

REQUEST FOR DESIGNER SERVICES (RFS)

Acton-Boxborough Regional School District Acton, MA

C.T. Douglas Elementary School May, 30, 2018

Invitation: The Acton-Boxborough Regional School District of Acton, MA (“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 C. T. Douglas Elementary School in Acton, 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 approval 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. 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 ***\$72,000,000 to \$96,000,000*** depending upon the solution that is agreed upon by the Owner and the MSBA and that is ultimately approved by a vote of the MSBA’s Board of Directors. The Fee for Basic Services will be negotiated.

Pursuant to M.G.L. Chapter 7C, Section 6, the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO). The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the contract price for combined minority business enterprises (MBE) and women-owned business enterprises (WBE). Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal. Proposed MBE/WBE participation plans that include solely MBE or solely WBE participation, or do not include a reasonable amount of participation by both MBE and WBE firms to meet the combined goal will not be considered responsive. Applications from MBE and WBE firms as prime designers are encouraged. Where the prime Designer is an SDO certified MBE or WBE, 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.

The minority and women-owned business enterprises 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 MBE/WBE goals. Consultants to the prime Designer can team within their disciplines in order to meet the MBE/WBE goals but must state this relationship on the organizational chart (Section 6 of the application form).

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

A. Background:

The Acton-Boxborough Regional School District (ABRSD) is a comprehensive PreK-12 school system serving the communities of Acton and Boxborough, located about 20 miles northwest of Boston. The Acton-Boxborough mission is to develop engaged, well-balanced learners through collaborative caring relationships. The Acton and Boxborough communities strongly support excellence in public education and are truly dedicated to instilling a passion for learning in our students. The district prioritizes students' social and emotional wellbeing while supporting students to excel academically and through extensive and diverse extra-curricular opportunities. Serving 5,700 students, the district is comprised of nine schools: The Carol Huebner early childhood program, six elementary schools, one junior high school, and one high school. The towns of Acton and Boxborough are deliberate choices for residents and educators seeking the best educational opportunities

As part of the Feasibility Study, the ABRSD would like to examine two potential consolidation scenarios: consolidation of the C.T. Douglas Elementary School with the Paul P. Gates Elementary School and consolidation of the C.T. Douglas Elementary School with the Luther Conant Elementary School. In addition, the District would like this feasibility study to also examine relocation of the District's early childhood program, currently housed in the Blanchard Memorial School and the District's Administration Building, to the C.T. Douglas Elementary School.

As a result of the previous analysis on the base enrollment forecast and the revised analysis of capacity, and for planning and study purposes only, the MSBA recommends study enrollments for the Proposed Project (not including early childhood program students) as follows:

- C.T. Douglas Elementary School (no consolidation): 650 students
- Consolidation of the C.T. Douglas and Paul P. Gates Elementary Schools: 990 students
- Consolidation of the C.T. Douglas and Luther Conant Elementary Schools: 1,015 students

The C.T. Douglas Elementary School is located at 21 Elm Street, Acton, MA and houses 427 K-6 students (as of October 1, 2017) and 94 staff members at peak times. The school site is bounded on the north by Elm Street and residences across the street, to the east by residences, to the south by an extensive wetland system with boardwalk connection to the Paul P. Gates School located just south of the wetlands, and to the west by municipal athletic facilities. The site is made up of the existing main building, parking areas, and associated walkways and play fields. The property slopes steadily southwest to the Fort Pond Brook, with the southwest edge of the site at approximate elevation (El.) 206, the northern part of the main building at approximate El. 218, the southern part of the building at approximate El. 210 and the north edge of the site at Elm Street at approximate El. 218.

The building was designed by the Architects Collaborative in 1965 and constructed in 1966 as an elementary school. The building continues to be an elementary school. The building has remained largely untouched, with the exception of small renovations throughout to accommodate new technology for a growing student body; photovoltaic panels added during a re-roofing project in 2010; a modular building was added in the late 1990s (3 classrooms); another modular building added in the early 2010's (2 classrooms). Overall there is approximately 48,300 sf of space. The school is relatively untouched compared to other facilities of its age.

The school building is a single-story structure consisting of two wings connected by the lobby. There is a walk out lower level under west wing that contains additional classroom spaces. The main level of the west wing also houses classrooms. The west wing contains the cafeteria, playroom, offices and the modular classrooms that were added at a later date. The existing architectural drawings indicate that the structure is supported by conventional spread footings in both wings. The main floor of the west wing is shown to be constructed out of concrete tees. The roof framing in both wings is shown to be constructed out of concrete tees as well.

Starting in 2014 the ABRSD commissioned Dore & Whittier Architects, Inc. and embarked on an Existing Conditions, Capital Study and Visioning & Master Plan Development Study. This comprehensive study has been the basis for the plan the District has used to develop its list of Capital Projects. The ABRSD maintains a comprehensive website that includes all of the study information. The website can be found at <http://www.abschools.org/district/school-capital-and-space-planning>.

B. Project Goals and General Scope:

On or about April 2017, the Owner submitted a Statement of Interest (Attachment A) to the MSBA for the C.T. Douglas Elementary 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 February 14, 2018 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 C.T. Douglas Elementary School.

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, NE-CHPS or LEED-S scorecard, outline specifications, cost estimates, project schedule and proposed total project budget.

Project objectives under consideration by the Owner include:

- Update survey and existing condition information of the buildings at the (3) school sites including any hazardous materials.
- Identification of community concerns that may impact study options;
- Identification of specific milestone requirements and/or constraints of the District – e.g. Town votes, etc.
- Identification of potential alternative sites;
- Life cycle costs of operating the School as it relates to future operational budgets;
- Northeast Collaborative for High Performance Schools (NE-CHPS) criteria or US Green Building Council's LEED for Schools (LEED-S) Rating System
- Experience with the design and construction of zero net energy, zero net waste, and zero net water school buildings.
- Experience with designing a facility to meet an ultra-low EUI
- Provide design alternatives for renovation, addition/renovation and new construction options for the elementary schools to meet educational specifications of the School Department and the MSBA.

- Provide schedule, construction cost estimate, operating cost estimate and life cycle/sustainability analysis for each option.
- Constraints of the District –assumed that school will be in session on site for duration of project so phased occupied construction and possible use of swing space will be required. Purchase or leasing of offsite land/buildings and/or modular buildings may also be considered.
- Providing and maintaining a secure and positive educational environment during construction.
- Innovative Educational Planning
- Identification of construction alternatives including but not limited to the CM-at-Risk Delivery Method.
- Experience with constrained and/or occupied building sites
- Experience with phased occupied construction projects.

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. Unless specifically excluded, the Designer’s Basic Services consist of the tasks described in the Contract for Designer Services as amended and this RFS 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 include, but are not limited to, verification of existing record information including building dimensions, 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, data and communication, educational consultants, any specialty consultants for sustainable design (LEED-S/NE-CHPS), laboratory, library/media center and kitchen space, code consultants, accessibility, energy evaluations, detailed cost estimates; preparation of construction documents; bidding and administering the Construction Contract Documents and other design and consulting services incidental and required to fulfill the project goals. Please refer to the Contract and amendments for a complete summary of Basic Services.

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

Starting in 2014 the ABRSD embarked on an Existing Conditions, Capital Study and Visioning & Master Plan Development Study. This comprehensive study has been the basis for the plan the District has used to develop its list of Capital Projects. The ABRSD maintains a comprehensive website that includes all of the study information. The website can be found at <http://www.abschools.org/district/school-capital-and-space-planning>.

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.

<u>Milestone</u>	<u>Projected Date</u>
Designer Contract Executed	08/15/2018
MSBA Board of Directors Meeting – Preferred Schematic Report Approval	01/30/2019
MSBA Board of Directors Meeting - Project Scope and Budget Approval	10/10/2019
Feasibility Study Agreement expiration	02/15/2020
Local Project Funding Authorization	02/20/2020
Construction Start	10/1/2020
Substantial Completion of Construction	07/01/2022
Move-In	08/15/2022

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, will 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.
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 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, 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. Pursuant to M.G.L. Chapter 7C, Section 6, the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO). The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the design contract price for combined minority business enterprises and women-owned business enterprises. Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal.

F. Selection Criteria:

In evaluating proposals, the Owner and Designer Selection Panel will consider the members of the proposed design team. 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 and/or WBE).

1. *Architecture*
2. *Educational Programming*
3. *Civil Engineering*
4. *Landscape Architecture*
- Structural Engineering*
5. *Fire Protection Engineering*
6. *Plumbing Engineering*
7. *HVAC Engineering*
8. *Electrical/Lighting*
9. *Data/Communications*
10. *Environmental Permitting*
11. *Geotechnical Engineering*
12. *Geoenvironmental Engineering*
13. *Hazardous Materials*
14. *Cost Estimating*
15. *Kitchen/Food Service Consultant*
16. *Acoustical Consultant*
17. *Specifications Consultant*
18. *Library/Media*
19. *Technology Consultant/Audio Visual Consultant*
20. *Sustainable/Green Design/Renewable Energy Consultant including Zero Net Energy Building (ZNEB) Design*
21. *Code Consultant*
22. *Accessibility Consultant*
23. *Traffic Consultant*
24. *Furniture, Fixtures and Equipment Consultant*
25. *Site Surveying*
26. *Security Consultant*
27. *Licensed Site Professionals (LSP)*

Failure of an Applicant to list a team member may result in elimination of the Applicant for consideration by the DSP – even if that Applicant appears otherwise qualified.

**** 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 MBE and/or WBE.

Failure to address each 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 minority and women-owned business 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 M/WBE requirements. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their MBE/WBE goals. Consultants to the prime Designer can team within their disciplines in order to meet the 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, twenty-eight (28) hard copies, and two (2) digital copies in PDF format on separate compact disks or flash drives) must be received on or before 1:00 PM, June 27, 2018.** Applications should be printed double-sided and bound on the long edge, landscape orientation, in order that the pages lie and remain flat when opened. It is recommended that the proposal be laid out in such a manner that the reader doesn't need to be constantly rotating the proposal. Applications should not be provided with acetate covers.
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 the Standard Designer Application Form.**
5. Proposals shall be addressed to:

*JD Head, Director of School Operations
c/o Acton-Boxborough Regional School District
16 Charter Road, Acton, MA 01720
Phone Number: 978-264-5327
jdhead@abschools.org*

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

C.T. Douglas Elementary School Project
"Name of Applicant"

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

*JD Head, Director of School Operations
c/o Acton-Boxborough Regional School District
16 Charter Road, Acton, MA 01720
Phone Number: 978-264-5327
jdhead@abschools.org*

H. Pre-Proposal Meeting

All interested parties should attend a briefing session at the C. T. Douglas Elementary School, 21 Elm Street, Acton MA scheduled for **June 13, 2018 at 2:00 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, within its own discretion, 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: Contract for Designer Services - Base Contract for Design Bid Build or CM-at-Risk Project
(http://www.massschoolbuildings.org/sites/default/files/edit-contentfile/Guidelines_Forms/Contracts_Forms/Base%20Contract%20v_02_25.pdf)

Designer Services Contract Amendment for Design/Bid/Build
(http://www.massschoolbuildings.org/sites/default/files/edit-contentfile/Guidelines_Forms/Contracts_Forms/DBB%20v_02_25.pdf)

Designer Services Contract Amendment for CM-at-Risk
(http://www.massschoolbuildings.org/sites/default/files/edit-contentfile/Guidelines_Forms/Contracts_Forms/CM-R%20v_02_25.pdf)

Attachment C: Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated July 2016)
(<http://www.mass.gov/anf/docs/dsb/forms/citiestownsapplication2014.doc>)

Attachment D: Certifications

Attachment E: [MSBA's Designer Selection Panel's Procedures](#)

End of Request for Designer Services

Massachusetts School Building Authority

Next Steps to Finalize Submission of your FY 2016 Statement of Interest

Thank you for submitting your FY 2016 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete.** The District is required to print and mail a hard copy of the SOI to the MSBA along with the required supporting documentation, which is described below.

Each SOI has two Certification pages that must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer*. Please make sure that **both** certifications contained in the SOI have been signed and dated by each of the specified parties and that the hardcopy SOI is submitted to the MSBA with **original signatures**.

SIGNATURES: Each SOI has two (2) Certification pages that must be signed by the District.

In some Districts, two of the required signatures may be that of the same person. If this is the case, please have that person sign in both locations. Please do not leave any of the signature lines blank or submit photocopied signatures, as your SOI will be incomplete.

**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 as the chief executive office under the provisions of a local charter.*

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.

CLOSED SCHOOLS: Districts must download the report from the "Closed School" tab, which can be found on the District Main page. Please print this report, which then must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer. A signed report, with original signatures must be included with the District's hard copy SOI submittal. **If a District submits multiple SOIs, only one copy of the Closed School information is required.**

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 MSBA requires the full accreditation report(s) and any supporting correspondence between the District and the accrediting entity.

ADDITIONAL INFORMATION: In addition to the information required with the SOI hard copy submittal, 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 Diane Sullivan at 617-720-4466 or Diane.Sullivan@massschoolbuildings.org.

Massachusetts School Building Authority

School District Acton-Boxborough

District Contact Steve Mills TEL: (978) 264-4700

Name of School Douglas

Submission Date 4/7/2016

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 sign the required certifications and submit one signed original hard copy of the SOI to the MSBA, with all 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 hard copy 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 and certification signatures in a format acceptable to the MSBA. If Priority 1 is selected, your Statement of Interest 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.

Chief Executive Officer *	School Committee Chair	Superintendent of Schools
Glenn A. Brand	Kristina Rychlik	Glenn A. Brand
Superintendent of Schools		
(signature)	(signature)	(signature)
Date	Date	Date

* 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. Please do not leave any signature lines blank.

Massachusetts School Building Authority

School District Acton-BoxboroughDistrict Contact Steve Mills TEL: (978) 264-4700Name of School DouglasSubmission Date 4/7/2016

Note

Superintendent of Schools is Dr. Glenn A. Brand, this information needs to be updated. Steve Mills listed above was the former Superintendent.

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.

Potential Project Scope: Potential New School

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI: 2016 Douglas

Is this part of a larger facilities plan? YES

If "YES", please provide the following:

Facilities Plan Date: 9/15/2016

Planning Firm: Dore and Whittier**Please provide an overview of the plan including as much detail as necessary to describe the plan, its goals and how the school facility that is the subject of this SOI fits into that plan:**

The Douglas Elementary School is one of 9 facilities being evaluated by Dore and Whittier as part of a two-phase plan. Tasks and goals associated with this plan are described in detail below. PHASE I – Existing Conditions Analysis Task 1 - Meet with the Acton-Boxborough Regional School District to confirm project objectives and timelines. Assist in setting project goals. Set progress review meetings for all tasks through completion of services and submission of final report. Task 2 - Obtain and review current 10 year enrollment projections completed by the District. Task 3 - Review capacity of each facility and their ability to support the projected enrollment as well as how each facility meets current MSBA space standards. Task 4 - Review existing school buildings, grounds and systems relative to supporting the District's security protocols and summarize the findings in graphic and narrative format. Task 5- Obtain and review existing drawings of each of the Acton-Boxborough Regional School District's school buildings, engineering surveys and reports, and precedent studies and investigation as well as all capital projects conducted over the past 10 years. Task 6- Perform existing conditions analysis of each of the Acton-Boxborough Regional School District's school buildings. The analysis shall include: • Meet with school facilities staff to understand known current issues, • Tour each school to assess current physical condition of structure, interior and exterior materials and finishes, • Review building, accessibility and life safety code compliance, • Review plumbing, fire suppression, HVAC, electrical and technology systems condition, • Review hazardous material reports (if applicable). Task 7 - Perform analysis of each school site to include:• Site area of each school, including buildings, parking, roadways and playfields • Available area for additions or new buildings, • Available area for athletic fields and play areas,• Available area for vehicular and pedestrian circulation, • Potential impact on Neighbors. Task 8 - Based on information gathered in the Tasks above, develop a spreadsheet of maintenance and capital project items by school, by discipline. Provide a recommendation of priority for each item including: urgent; short term, 5 - 10 years. In addition develop the task list so items or projects from various schools can be grouped discipline Task 9 – Final Report - Based on approval of the Acton-Boxborough Regional School District, prepare and submit the final report including any comments received. PHASE II – Develop Educational Program and Master Plan Options The Acton-Boxborough Regional School District is interested in having its' school buildings support and enhance the goals of 21st Century teaching and learning. The exploration and development of the program and options may include: grade configurations; alternative educational delivery models; community learning and use and other ideas that may represent contemporary and future educational thinking. Task 1 - Meet with the Acton-Boxborough Regional School District and School Principals to identify long-range educational goals for the schools. Develop Educational Specifications; perform programming meetings with each school administration and appropriate educational and operational staff. Develop program assessments based on projected populations for each school. Assist the District with up to two, conceptual design phase, community forums to solicit input from parents, students and other community members. Task 2- Propose up to three conceptual capital needs Master Plan alternatives, which meet the program and existing conditions requirements for each school. These shall comprise options for maintenance only, renovation and addition, or new construction as well as any potential grade reconfiguration or school consolidation. These shall be analyzed with respect to: • Educational appropriateness • Availability of appropriate "expansion" area on reviewed sites; • Impact on present school and site operations; • Impact on neighbors; • Construction schedule and phasing (multiple phases vs. one phase project)• Impact on existing HVAC/plumbing and electrical systems;• "Satisfaction" of education goals; • Order of magnitude construction costs and total project costs, including phasing, swing space issues. • Provide context for how components may (or may not) meet the Massachusetts School Building Authority (MSBA) criteria for capital projects. Task 4- Provide for the preferred option: • Conceptual plans to illustrate the Master Plan; • Phasing plan;• Preliminary schedule for design through construction; • Educational specifications;• Projection of project costs for preferred option to include all costs normally a part of Massachusetts school projects to include: o Construction costs ("bricks and mortar"); o Itemized Fees, furnishings & equipment, clerk of works, project manager, contingencies, etc; Task 5 - Generate Final Report

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 23 students

per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 23 students per teacher

Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District? YES

If "YES", please provide the author and date of the District's Master Educational Plan.

This document is pending. Expected timeline is September 2016. The author of the plan is Dore and Whittier. The District partnered with Dore and Whittier June 2015 to complete a two phase District Master Plan and Feasibility Study. Phase I, Existing Conditions and Capital Planning Study has been completed and delivered January 2016. The District moved directly into Phase II, Master Planning and Educational Feasibility, and this final phase has a pending completion date of September 2016.

Is there overcrowding at the school facility? YES

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

The school is experiencing overcrowding. To address these concerns, the school has added modular buildings with approximately 1,550 SF of additional space. The modular buildings house a classroom, a special education/resource room, the school library, art and music classrooms. Each of these spaces is significantly undersized and ideally, these programs would be housed in a permanent part of the building. The current population is 483 students (as of 3/1/16) including 53 in Kindergarten, 69 in grade 1, 71 in grade 2, 74 in grade 3, 69 in grade 4, 73 in grade 5, and 74 in grade 6. Two storage areas have been converted to instructional purposes for regular education reading support. An additional two storage areas are used for spaces for a counseling assistant and a school psychologist. With so many closets and storage areas converted for instructional purposes, it leaves virtually no room for storage other than within instructional spaces. In addition the library, which is in a modular, has been subdivided to house a ½ day kindergarten class. Three programs are also housed in modular buildings, including music and art. PT and OT programs must share space with the Special Education Learning Center and ELL program which drastically overburdens the room. OT programs must sometimes use the hallways, as do small groups for differentiated regular education. Computer lab is taught on a cart that occupies a small conference room. The cafetorium houses two grade levels at a time for lunch and with tables removed can accommodate the whole school population. Due to the overcrowding, however, we prefer to break events into two half school events. The gymnasium and cafeteria space are significantly undersized. The District is currently experiencing a slight decrease in enrollment. One section of kindergarten will reduce our population by 18 students next year. This will slowly make classroom space available for Special Education programs, but will take at least four years to provide the proper space and this creates a challenge within the District's open enrollment process.

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? NO

If "YES", how many staff positions were affected? 0

At which schools in the district?

Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

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.

Does not apply but to elaborate on the above, Acton Public Schools (preK-6), Boxborough Public Schools (preK-6), and Acton Boxborough Regional Schools (7-12) merged in FY'15 to form the new Acton Boxborough Regional School District

(preK-12). Creating opportunity for some staffing consolidation. Some duplicative positions were merged and due to minor declining enrollment ABRSD has been able to decrease a couple of K sections in the past two years.

Please provide a detailed description of your most recent budget approval process including a description of any budget reductions and the impact of those reductions on the district's school facilities, class sizes, and educational program.

The preliminary budget presented to the School Committee in February represented a total of \$83,426,767, or a 3.90% increase over the FY'16 revised budget. This represented the total budget that the administration believed was required to meet our operational needs without a reduction in services. Upon the issuance of the State budget, and finalization of other estimates in the initial proposal, the administration adjusted the budget to refine applicable areas, which resulted in a reduction leading to a final FY'17 budget request of \$83,073,204 or an increase of 3.46% over FY'16. The total budget increase of \$2,776,809, or 3.46%, in FY'17 is driven primarily by four areas, comprising 3.3% of the 3.46%: i) Contractual Salary Increases: Personnel costs are increasing \$1,452,330, or 2.9%, over FY'16, due to salary increases that allow us to retain our almost 1,000 full- and part-time employees. ii) Commitment to Employee Benefits: Fringe benefits, including OPEB, Middlesex Retirement, and health insurance contributions, are increasing \$562,706, or 4.7%, over FY'16. iii) Increased Special Education Costs: Special Education out-of-district tuitions and necessary transportation costs, net of Circuit Breaker reimbursement, are increasing \$311,614, or 4.58%. iv) Utility & Infrastructure Costs: Utility costs are rising \$194,634, or 12%, principally due to higher electric rates. Debt service and capital budget combined are increasing \$147,075, or 6.35%, reflective of current initiatives in capital planning and upkeep.

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).

Douglas Elementary School was constructed in 1966. The building has remained largely untouched, with the exception of small renovations throughout to accommodate newer technology for a growing student body; photovoltaic panels were added during a re-roofing project in 2010; a modular building was added in 2001 (3 classrooms); another modular building added in 2010 (2 classrooms). The school is relatively untouched compared to other facilities of its age.

Summary:

- Originally constructed in 1966 with no renovations
- Roofing: reroofed in 1982 and 2010
- Modularity: 3 classrooms added in 2001 and 2 more classrooms added in 2010
- Photovoltaic panels added in 2010

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

45300

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 Douglas School is located on a 34 acre plot shared with the Gates School. The schools are separated by an extensive wetland system with a boardwalk connection between the schools.

The site includes an entry driveway leading directly to a small drop off loop with parking and a parking lot along the east property line. Safety concerns impacting the site include overlapping parent and bus drop off area, staggered bus arrivals due to inability to stack busses on site, no clearly separate walking paths, inadequate parking on site, significant traffic congestion on Elm Street and only one access point into the site.

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)

21 Elm Street, Acton, MA 01720

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 main building is predominantly brick veneer with concrete block back-up. The brick appears to have localized areas of cracking due to stress/contraction where concrete slab is adjacent. According to the original drawings, there is no insulation in the exterior walls. This amounts to a low thermal value.

The cornice/fascia/soffit and elevated floor slabs are pre-cast concrete integral to structural precast concrete "T" planks that extend from the interior to the exterior of the thermal envelope. There is no thermal break. Exposed concrete cornice/fascia is in poor condition with re-bar exposed throughout; there is evidence that some of the rebar has been covered with concrete patching. It appears that the rebar was installed very close to the surface and that over time, with exposure to the elements and freeze-thaw cycles over the past fifty years, the rebar has rusted and popped the concrete. This is a continual maintenance issue.

The building has original non-thermal metal framed, store-front-type single-pane windows with metal infill panels below. The windows have less than R-1 thermal value, are rusting and paint is peeling.

Most exterior doors are hollow-metal doors within metal curtain-wall frames offering little thermal value. A few doors are wood and they are in poor condition.

The roof is a fully-adhered EPDM membrane that was installed in 2010 with a 20-year warranty. It appears that tapered insulation was used, as the roof drains fairly well. A photovoltaic array covers a large portion of the roof with self-ballasted concrete blocks (no penetrations).

There are two modular buildings located at opposite ends of the building. These are constructed of wood-stud framing and T-111 siding and vinyl siding and fiberglass batt insulation. While it is not known how much insulation was used, typically the thermal value is very low and construction materials and methods are not intended for long-term use. Masonite and metal panel skirting at the modular buildings are subject to significant deterioration and damage easily. Crawl spaces inevitably become inviting places for animal wildlife. Due to the inherent poor construction techniques in modular buildings, fiberglass insulation below the floor has collapsed and fallen out of position between floor joists, resulting in failure of the thermal integrity of the building.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS? NO

Year of Last Major Repair or Replacement:(YYYY) 1966

Description of Last Major Repair or Replacement:

n/a

Roof Section A

Is the District seeking replacement of the Roof Section? NO

Area of Section (square feet) 38000

Type of ROOF (e.g., PVC, EPDM, Shingle, Slate, Tar & Gravel, Other (please describe))

Fully adhered EPDM roof

Age of Section (number of years since the Roof was installed or replaced) 6

Description of repairs, if applicable, in the last three years. Include year of repair:

Roof was replaced 6 years ago any repairs since have been covered by warranty.

Window Section A

Is the District seeking replacement of the Windows Section? YES

Windows in Section (count) 158

Type of WINDOWS (e.g., Single Pane, Double Pane, Other (please describe))

Original non-thermal metal framed, store-front-type single-pane windows with metal infill panels have less than R-1 thermal value, are rusting and paint is peeling

Age of Section (number of years since the Windows were installed or replaced) 51

Description of repairs, if applicable, in the last three years. Include year of repair:

Windows are original. Basic break fix repairs are all that have been completed since the building original construction.

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).

General Description:

HVAC: For the most part, all the mechanical equipment with the exception of the boiler plant, the unit ventilators and the control system are original to the building. The piping system throughout the building is provided with a mix of new fiberglass insulation and original fiberglass insulation which still has asbestos insulation on the elbows. The school mostly consists of unit ventilators for all the classroom spaces, indoor air handling units for the cafeteria and gymnasium, and five rooftop air handlers for the modular classrooms which provide heating, ventilation, and air conditioning for that area only. The rooftop unit and indoor air handling units are associated with duct distribution systems for the supply and return air. Exhaust air is provided throughout the building through the use of roof mounted exhaust fans. The building's overall temperature control system is handled with stand-alone electronic controls. Overall the equipment is functional; however, there are several issues with some of the indoor air handling units. The building has received maintenance over the years, however, some components are beginning to fail or show signs of possible future issues.

Electrical: There have been upgrades to the main switchgear fire alarm system, the service main (for the main building

distribution system) and some lighting. Existing panels and added panels have been retrofitted to accommodate computer loads. Branch circuits and data wiring have been added over the years. Electrical systems original to the building are in poor condition and beyond their serviceable life.

Interior lighting is typically 2'x4' recessed troffers with acrylic lenses, fluorescent lamps, and electronic ballasts in areas with dropped ceilings and acoustical ceiling tiles. All other locations consist of two lamp surface wraparound fixtures with fluorescent lamps and electronic ballasts. Gymnasium lighting consists of four lamp fluorescent high output fixtures with wire guard however the light level is inadequate. There are no automated lighting control system/occupancy sensors or daylight harvesting systems installed in the school. In general, interior lighting is in poor condition.

The fire alarm system consists of an addressable panel with horn/strobe notification appliances. The school has full coverage for detection. The system is in fair condition however does not meet current code as it lacks voice evacuation. The building does not have an emergency generator.

Plumbing: The Plumbing Systems serving the building are cold water, hot water, sanitary, waste and vent system, storm drain piping, and natural gas. Municipal water services the building, while the building sanitary is directed to a site septic system. The majority of the plumbing systems appear to be original to the building. Portions of the system have been updated as part of building upgrade projects. The plumbing systems, while continuing to function, in general have served their useful life. Attempts have been made to make some bathroom fixtures accessible, however, the majority of fixtures do not meet current accessibility codes.

Cast iron is used for sanitary and storm drainage. Rainwater from flat roof areas is collected by interior rain leaders which appear to discharge to a below grade drainage system. The cast iron piping and underground drainage piping is reportedly failing and is constantly a maintenance issue.

Fire Protection: The building does not contain an automatic sprinkler system.

Boiler Section 1

Is the District seeking replacement of the Boiler? NO

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) 9

Description of repairs, if applicable, in the last three years. Include year of repair:

School currently has High Efficiency Viessman Condensing Boilers installed in 2007 and we are not seeking replacement at this time. These could be potentially reused if the building is renovated or replaced. Routine annual maintenance / preventative maintenance and inspection is all that has occurred since installation.

Has there been a Major Repair or Replacement of the HVAC SYSTEM? YES

Year of Last Major Repair or Replacement:(YYYY) 2007

Description of Last Major Repair or Replacement:

Replaced boilers, control system, unit ventilators

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? YES

Year of Last Major Repair or Replacement:(YYYY) 2010

Description of Last Major Repair or Replacement:

- Description: The facility contains a recently installed roof mounted photovoltaic system. The panels are self ballasted. The system is 82kW. The inverter is located outside and is manufactured by Solectria Renewables Model #PVI82KW Serial #100303-21.

- The main electrical switch gear in the building was updated when the PV panels were added in 2010, the fire alarm system was updated in 2000 and the last major lighting fixture upgrades were completed in 2006.

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).

Flooring in the building is primarily original. Vinyl asbestos tile (VAT) and vinyl composition tile (VCT) of various vintages are found in the cafeteria, throughout the corridors and classrooms. VCT in modular classrooms is in poor condition; lifting at edges, and exhibiting cracks and gaps. The original wood flooring in the gym is in poor condition with significant buckling, wide and varied joints between planks and is not flat or consistent. Ceramic tile in the toilet rooms is chipped or missing tile in several locations. Most classrooms have carpet installed over a portion of the floor tile. Carpet has numerous large wrinkles that have formed in most classrooms. Carpeting also covers the corridor ramp, which is heavily worn and soiled.

Interior walls range from exposed brick, concrete masonry units, glazed block, fiber-reinforced polymer (FRP) panels, wood paneling with battens and gypsum wall board. The wood battens and wall board are showing signs of wear. Ceilings are generally exposed concrete tee roof structure with adhered acoustical panels with exposed utilities in most spaces. Some limited areas in the building and the modular classrooms have suspended acoustic panels; many are bowing/sagging and/or stained from leaks.

Interior doors are mostly original solid core wood veneer with a dark walnut stain. Some doors have lites with wired safety glass. Doors that have been heavily-used are in poor condition, with dings and scrapes.

There are a few built-in cabinets in the building. Those observed have a mix of melamine, plastic laminate and solid wood, of varying condition, however these are not generally commercial/institutional quality. Counters and sinks in classrooms are in poor condition.

The school has significant barriers to handicap accessibility. The entire lower level is not accessible, the ramp leading to the upper classroom wing is non-compliant and the doors into each classroom do not feature the required clear floor space for approach. The facility as a whole lacks comprehensive compliance. Other issues include accessible routes, maneuvering space, urinal screens, grab bars, toilet accessories, door hardware, drinking fountains and signage.

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

CT Douglas School offers comprehensive K-6 educational program that includes Grades 1-6 (three classrooms per grade level) in the main building. In modular buildings we operate an extended day program, library, music and art education as well as K-3 Special Education programs and English Language Learning (ELL) services. At all levels we are unable to expand services or programs needed to meet students' special education needs such as moderate to severe disabilities due to existing space constraints and lack of additional space.

Physical Therapy (PT) and Occupational Therapy (OT) programs at CT Douglas must share space with the Learning Center and ELL program which drastically overburdens the room. OT programs must sometimes use the hallways, as do small groups for differentiated regular education. The library, which also shares a modular building with a 1/2 day kindergarten, has been subdivided into several small group instructional spaces and cannot house one full class at a time. Several teaching staff and the school psychologist do not have their own offices and share these with Special Education conference rooms. The building has no designated rooms for project-based or hands-on learning in science and there is no room for storage of science and other instructional materials. The building has no handicap accessibility from the downstairs to the second (main) floor. The lack of space and accessibility is impeding our ability to provide a comprehensive, high quality educational experience.

CORE EDUCATIONAL SPACES: Please provide a detailed description of the Core 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).

CT Douglas is an elementary school with grades kindergarten through six. It serves integrated programs for Special Education also in grades kindergarten through six. There is a library in a modular and a small gymnasium. The school houses a school nurse's office. One of the three Special Education programs is in a shared modular with OT and ELL. Because of limited space, OT and PT do not have access to large spaces for gross motor therapy. The shared Special Education spaces are not optimal for learning. There are 20 general classrooms. Sizes range between 762 SF and 1,133 SF. There are approximately 17-18 kindergarten students per class, and between 23-25 students per class in Grades 1-6.

Cafeteria, gym, library, Special Education, resource, art and music spaces are undersized for the current student population.

CAPACITY and UTILIZATION: Please provide 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).

The school is experiencing overcrowding. To address these concerns, the school has added modular buildings with approximately 1,550 SF of additional space. The modular buildings house a classroom, a special education/resource room, the school library, art and music classrooms. Each of these spaces is significantly undersized and ideally, these programs would be housed in a permanent part of the building. The current population is 483 students (as of 3/1/16) including 53 in Kindergarten, 69 in grade 1, 71 in grade 2, 74 in grade 3, 69 in grade 4, 73 in grade 5, and 74 in grade 6. Two storage areas have been converted to instructional purposes for regular education reading support. An additional two storage areas are used for spaces for a counseling assistant and a school psychologist. With so many closets and storage areas converted for instructional purposes, it leaves virtually no room for storage other than within instructional spaces. In addition the library, which is in a modular, has been subdivided to house a ½ day kindergarten class. Three programs are also housed in modular buildings, including music and art. PT and OT programs must share space with the Special Education Learning Center and ELL program which drastically overburdens the room. OT programs must sometimes use the hallways, as do small groups for differentiated regular education. Computer lab is taught on a cart that occupies a small conference room. The cafetorium houses two grade levels at a time for lunch and with tables removed can accommodate the whole school population. Due to the overcrowding, however, we prefer to break events into two half school events. The gymnasium and cafeteria space are significantly undersized. The District is currently experiencing a slight decrease in enrollment. One section of kindergarten will reduce our population by 18 students next year. This will slowly make classroom space available for Special Education programs, but will take at least four years to provide the proper space and this creates a challenge within the District's open enrollment process.

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 District provides regular maintenance and cleaning as needed. The District also has a licensed plumber, electrician, and HVAC mechanic to provide in house repairs, saving the District on maintenance and repairs that would otherwise need to be outsourced. No significant capital projects are planned for the facility at this time.

The District budget for school based operations, capital, and preventative maintenance and repair at the Douglas school in Fiscal Year (FY) 2014 was \$144,016 which breaks down to \$2.98 per sq ft. In FY'15 the budget for the Douglas school was \$135,011 which breaks down to \$2.78 per sq ft. In our current year FY'16 the Douglas school budget is \$126,453 which breaks down to \$2.62 per sq ft. This recent level of budget funding, which is difficult to maintain in operational budgets year to year, does not allow for the District to address major capital needs for a building of this age and is utilizing funds for maintenance that could be better directed to educational programs.

Priority 2***Question 1: Please describe the existing conditions that constitute severe overcrowding.***

Five classrooms located in two modular buildings have been constructed adjacent to the building to accommodate educational space needs. Art sink/counter and art storage is located in a corridor of one of the modular buildings. Special education support spaces have been added in the corridor, infilling an area that previously was student overflow space. PT and OT programs must share space with the Special Education Learning Center and ELL program which drastically overburdens the room. OT programs must sometimes use the hallways, as do small groups for differentiated regular education. Computer lab is taught on a cart that occupies a small conference room. The cafetorium houses two grade levels at a time for lunch and with tables removed can accommodate the whole school population. Due to overcrowding, however, we prefer to break events into two half school events. The gymnasium and cafeteria space are significantly undersized. Multiple storage units and maintenance closets have been converted to one on one instructional space and one is being used as an undersized computer lab. All of these spaces completely lack appropriate ventilation necessary for inhabitable educational space.

Priority 2

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

The District added three modular units to the building in 2001 and another two modular units in 2010.

Priority 2

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.

At all levels we are unable to expand services or programs needed to meet students' special educational needs such as moderate to severe disabilities, due to lack of space. Because of the overcrowding and shared space within these rooms, Douglas School is the only school within the District that cannot house specialized programs for students with these disabilities. Students identified with moderate to severe disabilities must move to other schools within the District. This places a burden on the families because half of our elementary schools follow an early schedule and half follow a late one. If children are placed at different schools, it can be very complicated for their families.. This lack of adjustable space also limits our ability to provide accommodations for standardized testing. With over 40 students receiving accommodations on the MCAS this year, we are required to use at least 13 different spaces, in addition to regular education classrooms, for this testing. This displaces almost every program and office within the building including the principal and assistant principal.

The library, which also shares a modular building with a 1/2 day kindergarten, has been subdivided into several small group instructional spaces and cannot house one full class at a time. Several teaching staff and the school psychologist do not have their own offices and share these with Special Education conference rooms. This limits psychologist testing and therapy time as well as opportunities for math specialists to work with small groups of students.

The building has no designated rooms for project-based or hands-on learning in Science and there is no room for storage of Science and other instructional materials. All materials must be stored in classrooms and this limits teaching space as well as space for movement breaks for younger students.

The cafeteria, designed to accommodate 270 students is regularly used to house 483 students for all school functions. Whenever possible we hold these important gatherings outdoors or divide a program into two performances presented to half the school at a time.

The building has no handicap accessibility from the downstairs to the second (main) floor. With every inch of the existing building utilized, the school is unable to provide adequate areas for break-out and collaboration spaces for the students. The lack of space and accessibility is impeding our ability to provide a comprehensive, high quality educational experience.

Please also provide the following:

Cafeteria Seating Capacity:	144
Number of lunch seatings per day:	3
Are modular units currently present on-site and being used for classroom space?:	YES
If "YES", indicate the number of years that the modular units have been in use:	15
Number of Modular Units:	2
Classroom count in Modular Units:	5
Seating Capacity of Modular classrooms:	20
What was the original anticipated useful life in years of the modular units when they were installed?:	15
Have non-traditional classroom spaces been converted to be used for classroom space?:	YES

If "YES", indicate the number of non-traditional classroom spaces in use: 5

Please provide a description of each non-traditional classroom space, its originally-intended use and how it is currently used (maximum of 1000 characters):

Three original storage spaces are being used for different purposes. One is a counseling support area, one is a computer lab, and one is reading and writing support. The original library media center is being used as a classroom (with a smaller library now being housed in a modular space). The original teacher copy room / work space is now being used for the Assistant Principal's office.

Please explain any recent changes to the district's educational program, school assignment policies, grade configurations, class size policy, school closures, changes in administrative space, or any other changes that impact the district's enrollment capacity (maximum of 5000 characters):

The communities of Acton and Boxborough fully regionalized the educational system preK – 12 starting Fiscal Year 2015 (July 1, 2014). Previously Acton-Boxborough Regional School District consisted of grades 9 – 12. Full preK – 12 regionalization has had minor impacts on the District's elementary school choice program.

What are the district's current class size policies (maximum of 500 characters)?:

The School Committee has a commitment to provide the highest quality education for our children. The Committee recognizes that desirable class sizes are a necessary part of the growth and development of the individual student. Therefore, the committee recommends that elementary classes are kept within the following ranges.

Class size ranges:

Kindergarten 18-20 students

Grades 1-3 20-22 students

Grades 4-6 22-24 students

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.

As noted above:

- . Precast concrete structural system- interior-exterior with no thermal break; rebar is rusting and popping concrete
- . Single-pane metal window system (floor to ceiling)
- . Mechanical and electrical systems are a mix of old and new; older systems are in very poor condition; refer to detailed description above.
- . Exterior doors are generally in poor condition
- . VAT flooring is original and worn. Carpeting is worn and wrinkled. Gym flooring is worn and buckling. Acoustical ceiling tiles are sagging and in poor condition.

Priority 5

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

The School District has been patching concrete.

Some mechanical and electrical systems have been upgraded.

Some exterior doors have been replaced.

Some VAT flooring has been replaced.

The school provides maintenance to the facility systems described with in house licensed staff. Many of the system issues noted are too great for the District to address in its annual budget.

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.

Due to a lack of ADA compliance, specifically wheel chair accessibility, the District is limited in placement of some special education students which has had an impact on the District's overall special education programming. At times this has had an impact on families by separating siblings or forcing siblings to transfer to be with their brothers or sisters who require special services or accommodations. Daily educational delivery has been interrupted due to roof leaks in certain areas. The antiquated HVAC creates challenges associated with decibel levels in classroom spaces and other instructional spaces. Additionally, many non-traditional spaces that have been converted to instructional or office space often do not have adequate HVAC mechanical systems for the current use creating personal comfort issues. The local fire and life safety departments in the Town of Acton have complained to the District about the proliferation of instructional spaces in the corridors. Finally, though the District benefits financially from having licensed mechanical staff members as in house employees, we do encounter problems in the Douglas School where most of the repairs need to occur during the school day which can interrupt instructional delivery to the children.

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.

Every square foot of the building is utilized for educational space, including hallways, converted storage closets and modulars. If a system or component failure renders an area or space unusable, it becomes detrimental to the operation of the building. Addressing these failing systems would create a healthier, more comfortable and safer educational environment more conducive to learning. The District continues to be proactive, when possible, to address maintenance items in a timely manner.

Please also provide the following:

Have the systems identified above been examined by an engineer or other trained building professional?:

YES

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

Dore & Whittier Architects, Inc.
Garcia, Galuska DeSousa (MEP)

The date of the inspection: 8/1/2015

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

Deficiencies in handicap accessibility, thermal envelope, code compliance, and infrastructure such as heating, ventilating and air conditioning (HVAC), electrical and plumbing systems topped the list of capital improvement needs. The use of modular classrooms addresses temporary space needs, but is not a viable long-term solution. A summary of findings is below:

Landscape / Civil

- Only one loop for parent drop-off, busses and parking; no separation – safety concern
- Significant congestion and traffic back-up on Elm Street
- Only 4 busses at a time; staggered arrivals
- Only one access into the site; site is constrained
- Asphalt and sidewalks are in fair to poor condition
- Inadequate parking
- 2 Handicap spaces; needs crosswalk

Structural

- Significant cracking at concrete slab at the second floor and roof
- Exposed reinforcing

HVAC

- No ventilation provided for interior offices or corridors
- Thru-window air conditioners
- Spaces sub-divided into several spaces with one thermostat
- Standalone electronic thermostats - upgrade to a building-wide DDC
- Isolation valves within the hot water system are beginning to fail
- Piping insulation removed or damaged
- Constant issues with cafeteria and gym original units
- No makeup air in the Kitchen
- Odor in modular classrooms

Electrical

- New service main is behind wood stud partition with no clear space - not code compliant
- Remainder of the electrical distribution is in poor condition and is beyond its serviceable life
- Existing panelboards are original Federal Pacific with no spare capacity left
- Recommend upgrade to LED's occupancy and daylighting controls
- No emergency generator
- Fire Alarm: fair condition and does not meet current code

Plumbing

- Install grease interceptor for kitchen
- Provide new domestic water distribution piping and mixing valves
- Install plaster traps at art room sinks

Fire Protection

- No sprinkler system

Architectural

- Modulars: poor condition with fiberglass insulation failing
- No insulation in exterior walls
- Single pane windows
- Ice-damming and leaking at modulars
- Original wood floor in gym is failing
- Gym ceiling is low at 14'
- Lower classroom floor and platform are not accessible
- Classrooms are not accessible due to lack of clearance at doors and knob handles
- Paper storage in corridors
- Waste line at 5' high in storage/pull-out space
- Dirt crawl space is adjacent to occupied space

Food Service

- Replace wood top table with stainless
- Range is outdated and inefficient
- Dry goods storage is undersized
- Serving counter is antiquated and cannot keep chilled food cold

Hazardous Materials

- Suspect materials are expected due to building age but are being maintained well

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.

Due to the complete lack of ADA compliance in the facility, the District is extremely limited with regards to the special education space or offerings at Douglas. There is also a lack of meeting and collaboration space, ELL space, and student gathering space outside of the cafetorium and gymnasium.

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 items above have been placed into a Capital Improvement Plan and divided into three different priorities, to be completed over time:

Priority 1: 0-2 years

Priority 2: 3-6 years

Priority 3: 7+ years

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.

At all levels we are unable to expand services or programs needed to meet students' special educational needs such as moderate to severe disabilities due to lack of space. Because of the overcrowding and shared space within these rooms, the Douglas School is the only school within the District that cannot house specialized programs for students with these disabilities. Students identified with moderate to severe disabilities must move to other schools within the District. This places a burden on the families because schools within the system may follow a different opening and ending schedule. This lack of adjustable space also limits our ability to provide accommodations for standardized testing. With over 40 students receiving accommodations on the MCAS this year, we are required to use at least 13 different spaces in addition to regular education classrooms, for this testing. This displaces almost every program and office within the building including the principal and assistant principal.

The library, which also shares a modular building with a 1/2 day kindergarten, has been subdivided into several small group instructional spaces and cannot house one full class at a time. Several teaching staff and the school psychologist do not have their own offices and share these with Special Education conference rooms. This limits psychologist testing and therapy time as well as opportunities for math specialists to work with small groups of students.

The building has no designated rooms for project-based or hands-on learning in Science and there is no room for storage of Science and other instructional materials. All materials must be stored in classrooms and this limits teaching space as well as space for movement breaks for younger students.

The cafeteria, designed to accommodate 270 students, is regularly used to house 483 students for all school functions. Whenever possible, we hold these important gatherings outdoors or divide a program into two performances presented to half the school at a time.

The building has no handicap accessibility from the downstairs to the second (main) floor. The lack of space and accessibility is impeding our ability to provide a comprehensive, high quality educational experience for our students.

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
Glenn A. Brand	Kristina Rychlik	Glenn A. Brand
Superintendent of Schools		
(signature)	(signature)	(signature)
Date	Date	Date

* 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. Please do not leave any signature lines blank.

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	MBE/ WBE
Civil Engineering			
Landscape Architecture			
Structural Engineering			
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 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

PROJECT DESCRIPTION, FEE AND SIGNATURES

ARTICLE 1 DEFINITIONS

ARTICLE 2 RELATIONSHIP OF THE PARTIES.....

ARTICLE 3 RESPONSIBILITIES OF THE OWNER.....

ARTICLE 4 RESPONSIBILITIES OF THE DESIGNER.....

ARTICLE 5 SUB-CONSULTANTS

ARTICLE 6 COMPENSATION

ARTICLE 7 BASIC SERVICES.....

ARTICLE 8 EXTRA SERVICES

ARTICLE 9 REIMBURSABLE EXPENSES

ARTICLE 10 COMPENSATION AND RESPONSIBILITY FOR CHANGE ORDERS

ARTICLE 11 RELEASE AND DISCHARGE

ARTICLE 12 ASSIGNMENT, SUSPENSION, TERMINATION, NO AWARD

ARTICLE 13 NOTICES

ARTICLE 14 INDEMNIFICATION

ARTICLE 15 INSURANCE

ARTICLE 16 OWNERSHIP OF DOCUMENTS.....

ARTICLE 17 STATUTORY REQUIREMENTS.....

ARTICLE 18 MISCELLANEOUS

ATTACHMENT A PAYMENT SCHEDULE

ATTACHMENT B REQUEST FOR DESIGNER SERVICES (RFS)

ATTACHMENT C M/WBE PARTICIPATION SCHEDULE

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 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 form prescribed by the Authority which contains the certification of the Designer, OPM and the Owner that the Project 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 and construction.

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.

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 – A minority-owned business (MBE) or a women-owned business (WBE) certified by the Supplier Diversity Office (SDO), formerly the State Office of Minority and Women Business Assistance (SOMWBA).

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.

PROJECT CONSTRUCTION BUDGET – That 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 and 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 2.02 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 Agreement described in 963 CMR 2.10(10) 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.

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 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 (2) 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 required for the project except where the OPM is an existing public employee of the Owner as described in M.G.L. c. 149, § 149A1/2.
- 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 and 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 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 the RFS and Attachment A.
- 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 and the Authority, 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 and the Authority 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 performance of the Designer's obligations under this Contract. No act or omission of the Owner or the Authority 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 and fax 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.
- 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 the RFS. Unless otherwise specified in the RFS, 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 the RFS to be constructed within the Project Construction 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-M, 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 Contractor 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 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. Such services shall be provided by qualified specialty Subconsultants as necessary. Both the types of services and the Subconsultants shall be approved by the Owner. In the event that the Designer employs the services of a Subconsultant to provide such services, the Designer shall employ such Subconsultants who have the professional liability insurance coverage described in paragraph 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 services shall be paid for as provided in Article 8 – Extra Services unless such services are specifically included as Basic Services in the RFS. Such services may include but need not be limited to:

4.11.1 Site surveys;

4.11.2 Structural tests and materials tests;

4.11.3 Geotechnical and geoenvironmental investigations and reports, including existing buildings hazardous material reports, boring tests, test pits, observation wells, testing and chemical analysis of site substrate conditions;

4.11.4 Traffic studies.

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 paragraphs 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 paragraph 18.5(b).

6.4 Installment Payments During Construction

6.4.1 During the construction 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 Phase shall be made in equal monthly installments for the duration of the construction Phase. The amount of each payment shall be determined by dividing 95% of the fee for Construction Phase/Final Completion 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 as approved by the Owner. The Designer shall be entitled to Extra Services in accordance with Article 8.3 should the Project be 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 Construction Phase/Final Completion as stipulated in Attachment A (as that fee may be amended), upon compliance with the following requirements:

6.5.1 Approval of the Certificate of Final Completion of construction (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 Certificate of Final Completion 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 MBE/WBE Subconsultants 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 that the Designer is unable to comply with items 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 the RFS 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 paragraph 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 paragraph 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.
- 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 the RFS and hereinafter may include specification of the number of submittals the Designer will be required to make and estimates of 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 six copies of each submittal to the Owner; two copies 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: In addition to all other submittals called for by this Article 7 and elsewhere in the Contract, including but not limited to hard copies and reproducibles of all submittals, the Designer shall submit two (2) electronic copies on compact disks 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 on CD electronic format as approved by the Owner and Authority and as follows:
- (a) All drawings shall be provided in standard AutoCAD software (release number and version to be established at time of contract execution) or in a compatible electronic CADD (.dxf) 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 and the Authority.
 - (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, and layering system.
 - (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. Creation of a Building Information Model is excluded from the definition of Electronic Submittals; if the Owner requests the Designer to create such a Model, the parties shall execute a separate agreement and Designer shall receive Extra Services for its creation.

7.2.5 In reviewing and preparing all documents for evaluation as part of the Feasibility Study 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;
- (d) Preliminary evaluation of alternatives;
- (e) Final Evaluation of Alternatives;
- (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) Analysis of school district student school assignment practices and available space in other schools in the district; and
- (b) Tuition agreements with adjacent school districts (per M.G.L. c.70B §8); and
- (c) Rental or acquisition of existing buildings that could be made available for school use. (per M.G.L. c.70B §8); and
- (d) Renovation and/or addition to existing building(s) and related facilities or fields, if appropriate to the Project; and
- (e) No-build or status quo option, to be used as a benchmark for comparative analysis of all other alternatives; and
- (f) In some cases, it may also be appropriate to consider construction of new building and the evaluation of potential locations.

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 every other week during this Phase.

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: 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 - analyze the impact of anticipated vehicular and pedestrian traffic, including impacts to existing infrastructure, to determine efficient and safe site access.

- (b) Environmental and Existing Building Assessment – Provide additional site and building assessments as may be required to quantify presence of unsuitable materials and scope of possible remediation efforts.
- (c) Geotechnical and Geoenvironmental Analysis – Provide additional geotechnical analysis as may be required to describe soil conditions, remediation requirements and appropriate foundation.
- (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.
- (f) Utility Analysis – 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) MA-CHPS or LEED-S Scorecard – Pursuant to the Authority’s Sustainable Building Design Guidelines complete a MA-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.
- (i) Accessibility - an analysis of the design's compliance with the Americans with Disabilities Act (ADA) and the Massachusetts Architectural Access Board requirements (MAAB).
- (j) 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 fuel source(s) and a preliminary 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, water heaters, cooling towers, chillers, air handling

units, heat recovery units, exhaust stacks, and special systems (e.g. fume exhausts).

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, security/surveillance) - 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.
- (k) Outline 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.
- (l) 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.
- (m) Construction cost estimate - in Unifomat II Level 3 format with aggregated unit rates and quantities supporting each item. 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.
- (n) Siting analysis, including content, traffic and access, topographic and utilities recognition.

- (o) Site Development Plan – Site plan shall be 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.
- (p) 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.
- (q) 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 six (6) copies of schematic design drawings, specifications, cost estimates, and other submittals. Two (2) additional copies shall be submitted to the Authority by the Designer.

7.4.6 The Designer shall present and explain the Schematic Design to the Owner, the OPM and 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 every other week during the Schematic Design Phase.

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, and they shall if necessary execute an amendment to the Contract to include all required modifications to govern the subsequent phases of the Designer's services.

7.4.9 Construction Delivery Method Evaluation and Selection

- (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 preparing measured drawings and detailed construction investigations documentation for existing buildings when such documentation does not exist;

8.2.2 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;

- 8.2.3 preparing documents for 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;
- 8.2.4 revising Construction Contract Documents which have been initially submitted and approved in their final and complete form, if general bids (Chapter 149) or subcontractor bids (Chapter 149 or 149A) for work required thereunder are not advertised based on such Construction Contract Documents within four months after initial submission;
- 8.2.5 services in connection with rebidding if the need to rebid is not attributable to the Designer;
- 8.2.6 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;
- 8.2.7 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;
- 8.2.8 providing consultation with respect to replacement of work damaged by fire or other casualty during construction;
- 8.2.9 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;
- 8.2.10 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;
- 8.2.11 performing services during a construction period extended beyond the additional 60 calendar day period, specified in Article 8.3;

- 8.2.12 performing professional services which are not otherwise required under this Contract as Basic Services;
- 8.2.13 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;
- 8.2.14 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 hearing 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 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 after the emergency arises as possible, and such 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 authorized by the Owner:
- 9.1.1 The actual cost to the Designer for Subconsultants and for additional tests under 4.11 provided, however, that reimbursement for such costs shall not be made unless the rates of compensation, the total estimated cost of the services and the scope of work for said services shall have been previously approved in writing by the Owner.
 - 9.1.2 The cost of printing more than nine (9) sets of design submittals for a CM at Risk project, or more than eight (8) sets of design submittals for a project pursuant to G.L.c. 149, or more than two electronic versions thereof per design submission deliverable phase or sub-phase.
 - 9.1.3 The cost of printing the bid documents and the related copying, postage, and handling services during a prequalification or bid period.
 - 9.1.4 The cost of reproducing the mylar reproducible of the construction drawings for use by the General Contractor or CM at Risk in preparing the record drawings.
 - 9.1.5 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.
 - 9.1.6 Renderings, models, mock-ups, photographs and any other presentation materials.
 - 9.1.7 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 or cost estimating, unless specifically required elsewhere in this Contract.
- 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 this Article 12), without the prior written approval of the Owner and the Authority. Likewise, any successor to the Designer must first be approved by the Owner and the Authority before performing any services under this Contract. Such written consent shall not in any way relieve the Designer or its assignee from its responsibilities under this Contract. 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 sub-paragraph 12.2.1 lasts for more than 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, 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. (b) 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: By written notice to the Owner and the Authority, the Designer may suspend or terminate (at Designer's sole option) this Contract:

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), shall have failed 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 receipt by the Designer 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, 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 confirmation slip that bears the time and date of request.

ARTICLE 14: INDEMNIFICATION

14.1 For claims arising out or relating to negligent errors and omissions in the performance of professional services rendered by the Designer, to the fullest extent permitted by law, the Designer shall indemnify and hold harmless the Owner and its officers and employees from and against 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, to the fullest extent permitted by law, Designer shall defend, indemnify and hold harmless the Owner and the Authority and their officers and employees from and against 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 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 General Laws Chapter 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 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 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 the RFS, 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 sub-consultant 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 9 - Reimbursable Expenses unless such services are specifically included as Basic Services in the RFS.

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 Design, 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 and Woman-Owned Business Participation: Pursuant to M.G.L. c. 7C, § 6, the Designer shall subcontract a minimum of seventeen and nine-tenths percent (17.9%) of the contract price to minority-owned business enterprises (MBEs) and women-owned business enterprises (WBEs), as certified by the Supplier Diversity Office, formerly the State Office of Minority- and Woman-Owned Business Assistance (SOMWBA), 1 Ashburton Place, 13th Floor, Boston, MA 02108; such percentages shall be based on the listed services defined and required in the RFS . If the Designer is an SDO-certified MBE or WBE 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.

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 MGL 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.

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 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	
Early Bid Packages	
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 lesser of \$150 per hour or the rate schedule set forth below for time expended, or (c) on an hourly basis in accordance with the lesser of \$150 per hour or a multiple of 2.5 times the direct personnel expense (without benefits) of the Designers or Subconsultants personnel including principals.

Hourly Rates:

ATTACHMENT B

REQUEST FOR DESIGNER SERVICES (RFS)

ATTACHMENT C

PARTICIPATION SCHEDULE FOR DESIGNER CONTRACTS BY SDO CERTIFIED MINORITY/WOMEN BUSINESS 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: _____

<u>Name of Company</u>	<u>Description of Work</u>	<u>M/WBE</u>	<u>Dollar Value Participation</u>
1. _____	_____	_____	\$ _____
2. _____	_____	_____	\$ _____
3. _____	_____	_____	\$ _____
4. _____	_____	_____	\$ _____
5. _____	_____	_____	\$ _____
6. _____	_____	_____	\$ _____

Dollar Value of MBE Commitment: \$ _____

Dollar Value of WBE 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 MBE/WBE 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 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 Basic 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 at least once every other week with the Owner, 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;
- (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) 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 Unifomat II Level 3 format, with unit rates and quantities supporting each item and reconciled with the detailed construction cost estimate and any updated cost estimates in accordance with Article 7.6.7. The estimate cost shall be projected, to the mid point of the construction period;

- (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. 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 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. No detailed specifications of materials or workmanship procedures need be included; 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.
 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 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, 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 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 six (6) copies of Design Development drawings, specifications, cost estimates, and other submittals. Two (2) copies shall be submitted to the Authority by the Designer. The Designer 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 and 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 at least twice per month (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 six (6) sets of the drawings, specifications, construction cost estimates and all other submittals. Unless a lesser number is specifically provided hereinafter, the Designer shall furnish two (2) 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 The 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, 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 Unifomat II Classification to Level 3, 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 Authority. The Designer shall submit said construction cost estimate separately, as a supplement to the 60% CD

Submittal, no later than twenty-one days after the submission of the 60% CD Submittal described in Article 7.7.4(a). 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 The 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 in order for the Owner to arrange for the services of an Independent Structural Peer Reviewer. Upon reaching 90 percent completion of construction documents, 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.

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 bid date; and other mutually agreed upon contingencies. The final construction cost estimate shall be prepared in Unifomat II Elemental Classification to Level 3 (Sections A-G inclusive), 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 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, 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 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 where 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, 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, 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, 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 and conduits. 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, 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:

<u>Symbol</u>	<u>Use Instead</u>
#	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 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 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 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 Owner's Project Manager 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 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 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 set of mylar reproductions, two 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 reproductions and two sets of prints are Reimbursable Expenses.
 - 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 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 at least once every other week with the Owner and the OPM during this Phase.
- 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 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;
 - (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) 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 Unifomat II Level 3 format, with unit rates and quantities supporting each item and reconciled with the detailed construction cost estimate and any updated cost estimates in accordance with Article 7.5.6. The estimate cost shall be projected, to the mid point of the construction period;

- (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 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. 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 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. No detailed specifications of materials or workmanship procedures need be included; 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.
 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 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, 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.

7.5.6 Construction Cost Estimate Requirements – The Designer shall provide a construction cost estimate in Unifomat II Level 3 format 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 six (6) copies of Design Development drawings, specifications, cost estimates, and other submittals. Two (2) copies shall be submitted to the Authority by the Designer.

7.5.8 The Designer shall present and explain the Design Development submittal to the Owner and 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 at least twice per month (or more frequently if needed) 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 six (6) sets of the drawings, specifications, construction cost estimates and all other submittals. Unless a lesser number is specifically provided hereinafter, the Designer shall furnish two (2) sets of said drawings, specifications, construction cost estimates and all other submittals to the Authority. 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.

7.6.3 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 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, 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 7.6.9, the Designer shall provide a construction cost estimate prepared using the Unifomat II Classification to Level 3, 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 and the Authority. The Designer shall submit said construction cost estimate separately, as a supplement to the 60% CD Submittal, no later than twenty-one days after the submission of the 60% CD Submittal described in Article 7.6.3(a). 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 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 7.6.4 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 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 in order for the Owner to arrange for the services of an Independent Structural Peer Reviewer. Upon reaching 90 percent completion of construction documents, 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.

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 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 bid date; and other mutually agreed upon contingencies. The final construction cost estimate shall be prepared in Unifomat II Elemental Classification to Level 3 (Sections A-G inclusive), 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 Article 7.6.4(e). 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 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, 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 where required to illustrate detailed requirements of rooms.
 - c. Large scale plans showing key areas e.g. lobby, special spaces. Indicate surface materials. (minimum scale $\frac{1}{4}'' = 1' - 0''$)
 - 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 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, interior floors.
- i. Exterior details, for roofing, flashing, expansion control and 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, 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, 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, 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 and conduits. 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, 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: 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.
- 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:

<u>Symbol</u>	<u>Use Instead</u>
#	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, 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 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 update 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 are 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 has to 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, 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, 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 it 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 mylar reproducibles, two 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.

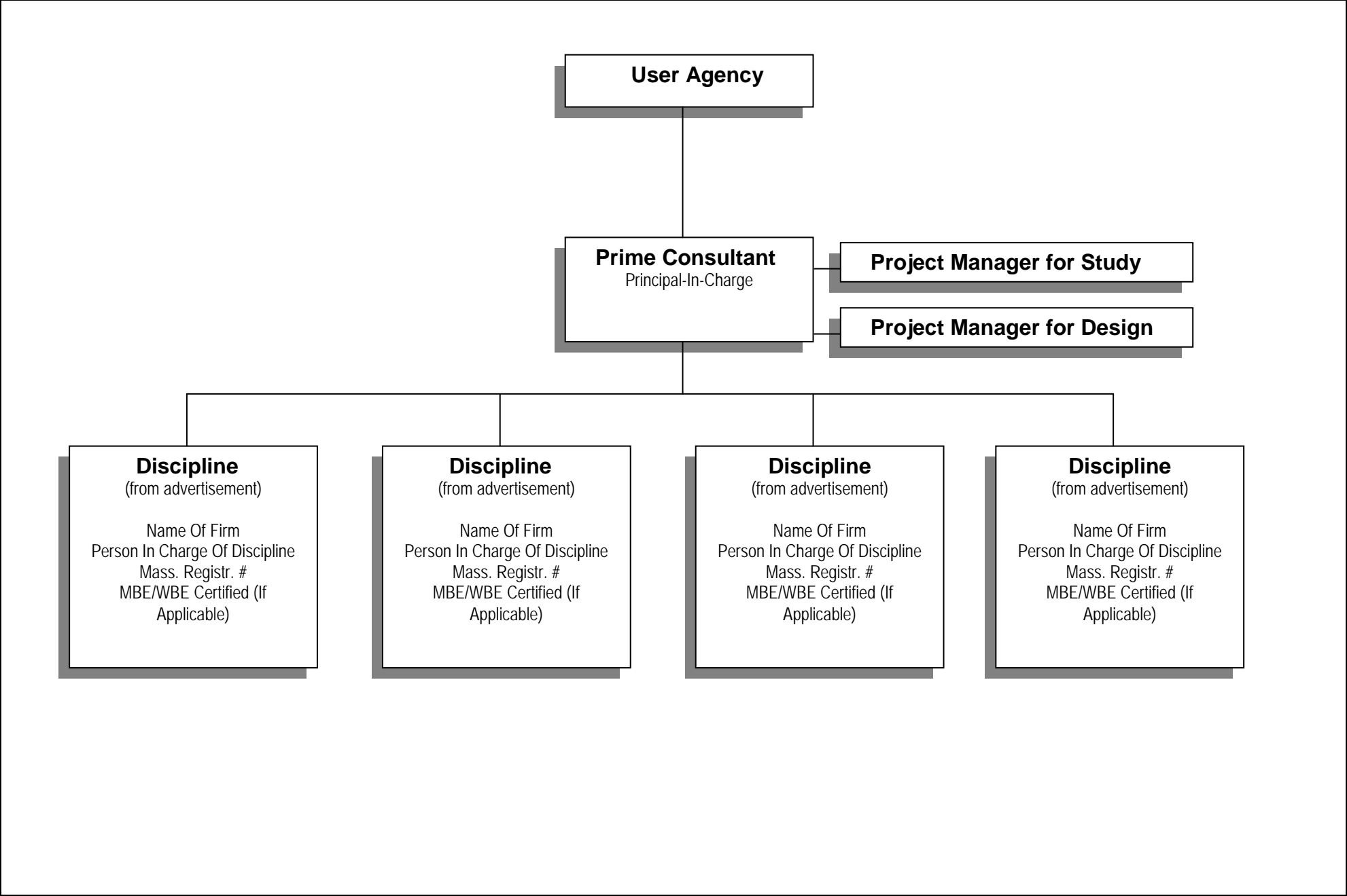
7.9.6 Ten (10) months after the date of substantial completion, performing one (1) site inspection and preparing a list of construction warranty deficiencies. The Designer shall consult with the Commissioning Consultant upon the acceptability of warranty compliance requirements and response actions.

- 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.

ATTACHMENT C

Commonwealth of Massachusetts DSB Application Form (Updated July 2016)	1. Project Name/Location for Which Firm is Filing:	2a. DSB #	Item #
		2b. Mass. State Project #	
3a. Firm (Or Joint-Venture) - Name and Address Of Primary Office To Perform The Work:	3e. 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):	3h. Check Below If Your Firm Is Either: (1) SDO Certified Minority Business Enterprise (MBE) <input type="checkbox"/> (2) SDO Certified Woman Business Enterprise (WBE) <input type="checkbox"/> (3) SDO Certified Minority Woman Business Enterprise (M/WBE) <input type="checkbox"/> (4) SDO Certified Service Disabled Veteran Owned Business Enterprise (SDVOBE) <input type="checkbox"/> (5) SDO Certified Veteran Owned Business Enterprise (VBE) <input type="checkbox"/>		
Email Address:			
Telephone No:	Fax No.:		
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	_____ (_____)
Architects	_____ (_____)	Electrical Engrs.	_____ (_____)
Acoustical Engrs.	_____ (_____)	Environmental Engrs.	_____ (_____)
Civil Engrs.	_____ (_____)	Fire Protection Engrs.	_____ (_____)
Code Specialists	_____ (_____)	Geotech. Engrs.	_____ (_____)
Construction	_____ (_____)	Industrial Hygienists	_____ (_____)
Cost Estimators	_____ (_____)	Interior Designers	_____ (_____)
Drafters	_____ (_____)	Landscape Architects	_____ (_____)
		Licensed Site Profs.	_____ (_____)
		Mechanical Engrs.	_____ (_____)
		Planners: Urban./Reg.	_____ (_____)
		Specification Writers	_____ (_____)
		Structural Engrs.	_____ (_____)
		Surveyors	_____ (_____)
			_____ (_____)
		Other	_____ (_____)
			_____ (_____)
			_____ (_____)
			_____ (_____)
			_____ (_____)
		Total	_____ (_____)
			_____ (_____)
5. Has this Joint-Venture previously worked together? <input type="checkbox"/> Yes <input type="checkbox"/> 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:



<p>7. Brief Resume of ONLY those Prime Applicant and Sub-Consultant personnel requested in the Advertisement. <u>Include Resumes of Project Managers</u>. 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.</p>	
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: <div style="text-align: right; margin-right: 50px;"> MBE <input type="checkbox"/> WBE <input type="checkbox"/> SDOVBE <input type="checkbox"/> VBE <input type="checkbox"/> </div>	c. Name and Address Of Office In Which Individual Identified In 7a Resides: <div style="text-align: right; margin-right: 50px;"> MBE <input type="checkbox"/> WBE <input type="checkbox"/> SDOVBE <input type="checkbox"/> VBE <input type="checkbox"/> </div>
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 Qualification Relevant To The Proposed Project: (Identify Firm By Which Employed, If Not Current Firm):	h. Other Experience and Qualification 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 DSB 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 Areas Of Experience Listed In DSB Advertisement)	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 and They Must Be In The Format Provided.

Sub-Consultant Name:

a. Project Name and Location Principal-In-Charge	b. Brief Description Of Project and Services (Include Reference To Areas Of Experience Listed In DSB Advertisement)	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)					

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.			

* 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 1/2" X 11" Supplementary Sheets Will Be Accepted. **APPLICANTS ARE ENCOURAGED TO RESPOND SPECIFICALLY IN THIS SECTION TO THE APPLICATION EVALUATION - PROJECT 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 _____ Printed Name and Title _____ Date _____
 (Signature)

The following forms MUST be attached to only ONE (ORIGINAL Copy) application: 1. SDO Certification required for MBE/WBE Firms; 2. Sub-Consultant Acknowledgment.

DSB S-CA	Commonwealth of Massachusetts Designer Selection Board SUB-CONSULTANT ACKNOWLEDGMENT
-------------	------------------------------------------------------------------------------------------------

Project: _____

Applicant Designer: _____

Sub-consultant: _____

SUB-CONSULTANT ACKNOWLEDGMENT

The sub-consultant named above hereby certifies that it has been notified by the Applicant Designer that it has been nominated to perform work on the Applicant Designer's team for the above Project, which is under consideration at the Designer Selection Board.

Signature of Sub-Consultant Duly Authorized Representative

Print Name and Title

Date _____

It is a requirement that all applicants supply this document signed, attached to the Original application, for each of the listed sub-consultants stating that they are aware and agree to being nominated by said applicant designer. Electronic signatures are accepted.

Required Certifications

Certificate of Non-Collusion

The undersigned certifies under penalties of perjury that this bid or proposal has been made 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

Tax Compliance Certification

Pursuant to M.G.I, c 62C. §49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

Conflict of Interest Certification

The undersigned certifies that the Responder understands that the Massachusetts Conflict of Interest Law, Chapter 268A of the Massachusetts General Laws, applies to the Responder with respect to the services outlined in the Request for Qualifications. The undersigned also certifies that the Responder understands that the Responder, its officers, employees, agents, subcontractors and affiliated agencies, shall not participate in any activity which constitutes a violation of the Massachusetts Conflict of Interest Law or which creates an appearance of a violation of the Massachusetts Conflict of Interest Law.

Non-Debarment Certification

The undersigned certifies under the penalties of perjury that the company/corporation is not presently debarred from entering into a public contract in the Commonwealth of Massachusetts under the provisions of M.G.L. c. 29, §29F, as amended, c 152, as amended or any other applicable debarment provision of any other chapter of the Massachusetts General Laws or any rule or regulation promulgated thereunder.

Hold Harmless Certification

The undersigned agrees to indemnify and hold harmless the Acton-Boxborough Regional School District, its officers, employees, and agents from and against any and all liabilities, claims, damages or expenses resulting from or incurred in connection with work performed under this contract. The undersigned agrees to indemnify and hold the Acton-Boxborough Regional School District harmless from and against any and all suits, causes of action, judgments or damages, including attorneys' fees, arising out of or resulting from bodily injury or death or destruction of property, in connection with work performed under this contract.

Signature

Date

Name of person submitting proposal

Name of business

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 to serve as the basis for the exemption under Section 46 from the jurisdiction of the Commonwealth's Designer Selection Board 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. 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.
 - E. 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.
 - F. Subject to the discretion of the Executive Director, each member appointed pursuant to subsections 2(A)(2) 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. 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.

- G. The MSBA shall give written notice of the names of the appointed members of the DSP to the Commonwealth's Designer Selection Board.
- 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 Massachusetts Central Register at least two 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);
 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 or engineer responsible for and being in control of the services to be provided.
 2. The Massachusetts registered architect or engineer 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, 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. Pursuant to M.G.L. Chapter 7C, Section 6, the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO). The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the contract price for combined minority business enterprises (MBE) and women-owned business enterprises (WBE). Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal.

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.
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 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.

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 and a lump sum fee 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.
- F. The DSP will immediately notify the Designer Selection Board of the actions taken under the expedited procedures process, in addition to the mandated annual report.

Section 10: Annual Report

- A. The DSP shall submit an annual report to the Commonwealth’s Designer Selection Board which must contain:
 1. A list of all finalists selected by the DSP and awards made by the Eligible Applicants;
 2. A summary of the activities and other actions of the DSP, the Eligible Applicants and the MSBA staff relating to activities undertaken pursuant to these procedures; and
 3. Any other items which the MSBA deems appropriate.

Section 11: Statutory Representations by the MSBA

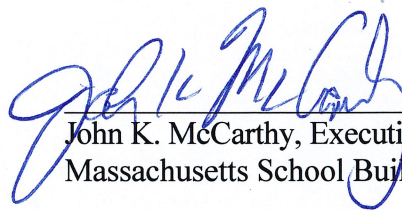
- A. The projects of the MSBA and the Eligible Applicants are not subject to the jurisdiction of the Division of Capital Asset Management and Maintenance.

- 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.

Section 12: Effective Dates

- A. The above designer selection procedures will be effective for all MSBA-funded projects through January 31, 2019.

Respectfully submitted under the penalties of perjury this 9 day of Nov, 2016



John K. McCarthy, Executive Director
Massachusetts School Building Authority