



PUBLIC NOTICE OF DESIGNER SELECTION

Designer Selection Board

One Ashburton Place, Room 1004, 10th Floor | Boston, MA | 02108
Telephone: 617-727-4046 | www.mass.gov/dsb

DSB List#: 20-08
Notice Date: May 20, 2020
Submission Deadline: June 10, 2020 At 2:00 PM
Project Number: DFS2001
Project Title: Southeast Fire Academy Master Plan and Certified Study
Project Location: Bridgewater, MA
Awarding Agency: Division of Capital Asset Management and Maintenance (DCAMM)
Estimated Construction Cost: \$7,708,000 (Phase I project)
Fee for Master Plan and Study \$250,000
Fee for Schematic Design / Certified Study To be Negotiated
Final Design To be Negotiated

Contract Type:

☒ Study & Design Services

Immediate Services Authorized:

☒ Schematic Plans and Outline Specifications

☒ Certifiable Building Study

☒ Other: Master Planning Services

Prime Firm Requested:

☒ Architect

☐ Landscape Architect

☐ Engineer

☐ Interior Designer

☐ Programmer

☐ Construction Manager

☐ Other:

It is intended that the following continued services will be required of the selected Design Team following completion of the certified study and notification of the Board in accordance with M.G.L. c. 7C.

☒ Design Development Plans and Specifications

☒ Construction Plans and Specifications

☒ Administration of Construction Contract

☐ Other:

AGENCY INFORMATION

The Massachusetts Department of Fire Services (DFS) is the sole agency within the Commonwealth responsible for coordinating fire service policy and operations. The fire service system in Massachusetts is made up of 366 fire departments, and DFS supports all these departments through several branches of the agency, including, the Massachusetts Firefighting Academy (MFA). The over 400 instructors, supported by 17 full time staff, of the MFA provide fire and emergency service training, education, and certification for all ranks of personnel, including volunteer, call, and career firefighters, at MFA's two campuses in Stow (DFS Headquarters) and Springfield, as well as at local sites.

PROJECT OVERVIEW

Project Context

Through ongoing assessments, MFA continues to identify regional fire training as a need, especially given growing training demands. The number of students in MFA trainings has increased from approximately 15,000 students in 2013 to over 23,000 in 2017, and there is currently a nine-month waiting period for individuals to enter the Career Recruit Program. To address these demands, DFS is working with the Division of Capital Asset Management and Maintenance (DCAMM) to prepare a study for a regional firefighting training academy to serve southeastern Massachusetts. The study is part of DFS' objectives to provide convenient training programs in each "corner" of the state, and expand services offered at DFS' current facilities in Stow and Springfield.

In 2019, DFS entered into an agreement with the Department of Corrections (DOC) to utilize the former Massachusetts Alcohol and Substance Abuse Center (MASAC) facility, located adjacent to the Old Colony Correctional Center in Bridgewater. The MASAC facility was closed by DOC in May of 2017. Legislation is currently pending to transfer the property from DOC to DFS. DFS intends to refurbish the existing buildings and buildout the site to create the Southeastern Massachusetts DFS facility.

Site Overview

The 18-acre parcel of land in Bridgewater currently houses nine buildings, with perimeter security fencing surrounding six of the buildings and three outside of the fence. The six buildings, with building sizes reflecting values indicated on CAMIS, inside the security fence include:

- four former dormitories, approximately 5,300 square feet each, which form a "quad" in the center of the property that surrounds a paved courtyard
- 10,800 square foot Administration building, housing office space, classrooms, breakrooms, and locker rooms
- 9,600 square foot Quonset Hut, which is a fabric structure of predominately large spaces, storage areas, and facility spaces, with some office spaces.

The three buildings located outside the fence include:

- 2,300 square foot maintenance building
- small guard house
- gate house at the entrance to the secured area.

All of the buildings were constructed in the early 1990's, except for the gate house, which was constructed in 2003.



Aerial view of the Bridgewater site

Current Upgrades in Progress

DCAMM is currently working with DFS to address building code requirements due to change of use from inmate detention to office and education. The upgrades will allow occupancy of the Administration Building and the Quonset Hut for DFS regional offices and space for initial training programs. The upgrades include providing ventilation to convert storage areas to occupiable spaces and installing a code compliant fire alarm system. As part of this study, DFS will also construct a Search/Rescue/Burn (SRB) training prop on the site and improve a substandard detention area to accommodate additional water run-off from fire training exercises. A Certified Building Study is currently in progress and it is anticipated that construction will be completed in the fall.



Example of a typical search & rescue prop

Other ongoing work by DFS includes refurbishing offices, multi-purpose spaces and locker-rooms in the Administration Building and the Quonset Hut for use by staff and students for training programs, removing security fencing from the dormitory quad, and replacing doors and locks to meet building code and improve safety and security.

In addition to the building upgrades, DFS has also installed several mobile training props in the courtyard and has installed a training tower prop in the grassy area just north of the quad.

Project Objectives

DFS envisions the Bridgewater facility to be comparable to the Springfield facility in terms of building space for training and administration, and outdoor training areas for props and meeting areas, circulation, storage areas, and site infrastructure. The Springfield facility was acquired by DFS from the City of Springfield in 2015, and the six-acre campus was refurbished to construct a new 18,475 SF administration and classroom building, three fire apparatus bays, totaling 5,400 SF, a water reclamation system, a three-story live fire training prop burn building, a five-story training tower, in addition to other outdoor training facilities, including a Search & Rescue Prop, an Outdoor Classroom and spaces for smaller props for training for a variety of technical situations.

The objective of this study is to identify the most cost-effective scenarios to achieve long-term programming objectives for the MFA, and to implement immediate improvements to accommodate enough training space to reduce demands at the facilities in Stow and Springfield. While it is anticipated that new construction will be required for site infrastructure, parking and circulation, and fire apparatus bays, the study will evaluate the ability to reuse existing building spaces to maximize space needs within budget limitations.

It is expected that planning for the site will also focus on sustainability and incorporate carbon reduction strategies and site improvements to address the impacts of climate change. This includes, but is not limited to, low/no carbon fuel sources, high energy efficiency measures, best practices in climate change resilience standards and adhering to DCAMM's climate change vulnerability assessments and resilience recommendations.

The approach to this study effort is in two parts, which will likely include tasks that overlap:

- prepare a **Master Plan** for the Bridgewater facility to accommodate a full spectrum of firefighter training services through a phased implementation strategy to be implemented over time.
- prepare a **Certified Building Study** for the first phase of improvements identified in the Master Plan, which are those tasks that can be accommodated within the current estimated

construction costs (ECC); subsequent phases of improvements envisioned in the Master Plan will be implemented through separate certified studies as funding becomes available.

Master Plan. It is anticipated that some of the existing buildings on the Bridgewater site are suitable for renovations to accommodate current and future programming, while other buildings may require demolition to accommodate spaces better served with new construction. The Master Plan will identify and prioritize building reuse in order to maximize funding for required new construction. The long-range Master Plan will consist of the following tasks, as detailed in later sections of this document.

- **Evaluate space needs for the training facility**, based on programming needs determined by DFS, which includes both classroom and live training on outdoor simulation props, and associated uses such as office and administrative spaces for DFS staff.
- **Assess site capacity** to accommodate various programming scenarios, including building space and outdoor training facilities, site infrastructure and parking and circulation requirements.
- **Conduct a facilities conditions assessment**, including a Chapter 34 code analysis, of existing buildings on the site to evaluate renovation potential to meet programming requirements and current building codes. After initial review of space needs and site capacity, the Designer's team will work with DCAMM and DFS to determine which of the nine buildings on the site will require assessment, and the extent of evaluation necessary, as some are already known to be infeasible for achieving future needs. Currently, it is anticipated that the Maintenance Building and several of the four former dormitories will be scoped for assessments; the Administration Building and the Quonset Hut underwent Chapter 34 code analysis in 2019, but further evaluation may be necessary upon consideration of space needs.
- **Prepare conceptual designs for site improvements, building renovations and new construction** required to meet programming needs.
- **Prepare an order of magnitude cost estimate** for the proposed improvements, broken out by project components, for use in determining project priorities.
- **Identify a phased implementation approach** for the full build-out of the campus, which prioritizes an improvement schedule based on anticipated budgetary considerations.

It is anticipated that Phase I improvements may include, but not be limited to, the following, which will be advanced for certification in the Study Phase, based upon preliminary cost estimates and budgetary constraints:

- Site work for installation of a new water reclamation system to recycle run-off from fire-fighting training activities and stormwater for reuse on site.
- Site work for parking and circulation needs, as well as access for fire trucks and training equipment.
- Installation of a live-burn building prop and other mobile props, along with other exterior storage needs for training equipment and fire apparatus.
- Construction of a fire apparatus service bay, to serve multi-purpose needs for indoor training, equipment storage, turnout gear laundry and storage, and a crib-room for storage of fire-training equipment and air tanks.
- Renovations of the Administration Building and some of the former dormitory buildings for classrooms, conference rooms, break rooms, large multi-purpose spaces, locker rooms, emergency management services rooms, and "hotel office space" for visiting emergency service personnel.

One of the long-term improvements to be considered in the Master Plan is including space for student housing, and feasibility for Massachusetts Emergency Management Agency (MEMA) to have a presence on the campus, which could include allowing MEMA access to the student housing during significant emergency activations.

Study Phase. The Certified Building Study will be for the first phase of improvements identified in the Master Plan and approved by DCAMM, which will allow DFS to begin construction of site circulation, infrastructure and renovations and construction of immediate building space needs. As stated earlier, subsequent phases of improvements envisioned in the Master Plan will be implemented through separately as funding becomes available. The study is expected to have multiple tasks and, following fee negotiation and contract amendment, will include schematic design:

STUDY PHASE (*Immediate services authorized*)

- **Program Development:** based on the assessments of space needs, site capacity and facility conditions conducted in the Master Plan phase, further refine high priority programming needs for interior and exterior spaces.
- **Existing Conditions:** refine the existing conditions assessment developed for the Master Plan, specific to the priority projects, including required code upgrades identified in a Chapter 34 code analysis, necessary improvements based on life cycle considerations, life safety concerns, energy, resiliency and vulnerability considerations, and utility systems on and serving the site, among other relevant criteria.
- **Alternatives Analysis:** develop and evaluate alternatives to meet programmatic needs, including assessment of what can be accomplished through renovation of existing spaces versus new facilities that should be constructed, with order of magnitude cost estimates to evaluate budgetary considerations.
- **Preferred Alternative:** prepare plans and narrative summarizing the preferred alternative to address infrastructure and programmatic needs, including a scope of work, program adjustments, cost estimates and an implementation plan.

SCHEMATIC DESIGN / CERTIFIABLE BUILDING STUDY PHASE (fee to be negotiated)

- **Schematic Design Documents:** prepare a complete set of schematic-level design documents, in accordance with DCAMM's Designer Procedures Manual and other applicable guidelines, for the preferred alternative.
- **Final Report:** complete a study that may be certified in accordance with M.G.L. c. 7C, ss. 59 and 60, compiling the above tasks.

SCOPE OF WORK

This project involves an assessment of the Bridgewater site and its capacity to accommodate desired programming in order to develop a master plan for strategic and cost-effective solutions and a phased approach to accommodate training programs and staffing accommodations. The analysis and associated recommendations in the master plan will determine priorities that can be accomplished within current funding limits, which will then be advanced in a certifiable study report, including schematic design documents, for the highest priority site and building improvements.

The scope of work is expected to have multiple tasks, which may overlap—the Master Plan, the Study for immediate improvements, and the Schematic Design / Certifiable Building Study for preferred alternative of immediate improvements. The tasks identified below are representative for the purposes of this advertisement and are not fully inclusive.

Task 1 - Project Start Up & Work Plan

Task 2 – Master Plan - Program Development, Site Capacity and Facilities Conditions Assessment

Task 3 – Study Development & Evaluation of Priority Alternatives

Task 4 – Preferred Alternative

Task 5 – Schematic Design

Task 6 – Certifiable Building Study Report

Task 1 – Project Start Up & Work Plan

The following tasks will be included in initiating the project.

Project Start Up

- Attend a DCAMM administrative conference to review project requirements and administrative and project management policies, procedures and protocols.
- Conduct a study conference with DCAMM and DFS to review project goals and objectives, the planning process, schedule of milestones, facility opportunities and constraints, information and data requirements, etc.
- Review relevant past studies and reports regarding the Bridgewater facility, as well as programming information from the DFS facilities in Stow and Springfield.
- Participate in site visits to the existing DFS facilities in Stow and Springfield.

Work Plan

The Designer will work with DCAMM to prepare a Work Plan, identifying team responsibilities and documenting the scope of work to complete the required tasks, deliverables, project schedule and fee. The Work Plan is subject to approval by the DCAMM Director of Planning and, once approved, will constitute a contract document governing the performance of work under the Designer's contract. During 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:

- A statement of the Designer's understanding of the vision, goals, scope, budget, and schedule for the project.
- A statement of climate and energy best practices to be evaluated to achieve the Commonwealth's objectives for energy efficiency, carbon reduction strategies and site improvements to address the impacts of climate change.
- Evaluation of the preliminary Total Project Cost (TPC) developed by DCAMM.
- A detailed schedule of meetings and workshops through the process, including key attendees, draft topics agendas, projected time frames for design and construction, and permitting timeline. It is anticipated that bi-weekly working sessions will be held throughout the duration of the study.

Task 1 Deliverables:

- Meeting notes from the administrative and study conferences.
- Work Plan.

Task 2 – Master Plan - Program Development, Site Capacity and Facilities Conditions Assessment

The emphasis will be on collecting and analyzing data and documentation which will inform the development of a Master Plan for a long-term overall development concept for the site, as well as to identify priority projects that will proceed into the study alternatives.

Workshops and Project Review Meetings

It is anticipated that bi-weekly project meetings will be held throughout the preparation of the Master Plan, with key members of the Designer's team and representatives from DCAMM and DFS. At key milestones for each task,

workshops may be held, with greater participation by DCAMM and DFS stakeholders, to review findings and solicit input for decision making.

Program Development

The Designer's team will confirm general program requirements for the Southeastern Massachusetts DFS facility, based on discussions with DFS staff and a review of programs at the facilities in Stow and Springfield. The Designer will provide a narrative that summarizes and assesses program needs, including a preliminary tabular program, expressed in net square feet with net to gross ratios and gross square feet requirements, and conceptual room layouts and adjacency diagrams indicating key relationships. The program will be confirmed by DFS and DCAMM, and used to determine immediate priorities that can be accommodated through available funding, which will be advanced during the development of alternatives in the study phase. Tasks will include:

- Interview DFS representatives to gain an understanding of their mission and goals for programs, staffing, functional and technical requirements, along with relevant planning or design considerations.
- Provide a narrative which assesses general programmatic needs and requirements, including an evaluation with respect to industry standards for training programs and recommendations that consider growth and expansion trends.
- Develop a tabular space program by individual functional areas, net useable square feet, and gross square feet.
- Provide conceptual room layouts for interior spaces, and site layouts for exterior spaces, with spatial adjacency diagrams indicating key relationships.

Site Capacity Assessment

Through site visits and review of existing information, the Designer's team will assess the site's opportunities and constraints, and determine its capacity to accommodate space needs, infrastructure and construction feasibility. Tasks will include:

- Analyze and document conditions relevant to site development and new construction, including but not limited to topography, geotechnical conditions, hazardous materials, wetlands, drainage and ground water flows, location and capacity of utilities and infrastructure, vegetation, wind direction, solar exposure, internal and external pedestrian circulation, desire lines and access issues, parking and vehicular circulation.
- Evaluate the site for potential risks and vulnerabilities related to environmental sustainability and climate change, and work with DCAMM to prepare a resilience analysis to identify mitigation requirements that minimize impacts related to climate change.
- Based on existing site conditions, propose building and site use program requirements and site planning criteria in both a conceptual site plan and supporting project narrative.

Facilities Conditions Assessment

The Designer's team will review background documentation of the Bridgewater facility, compiled by DCAMM and DFS, and conduct field inspections to assess conditions of the existing buildings and utility systems on and serving the site, and prepare a Facilities Conditions Analysis (FCA) to create a prioritized list of improvements needed. Tasks will include:

- Review prior/relevant studies of the facility, as well as interview facilities staff from DFS and DOC and obtain documentation of completed building improvements.
- Identify any missing/needed information related to existing conditions, where further assessments and verification may be needed.
- An accessibility assessment will be completed by DCAMM, or its accessibility consultants, for the Designer to incorporate into the FCA. DCAMM, or its accessibility consultants, will provide technical assistance and review of both study and design documents, and the Designer will be responsible for addressing all issues raised by the accessibility team and preparing cost estimates for implementation.
- Complete the FCA for the Bridgewater facility, including a Chapter 34 review of the existing buildings and systems (Note: A Chapter 34 Review of the Administration Building and the Quonset Hut was recently completed - findings to be verified by the Design Team). The FCA shall detail all relevant deficiencies or

concerns, prioritize the improvements based on life cycle considerations, life safety concerns, energy, resiliency and vulnerability considerations, and utility systems on and serving the site, among other relevant criteria. (Note: it is not anticipated that building information modeling (BIM) will be necessary for this scope of work; if it is later determined to be beneficial, it will be addressed as an additional service.)

- Prepare order of magnitude costs for the upgrades and potential operating cost impacts.
- The FCA shall detail necessary improvements to meet current standards for sustainable energy, in accordance with current State policies and the Massachusetts Energy Code, with a primary focus on best practices to reduce energy consumption, costs, and resulting carbon emissions. As part of the assessment, existing and target energy use intensity (EUI) metrics shall be developed by the Designer for each of the buildings.

Cost

Order of magnitude cost estimates will be developed to establish priorities that can be accommodated within currently available funds (as communicated by DCAMM), and to develop a phasing plan for longer-term improvements as additional funding becomes available. A workshop will be held to review and discuss the findings with key staff from DCAMM and DFS. Costs to be considered will include, but not be limited to:

- Site improvement costs, including utility systems upgrades, vehicular and pedestrian circulation and site development needs for buildings or exterior training props and facilities.
- Renovation and system upgrades for existing buildings to meet space programming objectives, or demolition costs for buildings determined to be infeasible to retain.
- Construction of new buildings and exterior facilities identified for programming or facilities management purposes.

Schedule

Prepare a phasing plan for short- and long-term site and building improvements. For those improvements determined to be high priority and suitable to be accomplished within available funding (as communicated by DCAMM) prepare a preliminary design and construction schedule, which details permitting and regulatory reviews required. The schedules shall outline an approach to maintain current programming on-site during construction periods, including a plan for swing space that may be necessary.

Task 2 Deliverables:

Task 2 will culminate in the preparation of a Master Plan report, which will be a stand-alone document, but will also be summarized and incorporated into the certifiable study, that consists of the following components:

- Programming narrative, preliminary space program tabulation, conceptual room and site layout diagrams, and adjacency diagrams.
- Site capacity narrative and conceptual site plan for building and site use, including assessment of site conditions, infrastructure needs, parking and circulation requirements, and environmental resiliency mitigations.
- Chapter 34 Code analysis.
- Facilities Conditions Analysis, including narrative and supporting spreadsheets compatible for incorporation into CAMIS, summarizing and prioritizing building systems improvements to address required life safety improvements, Lifecycle needs for systems replacements, and upgrades required to meet current building codes.
- Order of magnitude cost estimates for recommended site improvements, building systems upgrades and renovations for existing buildings, and construction of new buildings and exterior facilities required for programming or facilities management purposes.
- A preliminary design and construction schedule, which details permitting and regulatory reviews required.
- Workshop materials for project review and cost analysis meetings.
- Workshop meeting minutes.

Task 3 – Study Development & Evaluation of Alternatives

Workshops and Project Review Meetings

It is anticipated that bi-weekly project meetings will be held throughout the preparation of the Study, with key members of the Designer's team and representatives from DCAMM and DFS. At key milestones for each task, workshops may be held, with greater participation by DCAMM and DFS stakeholders, to review findings and solicit input for decision making.

Study Tasks

Based on the assessments conducted for the Master Plan, this phase of the study will further refine programming and design considerations to develop and analyze feasible alternatives for the priorities determined by DCAMM and DFS to be achievable within the immediately available budget. These scenarios will define and prioritize the deficiencies in the existing buildings and site and identify the best and most cost-effective approach, whether through renovation or new construction, to address them and achieve the priority goals and objectives of this study.

- Further assess and refine programming objectives identified in the Master Plan task for the top priority projects, including assessment of trade-offs to balance optimal space needs with what can most feasibly be achieved within available funding. The assessment will include further refinement of "right sized" programming needs in net square feet, net-to-gross square feet ratios, and gross square feet, along with an assessment of adjacency and system requirements.
- Further assess and refine the existing conditions assessment developed for the Master Plan, specific to the priority scope items. The assessment shall specify all relevant deficiencies or concerns, including required code upgrades identified in a Chapter 34 code analysis, necessary improvements based on life cycle considerations, life safety concerns, energy, resiliency and vulnerability considerations, and utility systems on and serving the site, among other relevant criteria.
- Develop alternatives (up to three) for space accommodations to accommodate intended priority programming needs, through renovation of existing buildings, new construction, or a combination of both, for priority program elements. Each alternative shall also include site improvements to accommodate exterior programming needs, including locations for permanent and mobile props, equipment storage, parking and circulation. For each alternative, prepare preliminary scopes of work, space programs, space stacking diagrams, room layout diagrams, cost estimates with life cycle analysis, and implementation schedules including applicable details of swing-space needs to accommodate construction while maintaining current operations.
- Alternatives shall also evaluate approaches to address environmental impacts from climate change, universal design and accessibility goals and achievement of design objectives.
- Complete an assessment of commissioning, including preliminary evaluation by a third-party commissioning agent (engaged by DCAMM).
- Prepare a matrix that illustrates a pros and cons analysis of the alternatives in regard to criteria established by the Team.

Cost

- For each alternative, provide a cost analysis in accordance with DCAMM's Cost Estimating Manual
- Recommend potential options to reconcile preliminary costs with project budget if needed.
- Conduct a cost workshop with DCAMM and DFS stakeholders.

Schedule

- For each alternative, further develop the project schedule for design and construction including required permits and associated required regulatory review which can impact the schedule.
- Evaluate schedule options and issues, including swing space needs and timing.

Global Workshop

A Global Workshop, led by the Designer, should take place following the completion of alternatives; all project participants and interested parties will be given a chance to comment on all the alternatives, and to contribute to recommendations for the building concepts for further development.

Task 3 Deliverables:

Task 3 will culminate in the preparation of an “Alternatives Assessment Report”, which will be also be summarized and incorporated into the certifiable study, that consists of a written narrative and supporting graphics and spreadsheets, that details, but is not limited to, the following components:

- A summary of programming objectives, “right sized” programming needs, and proposed space accommodations in net square feet, net-to-gross square foot ratios, and gross square feet, along with an assessment of adjacency and system requirements.
- A summary of existing conditions and required upgrades, and recommended improvements.
- Alternative design concepts including program, summary narratives, cost analysis and schedules.
- Comparative matrix illustrating pros and cons regarding each alternative’s ability to meet goals for the project, 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.
- Project schedule for design and construction, including required permits and regulatory reviews, and applicable timing for swing space needs and other enabling projects.
- Evaluate schedule options and issues, including swing space needs and timing
- Global workshop materials, including presentations and meeting minutes.
- Project meeting minutes.

Task 4 –Preferred Alternative

Based upon input received during stakeholder reviews and the Global Workshop, the Designer shall develop a preferred alternative for the priority scope items and prepare plans and narrative summarizing the preferred alternative to address infrastructure and programmatic needs, including scope of work, program adjustments, cost estimates and an implementation plan. The preferred alternative will be further developed in the schematic design phase of the study. The documentation for the preferred alternative shall include, but not be limited to:

- Final space programs for buildings and exterior programs, including complete tabular programs listing all spaces, relationship diagrams depicting important adjacencies and detailed information about the requirements of each space, and finalized room data sheets.
- Scope of renovation or new construction including space designs, systems upgrades, site improvements, summary of accessibility and energy code compliance.
- Detailed cost estimate in accordance with DCAMM’s Cost Estimating Manual.
- Implementation plan addressing schedule, phasing, permits, regulatory reviews, and other requirements such as compliance with the Massachusetts Architectural Access Board and the Americans with Disabilities Act, the Commonwealth’s Leading by Example Executive Orders and the Massachusetts Energy Code, and provisions for addressing environmental and community impacts.
- The schedule and cost budget should identify the need for swing space and other enabling needs to maintain continuous operations of existing activities on the campus.

Task 4 Deliverables:

Task 4 will culminate in the preparation of presentation of the preferred alternative, which will be also be summarized and incorporated into the certifiable study, that consists of a written narrative and supporting graphics and spreadsheets, that details the following components:

- Final space programs for buildings and exterior programs
- Detailed recommended scope of work.
- Pre-schematic architectural design set including conceptual plans, exterior elevations and room data sheets for interior spaces.

- Building code analysis and report.
- Statement of compliance with the Commonwealth's Leading by Example Executive Orders and provisions for addressing environmental and community impacts.
- Accessibility compliance in collaboration with DCAMM's third-party accessibility consultant
- Equipment list and performance requirements.
- M/E/P Systems narrative report of recommended systems and alternatives.
- Detailed Cost Estimate in Uniformat II / Level 3.
- Permitting / regulatory reviews with associated timelines for each.
- Implementation plan addressing schedule, phasing, permits and other requirements such as submittals to regulatory agencies, including, but not limited to, the local Conservation Commission, the Massachusetts Environmental Policy Act office (MEPA), and other relevant agencies or organizations.

SCHEMATIC DESIGN PHASE & CERTIFIABLE BUILDING STUDY PHASE

The fee associated with Tasks 5 - Schematic Design Documents and Task 6 - Certifiable Building Study Report, will be negotiated during the study phase, following the determination of the final scope of work to be completed and the estimated construction cost. The Designer's contract will be amended to incorporate the Schematic Design fee and scope for this phase of work.

Task 5: Schematic Design Documents

The Designer will prepare and submit a schematic design package in full compliance with all contract requirements, including, without limitation, those of DCAMM's Designer Procedures Manual. Tasks under the Schematic Design Phase will include, but not be limited to, the following:

- Coordinate initial design conference.
- Develop and submit Workplan for Schematic Design/Certifiable Study Phase.
- Attend bi-weekly progress workshops with DCAMM and DFS.
- Prepare building site analysis (as required).
- Finalize Building Code Analysis.
- Coordinate with DCAMM's accessibility team (and, if applicable, third-party accessibility consultant) to ensure the buildings are designed to reflect Universal Design values, DCAMM best practices, and meets the intent and requirements of Title II of the ADA, the 2010 ADA Guidelines, and MAAB requirements.
- Evaluate energy efficiency and carbon reduction opportunities and conduct a life cycle cost analysis; the life cycle cost analysis will include review of all existing building systems (including those which have been determined to be past their useful life), as well as an analysis of all proposed systems;
- Prepare an updated cost estimate per the Cost Estimating Manual and participate in cost estimating activities.
- Coordinate with the Construction Manager, if determined applicable, and a third-party commissioning agent (to be hired by DCAMM).
- Implementation plan addressing schedule, phasing, permits and other requirements such as submittals to regulatory agencies, including, but not limited to, the local Conservation Commission, the Massachusetts Environmental Policy Act office (MEPA), and other relevant agencies or organizations.

Task 5 Deliverables:

Schematic Design submission requirements are set forth in DCAMM's Designers Procedures Manual, and include further development of the preferred alternative deliverables as well as the following:

- **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 (delineating which are provided by DCAMM's third-party commissioning agent and any responsibilities of Designer and contractor).

- **Energy Modeling, Energy Conservation, and Life Cycle Cost Analysis:** An energy conservation scope plan, including existing and target energy use intensity (EUI) metrics and energy conservation and carbon reduction design strategies, and targets for achievement of applicable certifications determined by DCAMM and DFS.
- **Site plans:** Site plans of the 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.
- **Floor Plans–Levels:** Floor plans of all levels indicating each applicable building’s general mechanical, electrical, plumbing, and structural systems.
- **Floor Plans–Demolition and/or Current Conditions:** Demolition and/or existing conditions floor plans for all trades.
- **Site Relationship:** Four elevations, for each applicable building, 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, if applicable, identifying program spaces and relationship to site configurations.
- **Outline of Specifications:** Preliminary outline of project specifications.
- **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.

Task 6: Certifiable Building Study Report

The final task will include a draft and final report, compiling and revisiting the products of Tasks 2-5 for review. The final report, including an executive summary and project narrative, is to be prepared and submitted for certification in required digital and hard copy formats, and includes all approved Schematic Design documents. Draft and final documentation of the study process shall include all drawings, tables, charts and narrative required to record decisions and support final design. The development of a finish model and final renderings of the preferred concept are also included in the final report.

An Appendix to the final report may include full copies of applicable assessments, room data sheets, full cost estimates, presentations, specifications, etc.

Task 6 Deliverables:

- Draft report compiling and revisiting the products of Task 2-5 for review and comment by DCAMM and DFS.
- **Certifiable Building Study Report:** a professional, detailed study report that includes all of the analyses, findings, and relevant background information, and serves as the basis for design. Documents are required to be submitted electronically in a format and software acceptable to DCAMM. 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, project narrative, project justification and rationale for selection of consensus renovation plan, schematic design package, final ADA, 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 presentation of the project, in summary form with accompanying visuals (such as PowerPoint), to be used in presentations to key stakeholders.

SUPPORTING DOCUMENTS

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

N/A

PROJECT REQUIREMENTS

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

Affirmative Marketing Program

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 10, 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, 559 and 565, the Division of Capital Asset Management and Maintenance (DCAMM) has established a minimum combined MBE/WBE participation goal of 17.9% of the overall value of the study and final design contracts for this project. Applicants must utilize a mix of both MBE and WBE firms whose participation, when added together, meets the overall combined goal set for the Contract. The combined goal requires a reasonable representation of both MBE and WBE firm participation. The Combined MBE/WBE goal must be met within the list of requested prime and sub-consultants and those MBE/WBE firms with which they team. MBE/WBE firms providing extra services, such as surveying or testing, can also contribute to the overall MBE/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/WBE Program appears in the "Participation by Minority Owned Businesses and Woman Owned Businesses," in the Commonwealth of Massachusetts Contract for Study, Final Design, and Construction Administration Services (January 2019) at Attachment C, and 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 will be required to bring a reasonable amount of participation by a firm(s) that holds the certification which is not held by the applicant to the project.

Proposed MBE/WBE participation plans that include solely MBE or solely WBE participation, or have only nominal participation by one or the other to meet the combined goal, will not be considered responsive. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet the MBE/WBE goal. Consultants to the prime can team within their disciplines in order to meet the MBE/WBE goal, but must state this relationship on the organizational chart (Section 6 of the application form).

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 Study and Design Contracts referenced above.

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

Leading by Example (currently Executive Order 484): – Clean Energy and Efficient Buildings

Projects undertaken under this contract shall comply with all applicable requirements in accordance with Leading by Example Executive Orders (currently # 484), or the most recent Leading by Example Executive Order, and the Massachusetts Energy Code: see <http://www.mass.gov/anf/docs/dcam/dlforms/energy/energy-eo484-final.pdf>.

All building studies shall include preliminary estimates of the project's energy use, water use, and greenhouse gas emissions using protocols established by EOEA 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 the Leading by Example's Executive Orders goals are documented in the consensus solution, implementation plan and estimated construction cost.

LEED Certification

If applicable, projects designated under this contract shall be certified at a level of Silver or higher, including Mass LEED Plus requirements. All measures proposed to achieve a LEED rating shall be incorporated into Final Design as part of the Designer's base fee; administration of the certification process by the Design Team during the Final Design and Construction phases of the project will be considered an extra service.

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.

Accessibility

The Design Team must comply, at a minimum, with 521 CMR, The Rules and Regulations of the Architectural Access Board (<http://www.mass.gov/ocabr/government/oca-agencies/dpl-lp/opsi/consumer-prot-and-bus-lic/license-type/aab/aab-rules-and-regulations.html>), 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 Design Team shall comply with the one that provides the greater degree of accessibility. The Design 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) 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.

Policies & Procedures

Financial Statement

Chapter 7C, Section 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 DCAMM.

DCAMM Procedures

The Design Team will follow 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 Design 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 Design Team members will be required at all workshops.

Environmental and other supplemental services

DCAMM reserves the right to obtain supplemental services through independent consultants who will collaborate with the Prime Firm and the Design Team. Asbestos inspection, design and monitoring, and indoor air quality testing and monitoring will be extra services under this contract.

Construction Specifications

The Design Team 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. 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 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 applicable DCAMM and DFS staff 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 may be performed utilizing a construction management at-risk (CMAR, sometimes referred to as CM/GC) contract in accordance with MGL Chapter 149A. If determined to be applicable, it is anticipated that the CM will be on board during the Schematic Design phase of Final Design 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 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 Construction Manager at Risk procurement with the goal that DCAMM, Client Agency, Design Team, 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 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* (January 2019) ("Contract"). The Contract will be signed when the study services are procured. If this Advertisement 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. Designers awarded the Contract for Study and/or schematic design are not guaranteed to be awarded the Design Phase.

Study Phase: Pursuant to M.G.L. c. 7C Section 59, the Schematic Design will be included in the certified Study. DCAMM has established a goal of **ten (10) months** to complete a certifiable study, including Schematic Design; for this project, it is anticipated that, together, the Master Plan and the Study phases will take seven (7) months, with three months to complete Schematic Design. Under the Contract, this is divided into a "draft study phase", wherein a preliminary study (including Tasks 2-4 set forth in the Scope of Work Section above) is completed and a "certifiable study/schematic design phase" wherein Schematic Design documents a the final study report in accordance with M.G.L. c. 7C, ss. 59 and 60 (Tasks 5 and 6 set forth in the Scope of Work section above) are prepared. DCAMM and Designer will negotiate the Study/Schematic Design fee in accordance with M.G.L. c. 7C, s. 50 and execute an amendment to incorporate the Study/Schematic Design services and fee into the project contract. If selected for study services, the applicant agrees to execute the Study/Design Contract or its successor, without revisions or modifications. DCAMM compensates the Design Team during the Study Phase for approved products in accordance with the approved work plan.

Design Phase: DCAMM has established a goal of **nine (9) months** to complete design (DD and CD). At the conclusion of the study, if the applicant is requested by DCAMM to perform final design services, the applicant agrees to amend the Study/Design 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.

The Contract is available on the DCAMM website at:

<https://www.mass.gov/files/documents/2019/02/04/contract-for-study-final-design-and-construction-admin-services.pdf>

Also available is a template Design Phase Amendment, which includes Attachment G – Design Phase Scope of Services. <https://www.mass.gov/files/documents/2017/11/06/design-phase-amendment-to-contract-for-study-final-design-and-construction-admin-services.pdf>

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).

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.

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. Landscape Architect
 3. Mechanical Engineer (M/P/FP)
 4. Electrical Engineer
 5. Structural Engineer
 6. Civil Engineer
 7. Specifications Consultant
 8. Cost Estimator (independent consultant required)
 9. MA Building Code Consultant
- 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, licensed or unlicensed, that exhibit through their application that they possess acceptable experience to provide design services in the field of landscape architecture as needed for the project; 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.

EVALUATION FACTORS

Applications will be evaluated based upon the requirements of M.G.L. Ch. 7C §49 and the work listed on DSB Application Form Sections 8, 9 AND 10 which illustrate current qualifications in the following areas:

1. Diversity Focus Statement (question 10) Approach to enhancing diversity in assembling the team for this project and the inclusion of firms that expand the overall breadth of different firms working on DCAMM projects including description of specific working relationships and responsibilities between and amongst team members for both MBE/WBE firms and those with which they will be teaming.
2. Experience developing and implementing plans involving adaptive reuse and modernization of existing buildings for specialized programming needs and determining alternative capital investment strategies to achieve innovative results that maximize cost savings.
3. Preparation of campus master plans for education or training facilities, which involve both indoor and outdoor programming for training exercises and addresses all aspects of site planning including site infrastructure, access and circulation, and sustainable site development practices. Programming experience for first responder training facilities is highly preferred, but not required.
4. Prior work in building design with measured outcomes in energy conservation performance with preference on no/low carbon building systems or zero-net energy in new buildings or renovations.
5. Knowledge of, and experience with Massachusetts public construction requirements and processes.

APPLICANTS PLEASE NOTE

Please use the latest [DSB Application Form \(Updated July 2016\)](#) and follow the [General Instructions for Filing Applications](#).

Application Update: Please email an electronic copy of the application form with the Sub-Consultant Acknowledgement forms and SDO Certification letters to applications.dsb@massmail.state.ma.us. DO NOT MAIL OR HAND DELIVER PAPER COPIES.

Applications that are incomplete will be rejected. Applications that are submitted on a form other than **DSB Application Form (Updated July 2016)** may be rejected as non-compliant and not be considered by the Board. Applications received at the DSB Office after the advertised deadline will not be considered.