



## PUBLIC NOTICE OF DESIGNER SELECTION

### Designer Selection Board

One Ashburton Place | Boston, MA | 02108  
Telephone: 617-727-4046 | [www.mass.gov/dsb](http://www.mass.gov/dsb)

**DSB List#:** 22-14  
**Notice Date:** May 18, 2022  
**Submission Deadline:** June 8, 2022 At 2:00 PM  
**Project Number:** MAS2202  
**Project Title:** Science, Nursing and Allied Health Renovations  
Massasoit Community College  
**Project Location:** Brockton Campus, Brockton, MA  
**Awarding Agency:** Division of Capital Asset Management and Maintenance (DCAMM)  
**Estimated Construction Cost:** \$29,348,543 (to be confirmed by study)  
**Fee for Certifiable Study** \$425,000  
**Fee for Schematic Design** To be Negotiated  
**Fee for Final Design** To be Negotiated

#### Contract Type:

☒ Study & Design Services

#### Prime Firm Requested:

☒ Architect  
☐ Landscape Architect  
☐ Engineer  
☐ Interior Designer  
☐ Programmer  
☐ Construction Manager  
☐ Other:

#### Immediate Services Authorized:

☒ Schematic Plans and Outline Specifications  
☒ Certifiable Building Study  
☐ Other:

It is intended that the following continued services will be required of the selected Designer's team following completion of the certified study and notification of the Board in accordance with Massachusetts General Law Chapter. 7C.

☒ Design Development Plans and Specifications  
☒ Construction Plans and Specifications  
☒ Administration of Construction Contract  
☐ Other:

## AGENCY INFORMATION



Massasoit Community College (MAS) was founded in 1966, and it is one of fifteen state-supported community colleges in the Commonwealth with the overall purpose to provide affordable access to higher education opportunities. With the primary goal of serving the Greater Brockton area and South Shore region, the first five buildings of the permanent Brockton campus officially opened in 1972, and the five remaining buildings of the campus were completed in 1978.



*Aerial image of Massasoit Community College Brockton Campus*

MAS's mission is to provide an environment for a dynamic, diverse learning community that supports all students in their education, leading to a career, transfer to four-year institutions, and the pursuit of lifelong learning and productive membership in a global society.

The foundation of this institution of higher education is embodied in the following core values:

- Commitment to Student Success
- Commitment to Access and Affordability
- Commitment to Diversity and Inclusion
- Commitment to Excellence
- Commitment to the Community, Civic Engagement, and Regional Economic Development
- Commitment to Sustainability.





*Bird's eye view of campus buildings -- with roof-mounted solar panel arrays – and open spaces with recent accessibility improvements (photo image source: Jones Architecture)*

### **Department of Higher Education (DHE)**

DHE is the statutorily created agency in Massachusetts responsible for defining the mission of and coordinating the Commonwealth's system of public higher education and its institutions. The DHE works to create and maintain a system of public higher education which provides Massachusetts citizens with the opportunity to participate in academic and educational programs for their personal betterment and growth, to contribute to the area's existing base of research and knowledge, and to contribute to the Commonwealth's future economic growth and development. For more information on DHE visit their website [www.mass.edu](http://www.mass.edu).



### **Division of Capital Asset Management and Maintenance (DCAMM)**

DCAMM is an agency within the Executive Office for Administration and Finance (ANF) responsible for capital planning, major public building construction, facilities management, and real estate services for the Commonwealth of Massachusetts. The agency was created by the legislature in 1980 to promote quality and integrity in the management and construction of the Commonwealth's capital facilities and real estate assets. <https://www.mass.gov/orgs/division-of-capital-asset-management-and-maintenance>

## PROJECT OVERVIEW

The project consists of comprehensive renovations to MAS's Science (S) and Liberal Arts (LA) buildings. Based on preliminary planning, the proposed project approximates the following scope which is to be reviewed, updated and confirmed by the proposed study:

26,000 GSF – Liberal Arts Building Renovation to accommodate Science programs

26,000 GSF – Science Building Renovation to accommodate Nursing and Allied Health (AH) programs

11,000 GSF – Backfill of space vacated by Allied Health programs in the Humanities Building

The following summarizes the results of preliminary planning for the proposed project.

Program Goals and Objectives: MAS is aiming for the highest and best use of the campus buildings to provide spaces directly related to student instruction, faculty access, and student support. Key outcomes desired from the proposed project are as follows:

- Reconfigured spaces serving academic programs with projected enrollment growth
- Right-sized classrooms to support group learning formats
- Increased specialized instructional and support space for AH from 2,900 ASF to 6,200 ASF
- Greater flexibility in use and scheduling of specialized instructional spaces for Science and AH
- Modernized instructional and student study spaces
- Reduction in classrooms due to flexible spaces to accommodate a wide range of academic programming and class sizes, which off-sets existing underutilized space
- Building support spaces in line with current code requirements
- Right-sized office and support spaces for faculty.

MAS is developing more flexible and innovative program delivery models which the proposed project will appropriately accommodate. The planned design concept for the Science program renovations includes a central laboratory prep and storage space, surrounded by eight discipline-agnostic instructional labs. Rather than having dedicated labs with separate prep spaces, the centralized layout maximizes the number of sections that can be offered by allowing each lab to serve multiple disciplines. Offering multiple sections of in-demand courses at preferred times provides students more opportunities to meet requirements in each term, potentially shortening their time-to-completion for courses and allows the College flexibility in responding to student demand. Flexible lab spaces with modern technology will also support remote instruction. Lab spaces will also be able to be used by instructors to record and broadcast laboratory experiences, and spaces will be able to host in-person laboratory classes, coupled with remote instruction. The ability to merge in-person experiences with remote instruction will allow more flexible scheduling and make time-intensive lab science courses more accessible to busy students.

The new nursing instructional labs will be right-sized to accommodate mock-headwalls, extensive healthcare equipment, and in-lab computer stations to facilitate hands-on training. All these elements are deficient in the current teaching labs. The rooms will be adjacent to observation and student feedback rooms which are critical to nursing instruction. These renovations will improve the quality of the education and training the College can provide and will support an increase in enrollments in the Nursing and AH programs.

The Nursing Simulation Suite will resemble and function like an actual medical facility with patient rooms, nursing station, clean and soiled storage rooms, control rooms and observation/ debriefing rooms. The Suite will be a magnet for students seeking state-of-the-art healthcare education, be a major asset to the College, and serve to attract and retain both faculty and students. There may be potential to explore external funding opportunities to implement this upgrade.

The design premise for all instructional space renovations will be to enhance student collaboration spaces that emphasize project-based work, fostering interaction, critical thinking and other soft skills that are essential competencies sought by employers.

MAS and DCAMM will engage with the selected Designer in a purposeful exploration of industry trends and best practices, hybrid teaching, COVID19 impacts and related items. The design of the proposed renovations must attempt to anticipate future scenarios with respect to pedagogy and public health considerations.

The proposed renovations will serve most credit programs and impact most students enrolled at MAS. This project is aimed at achieving the following objectives for MAS:

- Advance academic equity by strengthening coursework with collaborative skill building
- Reinvest in outdated existing facilities, address deferred maintenance, reconfigure layouts to maximize capacity and functionality, and refurbish outmoded spaces with appropriate finishes, equipment and technology
- Modernize spaces for three programs that prepare students for careers in key industries
- Implement a cost-effective project with minimal swing-space, ensures continuity, and benefits 20 percent of the buildings on campus.

Project Need: The MAS Brockton campus was constructed in the early 1970's, consisting of interchangeable one-story buildings. Due to their age and original construction, the building conditions are fair to poor, with critical needs including the following:

- Exterior envelopes, with roofs and windows needing replacement, which do not meet current energy codes
- Mechanical, electrical and plumbing systems are at the end of their useful life
- Fire protection and other life safety system elements do not meet current codes
- Accessibility does not comply with the Americans with Disabilities Act requirements.

Additionally, room layouts from the 1970's do not meet today's standards for technology and pedagogy based on team-based learning. Among the conditions identified as being substandard are the following items:

- Casework and cabinetry with delaminating finishes and corrosion create hazardous conditions
- Labs are over-crowded and lack utilities and storage for materials and equipment
- Classrooms of limited capacity and configuration do not facilitate collaborative project-based learning
- Computer stations are insufficient given other space demands
- Inadequate faculty office space, with crowding and poor ventilation.

Project Approach: The proposed implementation must be accomplished with minimal disruption to academic programs with coordinated planning and necessary phasing while ensuring that the project remains within the identified budget limit. Preliminary planning suggests the need for a three-phased implementation strategy:

- Phase One-- Liberal Arts programs are relocated to underutilized space on the campus to allow for the gut-renovation of the vacated space for Science programs
- Phase Two -- Existing Science program spaces will be renovated to allow for the expansion of Allied Health programs
- Phase Three -- Vacated Allied Health space in the Humanities Building and the Field House is improved for backfill by Liberal Arts programs.

Short-Term Priorities: The proposed project will upgrade two buildings with new systems as warranted, which will address critical facility needs and ensure that an estimated 20 percent of the Brockton Campus buildings are sustainable and energy efficient. The results of the proposed renovation will free up future deferred maintenance funding for remaining buildings on the Brockton Campus. Improved teaching spaces will expand use of technology and collaboration, which is expected to improve student retention and achievement, expand program delivery and further Massasoit's mission to provide academic equity and support initiatives in Brockton, a Gateway City, to address social and economic challenges.

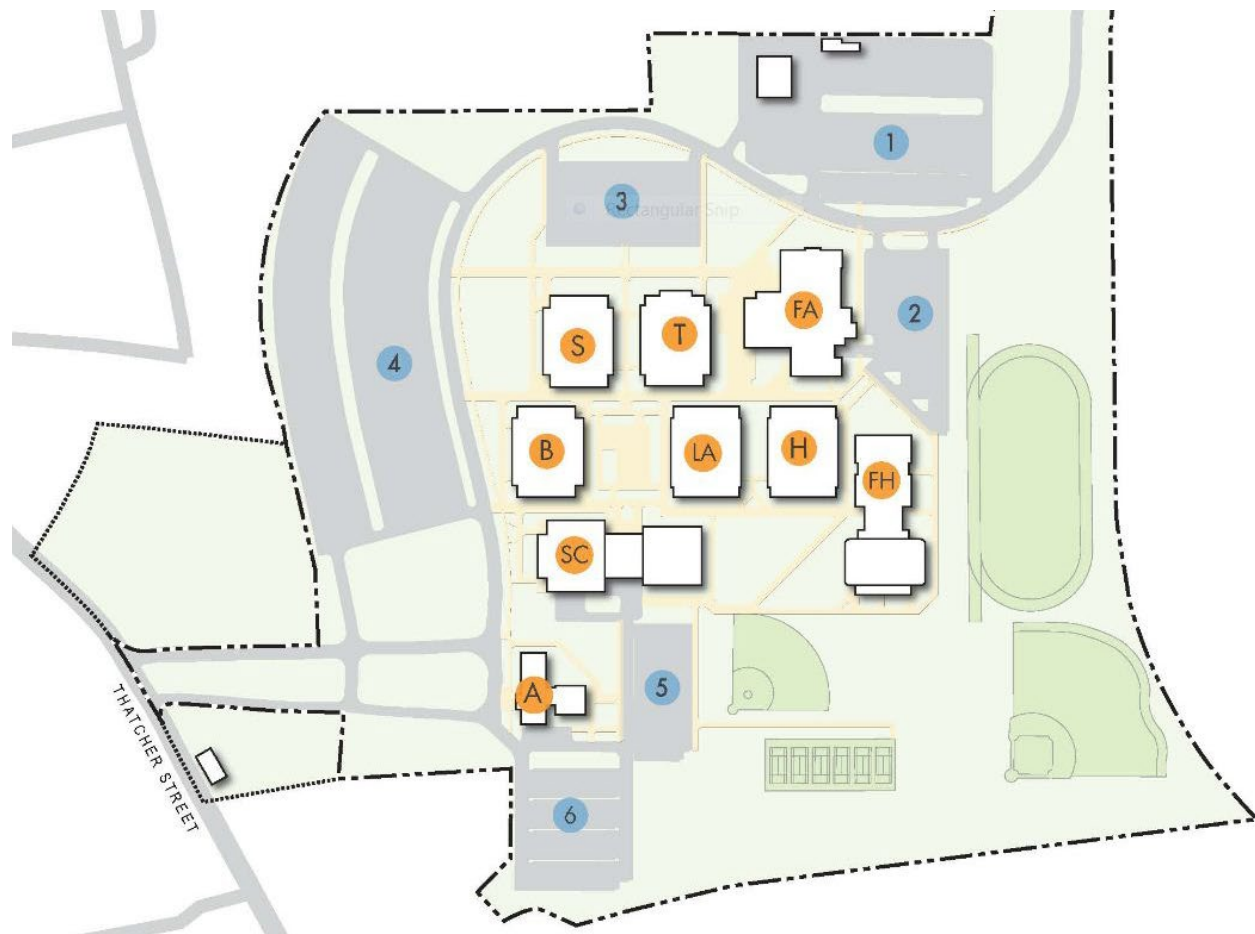
Long-Term Objectives: The proposed project will enhance MAS's ability to strengthen existing and forge new partnerships with educational and industry partners. As workforce needs evolve, education and training are critical for skilled labor supply to meet demands. The proposed renovations will allow MAS to leverage industry partners to acquire and maintain state-of-the-art technology and resources and provide students with necessary programs to attain experience and skills for success in the workforce.

MAS and DCAMM strongly advocate for a design solution embodying excellence which is guided by the following principles:

- Imaginative floor plans and room layouts well-suited for current and anticipated modes of teaching, providing flexibility and equipped with appropriate technology and other necessary features for specialized instruction focused on Science and Allied Health programs, and organized to maximize space use efficiency.
- Functionality, flexibility and durability shall not be trumped or compromised by aesthetic considerations.
- Adaptability shall be an important design consideration; as needs change in response to evolving programs and approaches to instruction, room layouts and furnishings, fixtures and equipment should lend themselves to reconfiguration and updating.
- Cost-effectiveness and "bang-for-the-buck" shall be essential criteria in design choices regarding materials, technologies and systems.
- Accessibility shall be seamlessly integrated in the architectural outcomes, not only meeting, but preferably exceeding MAAB requirements and ADA obligations.
- Resilience and decarbonization shall be integrated into the project as elaborated below.

In support of DCAMM's mission to create and manage forward thinking sustainable buildings, design teams are expected to identify and integrate carbon reduction strategies and resilience improvement opportunities associated with this project. This includes, but is not limited to, low/no carbon fuel sources, high efficiency measures, incorporating climate change resilience standards and adhering to agency climate change vulnerability assessments and resilience recommendations. For these purposes, resilience is defined as: Ensuring that state facilities can be operated or adapted to resist and recover from the effects of hazards in a timely and efficient manner. This includes ensuring the preservation, restoration, or improvement of its essential structures and functions for the duration of its life cycle.

## EXISTING CAMPUS AND PROJECT CONTEXT



*Massasoit Community College Brockton Campus Map showing buildings, parking lots, playing fields and open spaces*

### Buildings

- A- Administration -- 24,570 GSF, built in 1978
- B- Business Building -- 26,100 GSF built in 1976
- FA Fine Arts Building -- 53,650 GSF, built in 1976
- FH Field House -- 72,250 GSF, built in 1976
- H Humanities Building -- 26,770 GSF, built in 1976
- LA Liberal Arts Building -- 26,000 GSF, built in 1976
- S Science Building -- 26,000 GSF, built in 1972
- SC Student Center- -89,349 GSF, built in 1972
- T Technology Building -- 28,349 GSF, built in 1972

### Parking Lots

- 1 Maintenance Lot -- 342 spaces
- 2 Fine Arts Lot -- 136 spaces
- 3 Technology Lot -- 186 spaces
- 4 Main Lot -- 950 spaces
- 5 Student Center Lot -- 125 spaces
- 6 Administration Lot -- 161 spaces





*Science Building exterior*





*Liberal Arts Building exterior*



*Field House exterior*



*Existing science laboratory*



*Existing science laboratory*



*Existing science laboratory*



*Existing laboratory prep room*



*Existing nursing/allied-health laboratory-classroom*



*Existing classroom*



*Existing nursing/allied-health laboratory-classroom*



*Existing nursing/allied-health laboratory-classroom*

## **SCOPE OF WORK**

The tasks identified below are representative for the purposes of this advertisement and are by no means fully inclusive.

**Task 1** - Project Start Up & Work Plan

**Task 2** - Program Development & Existing Conditions Documentation and Analysis

**Task 3** - Development & Evaluation of Alternatives

**Task 4** – Preferred Alternative

**Task 5** – Draft Study Report

**Task 6** -- Schematic Design

**Task 7** - Certifiable Building Study Report



## Task 1 – Project Start Up & Work Plan

### **Project Start Up**

- Attend a DCAMM administrative conference to review all project requirements and DCAMM administrative and project management policies, procedures and protocols.
- Conduct study conference/workshop with DCAMM and user agency working group to review project goals and objectives, planning process, schedule of milestones, information and data requirements, etc. All Designer team members (including subconsultants) will be introduced to the user group, and their roles and responsibilities described. The Designer should assume bi-weekly working sessions throughout the duration of the study phase unless otherwise notified. Meetings may be held in-person, online or in hybrid format.
- Compile a data request, identifying any additional information needed.

### **Work Plan**

- Upon contract signing, the Designer, with DCAMM, will generate a Project Work Plan that will provide a detailed scope of work (SOW) including all required tasks, deliverables, schedule and fee breakdown for this Study. Both DCAMM and the Designer will review and approve this Work Plan. All study services authorized by any notice-to-proceed must comply with the workplan approved by the DCAMM Director of Planning, which will be incorporated into the Designer's contract upon written approval. During the course of the Study, new opportunities or constraints may be uncovered and require a re-thinking of original intentions. If necessary, a memo will be issued outlining any revisions to the Work Plan that might be required. The Work Plan at a minimum will include:
  - Statement of understanding of the vision, goals/objectives, scope, budget, and schedule for the project.
  - Statement of climate and energy, "best in class" energy (site) use intensity, zero-net energy, low or no carbon fuels, and/or climate resilience goals. Specific metrics (such as, Energy Utilization Index – EUI) may be included as appropriate.
  - Confirmation of team members' roles and their expected participation including MBE/WBE participation.
  - Evaluation of the preliminary total project cost (TPC) developed by DCAMM; and
  - Detailed schedule of meetings and workshops through the study phase including key attendees, draft topics agendas, projected time frames for design and construction, and permitting timeline.

### **Deliverables**

- Presentation materials and meeting minutes from the administrative and study meetings
- Project Directory including stakeholder list
- Data Request
- Work Plan identifying project goals, key dates, deliverables, and project schedule

-

## Task 2 – Program Development & Existing Conditions Documentation and Analysis

During this phase of the study, the emphasis will be on collecting and analyzing data and documentation which will inform the alternatives developed in Task 3.

### **Program**

The Designer, with its consultant(s), will review and confirm all program requirements for the MAS. This will include an analysis of the existing program relative to right-sized standards as well as future program requirements. The Designer will provide a narrative that justifies program needs as well as a preliminary tabular program expressed in net square feet with net to gross ratios and gross square feet requirements, and typical room layouts and adjacency diagrams indicating key relationships and technical requirements. The program will be reviewed and endorsed by MAS, and DCAMM before proceeding to the development of alternatives. The Designer will:

- Schedule and facilitate a tour (s)/site visit(s) of comparable facilities to assist MAS and DCAMM in the planning process.

- Research, document and present trends and best practices with respect to design of comparable facilities, focusing on innovative features.
- With applicable subconsultant(s), analyze the agency's current and future needs relative to their programmatic evolution, best practices for modern planning for buildings of this type, applicable regulations, future trends and opportunities for sharing .
- Interview MAS representatives to gain a thorough understanding of their mission, programs, staffing, functional and technical requirements and any other relevant planning-design considerations.
- Conduct a workshop to explore pandemic-related impacts on the planning and design of spaces relevant to the proposed MAS project. Document workshop findings and identify consequences on architectural program for items such as space allocation per student station, room occupancy and layout configuration, room scheduling and utilization, etc..
- Provide a narrative which documents and presents a justification for all programmatic needs and requirements.
- Develop detailed tabular space program broken down by individual functional area and sub-area and identifying all net useable square footage, and all gross space requirements. Confirm program is detailed enough to ensure its accommodation in the existing building(s). Evaluate the program with respect to industry standards and norms as well as the established budget.
- Provide preliminary typical room layouts and spatial adjacency diagrams indicating key relationships, and technical requirements; and
- Compile an equipment list identifying existing equipment and new equipment, including space and power requirements to inform the space program.
- Outline a basis of design consistent with MA climate goals and options for building systems requirements, including high performance envelope, right-sized systems, and using low carbon fuels for meeting thermal loads.

#### **Scope – Site and Building**

- Existing Documentation Review and Analysis
  - Review documentation provided by DCAMM and identify any additional material or information needed to complete this Study.
- Existing Building and Site Conditions Analysis and Documentation
  - Have architectural and engineering teams perform a visual survey, supplemented by selective destructive testing (which may include sampling and testing of known or suspected hazardous materials), if necessary, to confirm building conditions and to support accurate conceptual pricing.
  - Update survey information as needed.
  - Review existing deferred maintenance data of the Liberal Arts and Science buildings.
  - Interview DCAMM Energy Team and facility and maintenance staff for input on condition, use and operation of the building(s). Review operations and maintenance procedures with MAS facilities staff and identify areas of potential improvement and alignment with current best practices.
  - Review Executive Order 594 or the current Massachusetts Leading by Example Executive Order, LEED criteria, and other applicable performance data requirements. Develop a project base case profile for climate change action (including low/no carbon fuels), energy and water use and proposal to comply with Executive Orders.
  - Evaluate existing envelope condition and opportunities to reduce envelope heat loss and right-size mechanical systems.
  - Determine existing building site energy use intensity (kBtu/sf of building use, excluding on-site solar generation) and set target for the project.
  - Provide an evaluation of vulnerability to flood, storm surge, rising sea level, increased precipitation, temperature and identify strategies to fix known problems and avoid risk (use Resilience Checklist and resilience design standards @ resilientma.org).
  - Provide a thorough survey and analysis of hazmat conditions including scope, methods and cost for remediation as required to do this project.
  - Develop analytical framework for measuring construction and operating cost impacts during study and design phases, include but not limited to life cycle costs, utility incentive rebates, alternative compliance payments, demand response payment and other incentives.



- Provide a complete code analysis, relevant to anticipated permit application date, including a comprehensive Chapter 34 analysis for all affected buildings. Identify necessary permits, reviews and interactions with regulatory agencies and factor into a detailed timeline for project delivery.
- Identify relevant Executive Orders and applicable utility or energy-related incentives. Detail all relevant deficiencies or concerns and propose approaches for resolution to be incorporated in the alternatives developed in Task 3.
- DCAMM will utilize its accessibility consultants to provide technical assistance and oversight for accessibility compliance during the study, design and construction process. The Designer is responsible for coordinating all work with DCAMM's accessibility consultant.

#### **Cost**

- Provide a current assessment of the construction cost escalation rate for similar buildings in Massachusetts.
- Recommend potential options to reconcile preliminary costs with project budget for review by DCAMM.

#### **Schedule**

- Prepare preliminary design and construction schedule and/or phasing and backfill plan. Show in detail permitting and regulatory reviews required and their impact on timeline. Outline an approach to maintain 24/7/365 operation of the existing building(s).

#### **Deliverables**

- Complete annotated list of all documentation provided to the Designer by DCAMM.
- List of additional documentation or information identified by Designer as required to complete this Study.
- Facilities Conditions Assessment.
- Base document set including:
  - Site Plan;
  - Dimensioned floor plans, elevations and sections
  - Photographs documenting conditions of the building and site.
- Clearly organized and illustrated existing condition report (for all above tasks) combining the analysis of site, building program, case studies, code analysis, budget, and schedule, with completed workshop material and meeting minutes collated in an appendix. This report should include a summary of findings, issues and factors expected to have an impact on design alternatives and costs.
- PowerPoint presentations for project workshops and meetings, as needed.
- Meeting minutes.

#### **Task 3 – Development & Evaluation of Alternatives**

This phase of the study will focus on developing and analyzing a minimum of three to five meaningful alternatives for this project. These scenarios will define and prioritize the deficiencies in the building and site and identify the best and most cost-effective approach to address them and achieve the goals of this study. Develop a matrix based on agreed upon criteria to evaluate each option.

#### **Program**

- Create and analyze a minimum of three meaningful alternatives for implementing the recommended program and/or in phases, including swing space and backfill
- Provide blocking and stacking diagrams and illustrate internal adjacencies and collaboration opportunities for each.
- Indicate any site issues. Include circulation diagrams and indicate accessible paths of travel.

#### **Scope – Site and Buildings**

- Develop a master list of facility deficiencies and proposals to address them.
- Present a matrix that illustrates a pros and cons analysis of alternatives regarding criteria (including program options, floor plan layout, materials and level of finish, etc.) established by the Designer, MAS, DCAMM and Commonwealth-contracted consultants or contractors, which may include (if applicable) the construction manager at risk procured for the project (CM)

- Identify and define priority projects for near- and long-term implementation, this list may include phased projects, swing space and backfill.

#### **Cost**

- Provide an order of magnitude cost for the alternatives.
- Conduct a workshop to review project costs and resource allocation strategy.

#### **Schedule**

- Further develop the project schedule for design through construction including required permits and associated required regulatory review which can impact the schedule.
- Evaluate schedule options and issues, including swing space needs, backfill and timing.

#### **Project Review Workshop**

A workshop led by the Designer (Project Review Workshop), will be scheduled to provide all project participants and stakeholders an opportunity to comment on the key issues identified by the Study and to review the alternative concepts and preferred option selected from the work in Task 3. An appropriate presentation should be prepared for the Project Review Workshop and the selected alternative refined and documented per the outcome of the Project Review Workshop.

#### **Deliverables**

- Documentation of findings with appropriate narrative describing alternative concepts and preferred option, analysis and workshop outcome. PowerPoint format for workshop presentation. Well-organized, clearly written and well-illustrated technical memorandum or mini-report, as appropriate.
- Prioritized list of projects illustrating construction and funding schedule.
- Comparative matrix illustrating pros and cons regarding MAS and DCAMM goals for the project program, scope, costs, construction schedule, and potential implementation impact.
- Technical memorandum on costs, including comparable costs and assessments, possible approaches for cost control, and results of workshops.
- Meeting minutes.

#### **Task 4 – Development of Preferred Concept**

Outline the preferred project strategy and plan for its implementation distilled from the alternatives and as directed by DCAMM and MAS and, if applicable, as informed by the CM. Include comments from the Project Review Workshop(s) and cost workshops. Prepare the following package as part of the certification documentation:

#### **Program**

- Narrative outlining all components to be included in the building and rationale for inclusion.
- Finalized detailed tabular program listing all programmed and support spaces.
- Revised relationship diagram depicting important adjacencies.
- Revised room data sheets with room layouts as required for illustration, equipment lists and performance requirements.

#### **Scope – Site and Building**

- Narrative that clearly outlines the preferred strategy for renovation, new construction, and/or phased projects, swing space requirements and backfill as well as the rationale for their selection, including a detailed approach to maintaining the 24/7/365 operation of the existing building(s).
- Site plan to scale showing building footprint(s) and all proposed site, civil, and landscape work included in the estimate
- Pre-schematic floor plans, exterior elevations, blocking and stacking diagrams, 3D views of key interior spaces and exterior perspectives
- Architectural, MEP systems, and site narratives
- Building code analysis, review of permits and compliance requirements
- Outline specification for preferred alternative

- Basis of design for integration of envelope and MEP systems, Executive Order 594 compliance, LEED target level, LEED checklist, EUI target, and energy and water use estimates; Architectural, MEP systems, and site narratives.

#### **Cost**

- Detailed cost estimate per the [DCAMM cost estimating manual](#)

#### **Schedule**

- Detailed review of applicable codes, permits and compliance requirements.
- Implementation schedule including required permitting, reviews, construction phasing, required move and swing space coordination, backfill and other critical logistics, enabling projects, etc.

#### **Deliverables:**

- Concise PowerPoint presentation explaining preferred option
- Narrative report that clearly outlines all program, scope, budget, and schedule of the preferred alternative, as well as the rationale for selection.

#### **Task 5 – Draft Study Report**

A draft study report that will include compiling and revisiting the products of the Tasks above for review. Draft documentation of the Study process will include all drawings, tables, charts, and narrative required to record decisions and support the preferred alternative. This document must be clearly organized with a table of contents, well-written and illustrated.

#### **Deliverables**

“Draft Study Report” shall mean a professional, detailed report that includes all the analyses, findings, and relevant background information compiled from all Tasks performed and services as the basis for design. Documents to be transmitted electronically in a format and software acceptable to DCAMM.

***Note: The fee associated with the Tasks below will be negotiated during the study phase, following the determination of the building program. The Designer’s contract will be amended to incorporate the final fee and scope for the Schematic Design/Certifiable Study phase.***

#### **Task 6 - Schematic Design**

- Prepare and submit a Schematic Design package in full accordance with DCAMM’s [Designer’s Procedures Manual](#). Tasks under the Schematic Design Phase include, but not limited to:
  - Coordinate initial Schematic Design conference;
  - Review and update Workplan as necessary;
  - Conduct progress workshops with DCAMM, User Agency, Designer’s team and, if applicable, CM;
  - Finalize building code and site analysis.
  - Coordinate with DCAMM’s accessibility consultant and participate in a Universal Design workshop (Note that the UD workshop will be conducted by the DCAMM access consultant but shall be scheduled by the Designer at a time they feel will be most beneficial in the design process. Designer to provide schematic level design information and drawings to access consultant at least two weeks prior to the UD workshop.);
  - Coordinate with DCAMM’s accessibility consultant to ensure the building is designed to address Universal Design goals/ MAAB / ADA standards and best practices.
  - Identify energy efficiency and carbon reduction opportunities.
  - Conduct a life cycle cost analysis (including the integration of envelope and MEP systems), operational costs including maintenance, utilities, alternative compliance payments and demand response payments.
  - Resilience assessment and design strategies

- Participate in cost estimating activities, including, if applicable, cost reconciliation with the CM and/or other Commonwealth-contracted consultants/contractors;
  - Participate in the evaluation and selection of the Construction Manager (CM) in the statutorily required Designer role; and
  - Coordinate with the CM.
- **Deliverables**
    - Design Premise: Premise upon which the design scheme is based, including sketches which illustrate indoor and outdoor program functional relationships, access, and future expansion;
    - Commissioning Plan: A scope of the commissioning services incorporated;
    - Basis of Design for high efficiency and low/no fossil fuel MEP systems;
    - Envelope design and target performance;
    - Mass LEED target level and checklist (or other required certification as required by Executive Order);
    - Life cycle cost analysis;
    - Resilience assessment and design strategies including the Resilience Checklist and results of resilient design standards (resilientma.org)
    - Drawings:
      - Site plans: Site plans of project addressing impact of accessibility, zoning, context, utilities, environment, parking, drainage calculations, planting, and other related program criteria;
      - Floor plans–Spaces: Floor plans of all levels identifying all program spaces, including security;
      - Floor Plans–Levels: Floor plans of all levels indicating the building’s general mechanical, electrical, plumbing, and structural systems;
      - Floor Plans–Demolition and/or Current Conditions: (If applicable) Demolition and/or existing conditions floor plans for all trades;
      - Floor Plans–Site Relationship: Four elevations from the main orientation points of view indicating the relationship to site configurations;
      - Floor Plans–Program Spaces and Site Configurations: Two cross-sections with floor heights, including basement spaces identifying program spaces and relationship to site configurations;
      - Designer’s Studies: A three-dimensional representation, axonometric, perspective drawing or an aerial photographic view of the Designer's Study model to convey the general massing of the project; a computer-generated model in context is preferable;
      - Floor Plans–Scales: The plan, section, and elevation drawings shall be 1/4" = 1'0". If the building is large or irregular in shape and will not adapt to the use of match lines, 1/8" = 1'0" scale may be approved for submission; and
      - Sheet size to be half-size.

### **Task 7 – Certifiable Building Study Report**

Prepare draft study report compiling the products of all tasks. Incorporate comments from draft report into a final report for certification, including an executive summary and project narrative. Submit one copy for final DCAMM review and comment prior to final submission in digital and spiral-bound hard copy formats (three copies maximum).

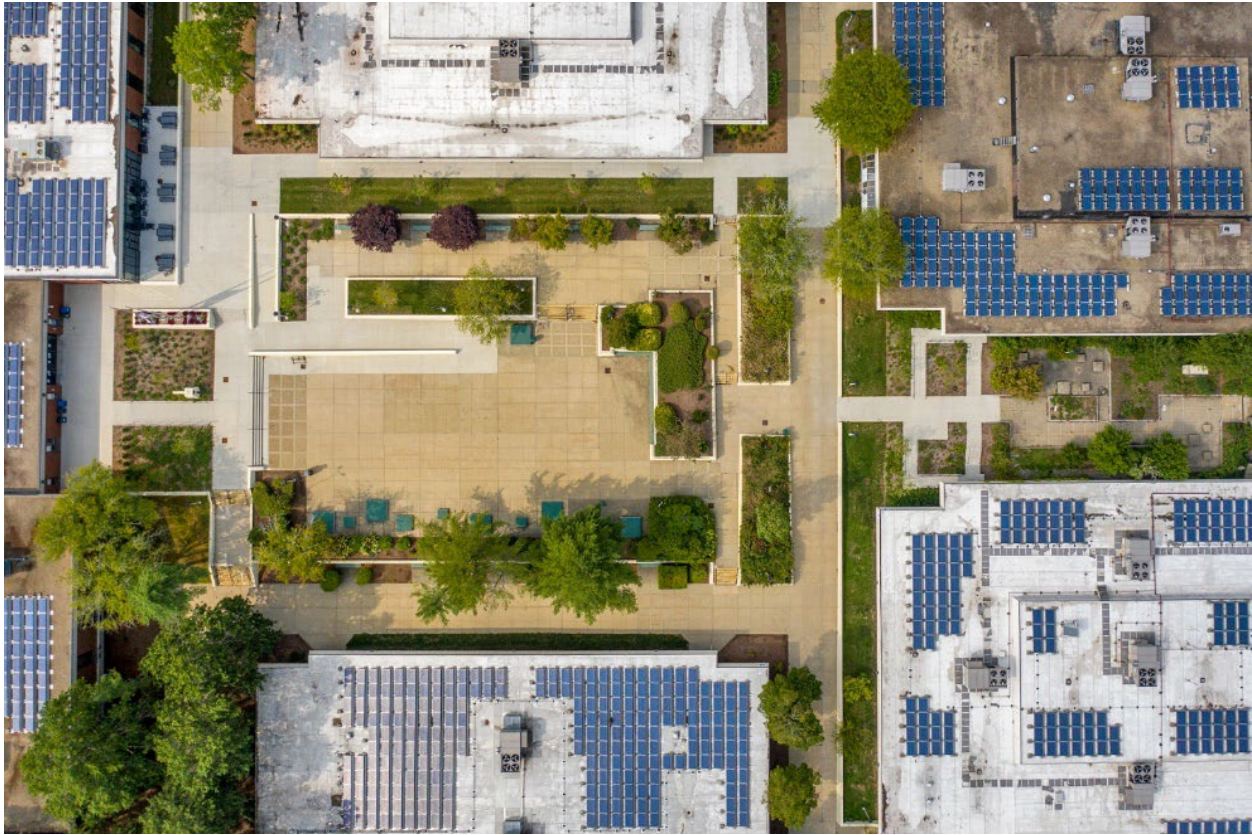
#### **Deliverables**

- Draft report compiling and revisiting the products of Task 2, 3, 4, 5, and 6 for review and comment by DCAMM and MAS.
- Final Report that incorporates comments from the draft report for certification in required digital and hard copy formats. The report package should provide a sufficiently detailed information package that describes all relevant aspects of the proposed phased renovation strategy and includes: the executive summary; program and final tabular program, project narrative; project justification and rationale for selection of consensus renovation plan; schematic design package; final Universal Design goals and Accessibility analysis, operations,



MEP and site narratives; code analysis; energy costs, sustainable and resilient design approach; a phased construction cost estimate and narrative; an operating cost analysis; and a proposed project schedule (Gantt chart).

- Executive briefing Power Point presentation.



*Aerial view of campus core showing building footprints and open spaces*

## APPLICATION EVALUATION

Applications will be evaluated based on the DSB criteria for selection of semi-finalist and finalist appearing on the DSB website <https://www.mass.gov/files/documents/2018/12/19/criteria-for-selection-of-semi-finalists-and-finalists-160707.pdf>. The specific Personnel and Project Experience required is listed below.

### PERSONNEL

1. Architect (**Prime Firm**)
2. Mechanical Engineer (M/P/FP)
3. Electrical Engineer
4. Structural Engineer
5. Civil Engineer
6. Landscape Architect
7. Specifications Consultant
8. Cost Estimator (independent consultant required)
9. MA Building Code Consultant
10. Hazardous Materials Consultant
11. Higher Education Lab Programmer-Planner

- The title “Architect” refers to design professionals that maintain a current registration with the Massachusetts Board of Registration of Architects; and
- The title “Landscape Architect” refers to design professionals that maintain a current registration with the Massachusetts Board of Registration of Landscape Architects; and the title “Landscape Professional” refers to an individual who may not hold a certificate of registration from the Board of Landscape Architects, but can prove requisite experience, education and training that enable them to perform the landscape design services outlined herein; and
- The title “Engineer” refers to design professionals that maintain a current registration in any one of the engineering categories governed by the Massachusetts Board of Registration of Professional Engineers and of Land Surveyors.

## EXPERIENCE FACTORS

Applications will be evaluated based upon the requirements of M.G.L. C. 7C, § 49 and the work listed on DSB Application Form Sections 4 and 5 which illustrate current qualifications in the following areas:

1. The Prime firm, through their Diversity Focus Statement (in Section 5), shall demonstrate their firm’s implementation of Equity, Diversity, and Inclusion (EDI) principles within its organization and within the design profession. The Statement shall:
  - a) document the firm’s track record for meeting and exceeding the goals of DCAMM and other agencies for EDI, including the demonstrated track record of the Prime firm for meeting DCAMM or other agency diversity goals, highlighting, in particular, prior projects that have met or exceeded these goals.
  - b) specify the firm’s approach toward assembling the team for this project, both with internal staff and the inclusion of M/W/VBE firms
  - c) highlight the experience of the working relationships among the team, and a description of the roles and responsibilities among the team members assigned to this project. DCAMM and the DSB strongly encourage teams comprised of firms that expand the overall breadth of different firms working on State projects.
2. Recent, demonstrated experience in the programming, design, and completed construction of projects of comparable type, scale and complexity, including Ch.149A (CM-at-Risk). Projects cited as relevant experience should be those where key proposed prime team personnel have had major roles and responsibilities. Projects cited as relevant experience should include the following scope of work: evaluation of existing conditions, imaginative thinking design and programming for state-of-the-art higher education science, nursing and allied health labs, evidence of the required technical skill and expertise of the proposed team, ability to plan for maintaining operations during construction, and projects that require swing space considerations.
3. Key team members, including project architect, project manager, principal mechanical engineer, with demonstrated experience in leading and facilitating projects in existing building renovations that target high efficiency, low carbon fuels for space conditioning, and climate resiliency in design and systems, including knowledge of Passive House and Net Zero building design principles, resilient design, considerations of site-specific resilience enhancements, decarbonization of fossil fuel systems, the integration of architectural elements and mechanical systems, and strategic electrification.
4. Project-leads for both the Designer and their consultants (principals and project managers) must reflect their specific experience with comparable projects of relevant type and scale. Evidence should show that they are capable of developing a strategy for, and leading the client team, their own design team and any other stakeholders to a clear consensus design solution and successfully constructed project.

## SUPPORTING DOCUMENTS

The scope of work for this project is supported by the materials listed below.

- **FY23 Submission: Massasoit Community College - Science, Nursing and Allied Health Renovations** (PDF), by Massasoit Community College, dated December 2021  
<https://www.mass.gov/doc/mas-fy23-mpcr/download>
- **Massasoit Community College Science, Nursing and Allied Health Renovations Readiness Study** (PDF), by Payette, dated December 2019  
<https://www.mass.gov/doc/2019-mcc-readiness-study-final-r1/download>

## PROJECT REQUIREMENTS

Project requirements, general conditions and/or requirements of this public notice include, but are not limited to:

### Affirmative Marketing

### MBE/WBE Participation

The Commonwealth is committed to helping address the disparity in the participation of minorities and women in design. Along with the MBE and WBE participation goals which reflect ownership status set forth below, the Designer Selection Board and DCAMM are interested in learning about the applicant firm's approach and commitment to diversity in its HR policy, its overall business practices and in assembling this project team. Firms are encouraged to be creative in assembling their teams by considering dividing the work of a particular discipline, when appropriate, including work it would typically provide in house, partnering, offering opportunities to qualified firms with which it or its consultants have not previously worked or firms that may have less experience working on public projects, and other means that provide additional opportunities for MBE and WBE firms in new ways.

**Applicants, as prime firm and team lead should include in their application, under Section 5, a Diversity Focus Statement directly addressing their approach to enhancing diversity in assembling the team for this project, including a clear description of each working relationship, and in their overall HR and business practices. The Designer Selection Board strongly encourages teams composed of firms that expand the overall breadth of different firms working on DCAMM projects. See also Evaluation Factors.**

In accordance with M.G.L. C.7C, §6 and Executive Orders 526 and 565, the **Division of Capital Asset Management and Maintenance (DCAMM)** has established minimum MBE and WBE participation goals of **5.3% MBE and 10.3% WBE** of the overall value of the study and final design contracts for this Contract/project. Applicants must utilize both MBE and WBE firms whose participation meet these separate participation goals set for the Contract. The separate MBE and WBE participation goals must be met within the list of requested prime and sub-consultants and those MBE and WBE firms with which they team. MBE and WBE firms providing extra services, such as surveying or testing, can also contribute to the MBE and WBE participation on the project.

All applicants must indicate in their applications how it or its consultants will meet these goals and will be evaluated on that basis. Further information about the MBE and WBE Program appears in the "Participation by Minority Owned Businesses and Woman Owned Businesses," in the Commonwealth of Massachusetts Contract for House Doctor Services at Attachment F, and a list of firms currently MBE or WBE certified appears on the Supplier Diversity Office website: <http://www.mass.gov/sdo>.

Applications from MBE and WBE firms as prime consultant are encouraged. Applicants that are themselves MBE or WBE certified may use their participation toward meeting the goal for the certification they hold and will be

required to bring participation by additional firm(s) that holds the necessary SDO certifications to meet or exceed the goals on this Contract. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet the MBE and WBE goals. Consultants to the prime can team within their disciplines to meet the MBE and WBE goals but must state this relationship on the organizational chart (Section 6 of the application form). Please note that only firms that are currently Massachusetts Supplier Diversity Office certified as MBE or WBE can be credited toward meeting project MBE or WBE goals.

#### **Additional Diversity Programs:**

##### **Veteran Owned Business Participation Benchmark – Chapter 108 of the Acts of 2012; Executive Order 565**

The Commonwealth encourages the participation of Service-Disabled Veteran-Owned Business Enterprises (“SDVOBE”) and Veteran-Owned Business Enterprises (“VBE”) on its design projects. The benchmark for combined SDVOBE and VBE participation on DCAMM and other Executive Branch agencies design projects is 3% of the contract price as set forth in the standard DCAMM Contract for House Doctor Services referenced herein.

In addition, the Commonwealth encourages the participation of Disability-Owned Business Enterprises (DOBEs) and Lesbian, Gay, Bisexual, and Transgender Business Enterprises (LGBTBEs) firms on its design projects (see Executive Order 565 -No. 565: Reaffirming and Expanding the Massachusetts Supplier Diversity Program | Mass.gov).

#### **Energy, Sustainability and Climate Change Adaptation**

##### **Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth**

Projects undertaken under this contract shall comply with all applicable requirements of Executive Order 569 – see <https://www.mass.gov/executive-orders/no-569-establishing-an-integrated-climate-change-strategy-for-the-commonwealth>. Project teams will need to complete the DCAMM Resilience Checklist and the design requirements of the Resilient MA program (resilientma.org).

##### **Executive Order 594: Leading by Example – Decarbonizing and Minimizing Environmental Impacts of State Government**

Projects undertaken under this contract shall comply with all applicable requirements of Executive Order “594” (EO 594) or the most recent Leading by Example Executive Order: see <https://www.mass.gov/executive-orders/no-594-leading-by-example-decarbonizing-and-minimizing-environmental-impacts-of-state-government>.

All building studies shall include preliminary estimates of the project’s energy use, water use, and greenhouse gas emissions using protocols established by EOEEA or as determined by DCAMM. No building study shall be certified for final design unless all means, methods, and commitments required to mitigate the project’s impact on the operating agency’s plan for meeting goals of the relevant Executive Orders are documented in the consensus solution, implementation plan and estimated construction cost.

#### **Universal Design/Accessibility**

##### **Universal Design**

Design solutions provided under this contract are expected to meet the diverse and changing needs of users across age, ability, language, ethnicity and economic circumstance. DCAMM welcomes innovative design strategies that are usable by the widest range of people operating in the widest range of situations without special or separate design. The design team is expected to utilize the 8 Goals of Universal Design as guidance for applying Universal Design and accommodating people of all abilities.



## Accessibility

The Designer's team must comply, at a minimum, with 521 CMR, The Rules and Regulations of the Architectural Access Board (<https://www.mass.gov/orgs/architectural-access-board>), as well as the 2010 ADA Standards for Accessible Design (<http://www.ada.gov/regs2010/2010ADAStandards/2010ADASTandards.htm>). When the requirements of these two laws differ the Designer's team shall comply with the one that provides the greater degree of accessibility. The Designer's team is also expected to understand and reflect in its design the civil rights obligations of the Commonwealth under Title II of the Americans with Disabilities Act ([http://www.ada.gov/regs2010/titleII\\_2010/titleII\\_2010\\_regulations.htm](http://www.ada.gov/regs2010/titleII_2010/titleII_2010_regulations.htm)) to provide equal access to programs, services, activities and comply with ADA scope requirements for alteration of primary function areas, as applicable. DCAMM will use its accessibility consultants to provide technical assistance and oversight for accessibility compliance during the study, design and construction process, including accessibility audits of existing buildings. The Designer will incorporate the work of the accessibility consultant into their construction documents.

## Policies & Procedures

### Financial Statement

M.G.L. c. 7C, §51 requires that on public design contracts where the total design fee is expected to exceed \$30,000 and for the design of a project for which the estimated construction cost is expected to exceed \$300,000 the Designer shall:

- a) File its latest CPA or PA audited financial statement with the Division of Capital Asset Management and Maintenance (DCAMM) and continue to do so annually throughout the term of the contract.
- b) Submit a statement from a CPA or PA that states that they have examined management's internal auditing controls and expresses their opinion regarding those controls to the **DCAMM**.

### DCAMM Procedures

The Designer must be familiar with the procedures established in DCAMM's Designer Procedures Manual dated August 2008 (<https://www.mass.gov/files/documents/2017/12/19/designers-procedures-manual-aug08.pdf>). Applicants are urged to review and become familiar with the following supplemental material, which is available on the web at: (<http://www.mass.gov/dcam>).

### Electronic Project Management Information Systems

Consultants will be required to use DCAMM's electronic web-based project management information system as a repository for project correspondence, documentation, project budgeting, and scheduling. No special software is required.

### Workshops

DCAMM and the Designer's team will hold periodic workshops to ensure that critical issues are not overlooked and that all team members have an opportunity to contribute their expertise, to anticipate potential obstacles, to identify potential solutions, and to expedite the decision-making process. Attendance by key members of the Designer's team will be required at all workshops.

### Environmental and other supplemental services

Development of any hazardous materials assessments, specifications, and documents will be provided through the Hazardous Materials Consultant design team member identified above. DCAMM reserves the right to obtain supplemental services through independent consultants who will collaborate with the Designer's team. These supplemental services may include, but are not limited to, asbestos inspection and monitoring, and indoor air quality testing and monitoring.

## **Construction Specifications**

The Designer shall utilize the DCAMM Standard Specification.

## **Cost Estimating**

Cost estimates, cost models, and estimator participation in both the study and the design phases shall meet the requirements of the current DCAMM Cost Estimating Manual and will be submitted in Uniformat II in the study phase and in both Uniformat II to Level 3 and CSI Masterformat in the design phase. The Cost Estimating Manual can be found at <https://www.mass.gov/files/documents/2017/12/19/cost-estimating-manual.pdf> and Uniformat II can be found at <http://fire.nist.gov/bfrlpubs/build99/PDF/b99080.pdf>.

## **Building Information Modeling (BIM)**

Building Information Modeling (BIM) will be used in the study, design, and construction phases of the project. The BIM List of Services can be found at <http://www.mass.gov/anf/docs/dcam/pubblgdgconstr/16-2-27-bim-list-of-services.pdf>. This List of Services document is a general statement of DCAMM's current requirements regarding the use of Building Information Modeling technology in agency projects. The specific requirements regarding use of the BIM will vary depending on the nature of the project, the levels of development delineated in the DCAMM approved BIM Execution Plan for the project, and the diverse purposes for which DCAMM will use the BIM during the life cycle of the facility from design through facility operations. In all instances, the language of the project contract(s) will be controlling.

## **Building Commissioning**

DCAMM will include an independent third-party building commissioning agent as part of this project. The commissioning agent will develop in collaboration with DCAMM an operations and maintenance plan as a reimbursable expense during the building commissioning phase. The commissioning agent will meet with DCAMM and the Designer's team during planning, design and construction to evaluate design proposals and make recommendations to ensure the maintainability and operational efficiency of the new building.

## **CM at Risk**

The construction of this project will be performed utilizing a construction management at-risk (CMAR, sometimes referred to as CM/GC) contract in accordance with M.G.L. c. 149A. It is anticipated that the CM will be on board during the Schematic Design phase of the project.

## **Integrated Project Delivery Approach/Lean Construction Tools**

To the extent allowed under the Commonwealth public procurement laws and regulations, DCAMM may elect to use some aspects of an Integrated Project Delivery (IPD) approach, as generally described in the AIA document *Integrated Project Delivery: A Guide* (2007) – (see [http://info.aia.org/SiteObjects/files/IPD\\_Guide\\_2007.pdf](http://info.aia.org/SiteObjects/files/IPD_Guide_2007.pdf) for informational purposes). To the extent the IPD approach and/or Lean Construction Tools conflict with DCAMM's contract terms or the laws governing DCAMM, then the contract documents and laws shall take precedence. DCAMM's preliminary approach to IPD will use CM procurement with the goal that DCAMM, client agency, Designer, CM, trade partners, and other key stakeholders will work as an integrated project delivery team within the existing statutory and contractual frameworks.

DCAMM may elect to use Lean Construction Tools as part of the IPD project delivery approach. The Lean Tools that DCAMM may use in connection with the project include Value Stream Mapping, Set Based Design, Target Value Design, A3 Decision-making, and Last Planner™ - (see [http://www.leanconstruction.org/media/docs/LCI\\_Glossary12232015.pdf](http://www.leanconstruction.org/media/docs/LCI_Glossary12232015.pdf) for informational purposes).

# CONTRACT REQUIREMENTS

## Contract for Study, Final Design, and Construction Administration Services

DCAMM uses one standard *Contract for Study, Final Design and Construction Administration Services* (October 2020) (Contract). If selected for study services, the applicant agrees to execute the Contract or its successor, without revisions or modifications. *No costs shall be incurred, or work performed before all contract documents are properly executed and a project Notice to Proceed is issued in accordance with the terms of the Contract.*

If this Notice indicates that the Schematic Design/Certifiable Building Study fee is to be negotiated, following successful fee negotiations, the Contract will be amended to incorporate a scope and fee for schematic design and certifiable study services. If study certification pursuant to M.G.L. c. 7C is completed, the Contract may be amended to incorporate the design and construction administration scope of services and fee. At the conclusion of the study, if the applicant is requested by DCAMM to perform final design services, the applicant agrees to amend the Contract's scope of services to include final design and construction administration services (Attachment G – Design Phase Scope of Services), and the certified study, and any other documents as necessary. Designers awarded the Contract for Study and/or schematic design are not guaranteed to be awarded the Design Phase.

Study Phase: DCAMM has established a goal of **nine (9) months** to complete a Study, including Schematic Design.

Design Phase: DCAMM has established a goal of **ten (10) months** to complete design (DD and CD). The schedule for construction administration services will be established (if applicable, in consultation with the CM) as part of the study phase.

The Contract is available on the DCAMM website at:

<https://www.mass.gov/doc/contract-for-study-final-design-and-construction-administration-services-0/download>.

Also available is a template Design Phase Amendment, which includes a sample form of Attachment G – Design Phase Scope of Services. <https://www.mass.gov/doc/design-phase-amendment-to-contract-for-study-final-design-and-construction-administration/download>.

Applicants are advised that certain documents are required as a condition of contract execution, including, without limitation, evidence of professional liability insurance in an amount equal to the lesser of \$5,000,000 or 10% of the Project's Fixed Limit Construction Cost, but in no event less than \$250,000 per claim (i.e., minimum coverage of \$250,000 up to \$5,000,000 per claim depending on the construction cost). Evidence of pollution liability coverage in compliance with the Contract requirements may be carried by the Hazardous Materials Consultant identified above. All other coverage must be carried by the Designer.

## CONDITIONS FOR APPLICATION

Before a designer can apply for a project within DSB jurisdiction, they must file a written "disclosure statement" in accordance with M.G.L. c. 7C, § 48. The statement provides the basis for the DSB informational database and verifies that the designer meets certain general qualification and ownership requirements detailed in M.G.L. c. 7C, §§ 44 and 48. To help firms meet this requirement, the Designer Selection Board provides an online registration system that can be accessed at <https://www.mass.gov/service-details/new-dsb-online-registration-process>. Firms must register on this platform to submit the required disclosure statement; paper disclosure statement submissions are no longer accepted. As part of applying for a particular project, firms must verify that the information provided remains accurate and up-to-date or, if necessary, submit updated information.

## **APPLICANTS, PLEASE NOTE**

The Designer Selection Board has transitioned to a new online system for all of its operations on the AUTOCENE Enterprise Automation Platform. We encourage everyone in the design community to enter all their information and start getting used to this powerful new product! The board no longer accepts jurisdictional applications through our old application system and all new applications must be completed within Autocene. New users can request credentials through the system login screen: <https://dsb-dev.formverse5.com/FORMVERSESERVER-DSB/WebApp/Login.aspx?ReturnUrl=%2fFORMVERSESERVER-DSB%2fWebApp%2fHome.aspx>.