



## 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#:	22-23
Notice Date:	Sept 14, 2022
Submission Deadline:	Oct 5, 2022 At 2:00 PM
Project Number:	CL23-MB-0009 (UML Bid Number)
Project Title:	Design of Mechanical, Electrical, Plumbing and Fire Protection Repairs, Replacements and Upgrades in Existing Facilities
Project Location:	Lowell, MA
Awarding Agency:	University of Massachusetts Lowell (UML)
Available Aggregate Amount	\$6,000,000
Estimated Construction Cost:	Varies per Project, Not to Exceed authority delegated pursuant to M.G.L. c. 7C §5, for an individual project.
Contract Term	Up to six (6) years
Maximum Fee Per Contract( based on the scope of the work and services authorized, shall not exceed)	\$1,500,000

**Contract Type:** This contract will be a "House Doctor" contract. Multiple projects of the type described in the Project Overview and Scope of Work may be assigned, and fee increments approved, up to the maximum fee per contract. Selection by the DSB under this advertisement does not guarantee that a contract will be executed with any given firm. The Awarding Agency will enter into House Doctor contract(s) with selected firm(s) at its sole discretion, based on the Awarding Agency's needs. The Awarding Agency may award up to **four (4)** contracts, each with a total value of **\$1,500,000** to qualified designers under this contract. Awarding Authority may assign a House Doctor with which it has signed a contract to perform individual project(s) of the type described in this advertisement directly for another Commonwealth entity.

#### Prime Firm Requested

☐ Architect  
☐ Landscape Architect  
☒ Mechanical Engineer  
☐ Interior Designer  
☐ Programmer  
☐ Construction Manager

#### Immediate Service Authorized

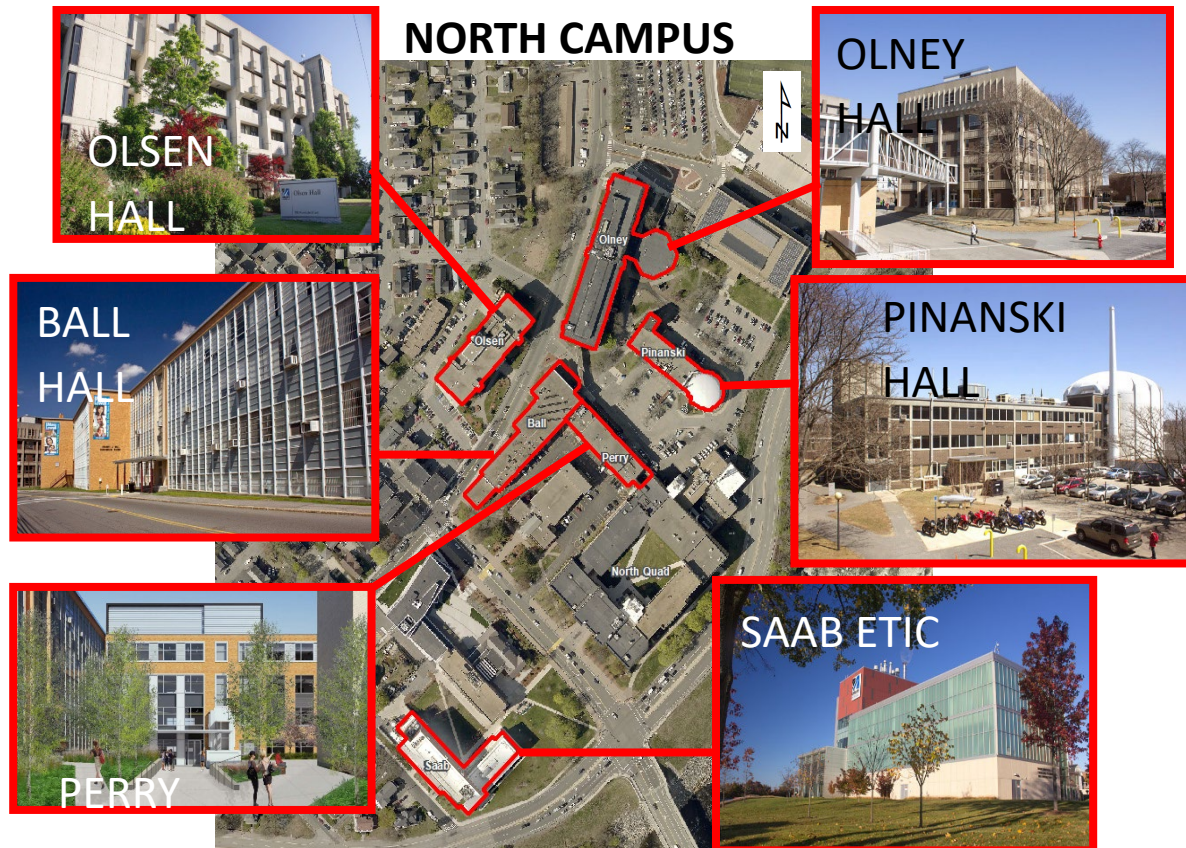
☒ Certifiable Building Study  
☒ Schematic Plans and Outline Specifications  
☒ Design Development Plans and Specifications  
☒ Construction Plans and Specifications  
☒ Administration and Construction Contract  
☐ Other

## Table of Contents

AGENCY INFORMATION .....	3
PROJECT OVERVIEW .....	4
SCOPE OF WORK .....	6
APPLICATION EVALUATION.....	7
Personnel .....	7
Evaluation Factors.....	8
SUPPORTING DOCUMENTS .....	9
PROJECT REQUIREMENTS .....	9
Affirmative Marketing.....	9
Additional Diversity Programs: .....	11
Energy, Sustainability and Climate Change Adaptation.....	11
Universal Design/Accessibility .....	12
Policies & Procedures .....	13
CONTRACT REQUIREMENTS.....	15
CONDITIONS FOR APPLICATION.....	15
APPLICANTS PLEASE NOTE.....	16

## AGENCY INFORMATION

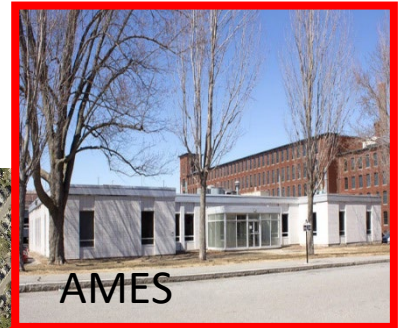
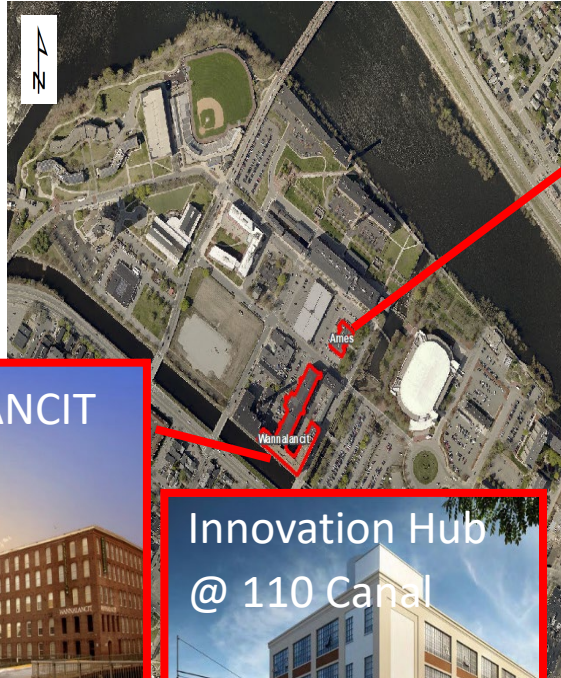
UMass Lowell is a public research university set in urban, historic, downtown Lowell. The campus is spread across three campus centers (North, South and East campuses) located within a radius of less than three miles from each other. The campus covers over 125 acres along the Merrimack River and has over 3 million SF in facilities. UMass Lowell facilities include buildings ranging in age from 5 to 125 years old.



## SOUTH CAMPUS



## EAST CAMPUS



## PROJECT OVERVIEW

The University seeks House Doctor MEPS firms for the preparation of certifiable studies, schematic plans and final design documents, as well as construction administration services for the replacement, alteration, and modernization of building mechanical, electrical, plumbing and fire protection systems.

Repair and modernization of campus facilities include, but are not limited to:

1. Research and instructional laboratories
2. Athletic facilities
3. Lecture halls, classrooms and teaching facilities
4. Office suites and administrative areas
5. Elevators
6. Residential Halls
7. Student recreational and support facilities, including dining and food service
8. Renovations within historical and/or buildings over 50 years old
9. Renovations within LEED Silver certified buildings

## SCOPE OF WORK

The scope of work may include but is not limited to:

1. Confirming the identified problem and investigating the nature and severity of the problem.
2. Documenting existing conditions.
3. Recommending detailed repairs and assessing order of magnitude costs for such repairs for both buildings as well as for campus support infrastructure.
4. Proposing alternate methods of repairs for resolution of the problem, including energy efficient alternatives. Develop budget and schedule impacts associated with the proposed solutions.
5. Developing the preferred solution to schematic design and/ or design development.
6. Preparing construction specifications and documents, cost estimates, and providing construction administration for the solution.

During the course of this contract, the University of Massachusetts Lowell expects to use e-Builder as a web-based project management software. The designer is expected to execute projects using the processes available in e-Builder. Once a process is rolled out live to e-Builder it will not be acceptable to perform the process or procedure outside of e-Builder. (Examples of processes performed in e-Builder include RFIs, submittals and change orders, etc.)

Consideration in the analysis should include energy costs, sustainability principles, expected remaining useful life of building systems and related life cycle costs. Particular attention should be paid to the constructability, reliability, durability and maintainability of building systems and materials.

If the selected designer is appointed for final design, the general scope of work will be defined by the certifiable building study and the current version of the DCAMM Designer Procedures Manual.

## 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. Mechanical Engineer (M/P/FP) (Prime Firm)
  2. Electrical Engineer
  3. Architect
  4. Structural engineer
  5. Landscape Architect
  6. Civil Engineer
  7. Specifications Consultant
  8. Cost Estimator (independent consultant required)
  9. MA Building Code Consultant
  10. Hazardous Materials 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 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.

## Evaluation 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 EDI goals, 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. detail the experience of the working relationships among the team, including a description of the roles and responsibilities among the team members assigned to this project.
2. Projects executed through this contract will be in the \$50k - \$10M construction cost range. Applications shall demonstrate experience with replacement, repair, and modernization of mechanical/HVAC systems, lighting, power, control systems, high and medium voltage electrical distribution systems, underground utilities, sprinkler, and fire alarm systems projects in this cost range.
3. Demonstrated experience working in existing buildings/occupied higher education facilities (academic classrooms, research and teaching laboratories, residential halls, student activity and athletic facilities, offices and administrative spaces)
4. Demonstrated experience being the prime designer on publicly bid Chapter 149 and Chapter 30/39M projects in Massachusetts in the \$50k - \$10M cost range. Experience carrying architectural sub-consultants preferred.
5. Key team members will have demonstrated experience in leading and facilitating projects which target high efficiency 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.

## SUPPORTING DOCUMENTS

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

- University of Massachusetts Lowell Website  
<https://www.uml.edu/>
- University of Massachusetts Lowell Design and Construction e-Library (contains design standards and frequently used forms)  
<https://www.uml.edu/facilities/planning-design-construction/project-management/forms-e-library.aspx>
- University of Massachusetts Lowell Strategic Plan and Latest Report Card  
<https://www.uml.edu/2020/>

## PROJECT REQUIREMENTS

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

### Affirmative Marketing

#### MBE/WBE Participation

**UML has not established minimum MBE/WBE participation goals for this project. Applicants from MBE/WBE firms as prime or sub-consultants are encouraged.**

Along with the MBE and WBE participation which reflect ownership status set forth below, the Designer Selection Board and **University of Massachusetts Lowell (UML)** 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, may 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 **University of Massachusetts Lowell (UML)** projects.

Further information about the MBE/WBE Program appears in the "Participation by Minority Owned Businesses and Woman Owned Businesses," in the current Commonwealth of Massachusetts Contract

for House Doctor at Attachment F, and on the Supplier Diversity Office website:  
<http://www.mass.gov/sdo>.

## **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](http://resilientma.org)).

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

In support of the Commonwealth’s commitment to sustainable design, the design team is expected to identify and integrate carbon reduction strategies including, but not limited to, low/no carbon fuel sources, high efficiency measures, and renewable energy sources such as geothermal and solar. Civil and landscape design should emphasize water conservation, integrated storm water management, and low-maintenance ecologically appropriate planting design. 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, especially, Section 3 – Standards for New Construction and Section 4 - Information about requirements for existing buildings): see <https://www.mass.gov/executive-orders/no-594-leading-by-example-decarbonizing-and-minimizing-environmental-impacts-of-state-government>.

Building studies may 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. The **University of Massachusetts Lowell (UML)** welcomes innovative design strategies that are usable by the widest range of people operating in the widest range of situations without the need for special or separate design. The design team is expected to utilize the [Goals of Universal Design](https://idea.ap.buffalo.edu/about/universal-design/) <https://idea.ap.buffalo.edu/about/universal-design/> as guidance for applying Universal Design solutions to the project.

### 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 <https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.htm> 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 or the applicable client agency 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. If an accessibility consultant is assigned, then the House Doctor must review and incorporate the accessibility consultants' findings into their proposed work. Assignment of an accessibility consultant does not relieve the House Doctor, designer, or their code consultant of their obligation to make sure all accessibility requirements are met on the project.

## 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 DCAMM or the **Awarding Agency**.

### DCAMM Procedures

The Designer must be familiar with the procedures established in DCAMM's Designer Procedures Manual <https://www.mass.gov/doc/designers-procedures-manual> (dated August 2008) 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 the **University of Massachusetts Lowell's (UML)** electronic web-based project management information system (e-Builder) as a repository for project correspondence, documentation, project budgeting, and scheduling. No special software is required.

### Workshops

The University of Massachusetts Lowell (UML) 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. **University of Massachusetts Lowell (UML)** 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 University of Massachusetts Lowell Design Standards on our e-Library at <https://www.uml.edu/facilities/planning-design-construction/project-management/forms-e-library.aspx>.

## **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/doc/cost-estimating-manual> 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 <https://www.mass.gov/doc/bim-list-of-services/download>

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**

**University of Massachusetts Lowell (UML)** will include an independent third-party building commissioning agent as part of this project, as needed. The commissioning agent will develop in collaboration with UML an operations and maintenance plan as a reimbursable expense during the building commissioning phase. The commissioning agent will meet with UML 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.

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

To the extent allowed under the Commonwealth public procurement laws and regulations, UML 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 [https://zdasets.aiacontracts.org/ctrzdweb02/zdpdfs/ipd\\_guide.pdf](https://zdasets.aiacontracts.org/ctrzdweb02/zdpdfs/ipd_guide.pdf) for informational purposes). To the extent the IPD approach and/or Lean Construction Tools conflict with UML's contract terms or the laws governing UML, then the contract documents and laws shall take precedence. DCAMM's preliminary approach to IPD will use CM procurement with the goal that UML, 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.

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

## CONTRACT REQUIREMENTS

Contract for Study, Final Design, and Construction Administration Services

UML uses DCAMM's 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.*

Study Phase: UML will establish a schedule to complete a Study, including Schematic Design on a per project basis.

Design Phase: UML will establish a schedule to complete design (DD and CD), and construction administration services on a per project basis.

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>.

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 <https://www.mass.gov/service-details/new-dsb-online-registration-process>

Selection Board provides an online registration system that can be accessed at. 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.formverse5.com/FORMVERSESERVER-DSB/WebApp/Login.aspx>