

8. A certification that all applicable local, state and utility officials have been contacted by the Designer regarding each utility connection and that the persons responsible for permits or connection approval have agreed to the systems' use.

7.7.7 Bid Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a Bid Documents Submittal which shall include:

1. Construction documents and other deliverables as defined in this Article 7.7.7 and as further defined in Articles 7.7.3, 7.7.8, and 7.7.9, incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.
2. From the construction drawings and specifications approved by the Owner, incorporating such changes as the Owner or the Authority requires, a set of reproducible black and white drawings and original specifications on high quality white bond paper, single-sided, properly packaged, suitable for reproduction, stamped and signed by all disciplines, that shall be prepared by the Designer and transmitted to the Owner; which documents shall become the property of the Owner as provided under Article 16. Other suitable reproducible media, having the same content shall be substituted, when so directed or authorized by the Owner.
3. Upon receipt of Owner authorization to advance to reproduction the approved documents for distribution to bidders and, upon reproduction thereof, the Designer shall promptly submit complete sets of bid documents to the Owner (two sets), the CM at Risk (one set) and the Authority (one set - half size for Drawings). Any subsequent addenda shall be promptly submitted to the Owner, the CM at Risk, and the Authority.

7.7.8 Drawing Requirements:

The documents prepared during the Construction Documents Phase shall set forth the requirements for construction of the Project to a level of detail that is customary and standard and shall include, but not be limited to:

(a) General information showing drawing index, symbols, abbreviations, notes, and location map.

(b) Site drawings shall be complete to define the extent and detail of site work. Show the following:

1. Layout and location of all proposed work including buildings, structures, retaining walls, parking, walls, geothermal wells, and all other site improvements, with details.
2. Existing and proposed grades and contours including floor elevations, existing structures and topography, survey base line, bench marks and boring locations.
3. Landscaping and planting.

4. All utility service lines, systems and structures for electricity, gas, oil, water, steam, telephone, CATV, fire alarm, sanitary and storm drainage including size, composition, grades and directions of flow.
5. Contract Limit Line and Storage Area for construction materials.
6. All existing foundations, obstructions and other physical characteristics of the site which may affect the construction work.
7. Site survey.
8. Cuts of benches, light standards.

(c) Demolition drawings and temporary work required.

(d) Architectural drawings shall include at a minimum:
1. Floor plans of each floor, including basement and lofts or attic with room and corridor dimensions, wall thicknesses, column locations, floor elevations, mechanical and electrical openings, door and window designations, partition types, floor materials, built in furniture and equipment, keyed to other architectural drawings. All rooms numbered.
2. Large scale floor plans, as required to illustrate detailed requirements of rooms.
3. Large scale plans showing key areas e.g. lobby, special spaces. Indicate surface materials. (minimum scale ¼" = 1'- 0")
4. Roof plans showing openings, drainage, slopes, expansion joints and all projections, including equipment.
5. Key plans on all floor plans and section drawings, where appropriate.
6. Building Sections as required to show spatial organization of building but no less than one longitudinal and one transverse.
7. Building elevations. All building elevations shall be fully developed, and hidden elevations shall be shown. Elevations shall be shown in a sequence as unfolded from a certain point.
8. Full height wall sections indicating dimensions, flashing, anchorage, reinforcing, coursing, cladding, and all other conditions at wall, roof, foundation, and interior floors.
9. Exterior details, for roofing, flashing, expansion control and construction joints, waterstops and other details showing all conditions both vertical and horizontal, including schedules.
10. Door, window, entrance, and storefront, schedules, and details.
11. Vertical circulation plans, sections and details including stairs, elevators, conveyors, dumbwaiters.
12. Interior elevations of all significant and typical spaces.
13. Interior details including casework, paneling surfacing, and acoustical treatment.
14. Reflected ceiling plans coordinated with fire protection, mechanical and electrical drawings, and ceiling details.
15. Schedules (clearly define new or existing)

a. Doors
b. Equipment, e.g. for services
c. Partitions
d. Finishes

(e) Structural drawings shall indicate the following:

1. Indicate or refer to location of geotechnical exploration data and reports related thereto.
2. Foundation plans with bottom grades showing layout of all footings, walls, slabs on grade including reinforcing, grade beams, and columns; include design soil bearing pressures and live loads.
3. Floor and roof plans of structural systems including framing, grades of finished floors and depressed areas, with locations and dimensions for all openings. Also indicate design floor loads.
4. Complete foundation wall elevation and typical sections, with reinforcing indicating location, dimensions and grades for all footings, steps and wall openings.
5. Complete details and sections with dimensions for all construction including expansion and construction joints, reinforcing and other embedded items.
6. Schedules (with dimensions) for all lintels, beams, joists, and columns.
7. Unless detailed on the Drawings, the following information shall appear in the general notes: class and 28-day strength of concrete for each portion, structural steel and concrete reinforcing design stresses for each type of structural member, concrete cover for each type of structural member, shrinkage and temperature steel requirements, reinforcing laps for main reinforcing and temperature steel; bendpoint, cutoff, and hook locations for all members, minimum beam and lintel bearing. Reinforcing steel fabrication shall be in accordance with most recent ACI, "Manual of Standard Practice for Detailing Reinforced Concrete." Structural steel fabrication shall be in accordance with the AISC "Manual of Steel Construction."

(f) Fire protection drawings shall indicate standpipe systems, sprinkler systems, suppression systems, access panels, fire pumps, accessories, and piping. All piping, equipment, fixtures and devices shall be located and sized. Design criteria shall be provided on the drawings in accordance with NFPA requirements.

1. Fire protection work, other than site work, shall not be combined on the same sheets with the Plumbing, HVAC, Electrical, or other drawings except with the prior approval of the Owner.

(g) Plumbing drawings shall indicate the following:

1. All work done by the Plumbing Subcontractor, which includes all water, gas,

air, vacuum, medical gases, sanitary and storm wastes, and accessories. Include foundation drain lines unless established as the work of the CM at Risk and shall not be indicated on the Plumbing Drawings. Site utilities shall be indicated on the utility drawings.

2. Plumbing work, other than site work, shall not be combined on the same sheets with the Fire Protection, HVAC, Electrical, or other drawings except with the prior approval of the Owner.
3. Trapping and venting of all plumbing fixtures including floor drains.
4. Water and gas supply sources, storm and sanitary discharge mains.
5. All piping shall be carefully sized and all sizes shall be indicated on drawings and riser diagrams. Indicate all directions of flow and pitch on piping.
6. All accessories, valves, fixtures including all drinking fountains, grease traps for kitchen waste and all necessary panels, identified as to type and size.
7. All piping and connections required for other trades (e.g., kitchen equipment, HVAC make-up water, etc.).
8. Acid waste, vents and neutralization systems for laboratories.
9. Plumbing Legend and/or graphical symbols on the first sheet of the Plumbing Drawings in accordance with the American National Standards Institute (ANSI).
10. Plumbing riser diagrams for structures two or more stories in height above the ground level.
11. Domestic water booster pumps, boiler feed water, meter location, hose bibbs, and wall hydrants.
12. Domestic hot water: storage tanks, piping material, and hanger details.
13. All required access panels shall be indicated.
14. Backflow preventors and cleanouts. Verify that access and clearance provisions for periodically inspected devices, including backflow prevention, are adequate to satisfy requirements of inspecting agencies.

(h) Heating, Ventilating and Air Conditioning Drawings shall indicate the following:

1. HVAC work, other than site work, shall not be combined on the same sheets with Fire Protection, Plumbing, Electrical, or other drawings except with the prior approval of the Owner.
2. All piping and ductwork systems shall be located and sized. All ductwork shall be shown double line.
3. All systems shall be sized at all reductions and riser diagrams of piping and duct systems shall be indicated.
4. All directions of flow and pitch on piping, and direction of flow, volumes for duct systems shall be indicated.
5. All equipment shall have sufficient servicing and/or replacement space indicated on drawings.
6. All equipment, accessories, valves and dampers with all necessary access panels, identified as to type and size. Access panels, where required for

access to valves and dampers shall be indicated on drawings.

7. Cooling system pumps, chillers, cooling towers, air handling units, heat pumps, ductwork system and dampers, fan details, temperature control system, air and hydronic balancing equipment, and schedules shall be indicated.
8. Cooling tower design shall be indicated on the drawings showing site location, elevations and floor plan of equipment layout and typical flow diagram as related to the total HVAC system.
9. All fire and smoke dampers, access panels and doors.
10. Mechanical room designs:
    a. Vent pipes for safety valves, relief valves, back pressure valves and tanks shall be extended above flat roofs in accordance with all governing authorities.
    b. In all designs for boiler and refrigeration plants, include a complete floor plan indicating location of all major mechanical equipment and sufficient service space.
    c. In designs of new and/or replacement boiler and refrigeration plants, provide a flow diagram detailing steam or hot water distribution systems, return systems, including all existing equipment and their function, as well as any proposed expansions with all necessary instrumentation and controls.

(i). Electrical Drawings shall indicate the following:

1. Site utilities shall be indicated on separate electrical site drawings, unless ample space is available on common site for utility drawings.
2. Electrical work, other than site work, shall not be combined on the same sheets with Fire Protection, Plumbing, HVAC, or other drawings except with the prior approval of the Owner.
3. General arrangement: Outline layout of each floor. Typical sections through the structure shall be indicated when necessary to define requirements, floor and ceiling heights, elevations, and type construction, including concrete pads shall be indicated. Indicate interface with other systems. Identify any work by other trades.
4. Interior lighting system: Light fixture schedules, circuiting location and mounting heights of all fixtures, receptacle and switch outlets, sizes and types of all lamps, conduits, all other accessories and riser diagrams shall be indicated on drawings. Indicate details and method of supporting electrical fixtures and conduits. Designer shall specify that all electrical lighting fixtures be supported from the building structure, and shall be independent of ducts, pipes, ceilings and their supporting members. Comply with seismic design criteria.
5. Power system: Locations, types, and method of control for all motors, heaters, appliances, controllers, starters, branch circuits, feeder conductors,

conduits, and solar panels. Indicate riser diagrams. Show details and indicate method of supporting electrical conduit. For larger projects, thermostats and control wiring are normally covered under the HVAC sub-contract, assure coordination.

6. Fire Alarm, Data, Communications, CATV/CCTV Systems: Locations and types of all devices, outlets and equipment, service connections, wiring diagrams, and all other essential details.
7. Services: Location and details of all services, whether overhead or underground, feeder sizes, plans and elevations of switchgear and transformers, metering and service switchboard arrangements, wiring and ground fault diagram and bus ducts.
8. General and sub-stations: Location, size, method of connection and protection of all generators, transformers, exciters, motor generators, switch gear, and associated equipment, current characteristics and equipment capacities. Indicate equipment connections by means of one line and/on wiring diagrams and schedule all major items of equipment and all instruments.
9. Underground work: The size and locations of manholes and types of cables, number, size, and location of ducts, locations, sizes and types of cable supports, fireproofing, duct line profile, and one line diagram of connections. All underground chambers, including manholes and pull-boxes, shall be constructed of cast in place or one piece pre-cast concrete.
10. Pole line work: if required as contract work, indicate location, length, treatment and class of poles, guying, cross arms, insulators, circuiting, transformers, protective and switching devices, lightning arresters, special structures, diagrams, current characteristics and grounding.
11. Exterior lighting: Location, size, and type of transformers, luminary, poles, light standards, cables, ducts, and manholes, details of control equipment and connection diagrams.
12. Emergency system details including transfer switch, type of fuel.
13. One line diagram indicating load KVA, and available short circuit amperes at each transformer, switchboard, distribution panel board, branch circuit panel board, and at major pieces of equipment.
14. Riser diagrams for all systems.

7.7.9 Project Manual Requirements:

(a) The format for the Project Manual, including its technical specifications shall be in accordance with the current CSI MasterFormat with separate sections for each of class of work required by M.G.L. c. 149 §44F.

(b) The following general information applies to the development of final Specifications:

1. Describe the extent of the work, the materials and workmanship, and include

the work under the proper section. If any portion of the work included in a section of the Specifications is to be performed by a trade covered by another section, there shall be clear and distinct cross-referencing between the sections. Merely to state "by others" is not acceptable.

2. For each item of material or equipment, the specifications shall provide for a minimum of three named brands of material or equipment and the words "or equal" or a description of material or equipment which can be met by a minimum of three manufacturers or producers, and the words "or equal." Proprietary products shall not be specified except as provided by M.G.L. c. 30, § 39M; however, when they are specified, proprietary specifications are subject to the "or equal" provisions of M.G.L. c.30, § 39M.
3. Specify materials mined or manufactured in Massachusetts first and the United States of America second whenever possible.
4. Do not use general clauses intended to be all-inclusive in lieu of complete descriptions.
5. Do not duplicate standard requirements that are contained in the contract form.
6. Use consistency throughout. The word "will" shall be used to designate what the Owner, Authority, Owner's Project Manager, Commissioning Consultant, or the Designer can be expected to do, and the word "shall" shall be used to designate what is mandatory for the CM at Risk or subcontractors to do.
7. Use the same term throughout for the same subject and the term shall be the same as that used on the drawings.
8. Do not use the term "etc."
9. Avoid such terms as "to the satisfaction of the Designer," "as directed by the Designer," "as approved" and "as required."
10. Specify work in appropriate Sections according to local trade jurisdiction.
11. Avoid the use of the following symbols:

Symbol	Use Instead
#	number, no., or pounds
%	percent
"	inch or in.
x	by
'	feet or ft.
o	degree
/	per or at

12. In sections for which filed sub-bids are required, refrain from using such terms as "the Contractor," the "Heating Contractor," or "the Plumbing Contractor," but where necessary for clarity refer to the "HVAC Subcontractor," the "CM at Risk" and the like.
13. Do not give numbers both in words and figures. Numbers less than 10 shall be

written in words, 10 and higher numbers shall be written in figures. In expressing dimensions, figures such as 2 in., 16 in., 7 ft., 6 in., shall be used.

14. Each filed sub-bid section shall detail all labor and materials required by the particular sub-trade and list, by number, those drawings (and only those drawings) indicating work of that sub-trade. In addition, list drawings indicating work of a particular trade that appears on drawings that are not customarily included in the work of the trade, when applicable.
15. Do not specify that a product or system shall require prequalification or advance approval prior to bidding.
16. Established unit price items shall be used for work categories which cannot be ascertained for exact quantities in bid documents (e.g. earthwork removal and/or replacement items). In such cases, the Designer shall establish ranges of quantities with associated unit price values for each range. Unit price values shall be established for added work, for deleted work, for base bid quantities when conditions so-suggest. Unit price values shall be ascertained through consultation with cost estimators and the CM at Risk, be current, equitable, and well defined as to elements of work, overhead, like issues to be encompassed. Established unit prices shall be published within the applicable technical specification sections, and referenced from general conditions as being operative as the basis for determining values to be used for payment or recovery for change order work.
17. Staging, scaffolding, cutting and patching, refuse collection and disposal, demolition work and cleaning task, allocation policy and proposed language shall be carefully assigned to avoid duplication or omission.
18. A final draft of Project Advertisement, Notice to Bidders, Instructions to Bidders, Contract Forms, General Conditions, Supplementary General Conditions, and other "front end" documents shall be included in the 90% construction documents submittal, along with a final version of all text to appear in Division 1, General Requirements. The Designer may defer insertion of final advertising / bid dates and wage rates, understanding that they are to be established and inserted immediately prior to release of documents for bidding.

7.7.10 Construction Cost Estimate Requirements

(a) The Designer shall provide the construction cost estimates described in Articles 7.7.4, 7.7.5, and 7.7.6 in accordance with the following provisions:

1. The Designer shall review its construction cost estimate in comparison with the detailed construction cost estimate, and any update cost estimates, provided by the CM at Risk and shall work in good faith and in cooperation and coordination with the CM at Risk to reconcile any differences between the cost estimates, to clarify assumptions upon which the cost estimates are based and to address any concerns or questions with the cost estimates that

are raised by the Owner, the OPM, the CM at Risk or the Authority. If the Designer is unable to reconcile all differences between the two construction cost estimates with the CM at Risk, then the Designer shall provide a detailed explanation of the differences to the Owner and the Authority. If, in any case, the agreed-upon, reconciled construction cost estimate exceeds the Project Construction Budget, the Designer shall cooperate with the Owner, the OPM, and the CM at Risk in identifying, specifying and recommending changes in materials, equipment, component systems and types of construction, or other adjustments in the scope or materials selections for the Project, including contingencies or alternative bid items, so as to facilitate revision of the design of the Project to reduce the cost of construction so as to comply with the Project Construction Budget.

2. Cost estimate data shall be organized to identify elements of project work which may be proposed to be advanced under separate construction phases and/or separate bidding packages. When so proposed, estimates shall develop cost data relative to corresponding bidding and work execution dates established in project schedules.

3. Cost estimates shall be projected to the mid-point of the construction period.

4. The summary sheets shall contain the following:

    a. The date that the estimate was prepared. (Value Date).

    b. The anticipated bid date.

    c. The project and contract number.

    d. The title and location of the project.

    e. The name of the Designer.

    f. The name of the Estimator.

    g. The site work cost (including all utilities).

    h. The building cost (including fixed equipment).

    i. The estimated construction cost of each Phase of the work, totaled.

7.7.11 The Designer shall participate in a final review of the Construction Documents with the Owner, the Owner's Project Manager, the Commissioning Consultant, and the CM at Risk, and the Designer shall incorporate such changes as are necessary to satisfy the Owner's review comments.

7.7.12 Guaranteed Maximum Price ("GMP")

(a) When the Construction documents are 60% complete as determined by the Owner, or at such later time as may be designated by the Owner, the Designer shall prepare a fully coordinated set of the then-current Construction Documents, which shall be delivered to the CM at Risk and shall be the basis of the CM's GMP proposal.

(b) The Designer shall provide technical assistance to the Owner and the OPM in the negotiation and development of a GMP with a CM at Risk in accordance with M.G.L. c. 149A, §7, that is acceptable to the Owner. The Designer shall meet with the Owner, OPM, and the CM at Risk to review the GMP proposal and the written statement of its basis. If the GMP proposal submitted by the CM at Risk exceeds the Construction Budget, the provisions of Articles 4.10.4 and 4.10.5 shall apply.

(c) The Designer shall provide technical assistance to the Owner and the Owner's Project Manager in the negotiation, preparation and execution of any amendments to the Owner-CM at Risk contract, including, but not limited to, the Guaranteed Maximum Price ("GMP") amendment pursuant to M.G.L. c.149A, § 7 and any separate amendment for any construction work commenced before execution of the GMP amendment pursuant to M.G.L. c.149A, §7(b)(3).

7.8 Bidding Phase

7.8.1 The Designer shall, when authorized by the Owner, prepare for reproduction and distribution the construction bid documents required for the solicitation and receipt of statements of qualifications and bids from Trade Contractors. The Designer shall prepare all addenda (to include bidder questions and Designer responses), subject to the Approval of the Owner. The Designer shall attend the pre-bid conference if one is scheduled, taking note of all questions asked. Relevant questions submitted in writing shall be answered by the Designer by means of written addenda to the bid documents as required. The Designer shall attend each bid opening of the Trade Contractors (and of other bidders if necessary) and shall, within five working days of the respective bid opening dates, advise the Owner in writing of the Designer's opinions as to the bids of Trade Contractors (and of other bidders if necessary).

7.8.2 The Designer shall receive all inquiries relating to the bid documents and, when necessary, answer questions by preparing and issuing written addenda. The Owner shall review and approve all such addenda prior to issuance to bidders.

7.8.3 There may be multiple bid packages for the Project. Multiple bid packages may be assembled and bid concurrently or consecutively as a portion of the Project. Portions of the Project may be bid separately from other portions. The Designer shall appropriately staff and structure its design and construction phase performance to assist the Owner in the preparation, issuance, bidding and negotiation, if any, of so-called early bid packages as provided in M.G.L. c. 149A, § 7(b)(3).

7.8.4 If the Project has to be re-bid, or the GMP Amendment must be re-negotiated and

amended because of a defect in the bid documents prepared by the Designer or in procedures proposed by the Designer, the Designer shall correct the defect and take the necessary actions for re-bidding the Project on proper bid documents without any additional compensation to the Designer.

7.8.5 The Designer shall review alternates and make written recommendations to the Owner as to their acceptance.

7.8.6 If the Owner executes a GMP Amendment for an amount that exceeds the amount established in the Project Construction Budget, such an award will not affect the Fee for Basic Services.

7.8.7 Trade Contractor Selection Process

(a) Trade Contractor Prequalification pursuant to M.G.L. c. 149A, §8(c)

1. The Designer shall participate as a member of the Owner's Trade Contractor Prequalification Committee established by the Owner pursuant to M.G.L. c.149A, § 8(b).

2. The Designer shall review the information provided by the CM at Risk describing the work to be required of each Trade Contractor and shall assist the Owner in the preparation of the Request for Qualifications for Trade Contractors to be used to solicit responses from eligible Trade Contractors and to prequalify Trade Contractors for participation in the Project.

(b) Request for Bids for Trade Contractor Services pursuant to M.G.L. c. 149A, §8(g)

1. The Designer shall assist and advise the Owner in the preparation of the Invitation for Bids for Trade Contractor services in accordance with the provisions of M.G.L. c. 149A, §8.

2. The Designer shall attend all pre-bid conferences and meetings.

(c) Trade Contractor Bid Review

1. The Designer shall attend all bid openings and shall review all Trade Contractor bids in conjunction with the Owner's Project Manager and CM at Risk to determine responsiveness, completeness, accuracy, price and conformance to the requirements of M.G.L. c.149A, § 8(g)-(i), and to provide technical guidance to the Owner regarding the acceptance or rejection of any Trade Contractor bid. Within five (5)business days after the respective bid opening dates, the Designer shall advise the Owner in writing of the Designer's opinions as to the bids of Trade Contractors (and of other bidders if necessary).

7.8.8 Selection of Subcontractors Who Are Not Trade Contractors pursuant to M.G.L. c.149A, § 8(j) ("Non-Trade Contractors")

(a) Non-Trade Contractor Bidding

1. The Designer shall review the detailed bidding information developed by the CM at Risk in accordance with M.G.L. c. 149A, § 8(j) for accuracy, completeness, coordination of scope and conformance with the construction documents.

(b) Non-Trade Contractor Bid Review and Award

1. The Designer shall attend all bid openings and scoping meetings if permitted or otherwise allowed by law, and, in conjunction with the OPM and CM at Risk, the Designer shall review all Non-Trade Contractor bids for responsiveness and completeness and advise the Owner on the acceptance or rejection of any Non-Trade Contractor bids by the CM at Risk. The Designer shall, in conjunction with the OPM, attend all final scope and negotiation meetings conducted by the CM at Risk. The Designer shall, within five (5) working days of the respective bid opening dates, advise the Owner in writing of the Designer's opinions as to the bids of Non-Trade Contractors.

7.9 Construction Administration Phase – Obligations During Construction: Following the execution of the Owner-CM at Risk Agreement, the Designer shall undertake certain of the obligations of administering the Owner-CM at Risk Agreement on behalf of the Owner, provided that Designer shall not be subject to provisions of the Owner-CM at Risk Agreement that would have the effect of expanding Designer's responsibilities or liabilities under this Contract without Designer's written consent. Services during this phase include, but are not necessarily limited to:

7.9.1 Upon commencement of construction activities for the Work or early bid packages or at times established in Project schedules, the Designer shall:

(a) Furnish the CM at Risk with information for establishing lines and grades and such supplemental drawings as are reasonably needed to implement the intent of the Construction Contract Documents;

(b) With reasonable promptness and in accordance with schedules agreed upon by the Designer and CM at Risk, observe testing when required under this Contract, and review and act upon samples, schedules, shop drawings and other submissions from the CM at Risk;

(c) Prepare, maintain and update logs for all submittals;

(d) Visit the site at intervals appropriate to the stage of construction, weekly or as otherwise agreed to by the parties, and observe the progress of the Work, issue written progress reports, and attend job meetings, and review and respond to meeting minutes prepared by the Owner's Project Manager, and to determine in general if the Work observed is being built in a manner indicating the Work when completed will be in accordance with approved Construction Contract

Documents;

(e) Collaborate with the on-site Project Representative of the OPM to identify and monitor issues of concern relative to the progress of the Work, and establish communications processes to help assure that matters of mutual concern are exchanged on a timely basis with one another, the OPM, CM at Risk, Commissioning Consultant, and Owner;

(f) On a weekly basis, make specific recommendations on rejection of any Work observed by the Designer that fails to conform to the Construction Contract Documents, and observe corrected Work;

(g) Require each Subconsultant engaged in accordance with Article 5 to make visits weekly or as otherwise agreed to by the parties during the progress of any work to which that Subconsultant 's services relate, and to report upon it in writing to the Designer;

(h) Recommend actions to be taken which may include condemnation or rejection of any work that the Designer determines fails to conform to the Owner- CM at Risk Agreement;

(i) Review and recommend appropriate action for proposed requests for changes and where required by the Owner, prepare documents associated with requests for a change in any Construction Contract Documents. Compensation for change order work by the Designer shall be determined in accordance with Article 10;

(j) Conduct semi-final and final inspections of the Project and report the results of such inspections in writing to the Owner;

(k) In association with the Commissioning Consultant, review the report by such Commissioning Consultant on the balancing of air and water circulation systems;

(l) In association with the Commissioning Consultant, review the report by such Commissioning Consultant on the setting and adjustment of automatic controls;

(m) In a timely manner, decide all questions regarding interpretation of, or compliance with, the Construction Contract Documents, except as the Owner may in writing otherwise determine;

(n) In association with the Commissioning Consultant, review the recommendations of such Commissioning Consultant for requirements upon operating and maintenance documents and building user training events and instructional media as established in the Construction Contract Documents; such Commissioning Consultant or OPM shall coordinate involvement of contracting parties, the Designer, and Owner;

(o) Furnish the Record Drawings as submitted by the CM at Risk in accordance with 7.9.3, and other required documents;

(p) Assist the Owner in providing the written CM at Risk Evaluations required of the Owner pursuant to M.G.L. c.149 §44D(7) at the completion of approximately 50% of the Construction Phase on forms prescribed by M.G.L. c.149 §44D(16);

(q) Perform inspections of the work as necessary to prepare a punch list identifying each incomplete or deficient Work item and performing re-inspections to authorize removal of satisfactorily completed Work items from the punch list, or to determine that the Project is complete. In association with the OPM, a cost shall be assigned to each incomplete or deficient Work item when it has been determined that the Project has reached Substantial Completion; and

(r) Receive from the CM at Risk all maintenance and operating manuals, occupancy permits, guarantees and other similar relevant materials.

7.9.2 The Designer shall submit to the Owner's Project Manager within 48 hours all requisitions for payment submitted by the CM at Risk in the form required by the Owner. The Designer may establish procedures with the CM at Risk for advance notification of requisition and/or draft version processing. With respect to each such requisition, the Designer shall certify to the best of its knowledge that the percentage of Work included in the requisition is accurate and that the work performed is in accordance with the Construction Contract Documents. In the event the Designer does not approve the requisition exactly as submitted by the CM at Risk, the Designer shall forward it for payment to the Owner's Project Manager dated and signed with corrections and with an accompanying letter of explanation setting forth the Designer's objections and recommended changes. The Designer shall coordinate the required visits of its own staff and those of its Subconsultants, to the construction site so as to enable it to submit to the Owner's Project Manager the CM at Risk's monthly requisition for payment. Timely payments to the CM at Risk are required by M.G.L. c. 30, § 39K. Therefore, the Designer shall establish procedures to help assure either immediate mail or messenger delivery of the requisition for payment to the Owner's Project Manager, and shall process requisitions for payment within five business days after receipt of the same, provided the CM at Risk has submitted a full and complete requisition for payment in the correct form.

7.9.3 Prior to issuance of the Certificate of Substantial Completion, the Designer shall obtain from the CM at Risk as-built drawings, including drawings showing the actual installation of the site utilities, plumbing, heating, ventilating and electrical work under the Owner-CM at Risk Agreement, and recording all changes. The Designer shall ascertain that changes authorized by change orders are shown on the CM at Risk's as-built drawings, but Designer shall be entitled to rely upon the accuracy and completeness of the CM at Risk's as-built information, and shall forward such to the Owner as Record Drawings.

7.9.4 Issue the Certificate of Substantial Completion of Construction.

7.9.5 The Designer shall meet with the Owner monthly during this Phase.

7.10 Completion Phase: Upon acceptance of the Certificate of Substantial Completion of Construction by the Owner, the Designer shall thereafter provide the following services:

7.10.1 With respect to a completed Project, preparing a Certificate of Final Completion.

7.10.2 With respect to a punch list, re-inspecting the work up to three times in order to determine that the punch list work is satisfactorily completed.

7.10.3 Reviewing and certifying the CM at Risk's Application(s) and Certificate(s) for Payment as necessary.

7.10.4 Attending meetings as reasonably necessary in the opinion of the Owner or Owner's Project Manager, unless such meetings involve continued discussions of incomplete or deficient work and the Basic Services punch list site visits have been expended. In such instance, the meetings shall be paid for as Extra Services.

7.10.5 Using the as-built information maintained by the CM at Risk during construction referred to in Article 7.9.3, and revising the applicable original reproducible drawings and electronic media drawings on the basis of the as-built drawings, provided that the Designer shall be entitled to rely upon the accuracy and completeness of the CM at Risk's as-built information. Upon completion of the required drafting and editing, provide one (1) set of mylar reproducibles, two (2) sets of prints and two (2) electronic version copies to the Owner which shall become the property of the Owner. The cost for printing the mylar reproducibles and two sets of prints are Reimbursable Expenses. Upon completion of the required drafting and editing, provide one (1) set of prints and one electronic version copy to the Authority.

7.10.6 Ten (10) months after the date of substantial completion, performing one (1) site inspection and preparing a list of construction warranty deficiencies. The Designer shall consult with the Commissioning Consultant upon the acceptability of warranty compliance requirements and response actions.

7.10.7 Informing the Owner in writing, through the Owner's Project Manager, of all such warranty deficiencies that should be addressed.

7.10.8 Performing one (1) site inspection within a further sixty (60) days to see that all such warranty deficiencies have been corrected.

7.10.9 Evaluation of CM at Risk: The Designer shall assist the Owner with providing the written CM at Risk Evaluations required of the Owner pursuant to M.G.L. c.149 § 44D(7) within seventy (70) days of the date of Substantial Completion for construction, on forms prescribed by M.G.L. c.149 § 44D(16).

7.11.10 The Designer shall assist the Owner in providing the written summary report on the Project to the Office of the Inspector General as required by the provisions of 945 CMR 2.09

7.10.11 Two (2) suitably bound, legible copies of all original design and quantity calculations including those pertinent to change orders and shop drawings, if applicable, shall be

furnished by the Designer to the Owner at the conclusion of the Owner-CM at Risk Agreement.

7.5 Design Development Phase

7.5.1 Upon receipt of an Approval to proceed to the Design Development Phase, the Designer shall meet regularly and as necessary with the Owner, the OPM, and the Authority. This shall include meeting with the Owner and the OPM during this Phase in accordance with the agreed upon project work plan.

7.5.2 The Designer shall update and refine items submitted during the Schematic Design Phase, and shall submit to the Owner and the Authority, on or before the date specified in the Project Schedule, and on the basis of the approved Schematic Design Phase Documents, the following deliverables as they are defined in this Article 7.5.2 and as they are further defined in Articles 7.5.3, 7.5.4, 7.5.5, 7.5.6 and 7.5.7:

(a) a list of all filings and permits within Designer's scope of services and professional expertise required to implement the design, along with a schedule of target dates for the procurement of such permits, both of which shall be regularly updated during the term of this Contract;

(b) information and documentation within the technical expertise of the Designer and that is necessary for the Owner to file local basic zoning and environmental permits. The Designer, as Extra Services, shall provide information and documentation for the Owner to file Environmental Notification Forms, Environmental Impact Reports, and any other filings for permits that must be filed during the design development phase;

(c) soils exploration data, geotechnical and geoenvironmental reports, showings of exploratory locations relative to siting of proposed structures, based on a review of the existing conditions information provided in the surveys and studies described in Article 7 Basic Services and Article 8 Extra Services;

(d) complete design development drawings; outline specifications indicating any filed sub-bid sections and sub-sub trades based on the cost of the work and other documents necessary to specify the size and character of the Project, including siting, landscape, architectural, structural, fire protection, plumbing, heating, ventilating and air conditioning, electrical, ADA/MAAB, product requirements and other features;

(e) creation of a Building Information Model and quality control documentation demonstrating, without limitation, coordination of: ceiling clearances, mechanical room size, and shaft sizes; specifications and drawings; filed sub-bid work or sections; scheduling; equipment and power; existing and new construction; and phasing;

(f) design development drawings which the Designer shall submit for review to the local building official;

(g) a life cycle cost analysis to determine the most cost-effective design decisions related to all energy and water consuming devices, overall building operation, and maintenance [M.G.L. c. 149, s. 44M];

(h) a construction cost estimate for the design in accordance with Article 7.5.6. ;

(i) a space measurement analysis for the design verifying that the sum of all program areas in the Project plus all other floor areas in the Project equals the gross floor

area of the Project;

(j) a written summary or summaries comparing the project design, as represented in the design development drawings, specifications and cost estimates with the Final Design Program requirements, and explaining any deviations in writing.

7.5.3 Design Development Drawing Requirements: The Design Development drawings shall illustrate and describe the refinement of the Project's design to a level of detail that is customary and standard. They shall establish the scope, relationships, forms, size, and appearance of the Project by means of plans, sections and elevations, typical construction details, and equipment layouts. The drawings shall delineate locations and elements of the Work that may be proposed for assignment to project construction phases and/or separate bidding packages. Documents shall include, but not be limited to, the following:

(a) Site and utility drawings showing:

1. Existing and proposed contours and locations of the proposed building or addition(s). Show entry level elevation and key exterior grades at perimeter. Indicate all retaining walls. Include benchmarks of site if survey is available.
2. All utilities existing and proposed, indicating location, elevation, composition and size e.g., manholes, sewers, hydrants, light standards, and geothermal wells. Include work by others, e.g., gas and electric utility providers.
3. Roads, laid-out parking areas, walks, recreation areas, terraces and other site improvements.
4. Building locations fixed and referenced from main survey baseline, if available.
5. Plant materials with a preliminary schedule.

(b) Building drawings and other graphic and written requirements with floor plans showing the following: (at a minimum scale of 1/8" = 1'0"):

1. building perimeter with exterior wall thicknesses and overall dimensions;
2. structural grid;
3. plan requirements of mechanical and electrical systems;
4. building core; elevators, stairs, shafts, and toilet rooms;
5. interior partitions; appropriate thicknesses and dimensions to fix basic organizations; indicate fire separations, ratings;
6. door swings;
7. floor elevations;
8. built-in furniture and equipment; and
9. furniture layout concept drawings.

(c) Roof plans showing:

1. proposed systems type;
2. pitch and drainage patterns;

3. roof drains, gutters and scuppers; and
4. skylights, stairs through roof, penthouses, major equipment, chimneys.

(d) Building sections: One transverse and one longitudinal section. Indicate floor to ceiling heights and floor-to-floor heights. Label all spaces;

(e) Building elevations showing:

1. full height elevations including roof structures, e.g., mechanical equipment, chimneys, and penthouses;
2. floor elevations, floor-to-floor heights, and overall height related to benchmarks on site plans;
3. all fenestration;
4. column centerlines;
5. principal finish materials indicating major control and expansion joints, and divisions of materials where required;
6. louver and equipment enclosure systems; and
7. exterior grades and topographical features in context.

(f) Full height wall sections for main elevations and at special conditions. Show foundation and perimeter treatment, wall construction including insulation and supporting structure, fenestration and mechanical penetrations, and floor construction;

(g) Interior elevations: Major spaces, e.g. library, lobby, and all typical spaces, e.g. classrooms;

(h) Reflected ceiling plans: show prototypical structural, fire protection, mechanical and electrical information for classrooms and major spaces, including lighting layouts with ceiling heights and material changes;

(i) Colored interior elevations and perspectives of major and typical spaces

(j) Schedules:

1. finish schedule by room types;
2. door schedule by room;
3. window schedule;
4. equipment schedules, e.g., food service, instructional media.

(k) Structural Concepts;

1. Foundation plan showing sizes and locations of typical components.
2. Framing plans: typical floor framing, roof framing, special framing, show framing at major openings and sizes of members.
3. Column locations.
4. Preliminary details including floor and roof deck, statements as to methods of lateral bracing and how requirements of earthquake code will be met.
5. Details for special and/or incidental structural features, e.g. tunnels,

connecting bridges and unique architectural features.

6. Connection to existing buildings at foundation and at key points at existing structure if applicable.

(l) Fire Protection: floor plans indicating wet or dry type systems, hose racks or cabinets and fire department tie-ins. Indicate whether a fire pump will be required and, if so, show location within the building. Show typical sprinkler head layout;

(m) Plumbing and sanitary systems: floor plans indicating locations of all plumbing fixtures and special features, and approximate location and size of all piping systems and principal items of equipment;

(n) Heating, Ventilating and Air Conditioning Systems:

1. Show locations and approximate sizes of piping systems, air handling systems, heat pumps, and principal items of equipment such as compressors or cooling towers.

2. Indicate space requirements of major equipment and their location in mechanical rooms and fan rooms. Major shafts.

(o) Electrical Systems;

1. All services including those for special purposes shall be located and indicated.

2. Lighting shall be indicated as to type, location and intensities in foot-candles for each special and typical space.

3. Switchgear and emergency generator.

4. Fire alarm system drawings showing all initiation and signaling devices, control panels, annunciator panels, etc.

5. Security system drawings.

6. Communications drawings showing chases, major equipment locations and any special distribution requirements.

7. CATV/CCTV drawings showing chases, major equipment locations and any special distribution requirements.

8. Information Technology drawings showing chases, major equipment locations and any special distribution requirements.

7.5.4 Other Consultant's Drawings and Other Graphic and Written Requirements: For special consultants, e.g., kitchen, elevator, library, media room, equipment where appropriate, provide drawings that locate and define the scope of the work. Coordinate with other disciplines. Provide cuts of all major pieces of equipment.

7.5.5 Project Manual Requirements (Specifications):

(a) Outline Specifications that are to accompany Design Development Drawings shall be prepared to a level of detail that is standard and customary and shall include, but not be limited to, a comprehensive description of the Project and the materials proposed for use in the work. Do not provide full-length, 3-part format specifications; however, the general scope shall be indicated by CSI

MasterFormat as applicable to proposed construction.

1. The Design Development Outline Specification shall also include a comprehensive "BASIS OF DESIGN." The "BASIS OF DESIGN" shall be a narrative description of the Project and shall include all applicable architectural, civil, structural, mechanical and electrical programs and/or systems. Identify all proposed filed sub-bid categories.
2. Project Manual shall include a statement to define "Work" which is proposed to be included in separate construction phases and/or bid packages.

(b) The following is a list of items that shall at a minimum be identified or outlined in this Phase:

1. Site work; clearing, drives, walks, parking areas, fences, excavation, backfill, planting, and geothermal wells.
2. Footings; on earth, rock, piles, caissons, proposed bearing pressures, and boring logs.
3. Foundation walls; type of concrete, reinforcing, type and extent of waterproofing.
4. Footing drains; type, disposal of drainage.
5. Exterior walls: superstructure, type, materials, brick type, alternate cladding, back-up materials, damp proofing material and extent, and special features.
6. Roofs; types, vapor barrier, insulation, flashings, and all materials.
7. Flashings; general types, all materials, weights, and where each type is to be used.
8. Sheet metal; gutters, leaders, and others uses, except flashings.
9. Windows; general types, materials, sub-frames, finish, glazing, and screens.
10. Doors, exterior and interior; types.
11. Steps, exterior; including platforms and landings' materials.
12. Stairs, interior; including platforms, landings, walls, materials and finishes.
13. Framing; wood, concrete or metal systems in accordance with general design.
14. Partition construction related to room type.
15. Cabinet and casework; types and materials.
16. Food Service Equipment; types and materials.
17. Furring; lathing, plastering, materials and locations.
18. Insulation thermal; types, thicknesses, methods of application and locations.
19. Acoustical treatments; types, thicknesses, methods of application and location.
20. Interior finishes; materials for floors, walls, bases, wainscots, trim, ceilings, and ceiling heights.
21. Fire Protection; standpipe systems, sprinkler systems, fire pumps and accessories.

22. Water supply; source, location of main to which connection will be made, type of pipe for service main, load requirements, load factors, and pressures.
23. Sanitary sewers; sewage disposal system, pipe, and other materials.
24. Storm sewers; storm drainage disposal system (institution or local facility), pipe and other materials.
25. Gas main; material, size, and location. Interface with utility company.
26. Plumbing; systems such as wastes, vents, hot water, cold water, gas, air, oxygen, vacuum, main source of supply, materials for each, water heaters, pumps, thermal insulation fixture quality, and all special features.
27. Heating, ventilating and air conditioning; type of heating and refrigeration plants, type and capacity of boilers, heat pumps, and cooling equipment, fuel, type of burners, fuel storage, heaters, feed water pumps and heaters, thermal insulation, type of heating medium, supply and return piping, radiation, unit heaters, radiant heating, principal air conditioning equipment types, special features, supply, return and exhaust ductwork.
28. Electric work; service connection, location, institution or public utility, overhead or underground, transformers including type and location, types of conduit and wiring, types of fixtures, location of main switchboard, radio, fire alarm, telephone, public address, emergency lighting and wiring, emergency or other generators, solar panels, special features, including Master TV, information retrieval and/or data processing system.
29. Elevators, dumbwaiters and platform lifts; capacities, speed, travel in feet, landings, operation, controls, platform sizes, machine type and location, car and entrance finishes, and signals.
30. Other built-in equipment, types, and materials.
31. Special features.

7.5.6 Construction Cost Estimate Requirements – The Designer shall provide a construction cost estimate in Uniformat II Level 3 and CSI Master Format 6-digit format to Level 3 and M.G.L. c. 149 § 44 (filed sub-bid) formats with aggregated unit rates and quantities supporting each item referenced in Article 7.5.5(b). The estimate cost shall be projected, to the mid-point of the construction period.

(a) The Designer shall review its construction cost estimate in comparison with the detailed construction cost estimate, and any updated cost estimates, provided by the OPM and shall work in good faith and in cooperation and coordination with the OPM to reconcile any differences between the construction cost estimates, to clarify assumptions upon which the cost estimates are based and to address any concerns or questions with the cost estimates that are raised by the Owner, the OPM, or the Authority. If the Designer is unable to reconcile all differences between the two construction cost estimates with the OPM, then the Designer shall provide a detailed explanation of the differences to the Owner. If, in any case, the agreed-upon, reconciled construction cost estimate exceeds the Project Construction Budget, the Designer shall cooperate with the Owner and the OPM

in identifying, specifying and recommending changes in, or additional specification of materials, equipment, component systems and types of construction, or other adjustments in the scope or quality of the Project, including contingencies or alternative bid items, so as to facilitate revision of the design of the Project to reduce the cost of construction so as to comply with the authorized Project Construction Budget.

(b) Cost estimate data shall be organized to identify elements of project work which may be proposed to be advanced under separate construction phases and/or separate bidding packages. When so proposed, estimates shall develop cost data relative to corresponding bidding and work execution dates established in project schedules.

7.5.7 Reports, drawings, specifications, cost estimates and other design development submittals shall be subject to the written approval of the Owner and the Authority. Unless a lesser number is requested by the Owner, the Designer shall submit to the Owner for approval four (4) copies of Design Development drawings, specifications, cost estimates, and other submittals. One (1) copy shall be submitted to the Authority by the Designer. The Designer shall also furnish to the Owner and the Authority electronic media copies of the foregoing drawings and documents in such form as may be required by the Authority.

7.5.8 The Designer shall present and explain the Design Development submittal to the Owner, the Authority, and at a local public meeting scheduled by the Owner, if any such meeting is scheduled or in conference.

7.5.9 The Designer and its Subconsultants shall collaborate with the Authority's Commissioning Consultant to develop design criteria which will support the purposes of building commissioning and energy/resources conservation concepts as commonly understood and as prescribed by the Commissioning Consultant.

7.6 Construction Documents Phase: In addition to the requirements specified in the RFS (Attachment B), upon receipt of an Approval to proceed with the Construction Documents Phase of the Project from the Owner, the Designer shall do the following:

7.6.1 The Designer shall meet regularly and as necessary with the Owner, the Authority, the OPM, and the Commissioning Consultant. This shall include meeting in accordance with the agreed upon project work plan with the Owner and the OPM during this Phase.

7.6.2 Based on the submittals approved in the Design Development Phase of the Project, the Designer shall update and refine the items previously submitted and shall submit the following on or before the date and time specified in the Project Schedule:

(a) Construction documents progress submittals as follows:

1. a 60% Construction Documents Submittal, with deliverables as defined in Article 7.6.3;
2. a 90% Construction Documents Submittal, with deliverables as defined in Article 7.6.4;
3. a Final Construction Documents Submittal, with deliverables as defined in

Article 7.6.5;

4. a Bid Documents Submittal, with deliverables as defined in Article 7.6.6

(b) As a part of each of the submittals required under Articles 7.6.3, 7.6.4, and 7.6.5, an updated work plan and recommended updates for incorporation into the Project Schedule by the OPM;

(c) As a part of each of the submittals required under Articles 7.6.3, 7.6.4, and 7.6.5, a report on the status of environmental, zoning, planning, building code, and ADA/MAAB approvals and permitting processes and a certified list of all required testing and all required permits identified in 7.5.2(a).

(d) All submittals by the Designer shall be subject to the written approval of the Owner, which approval shall not be unreasonably delayed, withheld, conditioned, or denied. Unless a lesser number is requested by the Owner or is specifically provided hereinafter, the Designer shall furnish to the Owner for approval four (4) sets of the drawings, specifications, construction cost estimates and all other submittals. Unless a lesser number is specifically provided hereinafter, the Designer shall furnish one (1) set of said drawings, specifications, construction cost estimates and all other submittals to the Authority. The Designer shall also furnish electronic media copies of the foregoing drawings and documents to the Owner and the Authority in such form as may be required by the Authority.

7.6.3 60 Percent Construction Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a 60 % Construction Documents Submittal (60% CD Submittal), which shall include:

1. Construction Documents and other deliverables, as defined in this Article 7.6.3 and as further defined in Articles 7.6.2, 7.6.7, 7.6.8, and 7.6.9, advanced to a level of intermediate (60 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.

2. In instances where the Designer takes exception to the Authority's previous review comments on the Design Development submittal, a written statement explaining its position.

3. The Basis of Design that accompanied the Outline Specifications in the Design Development Phase shall be updated and expanded to include all proposed architectural, structural, fire protection, plumbing, mechanical, electrical, civil, and landscape design concepts for the Project.

4. A space summary, in the form and format prescribed by the Authority, that sets forth the current space calculations and totals and certifies that said space calculations and totals are in compliance with those previously authorized by the Authority in the Project Funding Agreement.

5. Keying of graphics shall be sufficient to navigate through the set easily .

6. A list of all drawings related to the Project.

7. A materials selection statement identifying typical interior and exterior surfaces and their materials.

8. A color theory statement indicating proposed paint colors and material selections for typical and special spaces, explaining why they have been selected and how these selections relate to surrounding materials and colors.

9. Large scale plans of all mechanical and electrical spaces with major equipment indicated.

10. Project Manual, in CSI Master Format (full-length, current version), including all sections to be included in final technical specifications, developed to include a list of all materials in the building with their manufacturers. Identify all specifications sections which need to be filed sub-bid.

11. Identify all proposed bid alternates by inclusion in a project manual section titled "Alternates." Alternates shall be listed in sequence as approved by the Owner. Work required under bid alternates shall be described and/or drawn, as appropriate, to clearly define the design criteria and extent of work involved for implementation of the bid alternate. In each instance, the existing conditions and/or new design criteria for base bid work shall also be described and indicated in documents.

12. Code analysis: Provide a building code analysis. Any deviation from methods of compliance described in earlier submittals shall be indicated. The Code analysis shall identify its preparer, code edition referenced, and include a comprehensive description of operative building code provisions, with floor plans showing fire separation types, area calculations, egress capacity for exits and exitways, and any special features required to comply.

(b) As a requirement of the 60% CD Submittal, and in accordance with Article 7.6.3 and Article 7.6.9, the Designer shall provide a construction cost estimate prepared using CSI MasterFormat 6-digit format to Level 3 and MGL c.149 §44F (filed sub-bid) format including quantities of all materials and unit prices of labor, equipment, and materials as well as a cost estimate for each item of work, for review by the Owner and the Authority. The estimated cost shall be projected to the mid-point of the construction period. The development of said construction cost estimate shall under no circumstances delay the timely submission of the remainder of the 60% CD Submittal.

7.6.4 <u>90 Percent Construction Documents Submittal</u>:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a 90 % Construction Documents Submittal (90% CD Submittal), which shall include:

1. Construction documents and other deliverables as defined in this Article 7.6.4 and as further defined in Articles 7.6.2, 7.6.7, 7.6.8, and 7.6.9, advanced to a level of substantial (90 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.

2. A space summary, in the form and format prescribed by the Authority, that sets forth the current space calculations and totals and certifies that said space calculations and totals are in compliance with those authorized by the Authority in the Project Funding Agreement.

3. Interior Materials Color Boards, including samples of principal interior materials, labeled and mounted to indicate locations.

4. Final structural and energy design calculations.

5. A statement confirming that the Owner has been provided with structural design drawings, specifications, and calculations sufficient to enable execution of an independent structural peer review process, as defined in the Massachusetts Building Code, as amended (this requirement applies to all school construction projects with a floor area exceeding 10,000 square feet). The Designer shall advise the Owner of this requirement, in writing, not less than sixty (60) days prior to delivery of the 90% CD Submittal allowing the Owner to arrange for the services of an Independent Structural Peer Reviewer. Upon reaching 90 percent completion of construction documents, the Designer's structural engineering consultant shall have reached a level of 100 percent completion of its construction documents to enable the advancement of the independent structural peer review.

6. The Designer and its consultants shall fully cooperate with the Independent Structural Peer Reviewer in the process. The Designer shall obtain a copy of the Independent Structural Engineering Review report and submit it to the Owner and the Authority upon completion of the remainder of the construction documents at the level of final completion.

7. In instances where the Designer takes exception to any of the Authority's 60% CD Submittal review comments, a written position statement explaining the Designer's position on its exceptions to said review comments.
8. Project Manual in CSI Master Format (full-length, current version), including all sections to be included in final technical specifications, developed to include a list of all materials in the building with their manufacturers. Identify all specifications sections which need to be filed sub-bid.
9. As a requirement of the 90% CD Submittal, and in accordance with the provisions of this paragraph and Article 7.6.9, the Designer shall provide a construction cost estimate prepared using the CSI Master Format 6-digit format to Level 3 and MGL c.149 §44F (filed sub-bid) format, including quantities of all materials and unit prices of labor, equipment, and materials,

as well as a cost estimate for each item of work, for review by the Owner and the Authority. The development of said construction cost estimate shall under no circumstances delay the timely submission of the remainder of the 90% CD Submittal.

7.6.5 Final Construction Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a Final Construction Documents Submittal, which shall include:

1. Construction documents and other deliverables as defined in this Article 7.6.5 and as further defined in Articles 7.6.2, 7.6.7., 7.6.8, and 7.6.9, advanced to a level of final (100 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.

2. A final construction cost estimate, in accordance with the provisions of this paragraph and Article 7.6.9, based on the 90% Construction Documents, including cost estimates for general conditions, overhead and profit, insurance, bonds, and all other items expressed as percentage rates for design contingencies and construction contingencies and escalation to the mid-point of construction; and other mutually agreed upon contingencies. The final construction cost estimate shall be prepared the CSI MasterFormat to Level 3 and M.G.L. c.149,
§44F (filed sub-bid) format and shall be complete with a single line description for each item with the detailed unit rate or item cost buildup provided in each case.

3. Complete construction drawings and specifications, certified by the Designer as having satisfied the firm's quality control review process as previously confirmed with the Owner, in sufficient detail to permit fixed-price bids in open competition for construction of the Project when documents have been approved for issuance for bidding.

4. No later than at the 100% stage of completion of the final drawings and specifications, two sets of the final drawings and specifications that shall be provided to the local building official to be signed and stamped "Approved" by the local building official; two sets of plumbing drawings and specifications that shall be provided to the local plumbing inspector to be signed and stamped "Approved" by the local plumbing inspector; two sets of the fire protection, HVAC, and electrical construction documents that shall be provided to the local fire official to be signed and stamped "Approved" by the local fire official; two sets of the electrical construction documents that shall be provided to the local electrical inspector to be signed and stamped "Approved" by the local electrical inspector. Notwithstanding the foregoing, the Owner acknowledges that building officials, department inspectors, and fire officials have varying policies on approvals and submittal procedures, and the only obligation of the Designer in this regard is to promptly make the submittals described herein and assist the Owner in receiving the approvals to

the extent available.

5. At the 100 percent stage of completion of final drawings and specifications, a written summary comparing the final construction drawings and specifications and final estimated construction cost with the Final Design Program requirements and submittals made during the Design Development Phase and earlier in the Construction Documents Phase, explaining any significant deviations.

6. In instances where the Designer takes exception to any of the Authority's 90% CD Submittal review comments, a written position statement explaining the Designer's position on its exceptions to said review comments.

7. The Independent Structural Engineering Peer Review Report obtained from the Independent Structural Engineering Peer Reviewer referenced in Articles 7.6.4(5) and 7.6.4(6). The Designer shall include a certification statement from the project structural engineer designer of record to acknowledge receipt of the Report and to indicate response actions pursuant thereto. The Designer shall also forward a copy of said Report to the Building Inspector.

8. A certification that all applicable local, state and utility officials have been contacted by the Designer regarding each utility connection and that the persons responsible for permits or connection approval have agreed to the systems' use.

7.6.6 Bid Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a Bid Documents Submittal which shall include:

1. Construction documents and other deliverables as defined in this Article 7.6.6 and as further defined in Articles 7.6.2, 7.6.7, and 7.6.8, incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.

2. From the construction drawings and specifications approved by the Owner, incorporating such changes as the Owner or the Authority requires, a set of reproducible black and white drawings and original specifications on high quality white bond paper, single-sided, properly packaged, suitable for reproduction, stamped and signed by all disciplines, that shall be prepared by the Designer and transmitted to the Owner; which documents shall become the property of the Owner as provided under Article 16. Other suitable reproducible media, having the same content shall be substituted, when so directed or authorized by the Owner.

3. Upon receipt of Owner authorization to advance to reproduction of the approved documents for distribution to bidders and, upon reproduction thereof, the Designer shall promptly submit complete sets of bid documents to the Owner (two sets) and the Authority (one set - half size for Drawings). Any subsequent addenda shall be promptly submitted to the Owner and the Authority.

7.6.7 Drawing Requirements:

(a) The documents prepared during the Construction Documents Phase shall set forth the requirements for construction of the Project to a level of detail that is customary and standard and shall include, but not be limited to:

1. General information showing drawing index, symbols, abbreviations, notes, locations map.

2. Site drawings shall be complete to define the extent and detail of site work. Show the following:

   a. Layout and location of all proposed work including buildings, structures, retaining walls, geothermal wells, parking, walls and all other site improvements, with details.
   b. Existing and proposed grades and contours including floor elevations, existing structures and topography, survey base line, bench marks and boring locations.
   c. Landscaping and planting.
   d. All utility service lines, systems and structures for electricity, gas, oil, water, steam, telephone, CATV, fire alarm, sanitary and storm drainage including size, composition, grades and directions of flow.
   e. Contract Limit Line and Storage Area for construction materials.
   f. All existing foundations, obstructions and other physical characteristics of the site which may affect the construction work.
   g. Site survey.
   h. Cuts of benches, light standards.

3. Demolition drawings and temporary work required.

4. Architectural drawings shall include at a minimum:

   a. Floor plans of each floor, including basement and lofts or attic with room and corridor dimensions, wall thicknesses, column locations, floor elevations, mechanical and electrical openings, door and window designations, partition types, floor materials, built in furniture and equipment, keyed to other architectural drawings. All rooms numbered.
   b. Large scale floor plans, as required, to illustrate detailed requirements of rooms.
   c. Large scale plans showing key areas e.g. lobby, special spaces. Indicate surface materials. (minimum scale ¼” = 1’- 0”)
   d. Roof plans showing openings, drainage, slopes, expansion joints and all projections, including equipment.
   e. Key plans on all floor plans and section drawings, where appropriate.
   f. Building Sections as required to show spatial organization of the building but no less than one longitudinal and one transverse.
   g. Building elevations. All building elevations shall be fully developed, and hidden elevations shall be shown. Elevations shall be shown in a

sequence as unfolded from a certain point.

h. Full height wall sections indicating dimensions, flashing, anchorage, reinforcing, coursing, cladding, and all other conditions at wall, roof, foundation, and interior floors.
i. Exterior details, for roofing, flashing, expansion control, construction joints, waterstops and other details showing all conditions both vertical and horizontal, including schedules.
j. Door, window, entrance, and storefront, schedules, and details.
k. Vertical circulation plans, sections and details including stairs, elevators, conveyors, and dumbwaiters.
l. Interior elevations of all significant and typical spaces.
m. Interior details including casework, paneling surfacing and acoustical treatment.
n. Reflected ceiling plans coordinated with fire protection, mechanical and electrical drawings, and ceiling details.
o. Schedules (clearly define new or existing)
    i. Doors
    ii. Equipment, e.g. for services
    iii. Partitions
    iv. Finishes

5. Structural drawings shall indicate the following:

    a. Indicate or refer to location of geotechnical exploration data and reports related thereto.
    b. Foundation plans with bottom grades showing layout of all footings, walls, slabs on grade including reinforcing, grade beams, and columns; include design soil bearing pressures and live loads.
    c. Floor and roof plans of structural systems including framing, grades of finished floors and depressed areas, with locations and dimensions for all openings. Also indicate design floor loads.
    d. Complete foundation wall elevation and typical sections, with reinforcing indicating location, dimensions and grades for all footings, steps and wall openings.
    e. Complete details and sections with dimensions for all construction including expansion and construction joints, reinforcing and other embedded items.
    f. Schedules (with dimensions) for all lintels, beams, joists, and columns.
    g. Unless detailed on the Drawings, the following information shall appear in the general notes: class and 28 day strength of concrete for each portion, structural steel and concrete reinforcing design stresses for each type of structural member, concrete cover for each type of structural member, shrinkage and temperature steel requirements, reinforcing laps for main reinforcing and temperature steel; bendpoint, cutoff, and hook locations for all members, minimum beam and lintel bearing. Reinforcing steel fabrication shall be in accordance with most recent ACI, “Manual of Standard Practice for Detailing Reinforced Concrete.” Structural steel fabrication shall be in accordance with the AISC “Manual of Steel

Construction."

6. Fire protection drawings shall indicate standpipe systems, sprinkler systems, suppression systems, access panels, fire pumps, accessories, and piping. All piping, equipment, fixtures and devices shall be located and sized. Design criteria shall be provided on the drawings in accordance with NFPA requirements.

    a. Fire protection work, other than site work, shall not be combined on the same sheets with the Plumbing, HVAC, Electrical, or other drawings except with the prior approval of the Owner.

7. Plumbing drawings shall indicate the following:

    a. All work done by the Plumbing Subcontractor, which includes all water, gas, air, vacuum, medical gases, sanitary and storm wastes, and accessories. Include foundation drain lines unless established as the work of the General Contractor and shall not be indicated on the Plumbing Drawings. Site utilities shall be indicated on the utility drawings.
    b. Plumbing work, other than site work, shall not be combined on the same sheets with the Fire Protection, HVAC, Electrical, or other drawings except with the prior approval of the Owner.
    c. Trapping and venting of all plumbing fixtures including floor drains.
    d. Water and gas supply sources, storm and sanitary discharge mains.
    e. All piping shall be carefully sized and all sizes shall be indicated on drawings and riser diagrams. Indicate all directions of flow and pitch on piping.
    f. All accessories, valves, and fixtures including all drinking fountains, grease traps for kitchen waste and all necessary panels, identified as to type and size.
    g. All piping and connections required for other trades (e.g., kitchen equipment, HVAC make-up water, etc.).
    h. Acid waste, vents and neutralization systems for laboratories.
    i. Plumbing Legend and/or graphical symbols on the first sheet of the Plumbing Drawings in accordance with the American National Standards Institute (ANSI).
    j. Plumbing riser diagrams for structures two or more stories in height above the ground level.
    k. Domestic water booster pumps, boiler feed water, meter location, hose bibbs, and wall hydrants.
    l. Domestic hot water: storage tanks, piping material, hanger details.
    m. All required access panels shall be indicated.
    n. Backflow preventors and cleanouts. Verify that access and clearance provisions for periodically inspected devices, including backflow prevention, are adequate to satisfy requirements of inspecting agencies.

8. Heating, Ventilating and Air Conditioning Drawings shall indicate the following:
    a. HVAC work, other than site work, shall not be combined on the same

sheets with Fire Protection, Plumbing, Electrical, or other drawings except with the prior approval of the Owner.

b. All piping and ductwork systems shall be located and sized. All ductwork shall be shown double line.
c. All systems shall be sized at all reductions and riser diagrams of piping and duct systems shall be indicated.
d. All directions of flow and pitch on piping, and direction of flow, volumes for duct systems shall be indicated.
e. All equipment shall have sufficient servicing and/or replacement space indicated on drawings.
f. All equipment, accessories, valves and dampers with all necessary access panels, identified as to type and size. Access panels, where required for access to valves and dampers shall be indicated on drawings.
g. Cooling system pumps, chillers, cooling towers, air handling units, heat pumps, ductwork system and dampers, fan details, temperature control system, air and hydronic balancing equipment, and schedules shall be indicated.
h. Cooling tower design shall be indicated on the drawings showing site location, elevations and floor plan of equipment layout and typical flow diagram as related to the total HVAC system.
i. All fire and smoke dampers, access panels and doors.
j. Mechanical room designs:
    i. Vent pipes for safety valves, relief valves, back pressure valves and tanks shall be extended above flat roofs in accordance with all governing authorities.
    ii. In all designs for boiler and refrigeration plants, include a complete floor plan indicating location of all major mechanical equipment and sufficient service space.
    iii. In designs of new and/or replacement boiler and refrigeration plants, provide a flow diagram detailing steam or hot water distribution systems, return systems, including all existing equipment and their function, as well as any proposed expansions with all necessary instrumentation and controls.

9. Electrical Drawings shall indicate the following:

a. Site utilities shall be indicated on separate electrical site drawings, unless ample space is available on common site for utility drawings.
b. Electrical work, other than site work, shall not be combined on the same sheets with Fire Protection, Plumbing, HVAC, or other drawings except with the prior approval of the Owner.
c. General arrangement: Outline layout of each floor. Typical sections through the structure shall be indicated when necessary to define requirements, floor and ceiling heights, elevations, and type construction, including concrete pads shall be indicated. Indicate interface with other systems. Identify any work by general contractor or other trades.
d. Interior lighting system: Light fixture schedules, circuiting location and mounting heights of all fixtures, receptacle and switch outlets, sizes and

types of all lamps, conduits, all other accessories and riser diagrams shall be indicated on drawings. Indicate details and method of supporting electrical fixtures and conduits. Designer shall specify that all electrical lighting fixtures be supported from the building structure, and shall be independent of ducts, pipes, ceilings and their supporting members. Comply with seismic design criteria.

e. Power system: Locations, types and method of control for all motors, heaters, appliances, controllers, starters, branch circuits, feeder conductors, conduits, and solar panels. Indicate riser diagrams. Show details and indicate method of supporting electrical conduit. For larger projects, thermostats and control wiring are normally covered under the HVAC sub-contract, assure coordination.
f. Fire Alarm, Data, Communications, CATV/CCTV Systems: Locations and types of all devices, outlets and equipment, service connections, wiring diagrams, and all other essential details.
g. Services: Location and details of all services, whether overhead or underground, feeder sizes, plans and elevations of switchgear and transformers, metering and service switchboard arrangements, wiring and ground fault diagram, and bus ducts.
h. General and sub-stations: Location, size, method of connection and protection of all generators, transformers, exciters, motor generators, switch gear, and associated equipment, current characteristics and equipment capacities. Indicate equipment connections by means of one line and/on wiring diagrams and schedule all major items of equipment and all instruments.
i. Underground work: Shall include specifying (1) the size and locations of manholes, (2) types of cables, (3) number, sizes, and locations of ducts, (4) locations, sizes, and types of cable supports, fireproofing, duct line profile, and (5) one line diagram of connections.
j. Pole line work: If required as contract work, indicate location, length, treatment and class of poles, guying, cross arms, insulators, circuiting, transformers, protective and switching devices, lightning arresters, special structures, diagrams, current characteristics and grounding.
k. Exterior lighting: Location, size, and type of transformers, luminary, poles, light standards, cables, ducts, and manholes, details of control equipment and connection diagrams.
l. Emergency system details including transfer switch, type of fuel.
m. One line diagram indicating load KVA, and available short circuit amperes at each transformer, switchboard, distribution panel board, branch circuit panel board, and at major pieces of equipment.
n. Riser diagrams for all systems.

7.6.8 Project Manual Requirements:

(a) The format for the Project Manual, including its technical specifications, shall be in accordance with the current CSI MasterFormat with separate sections for each of class of work required by M.G.L. c. 149 §44F.

(b) The following general information applies to the development of final

specifications:

1. Describe the extent of the work, the materials and workmanship, and include the work under the proper section. If any portion of the work included in a section of the specifications is to be performed by a trade covered by another section, there shall be clear and distinct cross-referencing between the sections. Merely to state "by others" is not acceptable.
2. For each item of material or equipment, the specifications shall provide for a minimum of three named brands of material or equipment and the words "or equal" or a description of material or equipment which can be met by a minimum of three manufacturers or producers, and the words "or equal." Proprietary products shall not be specified except as provided by M.G.L. c. 30, § 39M; however, when they are specified, proprietary specifications are subject to the "or equal" provisions of M.G.L. c.30, § 39M.
3. Specify materials mined or manufactured in Massachusetts first and the United States of America second whenever possible.
4. Do not use general clauses intended to be all-inclusive in lieu of complete descriptions.
5. Do not duplicate standard requirements that are contained in the contract form.
6. Use consistency throughout. The word "will" shall be used to designate what the Owner, Authority, Owner's Project Manager, Commissioning Consultant, or the Designer can be expected to do, and the word "shall" shall be used to designate what is mandatory for the Contractor or subcontractors to do.
7. Use the same term throughout for the same subject and the term shall be the same as that used on the drawings.
8. Do not use the term "etc."
9. Avoid such terms as "to the satisfaction of the Designer," "as directed by the Designer," "as approved," and "as required".
10. Specify work in appropriate Sections according to local trade jurisdiction.
11. Avoid the use of the following symbols:

Symbol	Use Instead
#	number, no., or pounds
%	percent
"	inch or in.
x	by
'	feet or ft.
o	degree
/	per or at

12. In sections for which filed sub-bids are required, refrain from using such terms as "the Contractor," the "Heating Contractor," or "the Plumbing Contractor," but where necessary for clarity refer to the "HVAC Subcontractor," the "General Contractor" and the like.
13. Do not give numbers both in words and figures. Numbers less than 10 shall be written in words, 10 and higher numbers shall be written in figures. In

expressing dimensions, figures such as 2 in., 16 in., 7 ft., 6 in., shall be used.

14. Each filed sub-bid section shall detail all labor and materials required by the particular sub-trade and list, by number, those drawings (and only those drawings) indicating work of that sub-trade. In addition, list drawings indicating work of a particular trade that appears on drawings that are not customarily included in the work of the trade, when applicable.
15. Do not specify that a product or system shall require prequalification or advance approval for use prior to bidding.
16. Established unit price items shall be used for work categories which cannot be ascertained for exact quantities in bid documents (e.g. earthwork removal and/or replacement items). In such cases, the Designer shall establish ranges of quantities with associated unit price values for each range. Unit price values shall be established for added work, for deleted work, and for base bid quantities when conditions so-suggest. Unit price values shall be ascertained through consultation with cost estimators, be current, equitable, and well defined as to elements of work, overhead, like issues to be encompassed. Established unit prices shall be published within the applicable technical specification sections and referenced from general conditions as being operative as the basis for determining values to be used for payment or recovery for change order work.
17. Staging, scaffolding, cutting, and patching, refuse collection and disposal, demolition work and cleaning task, allocation policy and proposed language shall be carefully assigned to avoid duplication or omission.
18. A final draft of Project Advertisement, Notice to Bidders, Instructions to Bidders, Contract Forms, General Conditions, Supplementary General Conditions, and other "front end" documents shall be included in the 90% construction documents submittal, along with a final version of all text to appear in Division 1, General Requirements. The Designer may defer insertion of final advertising / bid dates and wage rates, understanding that they are to be established and inserted immediately prior to release of documents for bidding.

7.6.9 Construction Cost Estimate Requirements

The Designer shall provide the construction cost estimates described in Articles 7.6.3, 7.6.4, and 7.6.5 in accordance with the following provisions:

(a) The Designer shall review its construction cost estimate in comparison with the detailed construction cost estimate, and any updated cost estimates, provided by the OPM and shall work in good faith and in cooperation and coordination with the OPM to reconcile any differences between the cost estimates, to clarify assumptions upon which the cost estimates are based and to address any concerns or questions with the cost estimates that are raised by the Owner, the OPM, or the Authority. If the Designer is unable to reconcile all differences between the two construction cost estimates with the OPM, then the Designer shall provide a detailed explanation of the differences to the Owner and the Authority. If, in any case, the agreed-upon, reconciled construction cost estimate exceeds the Project Construction Budget, the Designer shall cooperate with the Owner and the OPM

in identifying, specifying and recommending changes in materials, equipment, component systems and types of construction, or other adjustments in the scope or materials selections for the Project, including contingencies or alternative bid items, so as to facilitate revision of the design of the Project to reduce the cost of construction so as to comply with the Project Construction Budget.

(b) Cost estimate data shall be organized to identify elements of project work which may be proposed to be advanced under separate construction phases and/or separate bidding packages. When so proposed, estimates shall develop cost data relative to corresponding bidding and work execution dates established in project schedules.

(c) Cost estimates shall be projected to the mid-point of the construction period.

(d) The summary sheets shall contain the following:

1. The date that the estimate was prepared. (Value Date).

2. The anticipated bid date.

3. The project and contract number.

4. The title and location of the project.

5. The name of the Designer.

6. The name of the Estimator.

7. The site work cost (including all utilities).

8. The building cost (including fixed equipment).

9. The estimated construction cost of each Phase of the work, totaled.

7.6.10 The Designer shall participate in a final review of the Construction Documents with the Owner, the OPM, and the Commissioning Consultant, and the Designer shall incorporate such changes, as necessary, to satisfy the Owner's review comments.

7.7 Bidding Phase

7.7.1 The Designer shall, when authorized by the Owner, prepare for reproduction and distribution the construction bid documents, including advertisements, for receipt of proposals from construction contractors, and for execution of the Owner-Contractor Agreement. The Designer shall prepare all addenda (to include bidder questions and Designer responses), subject to the Approval of the Owner and the Authority. The Designer shall attend the pre-bid conference if one is scheduled, taking note of all questions asked. Relevant questions submitted in writing shall be answered by the Designer by means of written addenda to the bid documents as required. The Designer shall attend each bid opening and, with the assistance of the Owner's

Project Manager, conduct a review of the qualifications of the low filed sub-bidders and general bidder (and of other bidders if necessary) and shall, within five working days of the respective bid opening dates, advise the Owner in writing of the Designer's opinions as to the sub-bidders' bids and as to which general bidder is the responsible and eligible bidder that has submitted the lowest bid.

7.7.2 The Designer shall assist the Owner in the prequalification of prime contractors and subcontractors in the filed sub-bidder or trade contractor scopes of work pursuant to M.G.L. c. 149, §§44D½ and 44D¾ including participation as a member of the Owner's Prequalification Committee.

7.7.3 The Designer shall receive all inquiries relating to the bid documents and, when necessary, answer questions by preparing and issuing written addenda. The Owner shall review and approve all such addenda prior to issuance to bidders.

7.7.4 When sub-bids are required:

(a) Attend sub-bid openings.

(b) Assist in reviewing sub-bids with the Owner for completeness and accuracy.

(c) Assess sub-bid amounts relative to cost estimates.

(d) Assist in checking references of sub-bidders and make written recommendations as to their qualifications, only required for projects in which pre-qualification has not occurred.

(e) Issue a letter of recommendation to Owner upon acceptance of sub-bids, identify any categories to be re-bid and reason(s) therefor.

(f) Prepare and distribute the filed sub-bid tabulation to all prospective bidders. The tabulation shall be reviewed and approved by the Owner prior to its issuance to bidders.

7.7.5 Unless otherwise directed by the Owner, attend and conduct the general bid opening.

7.7.6 Review with the Owner and the Owner's Project Manager general bids for completeness and accuracy.

7.7.7 Review bidder responses for alternates and make written recommendations as to their acceptance.

7.7.8 If the Project must be re-bid because of a defect in the bid documents prepared by the Designer or in procedures proposed by the Designer, the Designer shall correct the defect and take the necessary actions for re-bidding the Project on proper bid documents without any additional compensation to the Designer.

7.7.9 If within three (3) months after approval of Construction Contract Documents, in final form, the bids of the lowest responsible and eligible bidders or negotiated proposals exceed the approved Project Construction Budget, the provisions of Article 4.10 shall apply.

7.7.10 If the Owner awards a construction contract for an amount that exceeds the amount established in the Project Construction Budget, such an award will not affect the Fee for Basic Services.

7.8 Construction Administration Phase - Obligations During Construction: Following the execution of the Owner-Contractor Agreement, the Designer shall undertake certain of the

obligations of administering the Owner-Contractor Agreement on behalf of the Owner, provided that Designer shall not be subject to provisions of the Owner-Contractor Agreement that would have the effect of expanding Designer's responsibilities or liabilities under this Contract without Designer's written consent. Services during this phase include, but are not necessarily limited to:

7.8.1 Upon commencement of construction activities for the Work or early bid packages or at times established in Project schedules, the Designer shall:

(a) Furnish the General Contractor with information for establishing lines and grades and such supplemental drawings as are reasonably needed to implement the intent of the Construction Contract Documents;

(b) With reasonable promptness and in accordance with schedules agreed upon by the Designer and Contractor, observe testing when required under this Contract, and review and act upon samples, schedules, shop drawings and other submissions from the General Contractor;

(c) Prepare, maintain and update logs for all submittals;

(d) Visit the site at intervals appropriate to the stage of construction, weekly or as otherwise agreed to by the parties, and observe the progress of the Work, issue written progress reports, attend job meetings, and review and respond to meeting minutes prepared by the Owner's Project Manager, and to determine in general if the Work observed is being built in a manner indicating the Work when completed will be in accordance with approved Construction Contract Documents;

(e) Collaborate with the on-site Project Representative of the OPM to identify and monitor issues of concern relative to the progress of the Work, and establish communications processes to help assure that matters of mutual concern are exchanged on a timely basis with one another, the OPM, Commissioning Consultant, and Owner;

(f) On a weekly basis, make specific recommendations on rejection of any Work observed by the Designer that fails to conform to the Construction Contract Documents, and observe corrected Work;

(g) Require each Subconsultant engaged in accordance with Article 5 to make visits weekly or as otherwise agreed to by the parties during the progress of any work to which that Subconsultant 's services relate, and to report upon it in writing to the Designer;

(h) Recommend actions to be taken which may include condemnation or rejection of any work that the Designer determines fails to conform to the Owner-Contractor Agreement;

(i) Review and recommend appropriate action for proposed requests for changes and where required by the Owner, prepare documents associated with requests for a change in any Construction Contract Documents. Compensation for change order work by the Designer shall be determined in accordance with Article 10;

(j) Conduct semi-final and final inspections of the Project and report the results of such inspections in writing to the Owner;

(k) In association with the Commissioning Consultant, review the report by such Commissioning Consultant on the balancing of air and water circulation systems;

(l) In association with the Commissioning Consultant, review the report by such Commissioning Consultant on the setting and adjustment of automatic controls;

(m) In a timely manner, decide all questions regarding interpretation of, or compliance with, the Construction Contract Documents, except as the Owner may in writing otherwise determine;

(n) In association with the Commissioning Consultant, review the recommendations of such Consultant for requirements upon operating and maintenance documents and building user training events and instructional media as established in the Construction Contract Documents; such Consultant or OPM shall coordinate involvement of contracting parties, the Designer, and Owner;

(o) Furnish the Record Drawings as submitted by the General Contractor in accordance with 7.8.3, and other required documents;

(p) Assist the Owner in providing the written Contractor Evaluations required of the Owner pursuant to M.G.L. c.149 §44D(7) at the completion of approximately 50% of the Construction Phase on forms prescribed by M.G.L. c.149 §44D(16);

(q) Perform inspections of the work as necessary to prepare a punch list identifying each incomplete or deficient Work item and performing re-inspections to authorize removal of satisfactorily completed Work items from the punch list, or to determine that the Project is complete. In association with the OPM, a cost shall be assigned to each incomplete or deficient Work item when it has been determined that the Project has reached Substantial Completion; and

(r) Receive from the General Contractor all maintenance and operating manuals, occupancy permits, guarantees and other similar relevant materials.

7.8.2 The Designer shall submit to the Owner's Project Manager within 48 hours all requisitions for payment submitted by the General Contractor in the form required by the Owner. The Designer may establish procedures with the Contractor for advance notification of requisition and/or draft version processing. With respect to each such requisition, the Designer shall certify to the best of its knowledge that the percentage of Work included in the requisition is accurate and that the work performed is in accordance with the Construction Contract Documents. In the event the Designer does not approve the requisition exactly as submitted by the General Contractor, the Designer shall forward it for payment to the Owner's Project Manager dated and signed with corrections and with an accompanying letter of explanation setting forth the Designer's objections and recommended changes. The Designer shall coordinate the required visits of its own staff and those of its Subconsultants, to the construction site so as to enable the Designer to submit to the Owner's Project Manager the General Contractor's monthly requisition for payment. Timely payments to the Contractor are required by M.G.L. c. 30, § 39K. Therefore, the Designer shall establish procedures to help assure either immediate mail or messenger delivery of the requisition for payment to the Owner's Project Manager, and shall process requisitions for payment within five business days after receipt of the same, provided

the Contractor has submitted a full and complete requisition for payment in the correct form.

7.8.3 Prior to issuance of the Certificate of Substantial Completion, the Designer shall obtain from the General Contractor as-built drawings, including drawings showing the actual installation of the site utilities, plumbing, heating, ventilating and electrical work under the Owner-Contractor Agreement, and recording all changes. The Designer shall ascertain that changes authorized by change orders are shown on the General Contractor's as-built drawings, but Designer shall be entitled to rely upon the accuracy and completeness of the Contractor's as-built information, and shall forward such to the Owner as Record Drawings.

7.8.4 Issue the Certificate of Substantial Completion of Construction.

7.8.5 The Designer shall meet with the Owner monthly during this Phase.

7.9 Completion Phase: Upon acceptance of the Certificate of Substantial Completion of Construction by the Owner, the Designer shall thereafter provide the following services:

7.9.1 With respect to a completed Project, preparing a Certificate of Final Completion.

7.9.2 With respect to a punch list, re-inspecting the work up to three times in order to determine that the punch list work is satisfactorily completed.

7.9.3 Reviewing and certifying the Contractor's Application(s) and Certificate(s) for Payment as necessary.

7.9.4 Attending meetings as reasonably necessary in the opinion of the Owner's Project Manager, unless such meetings involve continued discussions of incomplete or deficient work and the Basic Services punch list site visits have been expended. In such instance, the meetings shall be paid for as Extra Services.

7.9.5 Using the as-built information maintained by the General Contractor during construction referred to in Article 7.8.3, and revising the applicable original reproducible drawings and electronic media drawings on the basis of the as-built drawings, provided that Designer shall be entitled to rely upon the accuracy and completeness of the Contractor's as-built information. Upon completion of the required drafting and editing, provide one set of Record Drawing mylar reproducibles, two sets of Record Drawing prints and two electronic version Record Drawing copies to the Owner which shall become the property of the Owner. The cost for printing the mylar reproducibles and two sets of prints are Reimbursable Expenses. Upon completion of the required drafting and editing, provide one set of Record Drawing prints and one electronic version copy to the Authority.

7.9.6 Ten (10) months after the date of substantial completion, performing one (1) site inspection and preparing a list of construction warranty deficiencies. The Designer shall consult with the Commissioning Consultant upon the acceptability of warranty compliance requirements and response actions.

7.9.7 Informing the Owner in writing, through the Owner's Project Manager, of all such warranty deficiencies that should be addressed.

7.9.8 Performing one (1) site inspection within a further sixty (60) days to see that all such warranty deficiencies have been corrected.

7.9.9 Evaluation of Contractor: The Designer shall assist the Owner with providing the

written Contractor Evaluations required of the Owner pursuant to M.G.L. c.149 § 44D(7) within 70 days of the date of Substantial Completion for construction, on forms prescribed by M.G.L. c.149 § 44D(16).

7.9.10 Two (2) suitably bound legible copies of all original design and quantity calculations including those pertinent to change orders and shop drawings if applicable shall be furnished by the Designer to the Owner at the conclusion of the Owner-Contractor Agreement.

CONTRACT FOR DESIGNER SERVICES
(BASE CONTRACT FOR DESIGN BID BUILD OR CM at RISK PROJECT)

This Contract is made as of this _____ day of _____ in the year _____ between
(day) (month) (year)

the _____, _____
(Owner) (street)

_____ , Massachusetts , _____
(City) (State) (Zip Code)

hereinafter called "the Owner" and _____
(Designer)

_____

_____ , _____ , _____ , _____
(street) (city) (State) (Zip Code)

hereinafter called the "Designer" for the Designer to provide the designer services required to complete the Basic and Extra Services described herein at _____
(name/description of Project)

_____

_____

_____

The Designer is authorized to perform the services required by this Contract through the Feasibility Study Phase and, pending receipt of a written Approval to proceed from the Owner, through the Schematic Design Phase. At the Owner's option, the Designer may be authorized to perform services for subsequent design phases and/or the Construction Phases and Completion Phase, at which time a mutually agreed upon amendment to this Contract will be executed between the Owner and the Designer. If the Owner elects to construct the Project using the CM at Risk ("CM-R") construction delivery method pursuant to M.G.L. c. 149A, this Contract shall be amended using the Authority's Standard Amendment for CM-R, as it may be amended from time to time by the Authority. If the Owner elects to construct the Project using the Design-Bid-Build ("DBB") construction delivery method pursuant to M.G.L. c. 149, this Contract shall be amended using the Authority's Standard Amendment for DBB, as it may be amended from time to time by the Authority.

For the performance of the services required under this Contract for the Feasibility Study Phase and the Schematic Design Phase, and excluding those services specified under Articles 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, and 8.3, the Designer shall be compensated by the Owner for Basic Services in accordance with the Payment Schedule included as Attachment A.

Designer's Project Architect/Engineer: _____

The Subconsultants to provide services, either as Basic or Extra Services, to the Designer under this contract may include the following, as identified on the RFS:

	Name of Firm	Name of Principal	SDO CERT.
Educational Programming			
Civil Engineering			
Landscape Architecture			
Structural Engineering			
Architecture			
Fire Protection Engineering			
Plumbing Engineering			

HVAC Engineering			
Electrical/Lighting/			
Data/Communications			
Environmental Permitting			
Geotechnical Engineering			
Hazardous Materials			
Cost Estimating			
Kitchen/Food Service Consultant			
Laboratory Consultant			
Acoustical Consultant			
Specifications Consultant			
Library/Media/Audio Visual Consultant			
Technology Consultant			
Theatrical Consultant			
Sustainable/Green Design/Renewable Energy Consultant			
Code Consultant			
Accessibility/ Universal Design Consultant			
Traffic Consultant			
Furniture, Fixtures and Equipment Consultant			
Site Surveying			
Security Consultant			

IN WITNESS WHEREOF, the Owner and the Designer hereby agree to the terms of the Contract and have caused this Contract to be executed by their respective authorized officers or other authorized representatives.

OWNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date_____

DESIGNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date _____

ATTACHMENT A

PAYMENT SCHEDULE

Payments shall be made in accordance with the provisions outlined in the Contract and with the following schedule:

Basic Services

Feasibility Study Phase.....$

Schematic Design Phase.....$

Design Development Phase.....$

Construction Documents Phase.....$

Bidding Phase.....$

Construction Administration Phase.....$

Completion Phase.....$

TOTAL.....$

Extra Services

Extra Services provided pursuant to Article 8 shall be compensated as determined by the Owner (a) by a lump sum fee agreed upon in advance in writing by the Owner and the Designer, or (b) on an hourly basis in accordance with the rate schedule set forth below for time expended, up to a not to exceed amount.

Hourly Rates:

ATTACHMENT C

PARTICIPATION SCHEDULE FOR DESIGNER CONTRACTS
BY SDO CERTIFIED ENTERPRISES

This form shall be submitted to the Owner by the Designer upon execution of the Contract for Designer Services attached hereto.

Owner: **Project No:**

Name of Company	Description of Work	SDO Cert.	Dollar Value Participation
1.	_	_	$
2.	_	_	$
3.	_	_	$
4.	_	_	$
5.	_	_	$
6.	_	_	$

Dollar Value of MBE Commitment: $
Dollar Value of WBE Commitment: $
Dollar Value of VBE Commitment: $
Dollar Value of SDVOBE Commitment: $
Total Dollar Value Commitment: $
Original Fee for Basic Services Amount $

DESIGNER CERTIFICATION

The undersigned certifies under the penalties of perjury that (1) it intends to subcontract with the above listed firms for the identified work and dollar amounts and (2) certifies that he/she has read the terms and conditions of the Designer Contract with regards to SDO certified entities participation and is authorized to bind the Designer to the commitment set forth above.

Date
Name of Architect/Engineer

_____
Authorized Signature

_____
Address

_____
City, State & Zip Code

ATTACHMENT C

ATTACHMENT C

ATTACHMENT D

M.G.L. c.30 §39R - INTERNAL ACCOUNTING CONTROLS
APPLIES TO CONTRACTS OF $100,000 OR MORE
SAMPLE LETTER TO BE PREPARED ON DESIGNER'S LETTERHEAD

Date

CEO
Owner
123 Reservoir Street
Enfield, MA 01234

RE: Enfield High School

Dear:

This Statement of Internal Accounting Controls is being submitted in accordance with Article 17.5.3 of the Contract for Design Services for the above captioned project. Please be advised that our firm, the Designer under the Contract, has a system of internal accounting controls which assures that:

1. transactions are executed in accordance with management's general and specific authorization;

2. transactions are recorded as necessary, to permit preparation of financial statements in conformity with generally accepted accounting principles, and to maintain accountability for assets;

3. access to assets is permitted only in accordance with management's general or specific authorization; and

4. the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Sincerely,

ATTACHMENT E

MGL c.30 §39R – INTERNAL ACCOUNTING CONTROLS
APPLIES TO CONTRACTS OF $100,000 OR MORE
SAMPLE LETTER TO BE PREPARED ON CPA's LETTERHEAD

CEO
Owner
123 Reservoir Street
Enfield, MA 01234

RE:

Dear

Please be advised that we have reviewed the Statement of Internal Accounting Controls prepared by the _____ in connection with the
Name of Designer
above-captioned project. This statement is required under M.G.L. c.30 §39R. In our opinion, representations of management are consistent with our evaluations of the system of internal accounting controls. In addition, we believe that they are reasonable with respect to transactions and assets in the amount which would be material when measured in relation to the firm's financial statements.

Sincerely,

(CPA)

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. _____

WHEREAS, the _____ ("Owner") and _____, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the _____ Project (Project Number _____) at the _____ School on _____. "Contract"; and

WHEREAS, effective as of _____, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:	Original Contract	After this Amendment
Feasibility Study Phase	$ _____	$ _____
Schematic Design Phase	$ _____	$ _____
Design Development Phase	$ _____	$ _____
Construction Document Phase	$ _____	$ _____
Bidding Phase	$ _____	$ _____
Construction Administration Phase	$ _____	$ _____
Completion Phase	$ _____	$ _____
Total Fee	$ _____	$ _____

This Amendment is a result of: _____
_____
_____

3. The Construction Budget shall be as follows:

   Original Budget: $_____

   Amended Budget $_____

4. The Project Schedule shall be as follows:

   Original Schedule: $_____

   Amended Schedule $_____

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date_____

DESIGNER

_____
(print name)

_____
(print title)

By _____
(signature)

Date _____

ATTACHMENT C

Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated July 2016)

Commonwealth of Massachusetts

Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated July 2016)

1. Project Name/Location For Which Firm Is Filing:

2. Project #

This space for use by Awarding Authority only.

3a. **Firm (Or Joint-Venture) - Name and Address Of Primary Office To Perform The Work:**

3. Name Of Proposed Project Manager:
For Study: (if applicable)
For Design: (if applicable)

3b. Date Present and Predecessor Firms Were Established:

3f. Name and Address Of Other Participating Offices Of The Prime Applicant, If Different From Item 3a Above:

3c. Federal ID #:

3g. Name and Address Of Parent Company, If Any:

3d. Name and Title Of Principal-In-Charge Of The Project (MA Registration Required):

Email Address:

Telephone No: Fax No.:

3. Check Below If Your Firm Is Either:

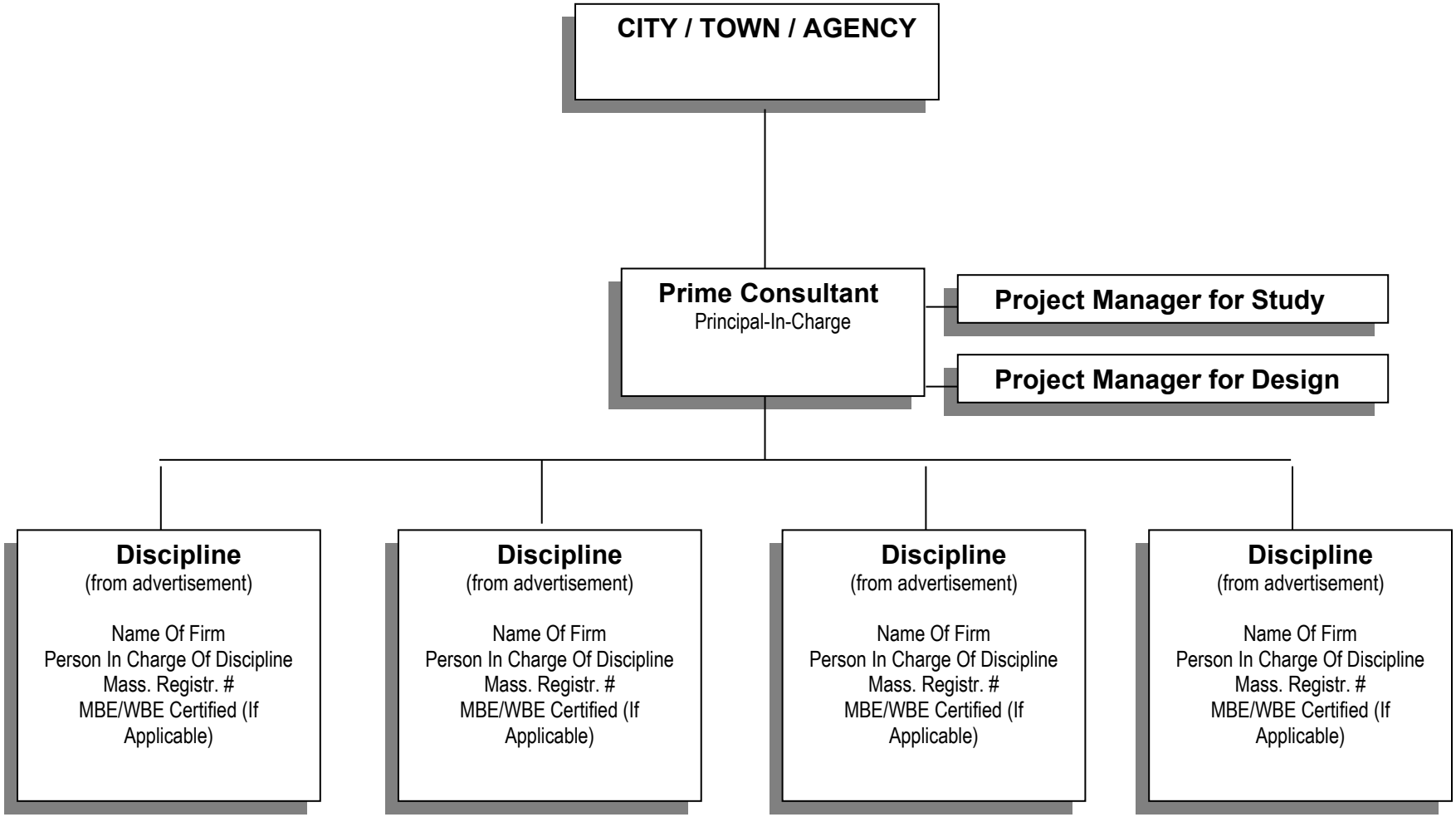
(1) SDO Certified Minority Business Enterprise (MBE) ❑
(2) SDO Certified Woman Business Enterprise (WBE) ❑
(3) SDO Certified Minority Woman Business Enterprise (M/WBE) ❑
(4) SDO Certified Service Disabled Veteran Owned Business Enterprise (SDVOBE) ❑
(5) SDO Certified Veteran Owned Business Enterprise (VBE) ❑

4. **Personnel From Prime Firm Included In Question #3a Above** By Discipline (List Each Person Only Once, By Primary Function -- Average Number Employed Throughout The Preceding 6 Month Period. Indicate Both The Total Number In Each Discipline And, Within Brackets, The Total Number Holding Massachusetts Registrations):

Admin. Personnel	____	(____)	Ecologists	____	(____)	Licensed Site Profs.	____	(____)	Other	____	(____)
Architects	____	(____)	Electrical Engrs.	____	(____)	Mechanical Engrs.	____	(____)		____	(____)
Acoustical Engrs.	____	(____)	Environmental	____	(____)	Planners: Urban./Reg.	____	(____)		____	(____)
Civil Engrs.	____	(____)	Fire Protection	____	(____)	Specification Writers	____	(____)		____	(____)
Code Specialists	____	(____)	Geotech. Engrs.	____	(____)	Structural Engrs.	____	(____)		____	(____)
Construction Inspectors	____	(____)	Industrial	____	(____)	Surveyors	____	(____)		____	(____)
Cost Estimators	____	(____)	Interior Designers	____	(____)		____	(____)		____	(____)
Drafters	____	(____)	Landscape	____	(____)		____	(____)	Total	____	(____)

5. Has this Joint-Venture previously worked together? ❑ Yes ❑ No

6. List **ONLY** Those Prime And Sub-Consultant Personnel Specifically Requested In The Advertisement. This Information Should Be Presented Below In The Form Of An Organizational Chart. Include Name Of Firm And Name Of The One Person In Charge Of The Discipline, With Mass. Registration Number, As Well As MBE/WBE Status, If Applicable:



7.	Brief Resume of ONLY those Prime Applicant and Sub-Consultant personnel requested in the Advertisement. Include Resumes of Project Managers. Resumes should be consistent with the persons listed on the Organizational Chart in Question # 6. Additional sheets should be provided only as required for the number of Key Personnel requested in the Advertisement and they must be in the format provided. By including a Firm as a Sub-Consultant, the Prime Applicant certifies that the listed Firm has agreed to work on this Project, should the team be selected.	
a.	Name and Title Within Firm:	a. Name and Title Within Firm:
b.	Project Assignment:	b. Project Assignment:
c.	Name and Address Of Office In Which Individual Identified In 7a Resides: MBE ❑ WBE ❑ SDVOBE ❑ VBE ❑	c. Name and Address Of Office In Which Individual Identified In 7a Resides: MBE ❑ WBE ❑ SDVOBE ❑ VBE ❑
d.	Years Experience: With This Firm: _____ With Other Firms: _____	d. Years Experience: With This Firm: _____ With Other Firms: _____
e.	Education: Degree(s) /Year/Specialization	e. Education: Degree(s) /Year/Specialization
f.	Active Registration: Year First Registered/Discipline/Mass Registration Number	f. Active Registration: Year First Registered/Discipline/Mass Registration Number
g.	Current Work Assignments and Availability For This Project:	g. Current Work Assignments and Availability For This Project:
h.	Other Experience and Qualifications Relevant To The Proposed Project: (Identify Firm By Which Employed, If Not Current Firm):	h. Other Experience and Qualifications Relevant To The Proposed Project: (Identify Firm By Which Employed, If Not Current Firm):

8a.	Current and Relevant Work By Prime Applicant Or Joint-Venture Members. Include **ONLY** Work Which Best Illustrates Current Qualifications In The Areas Listed In The Advertisement (List Up To But Not More Than 5 Projects).					
a.	Project Name And Location Principal-In-Charge	b. Brief Description Of Project And Services (Include Reference To Relevant Experience)	C. Client's Name, Address And Phone Number (Include Name Of Contact Person)	d. Completion Date (Actual Or Estimated)	e. Project Cost (In Thousands)	
					Construction Costs (Actual, Or Estimated If Not Completed)	Fee for Work for Which Firm Was Responsible
(1)						
(2)						
(3)						
(4)						
(5)						

8b. List Current and Relevant Work By Sub-Consultants Which Best Illustrates Current Qualifications In The Areas Listed In The Advertisement (Up To But Not More Than 5 Projects For Each Sub-Consultant). Use Additional Sheets Only As Required For The Number Of Sub-Consultants Requested In The Advertisement.					
Sub-Consultant Name:					
a. Project Name and Location Principal-In-Charge	b. Brief Description Of Project and Services (Include Reference To Relevant Experience	c. Client's Name, Address And Phone Number. Include Name Of Contact Person	d. Completion Date (Actual Or Estimated)	e. Project Cost (In Thousands)	
				Construction Costs (Actual, Or Estimated If Not Completed)	Fee For Work For Which Firm Was/Is Responsible
(1)					
(2)					
(3)					
(4)					
(5)					

9. List All Projects Within The Past 5 Years For Which Prime Applicant Has Performed, Or Has Entered Into A Contract To Perform, Any Design Services For All Public Agencies Within The Commonwealth.

# of Total Projects:	**# of Active Projects:**	**Total Construction Cost (In Thousands) of Active Projects (excluding studies):**

Role P, C, JV *	Phases St., Sch., D.D., C.D.,A.C.*	Project Name, Location and Principal-In-Charge	Awarding Authority (Include Contact Name and Phone Number)	Construction Costs (In Thousands) (Actual, Or Estimated If Not	Completion Date (Actual or Estimated) (R)Renovation or (N)New
		1.			
		2.			
		3.			
		4.			
		5.			
		6.			
		7.			
		8.			
		9.			
		10.			
		11.			
		12.			

* P = Principal; C = Consultant; JV = Joint Venture; St. = Study; Sch. = Schematic; D.D. = Design Development; C.D. = Construction Documents; A.C. = Administration of Contract

10. Use This Space To Provide Any Additional Information Or Description Of Resources Supporting The Qualifications Of Your Firm And That Of Your Sub-Consultants For The Proposed Project. If Needed, Up To Three, Double-Sided 8 ½" X 11" Supplementary Sheets Will Be Accepted. **APPLICANTS ARE ENCOURAGED TO RESPOND SPECIFICALLY IN THIS SECTION TO THE AREAS OF EXPERIENCE REQUESTED IN THE ADVERTISEMENT**.

Be Specific – No Boiler Plate

11. Professional Liability Insurance:

Name of Company	Aggregate Amount	Policy Number	Expiration Date

12. Have monies been paid by you, or on your behalf, as a result of Professional Liability Claims (in any jurisdiction) occurring within the last 5 years and in excess of $50,000 per incident? Answer **YES** or **NO**. If YES, please include the name(s) of the Project(s) and Client(s), and an explanation (attach separate sheet if necessary).

13. Name Of Sole Proprietor Or Names Of All Firm Partners and Officers:

Name	Title	MA Reg #	Status/Discipline	Name	Title	MA Reg #	Status/Discipline
a.				d.			
b.				e.			
c.				f.			

14. If Corporation, Provide Names Of All Members Of The Board Of Directors:

Name	Title	MA Reg #	Status/Discipline	Name	Title	MA Reg #	Status/Discipline
a.				d.			
b.				e.			
c.				f.			

15. Names Of All Owners (Stocks Or Other Ownership):

Name And Title	% Ownership	MA. Reg.#	Status/Discipline	Name And Title	% Ownership	MA. Reg.#	Status/Discipline
a.				d.			
b.				e.			
c.				f.			

16. I hereby certify that the undersigned is an Authorized Signatory of Firm and is a Principal or Officer of Firm. I further certify that this firm is a "Designer", as that term is defined in Chapter 7C, Section 44 of the General Laws, or that the services required are limited to construction management or the preparation of master plans, studies, surveys, soil tests, cost estimates or programs. The information contained in this application is true, accurate and sworn to by the undersigned under the pains and penalties of perjury.

Submitted by (Signature) _____ Printed Name and Title _____ Date _____

ATTACHMENT D

Enrollment Letter and Enrollment Certification

Massachusetts School Building Authority

March 7, 2025

Mr. Eric D. Batista, City Manager
City of Worcester
Worcester City Hall
455 Main Street
Worcester, MA 01608

Re: City of Worcester, Burncoat Senior High School

Dear Manager Batista:

I would like to thank representatives of the City of Worcester (the "District") for meeting with Massachusetts School Building Authority (the "MSBA") staff on December 20, 2024, to review enrollment projections and methodologies for the Burncoat Senior High School project (the "Proposed Project") and for the follow-up materials provided on January 8, 2025. As discussed, the next critical step is for the MSBA and the District to agree on a study enrollment for the Proposed Project.

The MSBA works with local communities to create affordable, sustainable, and energy-efficient schools across Massachusetts. A critical early component in achieving these objectives begins with an appropriate design enrollment that positions the District to efficiently meet space capacity needs throughout potential future enrollment variations.

The MSBA uses a data-driven enrollment projection methodology based on the widely accepted modified grade-to-grade cohort survival methodology (the "enrollment methodology"). The MSBA's enrollment methodology generates a baseline enrollment projection as discussed during the December 20, 2024, enrollment meeting, and as further described on the MSBA's website found under the 'Building With Us', MSBA Enrollment Methodology' section.

Based on discussions and information supplied by the District, data from sources such as the Department of Elementary and Secondary Education ("DESE"), and the Department of Public Health, the MSBA has been able to create enrollment options for the Proposed Project, as follows.

Burncoat Senior High School is one of seven schools serving grades 7-12 and 9-12 enrollments. Based on the information provided by the District, the MSBA understands that in addition to the Burncoat Senior High School's current configuration of grade 9-12, the District would like its Feasibility Study to evaluate the potential of consolidating the Burncoat Senior High School with the Burncoat Middle School to create a grade 7-12 school. The MSBA also understands that the District would like its Feasibility Study also to evaluate the potential of adding up to 21 Chapter 74 Career and Technical Education Programs ("CTE" Programs) as part of the proposed project.

As discussed during the enrollment meeting, space to accommodate proposed CTE Programs will be determined during the feasibility study phase of the MSBA's process at the time of the review of the District's proposed educational space program for the Proposed Project. Accordingly, this analysis will focus on the enrollment projections for grades 7-12.

The table below illustrates the District's K-12 enrollment during the most recent ten-year period, including enrollment for the school year 2024-2025, as reported by the DESE.

School Year	K-6	7-8	9-12	Total
2015-2016	13,485	3,301	7,026	23,812
2016-2017	13,588	3,366	7,156	24,110
2017-2018	13,463	3,415	7,143	24,021
2018-2019	13,395	3,560	7,158	24,113
2019-2020	13,218	3,548	7,170	23,936
2020-2021	12,406	3,494	7,233	23,133
2021-2022	12,119	3,481	7,252	22,852
2022-2023	12,379	3,375	7,427	23,181
2023-2024	12,286	3,263	7,560	23,109
2024-2025	12,460	3,418	7,589	23,467

A version of the above table with more detail regarding the District's historic enrollment may also be found in the District's Enrollment Projection package.

The total grade 7-12 enrollment in the City of Worcester, as reported by the District for the 2024-2025 school year, was 11,007 students, which is the maximum enrollment reported during the preceding ten years. Additionally, the 2024-2025 grade 7-12 enrollment reflects an increase of 314 students (2.8%) from the average enrollment reported during the preceding ten-year period.

The MSBA understands that the District proposed enrollment to accommodate approximately 2,000 students in grades 7-12 in a consolidated Burncoat Senior High School and Burncoat Middle School. According to DESE, the combined enrollments for the Burncoat Senior High School and Burncoat Middle School for the 2024-2025 school year were 1,793 students. The MSBA's Enrollment Methodology uses a baseline enrollment that is calculated using the ten-year average of projected enrollments. As such, the average base enrollment projection through the 2034-2035 school year is as follows:

- District-wide grade 9-12 enrollment: 7,220
- District-wide grade 7-12 enrollment: 10,420

As a result of a sensitivity analysis performed by the MSBA on this base enrollment projection and further discussion with the District, the following adjustments have been made to the district-wide base enrollment projection:

<u>Student Migration</u>

- The MSBA's default methodology projects enrollment utilizing the most recent five-year average grade-to-grade cohort survival ratios.
- In order to account for the recently observed changes in the pattern of grade-to-grade cohort survival ratios, the MSBA's base model has been adjusted to utilize the most recent three-year average grade-to-grade survival ratios.
- This adjustment added approximately the following numbers of students to the base enrollment as compared to the projection without this adjustment:
    - District-wide grade 9-12 enrollment: 505
    - District-wide grade 7-12 enrollment: 730

Out-of-District Enrollment

- In order to adjust for fluctuations in the out-of-district enrollment patterns of the District's residents over time, the MSBA has made an additional adjustment to the base enrollment projection.
- In order to make this adjustment, the MSBA adjusted the grade-to-grade survival ratios for grade K-8 enrollment by a total of 3.3% throughout a four-year period in the projection.
- This adjustment added the following numbers of students to the base enrollment as compared to the projection without this adjustment:
    - District-wide grade 9-12 enrollment: 290
    - District-wide grade 7-12 enrollment: 335

As a result of the analysis of the base enrollment forecast, the historical enrollment trends of the District, and the adjustments described above, the ten-year average projected district-wide enrollments are:

- District-wide grade 9-12 enrollment: 8,015
- District-wide grade 7-12 enrollment: 11,485

In order to recommend an enrollment for an appropriately sized Proposed Project based on the proposed grade 9-12 enrollment at the Burncoat Senior High School, the MSBA performed a review using the proposed "school use" and capacity information for those schools serving grades 9-12 enrollments: classrooms available in the University PreK Campus School and the Claremont Academy as well as capacity at the Doherty Memorial High School, North High School, South High School, and Worcester Technical High School (the "non-project schools"). This review identified 338 educational classrooms (exclusive of Special Education, Music, and "other"), which when multiplied by 23 students per classroom results in space for 7,782 students in the non-project schools identified above. The MSBA understands that year-to-year fluctuations in enrollment occur, and therefore, a 15% buffer has been applied, resulting in a design capacity of 6,615 students (rounded to the nearest five students) in the non-project schools.

In order to recommend enrollment for an appropriately sized consolidated Burncoat Senior High School and Burncoat Middle School, the MSBA repeated the review described above. This review considered the proposed "school use" and capacity information for those schools serving grades 7-12 enrollments (the "non-project schools"):

- Portion of the classrooms available in the Sullivan Middle School, which serves grade 6-8 enrollments;
- Classrooms available in the Worcester East Middle School and the Forest Grove Middle School, which serve grades 7-8;
- Classrooms available in the University PreK Campus School and the Claremont Academy, which serve grade 7-12 enrollment
- Classrooms in the following schools serving grade 9-12 enrollment: Doherty Memorial High School, North High School, South High School, and Worcester Technical High School.

This grade 7-12 review identified a total of 479 educational classrooms (exclusive of Special Education, Music, and "other"), and when multiplied by 23 students per classroom, results in space for 11,009 students in the non-project schools identified above. Applying a 15% buffer results in a design capacity of 9,360 students (rounded to the nearest five students) in the non-project schools.

As a result of the analysis of the base enrollment projection, the historical enrollment trends of the District, the adjustments described above, and a review of available space in the District's non-project schools, the MSBA recommends for planning and study purposes only, the following study enrollments for the Proposed Project:

- Burncoat Senior High School Current Configuration of grade 9-12 enrollment: 1,400 students (8,015 students minus 6,615 spaces in the non-project schools referenced above)
- Burncoat High School and Burncoat Middle School Proposed Consolidation of grade 7-12 enrollment: 2,125 students (11,485 students minus 9,360 spaces in the non-project schools referenced above)

Please note that these study enrollment recommendations do not represent an affirmation by the MSBA for approval and/or funding of any of these options and are intended only to provide a framework to inform the feasibility study, to be conducted as a means of determining the most cost-effective and educationally sound solution, to be agreed upon by the District and the MSBA. The MSBA's study enrollment recommendations assume full utilization of all remaining school facilities.

If the consolidation of the Burncoat Senior High School with the Burncoat Middle School is determined to be the Preferred Solution, the District will be required to document in the Preferred Schematic Report the proposed future use or disposition of any existing spaces vacated or otherwise reprogrammed as a result of the Proposed Project and that the Preferred Solution has been approved by the School Committee and necessary local officials. Further, the MSBA will require a written plan from the District describing the process for determining local support for the preferred enrollment option. Upon approval of the District's Preferred Solution, the MSBA will forward a design enrollment certification that is specific to the grade configuration associated with the approved Preferred Solution.

The MSBA believes that these study enrollment recommendations will position the District to efficiently meet space capacity needs throughout future enrollment variations. Please sign and return the attached certification at your earliest convenience to confirm agreement on these study

enrollment recommendations. If the District feels that this study enrollment recommendation does not meet the needs of the District, please respond to this letter via e-mail to Nina Pappacostas and propose a meeting/conference call time for which the District can be available to discuss enrollment.

If you have any questions regarding this matter, please do not hesitate to contact me or Nina Pappacostas (Nina.Pappacostas@massschoolbuildings.org) at 617-720-4466.

Sincerely,

Michael P McGurl

Michael McGurl
Director of Capital Planning

Cc: Legislative Delegation
The Honorable Joseph M. Petty, Mayor, City of Worcester
Khrystian E. King, Vice Chair, Worcester City Council
Jermaine Johnson, Vice Chair, Worcester School Committee
Dr. Rachel Monarrez, Superintendent, Worcester Public Schools
Brian E. Allen, Deputy Superintendent, Chief Operating Officer and Chief Financial Officer, Worcester Public Schools
File: 10.2 Letters (Region 2)

MSBA Project No. 202303480503

MASSACHUSETTS SCHOOL BUILDING AUTHORITY
CITY OF WORCESTER
BURNCOAT SENIOR HIGH SCHOOL
STUDY ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the Burncoat Senior High School (the "Proposed Project"), the City of Worcester knowledges and agrees that the design of options, which may be evaluated as a part of the feasibility study for the Burncoat Senior High School, shall be based in accordance with the following:

Burncoat Senior High School Grade 9-12 Enrollment	Burncoat Senior High School consolidated with Burncoat Middle School Grade 7-12 Enrollment
1,400 students	2,125 students

The City of Worcester further acknowledges and agrees that pursuant to 963 CMR 2.00 *et seq.*, the MSBA shall determine the square feet per student space allowance and total square footage according to the enrollments noted above. The City of Worcester acknowledges and agrees that it has no right or entitlement to any particular design enrollment, square feet per student space allowance, or total square footage and that it has no right or entitlement to a design enrollment any greater than any of the enrollments noted above, and further acknowledges and agrees that it shall not bring any claim or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the design enrollment for the Proposed Project that it has acknowledged and agreed to herein. The City of Worcester further acknowledges and agrees that, among other things, the design enrollment, square feet per student space allowance, and total square footage of the Proposed Project shall be subject to the approval of the MSBA's Board and that the final approval of a Proposed Project shall be within the sole discretion of the MSBA's Board.

The undersigned, for themselves and the City of Worcester, hereby certify that they have read and understand the contents of this study enrollment certification and that each of the above statements is true, complete and accurate. The undersigned hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the City of Worcester and to bind the City of Worcester to its terms.

Chief Executive Officer — Date: 3/26/25

Duly Authorized Representative of School Committee — Date: 3/24/25

Superintendent of Schools — Date: 3/24/25

ATTACHMENT E

MSBA Designer Selection Procedures

Massachusetts School Building Authority
Designer Selection Procedures

Section 1: Introduction

The following designer selection process has been adopted by the Massachusetts School Building Authority (MSBA) pursuant to Massachusetts General Laws, Chapter 7C, Sections 44 through 58 for the procurement of designers, and programmers by cities, towns, regional school districts, and independent agricultural and technical schools seeking funding from the MSBA for public school construction projects where the estimated construction cost is equal to or greater than $5,000,000.00 (or other such amount as may be determined from time to time by the Executive Director of the MSBA), except for the MSBA's model schools program. Designer selection for public school construction projects where the estimated construction cost is less than $5,000,000.00 (or other such amount as may be determined from time to time by the Executive Director of the MSBA) shall be conducted pursuant to Massachusetts General Laws, Chapter 7C, Section 54, by the respective city, town, regional school district or independent agricultural and technical school and in accordance with the MSBA's Designer Selection Guidelines.

Section 2: Designer Selection Panel

A. The MSBA Designer Selection Panel (DSP) shall be composed of the following individuals who shall be appointed to the DSP by the MSBA's Executive Director ("Executive Director") in accordance with following procedures:

1. The Executive Director, ex officio, or his/her designee;
2. Three (3) MSBA staff members associated with project management, design and/or construction oversight selected by the Executive Director;
3. One (1) public member selected by the Executive Director;
4. One (1) member who is a Massachusetts registered architect or architect emeritus as recommended by the Boston Society of Architects;
5. Two (2) members who are Massachusetts registered architects or architect emeritus selected by the Executive Director;
6. One (1) member who is a Massachusetts registered engineer as recommended by the American Council of Engineering Companies of Massachusetts;
7. Two (2) members who are Massachusetts registered professional engineers selected by the Executive Director;
8. One (1) member who is a representative of the construction industry as

recommended by Associated General Contractors of Massachusetts;

9. One (1) member who is a representative of the construction industry as recommended by the Massachusetts Building Trades Council;

10. Three (3) members who are proposed by the respective city, town, regional school district, independent agricultural and technical school or other public agency that is the Eligible Applicant, as defined in M.G.L. Chapter 70B, Section 2 for the specific project under consideration, one (1) of whom shall be designated by the school committee, district school committee, or board of trustees of the Eligible Applicant, as the case may be; one (1) of whom shall be the superintendent of schools of the Eligible Applicant, ex officio, or his/her designee; and one (1) of whom shall be the chief executive officer of the city or town that is the Eligible Applicant, ex officio, or his/her/its designee or, in all other cases, a member of the School Building Committee designated by the School Building Committee. The appointment of members pursuant to this Section 2(A)(10) shall be subject to the execution of a certification by each such member that the member has read and understands these procedures and the Designer Selection Guidelines.

B. Members proposed or recommended by the societies or associations pursuant to subsections 2(A)(4), 2(A)(6), 2(A)(8), and 2(A)(9) above and the members proposed by the Eligible Applicant pursuant to subsection 2(A)(10) above shall be subject to appointment by the Executive Director who reserves the right, within his/her discretion, not to appoint or to disapprove the appointment of said proposed or recommended members. In considering the appointment of members proposed by the Eligible Applicant pursuant to subsection 2(A)(10), the Executive Director may consider, among other things, the extent to which the three (3) proposed members, as a whole, represent the interests of the Eligible Applicant.

C. The Executive Director shall appoint a chairperson from one of the members appointed to the DSP pursuant to subsections 2(A)(3) through 2(A)(9) above, who is a registered architect, architect emeritus or registered professional engineer and who shall also serve as chairperson of any subcommittee of the DSP.

D. The Executive Director shall appoint a clerk of the DSP to administer the voting process and assist the chairperson with other procedural matters. The Clerk may be a staff member of the Authority or one of the members appointed to the DSP pursuant to subsections 2(A)(3) through 2(A)(9) above.

E. All meetings of the DSP shall be open to the public unless the DSP votes to go into executive session by a roll call vote and announces the purpose of the executive session and whether the DSP will convene in open session at the conclusion of the executive session. Any action taken by the DSP in executive session shall be by a roll call vote.

F. The presence of nine (9) members, no less than four (4) of whom shall be registered architects, architects emeritus or registered professional engineers, shall constitute a quorum. The DSP shall not conduct any business without the presence of a quorum. The affirmative vote of a simple majority of the members present and voting shall be necessary and sufficient for any action taken by the DSP. No vacancy in the membership of the DSP shall impair the right of a quorum to exercise all the rights and duties of the DSP. In the absence of a quorum, the Chairperson may recess a meeting to some other time or until a quorum is obtained.

G. Subject to the discretion of the Executive Director, each member appointed pursuant to subsections 2(A)(3) through 2(A)(9) shall serve for a two-year term provided that every member that is appointed by the Executive Director shall continue to serve until a successor has been appointed to the DSP by the Executive Director. Subject to the discretion of the Executive Director, members appointed pursuant to subsections 2(A)(3) through 2(A)(9) may serve consecutive terms. Members representing the Eligible Applicant who are appointed pursuant to subsection 2(A)(10) shall serve only while the DSP conducts business directly related to the selection of a designer for the project being proposed by that particular Eligible Applicant.

H. No member of the DSP shall participate in the selection of a designer as a finalist for any project if the member's participation would constitute a conflict of interest or an appearance of conflict in violation of M.G.L. Chapter 268A.

Section 3: Public Notice

A. Each contract for designer services for a project subject to these procedures shall be publicly advertised in a newspaper of general circulation in the area in which the project is located or is to be located and, in the Designer Services Section of the Massachusetts Central Register at least four weeks before the deadline for filing applications. The public notice shall contain:

1. A description of the project, including the specific designer services sought, the time period within which the project is to be completed, and, if available, the estimated construction cost;

2. If there is a program for the project, a statement of when and where the program will be available for inspection by applicants, and when and where a briefing session will be held for applicants and if there is not a program for the project, a statement to the effect;

3. The qualifications required of applicants for the projects;

4. The categories of designers' consultants, if any, for which applicants must list the names of consultants which the applicant may choose to use;

5. Whether the fee has been set or will be negotiated, and if the fee has been set, the amount of the fee;

6. The deadline for submission of applications;

7. The person and address from which application forms may be obtained and, when completed, to whom they may be delivered;

8. Any other pertinent information that may be required by law or deemed appropriate by the MSBA.

B. The individual designated by the Eligible Applicant to be in charge of procurement for a project who holds the Massachusetts Certified Public Purchasing Official Program certification shall certify that the public notice and all other documents issued pursuant to the

selection of a designer, including, but not limited to, program descriptions and request for services, have been prepared and issued in conformance with these procedures and Massachusetts General Laws, Chapter 7C, Sections 44 through 58.

Section 4: Master File Brochure and Application

A. Prior to filing an application for any project, designers shall first file a Master File Brochure with the DSP containing the following information:

1. Certification that the applicant, if applying to perform design services other than preparation of studies, surveys, soil testing, cost estimates or programs, is a designer as defined in M.G.L. Chapter 7C, Section 44 paragraph (b);
   **Please refer to M.G.L. Chapter 7C, Section 44 for the definition of Designer. In M.G.L. Chapter 7C, Section 44, "registered" means registered in the Commonwealth of Massachusetts.*

2. The names and addresses of all partners, if a partnership, of all officers, directors and all persons with an ownership interest of more than five per cent in the applicant if not a partnership;

3. The registration number and status of each such person in every jurisdiction in which such person has ever been registered as an architect, landscape architect or engineer;

4. A list of all projects for all public agencies within the Commonwealth for which the applicant has performed or has entered into a contract to perform design services within the five-year period immediately preceding the filing of the information required in this section;

5. A list of all current projects for which the applicant is performing or is under contract to perform any design services; and

6. If the applicant is a joint venture, the information required in this section shall be required for each joint venturer, as well as for the joint venture itself.

B. The DSP shall keep a permanent record of the Master File Brochures. Each designer shall update its Master File Brochure on an annual basis and shall make current the lists of projects required under Section 4(A)(4)-(6) with each application filed.

C. An applicant to perform design, programming or feasibility study services on a project must file, in addition to the Master File Brochure, a written application prescribed by the DSP relating to the applicant's experience, ability, and qualifications.

Every application or Master File Brochure filed shall be sworn to under penalties of perjury. Any applicant who has been determined by the DSP to have filed materially false information shall be disqualified by the DSP from further consideration for any project for such time as the DSP determines is appropriate.

Section 5: Selection Criteria

A. Minimum qualifications shall include:

1. Must be a qualified Designer within the meaning of M.G.L. Chapter 7C, Section 44, employing a Massachusetts registered architect responsible for and being in control of the services to be provided.

   **Please refer to M.G.L. Chapter 7C, Section 44 for the definition of Designer. In M.G.L. Chapter 7C, Section 44, "registered" means registered in the Commonwealth of Massachusetts.*

2. The Massachusetts registered architect responsible for and being in control of the services to be provided for the Designer must have successfully completed the Massachusetts Certified Public Purchasing Official Program seminar "Certification for School Project Designers and Owner's Project Managers," as administered by the Office of the Inspector General of the Commonwealth of Massachusetts at the time of application, and must maintain certification by completing the "Recertification for School Project Designers and Owner's Project Managers" seminar every three years thereafter. Proof of recertification or registration in the next recertification seminar for which space is available must be provided.

3. The Municipal Construction Affirmative Marketing Program (MCAMP) requires Municipalities to incorporate Minority Business Enterprise (MBE), Women Business Enterprise (WBE) and Veteran Business Enterprise (VBE)/Service-Disabled Veteran Business Enterprise (SDVOBE) goals into both their design and construction procurements for municipal contracts for the construction, reconstruction, alteration, remodeling, repair, or demolition of any public building by any city or town that includes funding provided in whole or in part by the Commonwealth, such as funding under the Massachusetts School Building Authority (MSBA), funding in any legislative appropriation, grant awards, reimbursements, municipal commitments to use state funds, and the like. To count towards participation, the business must be a Supplier Diversity Office (SDO) certified WBE, MBE or VBE/SDVOBE at the time of contract execution.

   To ensure goals are set properly, Municipalities should contact Meghan Costa, the SDO's Construction Program Coordinator, as soon as possible for assistance from SDO and DCAMM in goal setting. Ms. Costa can be reached at meghan.costa@mass.gov or at (617) 872-4064.

   The MBE, WBE, and VBE/SDVOBE must be selected from those categories of work identified in Item F of the RFS or be assigned to tasks required under Basic Services as specifically set forth in the Contract for Designer Services as amended. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their separate MBE, WBE, and VBE/SDVOBE participation goals. Consultants to the prime Designer can team within their disciplines in order to meet the separate MBE, WBE, and VBE/SDVOBE participation goals but must state this relationship on the organizational chart (Section 6 of the application form). Applications from MBE, WBE, and VBE/SDVOBE firms as prime designers are encouraged. Where the prime Designer is an SDO certified MBE, WBE, and VBE/SDVOBE, the Designer must bring a reasonable amount of participation by a firm or firms that hold the certification which is not held by the prime Designer on the project.

B. Other criteria for selection of finalists shall include:

1. Prior similar experience best illustrating current qualifications for the specific project.

2. Past performance of the firm, if any, with regard to public, private, DOE-funded, and MSBA-funded projects across the Commonwealth, with respect to:

   a) Quality of project design.

   b) Quality, clarity, completeness and accuracy of plans and contract documents.

   c) Ability to meet established program requirements within allotted budget.

   d) Ability to meet schedules including submission of design and contract documents, processing of shop drawings, contractor requisitions and change orders.

   e) Coordination and management of consultants.

   f) Working relationship with contractors, subcontractors, local awarding authority and MSBA staff and local officials.

3. Current workload and ability to undertake the contract based on the number and scope of projects for which the firm is currently under contract.

4. The identity and qualifications of the consultants who will work on the project.

5. The financial stability of the firm.

6. The qualifications of the personnel to be assigned to the project.

7. Geographical proximity of the firm to the project site or willingness of the firm to make site visits and attend local meetings as required by the client.

8. Any other criteria that may be required by law or that the DSP considers relevant to the project.

Section 6: Selection Process

A. Cities, towns, regional school districts, and independent agricultural and technical schools subject to these procedures shall not rank or pre-rank applicants. Rankings shall occur only by vote of the DSP in accordance with these procedures and shall occur only after interviews, if allowed by vote of the DSP, have been concluded by the DSP.

B. In the event that, upon reaching the deadline for submission of applications, three or fewer designer applications are received for a project, the Eligible Applicant may choose to modify the project description, estimated construction cost, program, desired designer qualifications, fee information, or other project information as necessary to attract interested designer applicants and begin the selection process again, starting with re-advertisement pursuant to Section 3: Public Notice. Should the Eligible Applicant choose to proceed with three or fewer designer applications and not re-advertise, the following procedure shall be followed:

1. The Eligible Applicant designee shall submit a statement that explains why the Eligible Applicant may have received three or less applications for the proposed project, The explanation should include but not necessarily be limited to:

    a. A description of the public advertisement including the names of the publications in which the advertisement was placed and the date(s) in which the advertisement was published.

    b. A description of the pre-proposal conference, if any, including the date, time, and location of the conference and names of attendees and the firms they represent.

2. The Eligible Applicant designee and/or the OPM shall contact those design firms that attended the pre-proposal conference/walkthrough but did not submit an application and summarize why an application was not submitted for the proposed project.

3. Legal counsel for the Eligible Applicant (i.e. town counsel or city solicitor) and the individual designated by the Eligible Applicant to be in charge of procurement for a project who holds the Massachusetts Certified Public Purchasing Official Program certification shall certify as to the adequacy and completeness of the procurement activity undertaken by the Eligible Applicant.

4. At the discretion of the chairperson and with the concurrence of the three DSP members representing the Eligible Applicant, the DSP may forego the initial application review and invite all the designer applicants to appear for an interview before the DSP.

C. The DSP may require any number of applicants to:

1. Appear for an interview before the DSP;

2. Present a written proposal to the DSP through the Eligible Applicant; or

3. Participate in a design competition held by the DSP through the Eligible Applicant.

D. The DSP shall use the following procedures to rank three (3) finalists in order of qualifications from among the applicants for a particular project:

1. Prior to a DSP meeting at which the selection of finalists will be made or discussed, each member of the DSP shall be given a copy of each designer’s application for his or her review.

2. At the DSP meeting, the DSP shall consider each application alphabetically or by some other method that may be determined by the chairperson from time to time.

3. When recognized by the chairperson, members of the DSP may comment or ask questions related to the selection process or the applications before the DSP.

4. Any potentially disqualifying deficiencies in an application should be noted in the record of the meeting.

5. After each member of the DSP has been given an opportunity to comment or ask questions, at the direction of the chairperson, each member of the DSP who is present

shall utilize a ballot form provided by the MSBA to assign points to his or her top three (3) choices in order of qualifications so that each number one choice shall receive three (3) points, each number two choice shall receive two (2) points, and each number three choice shall receive one (1) point. The completed ballot forms shall be signed by each member and submitted to the DSP Administrator who shall tally the total points awarded to each applicant. The chairperson shall then read aloud the total points awarded to each of the applicants. In cases where a DSP meeting is held remotely, or any DSP member(s) attends a DSP meeting remotely, all votes taken at such meeting will be by roll-call vote.

6. Once the point totals have been read aloud by the chairperson, the DSP may request interviews of the applicants with the highest point totals by the following procedure: Upon motion of one of the members, duly seconded by one of the other members, the DSP may vote to interview the applicants with the highest point totals.

7. If the DSP does not vote to conduct interviews, the DSP shall then vote to rank three (3) finalists in order of qualifications. If the DSP votes to conduct interviews, the DSP shall defer the ranking of the three (3) finalists until after the interviews have been concluded.

8. If the DSP votes to conduct interviews, the chairperson shall schedule the time and place of the interviews and written notice shall be given to the firms to be interviewed. Interviews shall be conducted in open session except that the chairperson may order competing firms, their agents and employees, to leave the meeting room during the interviews of their competitors. The MSBA may, within its discretion, develop standard questions to be answered or topics to be discussed by the applicants in the interview. Once the interviews have been concluded, at the direction of the chairperson, the DSP shall award points to the each of the firms in accordance with the procedures set forth in subsection 6(C)(5). Once the point totals have been read aloud by the chairperson, the DSP shall then vote to rank three (3) finalists in order of qualifications

9. In the event of a tie for the first, second or third highest point totals awarded to applicants by the DSP under Section 6(C)(5) or 6(C)(8), the chairperson shall determine, in his or her complete discretion, the procedure by which the tie shall be broken. The chairperson shall then read aloud the total points awarded to each of the applicants. Once the point totals have been read aloud by the chairperson, the DSP shall then vote to rank three (3) finalists in order of qualifications.

Once the DSP has voted to rank the top three (3) firms in order of qualifications, the MSBA shall transmit a list of the three (3) finalists ranked in order of qualifications to the Eligible Applicant along with a record of the final vote of the DSP on the selection and a written statement explaining the DSP's reasons for its ranking of the finalists.

Please be advised that the ranking of potential designer candidates will only be done at the scheduled DSP meeting, with a quorum of Panel members in attendance and only after each application is publicly reviewed and publicly discussed among Panel members. The District DSP members are welcome and encouraged to participate in such discussions, as well as share the results of any local reviews. In addition, interviews of potential candidates, if applicable, will only take place at a scheduled public DSP meeting and only with a quorum of Panel members in attendance.

Section 7: Award of Contract

A. The authority to award a contract for designer services for a project that will receive funding from the MSBA is vested with the Eligible Applicant and subject to the approval of the MSBA.

B. In the selection of a designer when the fee for designer services has been set prior to advertisement, the Eligible Applicant shall appoint a designer from the ranked list transmitted by the MSBA to the Eligible Applicant in the order of qualifications as determined by the DSP. If the Eligible Applicant proposes to select any designer other than the one ranked first by the DSP, it shall file a written justification for the proposed appointment with the DSP and shall not proceed until it has obtained written approval to proceed from the Executive Director.

C. When the fee for designer services is to be negotiated, the Eligible Applicant shall review the list transmitted by the MSBA in the order of qualifications as determined by the DSP and may exclude any designer from the list if a written statement of reasons for the exclusion is filed with the DSP. The Eligible Applicant shall then appoint a designer based upon a successful fee negotiation. The Eligible Applicant shall first negotiate with the first ranked designer remaining on the list. Should the Eligible Applicant be unable to negotiate a satisfactory fee with the first ranked designer within thirty (30) days, negotiations shall be terminated, and negotiations undertaken with the remaining designers, one at a time, in the order in which they were ranked by the DSP, until an arrangement is reached. Should the Eligible Applicant be unable to negotiate a successful fee with any designer initially selected by the DSP, the DSP shall recommend additional finalists in accordance with a procedure to be determined by the chairperson of the DSP that is not inconsistent with the procedures set forth in Section 6(B) above. The Eligible Applicant may require a finalist with whom a fee is being negotiated to submit a fee proposal and to provide current cost and pricing data on the basis of which the designer's fee proposal may be evaluated.

Section 8: Continued or Extended Services

A. The Eligible Applicant may appoint a designer to perform continued or extended services that were not contemplated in the original public notice if the following conditions are met:

1. A written statement is filed with the DSP explaining the reasons for the continuation or extension of services;

2. The program for the design services is filed with the DSP;
3. MSBA staff has made a written determination that the request for continued or extended services is otherwise in compliance with the MSBA's regulations, policies, procedures, and guidelines and the provisions of the feasibility study agreement, project scope and budget agreement, and/or project funding agreement, as applicable;

4. The DSP approves the appointment of the designer for continued or extended services and states the reason therefore.

Section 9: Emergency Designer Selection Process

A. If a situation arises in accordance with Chapter 7C, Section 53, which has been declared an "emergency" by the Executive Director, an Eligible Applicant may request an emergency selection of a designer.

B. In consultation with the technical staff of the MSBA, the Eligible Applicant shall prepare a proposed scope of work, an estimate of the cost of construction for the designer's services, and submit this, and any other relevant information to the Executive Director.

C. In lieu of public advertisement, the Executive Director or his/her designee will consult with the Eligible Applicant to select three to six qualified firms who have Master File Brochures on file, to solicit to perform this work.

D. The MSBA staff will poll an ad-hoc committee of three members of the DSP to select at least three qualified finalists and forward the names of the finalists to the Eligible Applicant with a written statement explaining the committee's reasons for its choice(s).

E. The Eligible Applicant will select one of the three finalists to perform the work and forward the name of the selected firm to the DSP with a written statement explaining the reasons for its choice.

Section 10: Statutory Representations by the MSBA

A. The projects of the MSBA and the Eligible Applicants are not subject to the jurisdiction of the Division of Capital Asset Management and Maintenance.

B. The DSP procedures substantially incorporate the procedures required of the Commonwealth's Designer Selection Board in M.G.L. Chapter 7C, Section 45 through 53, inclusive, and Section 55.

ATTACHMENT F

Certifications

CERTIFICATE OF AUTHORITY

At a duly authorized meeting of the Board of Directors of the _____ held on _____ Directors were present or waived notice,
(name of corporation) (date)
it was voted that _____ of this company be and hereby is
(officer and title)
authorized to execute contracts and bonds in the name and behalf of said company, and affix its Corporate Seal thereto, and such execution of any contract or bond of obligation in this company's name shall be valid and binding upon this company.

A TRUE COPY, ATTEST:

_____
[Signed]

_____
[Company Name and Address]

_____

I hereby certify that I am the _____ of the _____
(Title) (Name of Corporation)
that _____ is the duly elected _____
(Name of Officer) (Title)
of said company, and the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

Signature: _____

Name/Title: _____

Date: _____

(Corporate Seal)

COMMONWEALTH OF MASSACHUSETTS

WORCESTER, SS.

On this ____ day of _____, 2018, before me the undersigned notary public, personally appeared _____, who proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document, and acknowledged to me he/she signed it voluntarily for its stated purpose.

_____
Notary Public
My commission expires: