

ATTACHMENT F

**CONTRACT FOR DESIGNER SERVICES
AMENDMENT NO. 002**

EXHIBIT 1

**MSBA Designer Services Contract Amendment for DBB
v.02.25.11, Pages 1 – 25**

7.5 Design Development Phase

- 7.5.1 Upon receipt of an Approval to proceed to the Design Development Phase, the Designer shall meet regularly and as necessary with the Owner, the OPM, and the Authority. This shall include meeting at least once every other week with the Owner and the OPM during this Phase.
- 7.5.2 The Designer shall update and refine items submitted during the Schematic Design Phase, and shall submit to the Owner and the Authority, on or before the date specified in the Project Schedule, and on the basis of the approved Schematic Design Phase Documents, the following deliverables as they are defined in this Article 7.5.2 and as they are further defined in Articles 7.5.3, 7.5.4, 7.5.5, 7.5.6 and 7.5.7:
- (a) a list of all filings and permits within Designer's scope of services and professional expertise required to implement the design and a schedule of target dates for the procurement of such permits, which list and schedule shall be regularly updated during the term of this Contract;
 - (b) information and documentation within the technical expertise of the Designer and that is necessary for the Owner to file local basic zoning and environmental permits. The Designer, as Extra Services, shall provide information and documentation for the Owner to file Environmental Notification Forms, Environmental Impact Reports, and any other filings for permits that must be filed during the design development phase;
 - (c) soils exploration data, geotechnical and geoenvironmental reports, showing exploratory locations relative to siting of proposed structures;
 - (d) complete design development drawings; outline specifications indicating any filed sub-bid sections and sub-sub trades based on the cost of the work and other documents necessary to specify the size and character of the Project as to siting, landscape, architectural, structural, fire protection, plumbing, heating, ventilating and air conditioning, electrical, ADA/MAAB, product requirements and other features;
 - (e) quality control documentation demonstrating, without limitation, coordination of: ceiling clearances, mechanical room size, and shaft sizes; specifications and drawings; filed sub-bid work or sections; scheduling; equipment and power; existing and new construction; and phasing;
 - (f) design development drawings which the Designer shall submit for review to the local building official;
 - (g) a life cycle cost analysis to determine which design decisions related to all energy and water consuming devices and overall building operation and maintenance are the most cost effective [M.G.L. c. 149, s. 44M];
 - (h) a construction cost estimate for the design in Unifomat II Level 3 format, with unit rates and quantities supporting each item and reconciled with the detailed construction cost estimate and any updated cost estimates in accordance with Article 7.5.6. The estimate cost shall be projected, to the mid point of the construction period;

- (i) a space measurement analysis for the design verifying that the sum of all program areas in the Project plus all other floor areas in the Project equals the gross floor area of the Project;
- (j) a written summary or summaries comparing the project design, as represented in the design development drawings, specifications and cost estimates with the Final Design Program requirements, and explaining any deviations in writing.

7.5.3 Design Development Drawing Requirements: The Design Development drawings shall illustrate and describe the refinement of the design of the Project to a level of detail that is customary and standard, establishing the scope, relationships, forms, size and appearance of the Project by means of plans, sections and elevations, typical construction details, and equipment layouts. Drawings shall delineate locations and elements of Work which may be proposed to be assigned to project construction phases and/or separate bidding packages. Documents shall include, but not be limited to, the following:

- (a) Site and utility drawings showing;
 - 1. Existing and proposed contours and locations of the proposed building or addition(s). Show entry level elevation and key exterior grades at perimeter. Indicate all retaining walls. Include benchmarks of site if survey is available.
 - 2. All utilities existing and proposed, indicating location, elevation, composition and size e.g., manholes, sewers, hydrants, light standards. Include work by others, e.g., gas and electric utility providers.
 - 3. Roads, laid out parking areas, walks, recreation areas, terraces and other site improvements.
 - 4. Building locations fixed and referenced from main survey baseline, if available.
 - 5. Plant materials with preliminary schedule.
- (b) Building drawings and other graphic and written requirements with floor plans showing: (minimum scale 1/8" = 1'0");
 - 1. building perimeter with exterior wall thicknesses and overall dimensions;
 - 2. structural grid;
 - 3. plan requirements of mechanical and electrical systems;
 - 4. building core; elevators, stairs, shafts, toilet rooms;
 - 5. interior partitions; appropriate thicknesses and dimensions to fix basic organizations; indicate fire separations, ratings;
 - 6. door swings;
 - 7. floor elevations;
 - 8. built-in furniture and equipment; and
 - 9. furniture layout concept drawings.
- (c) Roof plans showing;

1. proposed systems type;
 2. pitch and drainage patterns;
 3. roof drains, gutters and scuppers;
 4. skylights, stairs through roof, penthouses, major equipment, chimneys.
- (d) Building sections: One transverse and one longitudinal section. Indicate floor to ceiling heights and floor-to-floor heights. Label all spaces;
- (e) Building elevations showing;
1. full height elevations including roof structures, e.g., mechanical equipment, chimneys, and penthouses;
 2. floor elevations, floor-to-floor heights, and overall height related to benchmarks on site plans;
 3. all fenestration;
 4. column centerlines;
 5. principal finish materials indicating major control and expansion joints, and divisions of materials where required;
 6. louver and equipment enclosure systems; and
 7. exterior grades and topographical features in context.
- (f) Full height wall sections for main elevations and at special conditions. Show foundation and perimeter treatment, wall construction including insulation and supporting structure, fenestration and mechanical penetrations, and floor construction;
- (g) Interior elevations: Major spaces, e.g. library, lobby, and all typical spaces, e.g. classrooms;
- (h) Reflected ceiling plans: show prototypical structural, fire protection, mechanical and electrical information for classrooms and major spaces, including lighting layouts with ceiling heights and material changes;
- (i) Colored interior elevations and perspectives of major and typical spaces
- (j) Schedules;
1. finish schedule by room types;
 2. door schedule by room;
 3. window schedule;
 4. equipment schedules, e.g., food service, instructional media.
- (k) Structural Concepts;
1. Foundation plan showing sizes and locations of typical components.
 2. Framing plans: typical floor framing, roof framing, special framing, show framing at major openings and sizes of members.
 3. Column locations.

4. Preliminary details including floor and roof deck, statements as to methods of lateral bracing and how requirements of earthquake code will be met.
 5. Details for special and/or incidental structural features, e.g. tunnels, connecting bridges and unique architectural features.
 6. Connection to existing buildings at foundation and at key points at existing structure if applicable.
- (l) Fire Protection: floor plans indicating wet or dry type systems, hose racks or cabinets and fire department tie-ins. Indicate whether a fire pump will be required and, if so, show location within the building. Show typical sprinkler head layout;
- (m) Plumbing and sanitary systems: floor plans indicating locations of all plumbing fixtures and special features, and approximate location and size of all piping systems and principal items of equipment;
- (n) Heating, Ventilating and Air Conditioning Systems;
1. Show locations and approximate sizes of piping systems, air handling systems and principal items of equipment such as compressors or cooling towers.
 2. Indicate space requirements of major equipment and their location in mechanical rooms and fan rooms. Major shafts.
- (o) Electrical Systems;
1. All services including those for special purposes shall be located and indicated.
 2. Lighting shall be indicated as to type, location and intensities in foot-candles for each special and typical space.
 3. Switchgear and emergency generator.
 4. Fire alarm system drawings showing all initiation and signaling devices, control panels, annunciator panels, etc.
 5. Security system drawings.
 6. Communications drawings showing chases, major equipment locations and any special distribution requirements.
 7. CATV/CCTV drawings showing chases, major equipment locations and any special distribution requirements.
 8. Information Technology drawings showing chases, major equipment locations and any special distribution requirements.
- 7.5.4 Other Consultant's Drawings and Other Graphic and Written Requirements: For special consultants, e.g., kitchen, elevator, library, media room, equipment where appropriate, provide drawings that locate and define the scope of the work. Coordinate with other disciplines. Provide cuts of all major pieces of equipment.
- 7.5.5 Project Manual Requirements (Specifications):
- (a) Outline Specifications that are to accompany Design Development Drawings shall be prepared to a level of detail that is standard and customary and shall include,

but not be limited to, a comprehensive description of the Project and the materials proposed for use in the work. No detailed specifications of materials or workmanship procedures need be included; however, the general scope shall be indicated by CSI MasterFormat as applicable to proposed construction.

1. The Design Development Outline Specification shall also include a comprehensive "BASIS OF DESIGN." The "BASIS OF DESIGN" shall be a narrative description of the Project and shall include all applicable architectural, civil, structural, mechanical and electrical programs and/or systems. Identify all proposed filed sub-bid categories.
 2. Project Manual shall include a statement to define Work which is proposed to be included in separate construction phases and/or bid packages.
- (b) The following is a list of items that shall at a minimum be identified or outlined in this Phase:
1. Site work; clearing, drives, walks, parking areas, fences, excavation, backfill, planting.
 2. Footings; on earth, rock, piles, caissons, proposed bearing pressures, boring logs.
 3. Foundation walls; type of concrete, reinforcing, type and extent of waterproofing.
 4. Footing drains; type, disposal of drainage.
 5. Exterior walls: superstructure, type, materials, brick type, alternate cladding, back-up materials, dampproofing material and extent, special features.
 6. Roofs; types, vapor barrier, insulation, flashings, all materials.
 7. Flashings; general types, all materials, weights, where each type is to be used.
 8. Sheet metal; gutters, leaders, others uses, except flashings.
 9. Windows; general types, materials, sub-frames, finish, glazing, screens.
 10. Doors, exterior and interior; types.
 11. Steps, exterior; including platforms and landings' materials.
 12. Stairs, interior; including platforms, landings, walls, materials and finishes.
 13. Framing; wood, concrete or metal systems in accordance with general design.
 14. Partition construction related to room type.
 15. Cabinet and casework; types and materials.
 16. Food Service Equipment; types and materials.
 17. Furring; lathing, plastering, materials and locations.
 18. Insulation thermal; types, thicknesses, methods of application and locations.
 19. Acoustical treatments; types, thicknesses, methods of application and location.
 20. Interior finishes; materials for floors, walls, bases, wainscots, trim, ceilings, ceiling heights.

21. Fire Protection; standpipe systems, sprinkler systems, fire pumps and accessories.
22. Water supply; source; location of main to which connection will be made; type of pipe for service main; load requirements; load factors and pressures.
23. Sanitary sewers; sewage disposal system, pipe and other materials.
24. Storm sewers; storm drainage disposal system (institution or local facility), pipe and other materials.
25. Gas main; material, size, location. Interface with utility company.
26. Plumbing; systems such as wastes, vents, hot water, cold water, gas, air, oxygen, vacuum, main source of supply, materials for each, water heaters, pumps, thermal insulation fixture quality, all special features.
27. Heating, ventilating and air conditioning; type of heating and refrigeration plants, type and capacity of boilers and cooling equipment, fuel, type of burners, fuel storage, heaters, feed water pumps and heaters, thermal insulation, type of heating medium, supply and return piping, radiation, unit heaters, radiant heating, principal air conditioning equipment types, special features, supply, return and exhaust ductwork.
28. Electric work; service connection, location, institution or public utility, overhead or underground, transformers including type and location, types of conduit and wiring, types of fixtures, location of main switchboard, radio, fire alarm, telephone, public address, emergency lighting and wiring, emergency or other generators, special features, including Master TV, information retrieval and/or data processing system.
29. Elevators, dumbwaiters and platform lifts; capacities, speed, travel in feet, landings, operation, controls, platform sizes, machine type and location, car and entrance finishes, signals.
30. Other built-in equipment, types and materials.
31. Special features.

7.5.6 Construction Cost Estimate Requirements – The Designer shall provide a construction cost estimate in Uniformat II Level 3 format with aggregated unit rates and quantities supporting each item referenced in Article 7.5.5(b). The estimate cost shall be projected, to the mid point of the construction period.

- (a) The Designer shall review its construction cost estimate in comparison with the detailed construction cost estimate, and any updated cost estimates, provided by the OPM and shall work in good faith and in cooperation and coordination with the OPM to reconcile any differences between the construction cost estimates, to clarify assumptions upon which the cost estimates are based and to address any concerns or questions with the cost estimates that are raised by the Owner, the OPM, or the Authority. If the Designer is unable to reconcile all differences between the two construction cost estimates with the OPM, then the Designer shall provide a detailed explanation of the differences to the Owner. If, in any case, the agreed-upon, reconciled construction cost estimate exceeds the Project

Construction Budget, the Designer shall cooperate with the Owner and the OPM in identifying, specifying and recommending changes in, or additional specification of materials, equipment, component systems and types of construction, or other adjustments in the scope or quality of the Project, including contingencies or alternative bid items, so as to facilitate revision of the design of the Project to reduce the cost of construction so as to comply with the authorized Project Construction Budget.

- (b) Cost estimate data shall be organized to identify elements of project work which may be proposed to be advanced under separate construction phases and/or separate bidding packages. When so proposed, estimates shall develop cost data relative to corresponding bidding and work execution dates established in project schedules.

7.5.7 Reports, drawings, specifications, cost estimates and other design development submittals shall be subject to the written approval of the Owner and the Authority. Unless a lesser number is requested by the Owner, the Designer shall submit to the Owner for approval six (6) copies of Design Development drawings, specifications, cost estimates, and other submittals. Two (2) copies shall be submitted to the Authority by the Designer.

7.5.8 The Designer shall present and explain the Design Development submittal to the Owner and the Authority and at a local public meeting scheduled by the Owner, if any such meeting is scheduled or in conference.

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

7.6 Construction Documents Phase: In addition to the requirements specified in the RFS (Attachment B), upon receipt of an Approval to proceed with the Construction Documents Phase of the Project from the Owner, the Designer shall do the following:

7.6.1 The Designer shall meet regularly and as necessary with the Owner, the Authority, the OPM, and the Commissioning Consultant. This shall include meeting at least twice per month (or more frequently if needed) with the Owner and the OPM during this Phase.

7.6.2 Based on the submittals approved in the Design Development Phase of the Project, the Designer shall update and refine the items previously submitted and shall submit the following on or before the date and time specified in the Project Schedule:

(a) Construction documents progress submittals as follows:

1. a 60% Construction Documents Submittal, with deliverables as defined in Article 7.6.3;
2. a 90% Construction Documents Submittal, with deliverables as defined in Article 7.6.4;

3. a Final Construction Documents Submittal, with deliverables as defined in Article 7.6.5;
 4. a Bid Documents Submittal, with deliverables as defined in Article 7.6.6
- (b) As a part of each of the submittals required under Articles 7.6.3, 7.6.4, and 7.6.5, an updated work plan and recommended updates for incorporation into the Project Schedule by the OPM;
- (c) As a part of each of the submittals required under Articles 7.6.3, 7.6.4, and 7.6.5, a report on the status of environmental, zoning, planning, building code, and ADA/MAAB approvals and permitting processes and a certified list of all required testing and all required permits identified in 7.5.2(a).
- (d) All submittals by the Designer shall be subject to the written approval of the Owner, which approval shall not be unreasonably delayed, withheld, conditioned, or denied. Unless a lesser number is requested by the Owner or is specifically provided hereinafter, the Designer shall furnish to the Owner for approval six (6) sets of the drawings, specifications, construction cost estimates and all other submittals. Unless a lesser number is specifically provided hereinafter, the Designer shall furnish two (2) sets of said drawings, specifications, construction cost estimates and all other submittals to the Authority. The Designer shall also furnish to the Owner and the Authority electronic media copies of the foregoing drawings and documents in such form as may be required by the Authority.

7.6.3 60 Percent Construction Documents Submittal:

- (a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a 60 % Construction Documents Submittal (60% CD Submittal), which shall include:
1. Construction Documents and other deliverables, as defined in this Article 7.6.3 and as further defined in Articles 7.6.2, 7.6.7, 7.6.8, and 7.6.9, advanced to a level of intermediate (60 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.
 2. In instances where the Designer takes exception to the Authority's previous review comments on the Design Development submittal, a written statement explaining its position.
 3. The Basis of Design that accompanied the Outline Specifications in the Design Development Phase shall be updated and expanded to include all proposed architectural, structural, fire protection, plumbing, mechanical, electrical, civil, and landscape design concepts for the Project.
 4. A space summary, in the form and format prescribed by the Authority, that sets forth the current space calculations and totals and certifies that said space calculations and totals are in compliance with those previously authorized by the Authority in the Project Funding Agreement.

5. Keying of graphics shall be sufficient to allow a reviewer to make his or her way through the set.
 6. A list of all drawings related to the Project.
 7. A materials selection statement identifying typical interior and exterior surfaces and their materials.
 8. A color theory statement indicating proposed paint colors and material selections for typical and special spaces and why they have been selected and how these selections relate to surrounding materials and colors.
 9. Large scale plans of all mechanical and electrical spaces with major equipment indicated.
 10. Project Manual, including all sections to be included in final technical specifications, developed to include a list of all materials in the building with their manufacturers. Identify all specifications sections which need to be filed sub-bid.
 11. Identify all proposed bid alternates by inclusion in a project manual section to be titled "Alternates." Alternates shall be listed in sequence as approved by the Owner. Work required under bid alternates shall be described and/or drawn, as appropriate, to clearly define the design criteria and extent of work involved for implementation of the bid alternate. In each instance, the existing conditions and/or new design criteria for base bid work shall also be described and indicated in documents.
 12. Code analysis: Provide a building code analysis. Any deviation from methods of compliance described in earlier submittals shall be indicated. Code analysis shall identify its preparer, code edition referenced, and include a comprehensive description of operative building code provisions, with floor plans showing fire separation types, area calculations, egress capacity for exits and exitways, and any special features required to comply.
- (b) As a requirement of the 60% CD Submittal, and in accordance with the provisions of this paragraph and Article 7.6.9, the Designer shall provide a construction cost estimate prepared using the Uniformat II Classification to Level 3, the CSI MasterFormat 6-digit format to Level 3 and MGL c.149 §44F (filed sub-bid) format including quantities of all materials and unit prices of labor, equipment, and materials as well as a cost estimate for each item of work, for review by the Owner and the Authority. The Designer shall submit said construction cost estimate separately, as a supplement to the 60% CD Submittal, no later than twenty-one days after the submission of the 60% CD Submittal described in Article 7.6.3(a). The development of said construction cost estimate shall under no circumstances delay the timely submission of the remainder of the 60% CD Submittal.

7.6.4 90 Percent Construction Documents Submittal:

(a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a 90 % Construction Documents Submittal (90% CD Submittal), which shall include:

1. Construction documents and other deliverables as defined in this Article 7.6.4 and as further defined in Articles 7.6.2, 7.6.7, 7.6.8, and 7.6.9, advanced to a level of substantial (90 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.
2. A space summary, in the form and format prescribed by the Authority, that sets forth the current space calculations and totals and certifies that said space calculations and totals are in compliance with those authorized by the Authority in the Project Funding Agreement.
3. Interior Materials Color Boards, including samples of principal interior materials, labeled and mounted to indicate locations.
4. Final structural and energy design calculations.
5. A statement confirming that the Owner has been provided with structural design drawings, specifications, and calculations sufficient to enable execution of an independent structural peer review process, as defined in the Massachusetts Building Code, as amended (this requirement is applicable, to satisfy Authority requirements for all school construction projects having a floor area in excess of 10,000 square feet). The Designer shall have advised the Owner of this requirement in writing not less than sixty (60) days prior to delivery of the 90% CD Submittal in order for the Owner to arrange for the services of an Independent Structural Peer Reviewer. Upon reaching 90 percent completion of construction documents, Designer's structural engineering consultant shall have reached a level of 100 percent completion of its construction documents to enable advancement of the independent structural peer review.
6. The Designer and its consultants shall fully cooperate with the Independent Structural Peer Reviewer in the process. The Designer shall obtain a copy of the Independent Structural Engineering Review report and submit same to the Owner and the Authority at the time of completion of the remainder of the construction documents at the level of final completion.
7. In instances where the Designer takes exception to any of the Authority's 60% CD Submittal review comments, a written position statement explaining the Designer's position on its exceptions to said review comments.

7.6.5 Final Construction Documents Submittal:

- (a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a Final Construction Documents Submittal, which shall include:
1. construction documents and other deliverables as defined in this Article 7.6.5 and as further defined in Articles 7.6.2, 7.6.7., 7.6.8, and 7.6.9, advanced to a level of final (100 percent) completion, and incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.
 2. a final construction cost estimate, in accordance with the provisions of this paragraph and Article 7.6.9, based on 90% Construction Documents, including cost estimates for general conditions, overhead and profit, insurance, bonds, and all other items expressed as percentage rates for design contingencies and construction contingencies and escalation to the bid date; and other mutually agreed upon contingencies. The final construction cost estimate shall be prepared in Unifomat II Elemental Classification to Level 3 (Sections A-G inclusive), the CSI MasterFormat to Level 3 and M.G.L. c.149, §44F (filed sub-bid) format and shall be complete with a single line description for each item with the detailed unit rate or item cost buildup provided in each case.
 3. complete construction drawings and specifications, certified by the Designer as having satisfied the firm's quality control review process as previously confirmed with the Owner, in sufficient detail to permit fixed-price bids in open competition for construction of the Project when documents have been approved for issuance for bidding.
 4. no later than at the 100% stage of completion of the final drawings and specifications, two sets of the final drawings and specifications that shall be provided to the local building official to be signed and stamped "Approved" by the local building official; two sets of plumbing drawings and specifications that shall be provided to the local plumbing inspector to be signed and stamped "Approved" by the local plumbing inspector; two sets of the fire protection, HVAC, and electrical construction documents that shall be provided to the local fire official to be signed and stamped "Approved" by the local fire official; two sets of the electrical construction documents that shall be provided to the local electrical inspector to be signed and stamped "Approved" by the local electrical inspector. Notwithstanding the foregoing, the Owner acknowledges that building officials, department inspectors, and fire officials have varying policies on approvals and submittal procedures, and the only obligation of the Designer in this regard is to promptly make the submittals described herein and assist the Owner in receiving the approvals to the extent available.
 5. at the 100 percent stage of completion of final drawings and specifications, a written summary comparing the final construction drawings and specifications and final estimated construction cost with the Final Design Program requirements and submittals made during the Design Development Phase and

earlier in the Construction Documents Phase, explaining any significant deviations.

6. In instances where the Designer takes exception to any of the Authority's 90% CD Submittal review comments, a written position statement explaining the Designer's position on its exceptions to said review comments.
7. The Independent Structural Engineering Peer Review Report obtained from the Independent Structural Engineering Peer Reviewer referenced in Article 7.6.4(e). The Designer shall include a certification statement from the project structural engineer designer of record to acknowledge receipt of the Report and to indicate response actions pursuant thereto. The Designer shall also forward a copy of said Report to the Building Inspector.
8. A certification that all applicable local, state and utility officials have been contacted by the Designer regarding each utility connection and that the persons responsible for permits or connection approval have agreed to the systems' use.

7.6.6 Bid Documents Submittal:

- (a) The Designer shall provide, on or before the date and time specified in the Project Schedule, a Bid Documents Submittal which shall include:
 1. Construction documents and other deliverables as defined in this Article 7.6.6 and as further defined in Articles 7.6.2, 7.6.7, and 7.6.8, incorporating corrections to indicate compliance with Owner and Authority review comments related to prior submittals.
 2. From the construction drawings and specifications approved by the Owner, incorporating such changes as the Owner or the Authority requires, a set of reproducible black and white drawings and original specifications on high quality white bond paper, single-sided, properly packaged, suitable for reproduction, stamped and signed by all disciplines, that shall be prepared by the Designer and transmitted to the Owner; which documents shall become the property of the Owner as provided under Article 16. Other suitable reproducible media, having the same content shall be substituted, when so directed or authorized by the Owner.
 3. Upon receipt of Owner authorization to advance to reproduction the approved documents for distribution to bidders and, upon reproduction thereof, the Designer shall promptly submit complete sets of bid documents to the Owner (two sets) and the Authority (one set - half size for Drawings). Any subsequent addenda shall be promptly submitted to the Owner and the Authority.

7.6.7 Drawing Requirements:

- (a) The documents prepared during the Construction Documents Phase shall set forth the requirements for construction of the Project to a level of detail that is customary and standard and shall include, but not be limited to:
1. General information showing drawing index, symbols, abbreviations, notes, locations map.
 2. Site drawings shall be complete to define the extent and detail of site work. Show the following:
 - a. Layout and location of all proposed work including buildings, structures, retaining walls, parking, walls and all other site improvements, with details.
 - b. Existing and proposed grades and contours including floor elevations, existing structures and topography, survey base line, bench marks and boring locations.
 - c. Landscaping and planting.
 - d. All utility service lines, systems and structures for electricity, gas, oil, water, steam, telephone, CATV, fire alarm, sanitary and storm drainage including size, composition, grades and directions of flow.
 - e. Contract Limit Line and Storage Area for construction materials.
 - f. All existing foundations, obstructions and other physical characteristics of the site which may affect the construction work.
 - g. Site survey.
 - h. Cuts of benches, light standards.
 3. Demolition drawings and temporary work required.
 4. Architectural drawings shall include at a minimum:
 - a. Floor plans of each floor, including basement and lofts or attic with room and corridor dimensions, wall thicknesses, column locations, floor elevations, mechanical and electrical openings, door and window designations, partition types, floor materials, built in furniture and equipment, keyed to other architectural drawings. All rooms numbered.
 - b. Large scale floor plans where required to illustrate detailed requirements of rooms.
 - c. Large scale plans showing key areas e.g. lobby, special spaces. Indicate surface materials. (minimum scale $\frac{1}{4}'' = 1' - 0''$)
 - d. Roof plans showing openings, drainage, slopes, expansion joints and all projections, including equipment.
 - e. Key plans on all floor plans and section drawings, where appropriate.
 - f. Building Sections as required to show spatial organization of building but no less than one longitudinal and one transverse.
 - g. Building elevations. All building elevations shall be fully developed, and hidden elevations shall be shown. Elevations shall be shown in a sequence as unfolded from a certain point.

- h. Full height wall sections indicating dimensions, flashing, anchorage, reinforcing, coursing, cladding, and all other conditions at wall, roof, foundation, interior floors.
 - i. Exterior details, for roofing, flashing, expansion control and construction joints, waterstops and other details showing all conditions both vertical and horizontal, including schedules.
 - j. Door, window, entrance, and storefront, schedules, and details.
 - k. Vertical circulation plans, sections and details including stairs, elevators, conveyors, dumbwaiters.
 - l. Interior elevations of all significant and typical spaces.
 - m. Interior details including casework, paneling surfacing and acoustical treatment.
 - n. Reflected ceiling plans coordinated with fire protection, mechanical and electrical drawings, and ceiling details.
 - o. Schedules (clearly define new or existing)
 - i. Doors
 - ii. Equipment, e.g. for services
 - iii. Partitions
 - iv. Finishes
5. Structural drawings shall indicate the following:
- a. Indicate or refer to location of geotechnical exploration data and reports related thereto.
 - b. Foundation plans with bottom grades showing layout of all footings, walls, slabs on grade including reinforcing, grade beams, and columns; include design soil bearing pressures and live loads.
 - c. Floor and roof plans of structural systems including framing, grades of finished floors and depressed areas, with locations and dimensions for all openings. Also indicate design floor loads.
 - d. Complete foundation wall elevation and typical sections, with reinforcing indicating location, dimensions and grades for all footings, steps and wall openings.
 - e. Complete details and sections with dimensions for all construction including expansion and construction joints, reinforcing and other embedded items.
 - f. Schedules (with dimensions) for all lintels, beams, joists, and columns.
 - g. Unless detailed on the Drawings, the following information shall appear in the general notes: class and 28 day strength of concrete for each portion, structural steel and concrete reinforcing design stresses for each type of structural member, concrete cover for each type of structural member, shrinkage and temperature steel requirements, reinforcing laps for main reinforcing and temperature steel; bendpoint, cutoff, and hook locations for all members, minimum beam and lintel bearing. Reinforcing steel fabrication shall be in accordance with most recent ACI, "Manual of Standard Practice for Detailing Reinforced Concrete." Structural steel fabrication shall be in accordance with the AISC "Manual of Steel Construction."

6. Fire protection drawings shall indicate standpipe systems, sprinkler systems, suppression systems, access panels, fire pumps, accessories, and piping. All piping, equipment, fixtures and devices shall be located and sized. Design criteria shall be provided on the drawings in accordance with NFPA requirements.
 - a. Fire protection work, other than site work, shall not be combined on the same sheets with the Plumbing, HVAC, Electrical, or other drawings except with the prior approval of the Owner.

7. Plumbing drawings shall indicate the following:
 - a. All work done by the Plumbing Subcontractor, which includes all water, gas, air, vacuum, medical gases, sanitary and storm wastes, and accessories. Include foundation drain lines unless established as the work of the General Contractor and shall not be indicated on the Plumbing Drawings. Site utilities shall be indicated on the utility drawings.
 - b. Plumbing work, other than site work, shall not be combined on the same sheets with the Fire Protection, HVAC, Electrical, or other drawings except with the prior approval of the Owner.
 - c. Trapping and venting of all plumbing fixtures including floor drains.
 - d. Water and gas supply sources, storm and sanitary discharge mains.
 - e. All piping shall be carefully sized and all sizes shall be indicated on drawings and riser diagrams. Indicate all directions of flow and pitch on piping.
 - f. All accessories, valves, fixtures including all drinking fountains, grease traps for kitchen waste and all necessary panels, identified as to type and size.
 - g. All piping and connections required for other trades (e.g., kitchen equipment, HVAC make-up water, etc.).
 - h. Acid waste, vents and neutralization systems for laboratories.
 - i. Plumbing Legend and/or graphical symbols on the first sheet of the Plumbing Drawings in accordance with the American National Standards Institute (ANSI).
 - j. Plumbing riser diagrams for structures two or more stories in height above the ground level.
 - k. Domestic water booster pumps, boiler feed water, meter location, hose bibbs, and wall hydrants.
 - l. Domestic hot water: storage tanks, piping material, hanger details.
 - m. All required access panels shall be indicated.
 - n. Backflow preventors and cleanouts. Verify that access and clearance provisions for periodically inspected devices, including backflow prevention, are adequate to satisfy requirements of inspecting agencies.

8. Heating, Ventilating and Air Conditioning Drawings shall indicate the following:

- a. HVAC work, other than site work, shall not be combined on the same sheets with Fire Protection, Plumbing, Electrical, or other drawings except with the prior approval of the Owner.
- b. All piping and ductwork systems shall be located and sized. All ductwork shall be shown double line.
- c. All systems shall be sized at all reductions and riser diagrams of piping and duct systems shall be indicated.
- d. All directions of flow and pitch on piping, and direction of flow, volumes for duct systems shall be indicated.
- e. All equipment shall have sufficient servicing and/or replacement space indicated on drawings.
- f. All equipment, accessories, valves and dampers with all necessary access panels, identified as to type and size. Access panels, where required for access to valves and dampers shall be indicated on drawings.
- g. Cooling system pumps, chillers, cooling towers, air handling units, ductwork system and dampers, fan details, temperature control system, air and hydronic balancing equipment, and schedules shall be indicated.
- h. Cooling tower design shall be indicated on the drawings showing site location, elevations and floor plan of equipment layout and typical flow diagram as related to the total HVAC system.
- i. All fire and smoke dampers, access panels and doors.
- j. Mechanical room designs:
 - i. Vent pipes for safety valves, relief valves, back pressure valves and tanks shall be extended above flat roofs in accordance with all governing authorities.
 - ii. In all designs for boiler and refrigeration plants, include a complete floor plan indicating location of all major mechanical equipment and sufficient service space.
 - iii. In designs of new and/or replacement boiler and refrigeration plants, provide a flow diagram detailing steam or hot water distribution systems, return systems, including all existing equipment and their function, as well as any proposed expansions with all necessary instrumentation and controls.

9. Electrical Drawings shall indicate the following:

- a. Site utilities shall be indicated on separate electrical site drawings, unless ample space is available on common site for utility drawings.
- b. Electrical work, other than site work, shall not be combined on the same sheets with Fire Protection, Plumbing, HVAC, or other drawings except with the prior approval of the Owner.
- c. General arrangement: Outline layout of each floor. Typical sections through the structure shall be indicated when necessary to define requirements, floor and ceiling heights, elevations, and type construction, including concrete pads shall be indicated. Indicate interface with other systems. Identify any work by general contractor or other trades.
- d. Interior lighting system: Light fixture schedules, circuiting location and mounting heights of all fixtures, receptacle and switch outlets, sizes and

types of all lamps, conduits, all other accessories and riser diagrams shall be indicated on drawings. Indicate details and method of supporting electrical fixtures and conduits. Designer shall specify that all electrical lighting fixtures be supported from the building structure, and shall be independent of ducts, pipes, ceilings and their supporting members. Comply with seismic design criteria.

- e. Power system: Locations, types and method of control for all motors, heaters, appliances, controllers, starters, branch circuits, feeder conductors and conduits. Indicate riser diagrams. Show details and indicate method of supporting electrical conduit. For larger projects, thermostats and control wiring are normally covered under the HVAC sub-contract, assure coordination.
- f. Fire Alarm, Data, Communications, CATV/CCTV Systems: Locations and types of all devices, outlets and equipment, service connections, wiring diagrams, all other essential details.
- g. Services: Location and details of all services, whether overhead or underground, feeder sizes, plans and elevations of switchgear and transformers, metering and service switchboard arrangements, wiring and ground fault diagram and bus ducts.
- h. General and sub-stations: Location, size, method of connection and protection of all generators, transformers, exciters, motor generators, switch gear, and associated equipment, current characteristics and equipment capacities. Indicate equipment connections by means of one line and/on wiring diagrams and schedule all major items of equipment and all instruments.
- i. Underground work: The size and locations of manholes and types of cables, number, size, and location of ducts, locations, sizes and types of cable supports, fireproofing, duct line profile, and one line diagram of connections. All underground chambers, including manholes and pull-boxes, shall be constructed of cast in place or one piece pre-cast concrete.
- j. Pole line work: if required as contract work, indicate location, length, treatment and class of poles, guying, cross arms, insulators, circuiting, transformers, protective and switching devices, lightning arresters, special structures, diagrams, current characteristics and grounding.
- k. Exterior lighting: Location, size, and type of transformers, luminary, poles, light standards, cables, ducts, and manholes, details of control equipment and connection diagrams.
- l. Emergency system details including transfer switch, type of fuel.
- m. One line diagram indicating load KVA, and available short circuit amperes at each transformer, switchboard, distribution panel board, branch circuit panel board, and at major pieces of equipment.
- n. Riser diagrams for all systems.

7.6.8 Project Manual Requirements:

- (a) The format for the Project Manual, including its technical specifications, shall be in accordance with the current CSI MasterFormat with separate sections for each of class of work required by M.G.L. c. 149 §44F.

(b) The following general information applies to the development of final Specifications:

1. Describe the extent of the work, the materials and workmanship, and include the work under the proper section. If any portion of the work included in a section of the Specifications is to be performed by a trade covered by another section, there shall be clear and distinct cross-referencing between the sections. Merely to state "by others" is not acceptable.
2. For each item of material or equipment, the specifications shall provide for a minimum of three named brands of material or equipment and the words "or equal" or a description of material or equipment which can be met by a minimum of three manufacturers or producers, and the words "or equal." Proprietary products shall not be specified except as provided by M.G.L. c. 30, § 39M; however, when they are specified, proprietary specifications are subject to the "or equal" provisions of M.G.L. c.30, § 39M.
3. Specify materials mined or manufactured in Massachusetts first and the United States of America second whenever possible.
4. Do not use general clauses intended to be all-inclusive in lieu of complete descriptions.
5. Do not duplicate standard requirements that are contained in the contract form.
6. Use consistency throughout. The word "will" shall be used to designate what the Owner, Authority, Owner's Project Manager, Commissioning Consultant, or the Designer can be expected to do, and the word "shall" shall be used to designate what is mandatory for the Contractor or subcontractors to do.
7. Use the same term throughout for the same subject and the term shall be the same as that used on the drawings.
8. Do not use the term "etc."
9. Avoid such terms as "to the satisfaction of the Designer," "as directed by the Designer," "as approved," and "as required".
10. Specify work in appropriate Sections according to local trade jurisdiction.
11. Avoid the use of the following symbols:

<u>Symbol</u>	<u>Use Instead</u>
#	number, no., or pounds
%	percent
"	inch or in.
x	by
'	feet or ft.
o	degree
/	per or at

12. In sections for which filed sub-bids are required, refrain from using such terms as "the Contractor," the "Heating Contractor," or "the Plumbing Contractor," but where necessary for clarity refer to the "HVAC Subcontractor," the "General Contractor" and the like.

13. Do not give numbers both in words and figures. Numbers less than 10 shall be written in words, 10 and higher numbers shall be written in figures. In expressing dimensions, figures such as 2 in., 16 in., 7 ft., 6 in., shall be used.
14. Each filed sub-bid section shall detail all labor and materials required by the particular sub-trade and list, by number, those drawings (and only those drawings) indicating work of that sub-trade. In addition, list drawings indicating work of a particular trade that appears on drawings that are not customarily included in the work of the trade, when applicable.
15. Do not specify that a product or system shall require prequalification or advance approval for use prior to bidding.
16. Established unit price items shall be used for work categories which cannot be ascertained for exact quantities in bid documents (e.g. earthwork removal and/or replacement items). In such cases, the Designer shall establish ranges of quantities with associated unit price values for each range. Unit price values shall be established for added work, for deleted work, for base bid quantities when conditions so-suggest. Unit price values shall be ascertained through consultation with cost estimators, be current, equitable, and well defined as to elements of work, overhead, like issues to be encompassed. Established unit prices shall be published within the applicable technical specification sections, and referenced from general conditions as being operative as the basis for determining values to be used for payment or recovery for change order work.
17. Staging, scaffolding, cutting and patching, refuse collection and disposal, demolition work and cleaning task, allocation policy and proposed language shall be carefully assigned to avoid duplication or omission.
18. A final draft of Project Advertisement, Notice to Bidders, Instructions to Bidders, Contract Forms, General Conditions, Supplementary General Conditions, and other "front end" documents shall be included in the 90% construction documents submittal, along with a final version of all text to appear in Division 1, General Requirements. The Designer may defer insertion of final advertising / bid dates and wage rates, understanding that they are to be established and inserted immediately prior to release of documents for bidding.

7.6.9 Construction Cost Estimate Requirements

The Designer shall provide the construction cost estimates described in Articles 7.6.3 and 7.6.5 in accordance with the following provisions:

- (a) The Designer shall review its construction cost estimate in comparison with the detailed construction cost estimate, and any update cost estimates, provided by the OPM and shall work in good faith and in cooperation and coordination with the OPM to reconcile any differences between the cost estimates, to clarify assumptions upon which the cost estimates are based and to address any concerns or questions with the cost estimates that are raised by the Owner, the OPM, or the Authority. If the Designer is unable to reconcile all differences between the two construction cost estimates with the OPM, then the Designer shall provide a detailed explanation of the differences to the Owner and the Authority. If, in any

case, the agreed-upon, reconciled construction cost estimate exceeds the Project Construction Budget, the Designer shall cooperate with the Owner and the OPM in identifying, specifying and recommending changes in materials, equipment, component systems and types of construction, or other adjustments in the scope or materials selections for the Project, including contingencies or alternative bid items, so as to facilitate revision of the design of the Project to reduce the cost of construction so as to comply with the Project Construction Budget.

- (b) Cost estimate data shall be organized to identify elements of project work which may be proposed to be advanced under separate construction phases and/or separate bidding packages. When so proposed, estimates shall develop cost data relative to corresponding bidding and work execution dates established in project schedules.
- (c) Cost estimates shall be projected to the mid point of the construction period.
- (d) The summary sheets shall contain the following:
 - 1. The date that the estimate was prepared. (Value Date).
 - 2. The anticipated bid date.
 - 3. The project and contract number.
 - 4. The title and location of the project.
 - 5. The name of the Designer.
 - 6. The name of the Estimator.
 - 7. The site work cost (including all utilities).
 - 8. The building cost (including fixed equipment).
 - 9. The estimated construction cost of each Phase of the work, totaled.

7.6.10 The Designer shall participate in a final review of the Construction Documents with the Owner, the OPM, and the Commissioning Consultant, and the Designer shall incorporate such changes as are necessary to satisfy the Owner's review comments.

7.7 Bidding Phase

7.7.1 The Designer shall, when authorized by the Owner, prepare for reproduction and distribution the construction bid documents, including advertisements, for receipt of proposals from construction contractors, and for execution of the Owner-Contractor Agreement. The Designer shall prepare all addenda (to include bidder questions and Designer responses), subject to the Approval of the Owner and the Authority. The Designer shall attend the pre-bid conference if one is scheduled, taking note of all questions asked. Relevant questions submitted in writing shall be answered by the

Designer by means of written addenda to the bid documents as required. The Designer shall attend each bid opening and, with the assistance of the Owner's Project Manager, conduct a review of the qualifications of the low filed sub-bidders and general bidder (and of other bidders if necessary) and shall, within five working days of the respective bid opening dates, advise the Owner in writing of the Designer's opinions as to the sub-bidders' bids and as to which general bidder is the responsible and eligible bidder that has submitted the lowest bid.

- 7.7.2 The Designer shall assist the Owner in the prequalification of prime contractors and subcontractors in the filed sub-bidder or trade contractor scopes of work pursuant to M.G.L. c. 149, §§44D½ and 44D¾ including participation as a member of the Owner's Prequalification Committee.
- 7.7.3 The Designer shall receive all inquiries relating to the bid documents and, when necessary, answer questions by preparing and issuing written addenda. The Owner shall review and approve all such addenda prior to issuance to bidders.
- 7.7.4 When sub-bids are required:
 - (a) Attend sub-bid openings.
 - (b) Assist in reviewing sub-bids with the Owner for completeness and accuracy.
 - (c) Assess sub-bid amounts relative to cost estimates.
 - (d) Assist in checking references of sub-bidders and make written recommendations as to their qualifications, only required for projects in which pre-qualification has not occurred.
 - (e) Issue a letter of recommendation to Owner upon acceptance of sub-bids, identify any categories to be re-bid and reason(s) therefor.
 - (f) Prepare and distribute the filed sub-bid tabulation to all prospective bidders. The tabulation shall be reviewed and approved by the Owner prior to its issuance to bidders.
- 7.7.5 Unless otherwise directed by the Owner, attend and conduct the general bid opening.
- 7.7.6 Review with the Owner and the Owner's Project Manager general bids for completeness and accuracy.
- 7.7.7 Review bidder responses for alternates and make written recommendations as to their acceptance.
- 7.7.8 If the Project has to be re-bid because of a defect in the bid documents prepared by the Designer or in procedures proposed by the Designer, the Designer shall correct the defect and take the necessary actions for re-bidding the Project on proper bid documents without any additional compensation to the Designer.
- 7.7.9 If within three (3) months after approval of Construction Contract Documents, in final form, the bids of the lowest responsible and eligible bidders or negotiated proposals exceed the approved Project Construction Budget, the provisions of Article 4.10 shall apply.

7.7.10 If the Owner awards a construction contract for an amount that exceeds the amount established in the Project Construction Budget, such an award will not affect the Fee for Basic Services.

7.8 Construction Administration Phase - Obligations During Construction: Following the execution of the Owner-Contractor Agreement, the Designer shall undertake certain of the obligations of administering the Owner-Contractor Agreement on behalf of the Owner, provided that Designer shall not be subject to provisions of the Owner-Contractor Agreement that would have the effect of expanding Designer's responsibilities or liabilities under this Contract without Designer's written consent. Services during this phase include, but are not necessarily limited to:

7.8.1 Upon commencement of construction activities for the Work or early bid packages or at times established in Project schedules, the Designer shall:

- (a) Furnish the General Contractor with information for establishing lines and grades and such supplemental drawings as are reasonably needed to implement the intent of the Construction Contract Documents;
- (b) With reasonable promptness and in accordance with schedules agreed upon by the Designer and Contractor, observe testing when required under this Contract, and review and act upon samples, schedules, shop drawings and other submissions from the General Contractor;
- (c) Prepare, maintain and update logs for all submittals;
- (d) Visit the site at intervals appropriate to the stage of construction, weekly or as otherwise agreed to by the parties, and observe the progress of the Work, issue written progress reports, and attend job meetings, and review and respond to meeting minutes prepared by the Owner's Project Manager, and to determine in general if the Work observed is being built in a manner indicating the Work when completed will be in accordance with approved Construction Contract Documents;
- (e) Collaborate with the on-site Project Representative of the OPM to identify and monitor issues of concern relative to the progress of the Work, and establish communications processes to help assure that matters of mutual concern are exchanged on a timely basis with one another, the OPM, Commissioning Consultant, and Owner;
- (f) On a weekly basis, make specific recommendations on rejection of any Work observed by the Designer that fails to conform to the Construction Contract Documents, and observe corrected Work;
- (g) Require each Subconsultant engaged in accordance with Article 5 to make visits weekly or as otherwise agreed to by the parties during the progress of any work to which that Subconsultant's services relate, and to report upon it in writing to the Designer;
- (h) Recommend actions to be taken which may include condemnation or rejection of any work that the Designer determines fails to conform to the Owner-Contractor Agreement;

- (i) Review and recommend appropriate action for proposed requests for changes and where required by the Owner, prepare documents associated with requests for a change in any Construction Contract Documents. Compensation for change order work by the Designer shall be determined in accordance with Article 10;
- (j) Conduct semi-final and final inspections of the Project and report the results of such inspections in writing to the Owner;
- (k) In association with the Commissioning Consultant, review the report by such Commissioning Consultant on the balancing of air and water circulation systems;
- (l) In association with the Commissioning Consultant, review the report by such Commissioning Consultant on the setting and adjustment of automatic controls;
- (m) In a timely manner, decide all questions regarding interpretation of, or compliance with, the Construction Contract Documents, except as the Owner may in writing otherwise determine;
- (n) In association with the Commissioning Consultant, review the recommendations of such Consultant for requirements upon operating and maintenance documents and building user training events and instructional media as established in the Construction Contract Documents; such Consultant or OPM shall coordinate involvement of contracting parties, the Designer, and Owner;
- (o) Furnish the Record Drawings as submitted by the General Contractor in accordance with 7.8.3, and other required documents;
- (p) Assist the Owner in providing the written Contractor Evaluations required of the Owner pursuant to M.G.L. c.149 §44D(7) at the completion of approximately 50% of the Construction Phase on forms prescribed by M.G.L. c.149 §44D(16);
- (q) Perform inspections of the work as necessary to prepare a punch list identifying each incomplete or deficient Work item and performing re-inspections to authorize removal of satisfactorily completed Work items from the punch list, or to determine that the Project is complete. In association with the OPM, a cost shall be assigned to each incomplete or deficient Work item when it has been determined that the Project has reached Substantial Completion; and
- (r) Receive from the General Contractor all maintenance and operating manuals, occupancy permits, guarantees and other similar relevant materials.

7.8.2 The Designer shall submit to the Owner's Project Manager within 48 hours all requisitions for payment submitted by the General Contractor in the form required by the Owner. The Designer may establish procedures with the Contractor for advance notification of requisition and/or draft version processing. With respect to each such requisition, the Designer shall certify to the best of its knowledge that the percentage of Work included in the requisition is accurate and that the work performed is in accordance with the Construction Contract Documents. In the event the Designer does not approve the requisition exactly as submitted by the General Contractor, the Designer shall forward it for payment to the Owner's Project Manager dated and signed with corrections and with an accompanying letter of explanation setting forth the Designer's objections and recommended changes. The Designer shall coordinate

the required visits of its own staff and those of its Subconsultants, to the construction site so as to enable it to submit to the Owner's Project Manager the General Contractor's monthly requisition for payment. Timely payments to the Contractor are required by M.G.L. c. 30, § 39K. Therefore, the Designer shall establish procedures to help assure either immediate mail or messenger delivery of the requisition for payment to the Owner's Project Manager, and shall process requisitions for payment within five business days after receipt of the same, provided the Contractor has submitted a full and complete requisition for payment in the correct form.

7.8.3 Prior to issuance of the Certificate of Substantial Completion, the Designer shall obtain from the General Contractor as-built drawings, including drawings showing the actual installation of the site utilities, plumbing, heating, ventilating and electrical work under the Owner-Contractor Agreement, and recording all changes. The Designer shall ascertain that changes authorized by change orders are shown on the General Contractor's as-built drawings, but Designer shall be entitled to rely upon the accuracy and completeness of the Contractor's as-built information, and shall forward such to the Owner as Record Drawings.

7.8.4 Issue the Certificate of Substantial Completion of Construction.

7.8.5 The Designer shall meet with the Owner monthly during this Phase.

7.9 Completion Phase: Upon acceptance of the Certificate of Substantial Completion of Construction by the Owner, the Designer shall thereafter provide the following services:

7.9.1 With respect to a completed Project, preparing a Certificate of Final Completion.

7.9.2 With respect to a punch list, re-inspecting the work up to three times in order to determine that the punch list work is satisfactorily completed.

7.9.3 Reviewing and certifying the Contractor's Application(s) and Certificate(s) for Payment as necessary.

7.9.4 Attending meetings as reasonably necessary in the opinion of the Owner's Project Manager, unless such meetings involve continued discussions of incomplete or deficient work and the Basic Services punch list site visits have been expended. In such instance, the meetings shall be paid for as Extra Services.

7.9.5 Using the as-built information maintained by the General Contractor during construction referred to in Article 7.8.3, and revising the applicable original reproducible drawings and electronic media drawings on the basis of the as-built drawings, provided that Designer shall be entitled to rely upon the accuracy and completeness of the Contractor's as-built information. Upon completion of the required drafting and editing, provide one set of mylar reproducibles, two sets of prints and two (2) electronic version copies to the Owner which shall become the property of the Owner. The cost for printing the mylar reproducibles and two sets of prints are Reimbursable Expenses.

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

- 7.9.7 Informing the Owner in writing, through the Owner's Project Manager, of all such warranty deficiencies that should be addressed.
- 7.9.8 Performing one (1) site inspection within a further sixty (60) days to see that all such warranty deficiencies have been corrected.
- 7.9.9 Evaluation of Contractor: The Designer shall assist the Owner with providing the written Contractor Evaluations required of the Owner pursuant to M.G.L. c.149 § 44D(7) within 70 days of the date of Substantial Completion for construction, on forms prescribed by M.G.L. c.149 § 44D(16).
- 7.9.10 Two (2) suitably bound legible copies of all original design and quantity calculations including those pertinent to change orders and shop drawings if applicable shall be furnished by the Designer to the Owner at the conclusion of the Owner-Contractor Agreement.

ATTACHMENT F

**CONTRACT FOR DESIGNER SERVICES
AMENDMENT NO. 002**

EXHIBIT 2

**Miller Dyer Spears
Designer Fee Proposal Documentation**

Lim Consultants, Inc.

6 Pleasant St., Suite 520, Malden, MA 02148

■ Phone: 781-338-9300 ■ cye@limconsultants.com

June 20, 2019

Will Spears, AIA, Principal
MILLER DYER SPEARS
99 Chauncy Street, Boston, MA 02111

Reference: Proposal on Design Development Phase through Construction Administration Phase Services
Braintree South Middle School, Braintree, Massachusetts
Lim Project Number: 2528.20

Dear Will:

We are pleased to submit herewith our fee proposal for the Design Development through Construction Administration phase structural engineering services for the Braintree South Middle School in Braintree, Massachusetts.

Project Description: We understand from the information provided that the proposed building would be a 145,741 GSF academic building with the estimated construction cost of \$69.2 M.

Basic Engineering Services: The scope of basic structural engineering services will be as follows:

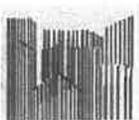
- Design of the primary structure for the building's superstructure and foundation.
- Design and detailing of peripheral structural members to support the facade including items like: angles, vertical struts, diagonal braces, plates, stiffeners, and related facade connections.
- Attend coordination meetings as required.
- Preparation of structural drawings at the Design Development phase, 60%CD phase, 90%CD phase, and 100%CD phase.
- Preparation of specifications pertaining to the primary structural work as shown on our drawings.
- Responding to and incorporation of MSBA comments and comments from peer reviewer.
- During construction administration phase, review of submittals related to the primary structural design including details as shown on our drawings, responding to RFIs, and issuing clarification sketches if requested.
- A maximum of 12 site visits to observe work for general compliance with our structural design, and field reports.

Excluded Services: It is to be noted that the following services are excluded from this proposal:

- Structural Engineer of Record affidavit and Structural Tests and Inspection as required by Chapter 17 of the Massachusetts State Building Code.
- Design, shop drawing review and site inspection of seismic restraints for mechanical, electrical, plumbing and fire protection systems.

Professional Fee: On the basis of the foregoing, the fee for our Basic Engineering Services will be as follows a fixed amount of \$353,000 (three hundred fifty three thousand dollars), the breakdown of which is as follows:

Design Development Phase	\$ 60,000
60% Contract Documents Phase	\$ 60,000
90% Contract Documents Phase	\$ 60,000
100% Contract Documents Phase	\$ 70,000
Bidding	\$ 13,000
Construction Administration Phase	\$ 90,000
Total:	\$ 353,000



Lim Consultants, Inc.

Date: 20 June 2019
Reference: Braintree South Middle School
Page: 2 of 2

Our quoted fee for basic engineering services is based the building square footage and construction cost noted in the Project Description. Should there be any change in the project size and/or construction cost, we reserve the right to renegotiate our fee.

Reimbursable Expenses: Our quoted fees include all expenses. We do not anticipate separate charges for expenses unless authorized in advance.

We wish to express our sincere thanks for the opportunity to submit this proposal. We look forward to working on this challenging project with you personally and working again with your firm. Kindly acknowledge acceptance of this proposal by signing and returning the enclosed copy which shall constitute authorization to proceed with the services described herein.

Very truly yours,



Christine Ye, PE
Principal

Accepted for:
MILLER DYER SPEARS

By: _____

Title: _____

Date: _____



Garcia, Galuska & DeSousa

Consulting Engineers Inc.

370 Faunce Comer Road, Dartmouth, MA 02747-1217

L#67144
Proposal

June 19, 2019

Miller Dyer Spears, Inc.
99 Chauncy Street
Boston, MA 02111

Attn: Will Spears, AIA

Re: Braintree South Middle School – DD through CA
Braintree MA

Dear Mr. Spears,

This proposal is for professional engineering services to provide design development through construction documents, including construction administration, for Plumbing, Fire Protection, Mechanical, Technology, and Security design services. This proposal excludes Electrical design services.

THE PROJECT

The project, as we understand it, consists of a new construction with the existing building to remain. The new building will be approximately 158,152 g.s.f. We will provide all required documentation per MSBA Module 6 and Module 7.

BASIC SERVICES

1. Under the lump sum fee proposal our design development, construction documents, and construction administration basic services include submissions for Plumbing, Fire Protection, Mechanical, Technology, and Security systems.
2. Our responsibility is to design the Plumbing Systems to ten feet outside the building foundation wall. Plumbing systems include domestic water distribution, natural gas distribution, water heating equipment for domestic use, sanitary distribution, plumbing fixtures and connections to appliances. Plumbing system design will include connections for all HVAC systems and will include new building gas piping design and design for boiler breeching. We shall coordinate with the local gas utility company to coordinate gas load requirements. Stormwater drainage system within the building Courtyard is included in plumbing scope however designed by Civil Consultant.
3. The fire protection design will include head end layouts for the building which will be superimposed on your reflected ceiling plans. The systems will be coordinated with the other trades and will be reviewed by us with the Fire Department. Service, alarm facilities, pumps, major runs of piping, and equipment will be shown on our drawings. Our fee includes the preparation of calculations necessary to comply with the requirements of the code. Sizing of the installed sprinkler piping network will be specified to be by the Sprinkler Contractor with review and approval by this office. During the analysis and code review phase, we will review the project, advise you of the relevant code requirements, and assist in discussions with the fire and building officials to determine the scope of required fire protection. We will assist in witnessing a flow test if required, however, other than witnessing any costs associated with completing the flow test will be billed as a reimbursable expense.

4. HVAC design will be based on the preferred schematic design HVAC system which will include a new high efficiency gas-fired condensing boiler plant and hot water heating system; high efficiency air conditioning displacement; ventilation system for classroom and administration areas; high-efficiency overhead air conditioning design for gym, locker room, and cafeteria/platform areas; and high-efficiency packaged rooftop air handling units and supplemental ductless cooling systems. The design for a new building energy management system with new direct digital automatic temperature control will also be provided.
5. Technology system design shall include outlet locations with an indication of outlet type and proposed label. Floor plans shall be coordinated with architectural and electrical power plans and shall be produced at the same scale as the electrical power plans. In addition, we will design all details showing terminal block and backboard elevations including all cable terminals, spaces for equipment, equipment racks, and station cable routing. Communications equipment closets (intermediate distribution frames – IDF's) shall be arranged to maximize the utility and growth potential available in spaces shown on the floor plans. Terminal elevations shall be based on detail elevations included in the contract documents and shall show additional detail as indicated herein, along with schedules showing terminal block quantities for all station cabling. Terminal outlet schedules shall show proposed labels for all four pair UTP horizontal cables at station outlets along with patch or 110 frame locations.
6. Technology equipment procurement including but not limited to network switches, servers, laptops, computers, wireless access points, interactive whiteboards, etc., which are considered technology FF&E is **excluded** from this proposal. Included in this proposal is coordination for technology infrastructure to accommodate this equipment as necessary.
7. Security system design shall include drafting work per Security Consultant recommendations. This proposal **excludes** security systems CA and specifications.
8. We will attend necessary coordination meetings attended by our project manager with your staff and other consultants as necessary to meet the projected design schedule.
9. Once final systems have been determined, and your office has authorized the preparation of construction documents, redesign of the documents to comply with further changes is considered to be an extra service.
10. All designs provided by this office will include LEED performance techniques. LEED Documentation and Energy Modeling are included in the basic services.
11. Documents will consist of REVIT drawings (latest version) and typed specifications all in format prescribed by your office. This proposal assumes that you will furnish the building backgrounds electronically compatible with REVIT (latest version).
12. Services during construction include review of shop drawings; document interpretation and clarification as may be required; and periodic observations of the construction work (not to exceed one observation per month during construction and reports thereon). Site observations are to determine general conformance of the work to the intent of the documents. This paragraph is not to be interpreted as requiring our attendance at weekly project meetings.
13. Included in the basic services is the furnishing of .PDF files for purposes of coordination and printing. Extraordinary printing will be billed as a reimbursable expense. Out of pocket expenses such as travel, sustenance, and other incidental expenses for routine trips to the project, and for coordination meetings with the design team, is included in the basic fee.

COMPENSATION AND PAYMENT

In consideration of the above, we propose a lump sum fee of Eight-Hundred, Seventy-Nine Thousand, Four-Hundred, Seventy Dollars **(\$879,470.00)**, detailed as follows:

PHASE	PLUMB	FIRE PROT	HVAC	TECH	SECURITY	TOTAL
Design Development	\$49,580.00	\$27,045.00	\$132,965.00	\$15,775.00	\$2,500.00	\$227,865.00
Construction Documents	99,160.00	54,090.00	265,935.00	31,550.00	7,500.00	458,235.00
Bidding or Negotiations	9,915.00	5,410.00	26,595.00	3,155.00	N/A	45,075.00
Construction Administration	39,665.00	21,635.00	106,375.00	12,620.00	N/A	180,295.00
Sub-Total	\$198,320.00	\$108,180.00	\$531,870.00	\$63,100.00	\$10,000.00	\$911,470.00
Less Study & SD						(64,000.00)
Sub-Total						\$847,470.00
LEED Documentation						12,000.00
LEED Energy Modeling						20,000.00
Total						<u>\$879,470.00</u>

Payment for the fee shall be made within 30 days of billing. Billings shall be rendered monthly in proportion to the services performed in the preceding 30-day period.

EXTRA SERVICES

Extra services shall be as set forth in Article 8 of the MSBA Designer Services Base Contract V.02.25.11. Extra services shall be confirmed and authorized in writing prior to rendering of same and may be compensated either by hourly reimbursement or on a mutually agreed upon fixed fee. Compensation for hourly services shall be in accordance with the following:

Principal	\$150.00/hr.
Senior Engineer	\$125.00/hr.
Engineer	\$105.00/hr.
Draftsman	\$ 70.00/hr.
Clerical	\$ 50.00/hr.

REIMBURSABLE EXPENSES

Reimbursable expenses shall be as set forth in Article 9 of the MSBA Designer Services Base Contract V.02.25.11.

We provide complete insurance coverage which includes \$4,000,000 aggregate Professional Liability Insurance coverage. Upon acceptance of this proposal, we will provide you with proper certification.

If the above meets with your approval, please return a signed copy to our office. This will act as our agreement and notice to proceed.

Very truly yours,

Garcia, Galuska & DeSousa
Consulting Engineers Inc.



David M. Pereira, P.E.

Miller Dyer Spears, Inc.

Will Spears, AIA

Date



38 Front Street FL 3, Worcester, MA 01608

Office: 508.797.0333

June 19, 2019

Mr. Will Spears, AIA, LEED AP BD+C, MCPPO
MDS/MILLER DYER SPEARS
ARCHITECTS
99 Chauncy Street, 8th Floor,
Boston, MA 02111

RE: Design Development, Construction Document and Construction Administration Proposal
Electrical Engineering Services
Braintree South Middle School
Town of Braintree, MA

Dear Mr. Spears:

ART Engineering Corporation (ART) is pleased to provide you with this proposal for consulting and design services associated with the Design Development, Construction Document and Construction Administration services for the electrical systems for the proposed project.

Listed below are details of our proposed scope of work and fee.

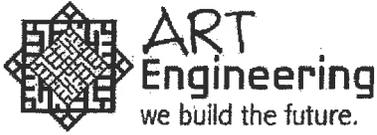
Scope of Work

Perform work associated with the electrical systems as described in the Massachusetts School Building Authority (MSBA) Contract for Designer Services Guidelines Sections 7.5 through 7.9 inclusive.

ART will provide the following services:

Design Development Phase:

1. Attend meetings as may be required.
2. Work will include but not limited to the following:
 - A) Calculations showing total electrical load.
 - B) All services including those for special purposes shall be located and indicated.
 - C) Lighting shall be indicated as to type, location and intensities in foot-candles for each special and typical space. Provide fixture cuts of typical lighting fixtures, e.g., classrooms. Provide fixture cuts for special lighting applications.
 - D) Switchgear and emergency generator shall be located and indicated.
 - E) Fire alarm system drawings showing all initiation and signaling devices, control panels, annunciator panels, etc.
 - F) PV System components shall be located and indicated.



Construction Documents Phase:

1. Attend meetings as may be required.
2. Work will include but not limited to the following:
 - A) Interior lighting system: Light fixture schedules, circuiting location and mounting heights of all fixtures, receptacle and switch outlets, sizes and types of all lamps, conduits, all other accessories and riser diagrams shall be indicated on drawings. Details and method of supporting electrical fixtures and conduits shall be indicated on drawings. All electrical lighting fixtures shall be supported from the building structure, and shall be independent of ducts, pipes, ceilings and their supporting members. Comply with seismic design criteria.
 - B) Power system: Locations, types and method of control for all motors, heaters, appliances, controllers, starters, branch circuits, feeder conductors and conduits shall be indicated on drawings. Riser diagrams shall be indicated on drawings. Details and method of supporting electrical conduit shall be indicated on drawings.
 - C) Fire Alarm System: Locations and types of all devices, outlets and equipment, service connections, wiring diagrams, all other essential details shall be indicated on drawings.
 - D) PV System: Locations and types of all equipment, service connections, wiring diagrams, all other essential details shall be indicated on drawings.
 - E) Services: Location and details of all services, whether overhead or underground, feeder sizes, plans and elevations of switchgear and transformers, metering and service switchboard arrangements, wiring and ground fault diagram and bus ducts.
 - F) General and sub-stations: Location, size, method of connection and protection of all generators, transformers, exciters, motor generators, switch gear, and associated equipment, current characteristics and equipment capacities. Indicate equipment connections by means of one line and/or wiring diagrams and schedule all major items of equipment and all instruments.
 - G) Underground work: The size and locations of manholes and types of cables, number, size, and location of ducts, locations, sizes and types of cable supports, fireproofing, duct line profile, and one-line diagram of connections. All underground chambers, including manholes and pull-boxes, shall be constructed of cast in place or one-piece pre-cast concrete.
 - H) Pole line work: Location, length, treatment and class of poles, guying, cross arms, insulators, circuiting, transformers, protective and switching devices, lightning arresters, special structures, diagrams, current characteristics and grounding.
 - I) Exterior lighting: Location, size, and type of transformers, luminary, poles, light standards, cables, ducts, and manholes, details of control equipment and connection diagrams.
 - J) Emergency system details including transfer switch, type of fuel.
 - K) One-line diagram indicating load KVA, and available short circuit amperes at each transformer, switchboard, distribution panel board, branch circuit panel board, and at major pieces of equipment.
 - L) Riser diagrams for all systems.

Construction Administration Phase:

1. Construction Administration Phase and Completion Phase services shall be provided in accordance with MSBA Contract for Designer Services Guidelines Section 7.8 and 7.9.



38 Front Street FL 3, Worcester, MA 01608

Office: 508.797.0333

Fee

ART proposes to perform the scope of work associated with the electrical systems for a lump sum fee of \$268,400. Our fee is broken down by phases as follows:

Design Development Phase	\$59,048	(22%)
Construction Document Phase	\$120,780	(45%)
Bid Phase	\$8,052	(3%)
Construction Administration Phase	\$67,100	(25%)
Closeout Phase.....	\$13,420	(5%)

Invoice for services will be rendered monthly, based on the percent of completion or percentage of effort expended by ART. Please sign and return a copy of this proposal indicating your acceptance.

Should you have any questions please call our office, or you can reach me on my cell at (508) 963-3600.

Cordially,

Azim Rawji, P.E.
Principal

Accepted for Client:

By: _____

Title: _____

Date: _____



June 20, 2019

Mr. Will Spears, AIA, LEED AP BD+C
Principal
Miller Dyer Spears
99 Chauncy Street
Boston, MA 02111

**RE: Professional Landscape Architectural Services for Design Development through Construction Administration for the South Middle School
Braintree, Massachusetts**

Dear Mr. Spears:

Traverse Landscape Architects (TLA) is pleased to offer this proposal for landscape architectural design services for the above-mentioned project.

I PROJECT UNDERSTANDING

It is our understanding that we will be working directly for Miller Dyer Spears (MDS) and will coordinate our efforts directly with your office and members of the consultant team.

This proposal is for landscape architectural services for Design Development through Construction Administration Phases of the project in keeping with Massachusetts School Building Authority (MSBA) requirements for South Middle School located in Braintree, MA. The school is located at 232 Peach Street in Braintree is surrounded by residential abutters to the east and west with a wooded area to the north.

II ASSUMPTIONS

- Base material, survey information, and previously developed plans will be provided to us in both hardcopy and digital format (AutoCAD Release 2002);
- TLA will assemble its material in a format consistent with the other members of the consultant team and our work will be incorporated into MDS's submission material;
- MDS will provide Architectural drawings including floor plans, developed elevations and details of proposed improvements as they are developed as well as program guidelines for the site development;
- TLA will review and provide design guidance on site related issues including sidewalks, parking, drop-off areas, circulation, grading and drainage, retaining walls, exterior hardscape areas, tree protection, plantings, play areas, open space and other site features that can affect the overall landscape appearance;
- TLA will coordinate with the civil engineer and the surveyor to understand all of the environmental and manmade constraints;
- We assume site elements such as structural design, grading and drainage, utility plans, phasing plans, demolition plans, overall site plans showing roads, curbs, traffic control, service areas, etc. will be prepared by the Civil Engineer with our review and input as required;
- Design, plan submissions and meetings above and beyond this scope of work shall be by supplemental agreement.
- We assume LEED for Schools will be used for this project.
- We assume outdoor field space is considered Open Space graded at similar slopes that exists today with no irrigation or formal athletic field design.
- We assume this will be a Chapter 149 Project - Design, Bid, Build

- We assume Design Development for Estimating will be done by Mid October 2019 and that 100% Bid Documents will be done by August 2020 with construction beginning in October 2020 with completion in June of 2022.

III EXCLUSIONS

This proposal excludes the following. If required, the services listed below will be by supplemental agreement:

- 1.0 **Permitting:** Permitting will be done by others. TLA will prepare documentation as necessary for permitting submissions. Any permitting or public presentations other than those specifically outlined in the Scope of Services will be by supplemental services agreement.
- 2.0 **Offsite Improvements:** Offsite improvements outside of the property lines including parking, sidewalks, landscape and roadway improvements have not been included in this proposal.
- 3.0 **Demolition:** Methods, timing and design for demolition of on-site structures are by others. TLA will provide information regarding tree and amenity protection, removal, stockpile or return to the owner to be included in demolition plans prepared by others.
- 4.0 **Lighting Design:** TLA will coordinate conceptual lighting locations, type and style with the Electrical Engineer and provide review and plan coordination as required. Final exterior lighting plans, electrical plans, and photometric studies will be prepared by electrical engineer.
- 5.0 **Cost Estimating:** TLA will not prepare cost estimates. TLA will review estimates prepared by others for items related to our work at all phases of design.
- 6.0 **Drainage, Grading and Utility Design:** TLA will set grades during design development. TLA will coordinate grading and drainage with the civil engineer throughout the design phases. The civil engineer will own final site grading, drainage and utility design in their plans.
- 7.0 **Meetings:** TLA will attend meetings as outlined in this scope of work. Additional meetings above and beyond what is outlined herein, will be by supplemental agreement.
- 8.0 **Irrigation design:** If irrigation design is requested, TLA will provide additional services for irrigation design.
- 9.0 **Project Phasing:** TLA will review and provide input on project phasing diagrams prepared by others as required.
- 10.0 **Early Bid Packages:** TLA does not anticipate early bid packages for this project. If required, TLA will provide additional services to prepare documents.
- 11.0 **Athletic Field Design:** No athletic field design is anticipated at this time. If required or requested, TLA will prepare additional services to prepare athletic field design documents.

IV SCOPE OF SERVICES

- 1.1 **Design Development Plans:** Utilizing the accepted Schematic Design plans and cost estimate review, TLA will prepare design development documents. It is anticipated that there will be two submissions during the design development phase: Draft submission for cost estimating and 100% Design Development for MSBA. These plans will include:
 - **Hardscape Materials and Amenities Plans:** The TLA design team will prepare hardscape plans indicating pedestrian circulation, walks, paths and plazas including materials, site furnishings, paving patterns, scoring patterns and construction methods. TLA will coordinate with your office on how the new construction, building materials, entrance areas and outdoor elements fit in with the site development. TLA will also provide spot grading and confirm drainage for plaza areas and courtyard areas with the Civil Engineer. TLA will review lighting concepts with MDS and the Electrical Engineer. TLA will review grading concepts with MDS and the Civil Engineer.
 - **Landscape Plans:** Landscape plantings plans including trees, shrubs, and groundcovers, as well as any specialty plantings such as school gardens, screening, rain gardens and storm water treatment areas.
 - **Details:** Hardscape and landscape details required at a design development level.

- 1.2 **Permitting Plans:** We anticipate that we will also prepare a stamped permitting set to the team at this stage. Formal submission will be by others.
- 1.3 **Draft Technical Specifications:** The TLA design team will prepare technical specifications for the information related to the site design components we are responsible for.
- 1.4 **Cost Estimate Review:** Based on the cost estimate prepared by others, the TLA team will review the estimate and prepare comments and if necessary potential cost saving solutions.
- 1.5 **Project Coordination:** TLA will coordinate with the project team throughout this phase to review and discuss design development issues related to this project. TLA anticipates attending up to four (4) coordination meetings during this phase. Coordination meetings can be design team meetings or meetings at the town for permitting. In addition, we also anticipate preparing presentation material and presenting at three (3) Building Committee Meetings.

Deliverables:

- One Draft DD Submission for Estimating
- One (1) formal Design Development Submission for MSBA
- One (1) Stamped Permitting Submission
- Technical Specifications

Services:

- Four (4) Coordination Meetings
- Three (3) Committee Presentations
- Cost Estimate Review
- Project Coordination

Task 2 – Construction Documents

- 2.1 **Construction Documents:** Utilizing the accepted Design Development designs and cost estimate review, TLA will prepare construction drawings and specifications at a level suitable for bidding and construction. The following submissions are anticipated: 60%, 90% and 100% Bid Set. These submissions include estimating sets and MSBA sets.

This task will include the final design of the required site and landscape details for the project, providing the Civil Engineer with site plan information and final grading to show on Civil Plans, and general coordination with the consultant team.

- 2.2 **Project Administration and Coordination:** The TLA team will coordinate with the project team during the development of the construction documents. It is anticipated that a total of three (3) meetings will be necessary during this stage of the project and one (1) Building Committee Presentation.

TLA will prepare responses to MSBA and OPM comments at 60% and 90% and revise plans and specs accordingly.

- 2.3 **Cost Estimate Review:** Based on the cost estimate prepared by others, the TLA team will review the estimate and prepare comments.

Deliverables:

- Construction Plans and Details for Estimating DD, 60% and 90% Submissions
- Construction Plans and Details for MSBA DD, 60%, 90% and 100% Bid Docs
- Technical Specifications

Services:

- Three (3) Coordination Meetings
- One (1) Building Committee Meeting
- Cost Estimate Reviews

Task 3 – Bidding

3.1 Pre-bid: The TLA team will attend a pre-bid meeting to receive questions or clarify Construction Document and Site work Technical Specification information, as required. It is anticipated that that TLA will attend one (1) meeting during the Bidding Phase.

3.2 Construction Document Addendum Preparation: The TLA team will provide written or sketch clarification, as necessary, to bidding contractors during the Bidding Phase. Once the Bidding Phase is complete the TLA team will provide one final issued Construction Document Addenda incorporating document changes for the bid document package.

Deliverables:

- Written Clarifications
- Drawing Clarifications
- Final Addendumized Construction Document Package

Services:

- One (1) Coordination Meeting

Task 4 – Construction Administration

4.1 Construction Observation: The TLA team will assist the project team during the construction phase of the project. Our effort will focus on those elements of the site that the TLA team has prepared final design documents for. This task includes attending pre-construction meetings, construction/job meetings, and visiting the site during the construction operations to provide an opinion of whether the work is proceeding in accordance with the design intent. This task includes meetings/site visits, plant tagging at a nursery within 100 miles of project site, clarifications, pencil requisition review, field reporting, time to review shop drawings and the preparation of field reports.

4.2 Construction Coordination Meetings: The TLA team will be available to attend construction meetings for this project. It is anticipated that the construction meetings will be at the same time as the construction field observation. TLA anticipates bi-weekly meetings when trade contractors are on site relating to our scope of work.

4.3 Consultation during Construction: The TLA team will be available to provide consultation during construction to interpret and make clarifications to contract plans and specifications, and resolve changes brought on during construction encountered by field conditions.

4.4 Shop Drawing Review: Contractor's submittals will be reviewed for compliance with the plans, specifications, and contract documents and for conformance with the design intent.

Deliverables:

- Shop Drawings
- Field Reports
- Submittal Review
- Clarification Sketches

Services:

- Site Meetings/Visits
- Consultation during Construction

Task 5 – Closeout

5.1 Punch List & Warranty Review: The TLA team will assist in the preparation of a site work punch list to be utilized in determining the Contractors substantial completion of site work construction. For this effort, the TLA design team has budgeted for two (2) punch list site inspection visits and for the preparation of a site work punch list. The TLA design team will assist in the review of any Contractor warranty submittals pertaining to our scope of work. TLA will provide maintenance guidelines for the landscape that can be incorporated into an Operations and Maintenance manual prepared by others. TLA will prepare any required affidavits and certificate of occupancy. TLA will prepare final documentation as required for LEED certification.

Deliverables:

- Two (2) Punch List Reports
- Required Certificates of Occupancy
- Required Affidavits

Services:

- Punch List Visits
- Warranty Review

V FEES	
Our fee structure for the above-outlined scope of work is as follows for each school:	
1. Design Development	\$32,000.00
2. Construction Documents	\$45,000.00
3. Bidding	\$5,000.00
4. Construction Administration	\$35,000.00
5. Closeout	3,000.00
Total	\$120,000.00

VII ADDITIONAL SERVICES

Other services required by MDS that are not part of the Scope of Services, as described above, shall be considered Additional Services. Additional Services shall be furnished by TLA, or obtained from others by TLA if requested in writing by MDS. MDS shall pay TLA for Additional Services in accordance with rates and charges agreed to in writing prior to authorization by MDS. See below for hourly rates:

Principal	\$125
Senior Associate	\$105
Associate	\$ 95
Senior Landscape Designer	\$ 85
Landscape Designer	\$ 75
Visualization	\$ 85
Clerical	\$ 45

If this proposal is acceptable to you, kindly indicate so by signing in the space provided and returning a copy to me. We will begin work immediately upon receipt of notification to proceed.

Traverse Landscape Architects, LLC appreciates this opportunity to be of service to Miller Dyer Spears. If you have any question or comments, please feel free to give me a call at (401) 383-4950.

Sincerely,
Traverse Landscape Architects, LLC

Accepted for
MILLER DYER SPEARS



Kris M. Bradner, RLA
Principal

Authorized Signature

Date

Please Print Name

June 26, 2019

Miller Dyer Spears
Attn: Will Spears
99 Chauncey Street
Boston, MA 02111



Re: South Middle School – Braintree, MA (DD-CA)

SCI #18074.00

Dear Will:

Samiotes Consultants, Inc. (Samiotes) is pleased to present this proposal for civil engineering services for the South Middle School located at 232 Peach Street in Braintree, Massachusetts. Our proposal is as follows:

I - SCOPE OF WORK

- A. **Site Preparation:** Samiotes will provide a Site Preparation Plan that will include demolition and removal of documented site elements, (identified) utilities below grade, and a Soil Erosion and Sediment Control Plan. The Soil Erosion and Sediment Control Plan will incorporate Best Management Practices (BMP's) principles in accordance with the latest methods established by the Massachusetts Department of Environmental Protection. Detailing of any building demolition (or demo of any structural elements) will be the responsibility of others. This scope will include the design of the reconfiguration / relocation of the existing site utility lines (if required) to be rerouted to accommodate the construction of the elementary school while the existing school is occupied.
- B. **Site Grading:** Samiotes will design the surface grading for the site from a drainage and ADA/MAAB perspective, thereby coordinating and implementing the requirements of the Owner, Architect, and Landscape Architect to the furthest extent possible. This will include review of and provide input to the earthwork spec.
- C. **Stormwater Management:** Samiotes will design a stormwater management system for the proposed building and site. This design will also include a tie-in of roof drains to the subsurface storm drain system. This work will include, as necessary, the design of a storm water collection system. Courtyard drainage system to be designed by Civil but to be part of plumbing contractor's work, drawn and specified as part of plumbing documents, with the exception of the drainage structures and perforated piping to be specified by Civil and provided by the site contractor; coordination matrix to be produced by Plumber for inclusion into CD's. The new stormwater management system will connect with existing storm drainage lines within the site. The stormwater management system shall be designed to accommodate storm events as required by the Town of Braintree.
- D. **Water System:** Samiotes will design a water system on site. This design shall include all fire protection lines into the building from existing water lines located on site. Criteria of line sizes and locations shall be the responsibility of

Samiotes Consultants, Inc.
Civil Engineers + Land Surveyors

20 A Street
Framingham, MA 01701-4102

T 508.877.6688
F 508.877.8349
www.samiotes.com

the Plumbing Consultant. This design will be coordinated with the plumbing contractor, drawn and specified as part of plumbing documents, with the exception of the drainage structures and perforated piping to be specified by Samiotes and provided by the site contractor.

- E. **Sanitary Sewage:** Samiotes will design the connection(s) of sanitary sewage services from the building to existing sanitary sewer lines located on site or in adjacent streets. Criteria of line sizes and locations shall be the responsibility of the Plumbing Consultant.
- F. **Vehicular Hardscape Design:** Samiotes will specify all vehicular hardscape elements (i.e. paving, curbing, etc.). Specific design features (decorative paving, paved terraces, and all pedestrian hardscape, etc.) will be the responsibility of the Landscape Architect. Samiotes will illustrate vehicular turning radius movements for emergency (fire trucks and ambulances) and service vehicles (busses, delivery trucks, dumpster truck access, and guest access). It is the Client's responsibility to provide Samiotes with the design criteria (i.e. maximum truck size).
- G. **Miscellaneous Utilities:** Samiotes will illustrate gas, electricity, telephone, cable and lighting for coordination purposes only. The design, detailing, and specifications shall be the responsibility of others.

II – TASKS

- A. **Soil Testing:** Samiotes will conduct soil testing for the site, which includes up to eight (8) hours on site with a Licensed Soil Evaluator present. This testing is required to determine the soil type / water table for drainage / site design. This task will also include coordination with the Excavator and Dig Safe and soil logs for testing by Samiotes. *Excavator Fees and Sig-Safe Markings will be the responsibility of the Owner.*
- B. **Design Development:** This task shall consist of documents which are of sufficient detail for review by the Owner and Design Team in accordance with the AIA definition of Design Development. This task shall include, but not be limited to, the design elements as outlined in Section I – Scope of Services. Design Development shall consist of plans and specifications. This task shall in essence be the basis for the Permitting and Contract Documents portion of this proposal.
- C. **Town of Braintree Planning Review:** Samiotes will prepare and submit an application for "Site Plan Review" or "Grading Permit" for the proposed project submission to the Town of Braintree Planning Board. This submission shall meet the requirements of the Town of Braintree Regulations and shall include a bound booklet that contains all applicable forms.
- D. **Contract Documents:** will consist of documents for civil engineering issues that are of sufficient detail for bidding and construction. These documents shall include Plans, Details, and Specifications in CSI format. Elements addressed in Contract Documents are:
 - 1. Site Preparation / Soil Erosion Plan.
 - 2. Utilities (Stormwater Management, Water, and Sanitary Sewage) Plan.
 - 3. Grading Plan.
 - 4. Vehicular Hardscape Design
 - 5. Construction Details for the aforementioned plans.
 - 6. Technical Specifications for the aforementioned plans and details shall be completed in CSI Standards format.

- E. **Meetings, Hearings and Coordination:** Samiotes shall meet with the Client/Design Team regarding permitting elements as necessary. This proposal assumes up to three (3) meetings and four (4) hearings.
- F. **Town of Braintree Building Permit:** (Site Drawings / Affidavits) – This task includes the coordination and production of up to four (4) wet stamped sets for inclusion in submission to the Town of Braintree from a building permit. This does NOT include a Plot Plan.
- G. **Bidding and Negotiations:** Samiotes will answer RFI's in a timely manner, review and comment on proposed value engineering ideas, and advise the Client with respect to VE options as required.
- H. **Construction Administration:** will consist of work required through the construction of the project. This work assumes an eighteen (18) month construction schedule and is as follows:
 - 1. Review of RFI's and Contractor COR's.
 - 2. Shop Drawing Review.
 - 3. Site Visits/Meetings (assumes up to 20 visits/meetings).
 - 4. Plan revisions based on site conditions.
 - 5. Solutions to civil engineering issues not addressed on construction drawings due to unknowns.
- I. **LEED Services:** Samiotes will work with the Owner and Design Team to add LEED certified elements to the Site Design and provide the required calculations/documentation for the USGBC to certify the project.

III – FEE FOR SERVICES (Invoice Task in Italics)

- A. **Soil Testing (Task 4)**
Fixed Fee – \$1,850.00
Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.
- B. **Design Development (Task 5)**
Fixed Fee – \$23,500.00
Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.
- C. **Town of Braintree Planning Board Review (Task 6)**
Fixed Fee – \$16,000.00
Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.
- D. **Contract Documents (Task 7)**
Fixed Fee – \$32,800.00
Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.
- E. **Meetings, Hearings, and Coordination (Task 8)**
Fixed Fee – \$10,500.00
Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.
- F. **Town of Braintree Building Permit (Task 9)**
Fixed Fee – \$350.00 per submission
Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.
- G. **Bidding and Negotiations (Task 10)**
Fixed Fee – \$2,000.00
Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.

Design
Development
Phase

Construction
Document
Phase

Bid Phase

<p>H. Construction Administration (Task 11) Fixed Fee – \$30,000.00 Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.</p>	CA Phase
<p>I. LEED Services (Task 12) Fixed Fee – \$3,000.00 Method of Billing – Lump Sum billed monthly as a percentage of task completion basis.</p>	Construction Document Phase

EXPENSES: Reimbursable Expenses are included in the fees listed above with the exception of Certified Mailings (required for initial filings) or any printings for submission(s) beyond those listed above. This assumes there will be up to two (2) submissions per filing.

IV – ADDITIONAL SERVICES

Additional services are those services not listed above. If necessary, additional services will be performed upon receipt of authorization to proceed and may include, but are not limited to, the following:

- A. Neighborhood / Abutter Issues.
- B. Unlisted/unanticipated approvals or permitting (i.e. NPDES SWPPP, Conservation Commission, Board of Health, etc.)
- C. Soil testing beyond the eight (8) hours listed in Section II. A.
- D. Design changes/revisions due to Owner’s programmatic changes or value engineering that affect work in progress.
- E. Field work (construction layout services, etc.)
- F. Parking and Traffic studies.
- G. Lighting Studies.
- H. Sport and Athletic field design/studies.
- I. Additional meetings or hearings beyond those listed in Section II. F.
- J. Retaining wall design. Documentation of site retaining walls; minimize dependence on third party design; Civil to document required drainage elements.

V - CLIENT RESPONSIBILITIES

- A. Provide such legal, accounting, and insurance counseling services as may be required by the Project and will provide Samiotes with all existing, reliable, and accurate information relating to the Project which Samiotes may request, but not limited to soils investigations, and program data. If the Client becomes aware of any fault or defect in the Project or Samiotes’ services, he/she will promptly notify Samiotes Consultants. The Client will furnish the required

information or services as expeditiously as necessary for the orderly performance of the services.

- B. Provide Format of Specifications. This example should include a first page, second page, and last page of a typical specifications section. Included in the typical specifications section should be the font size and type, and all headers and footers.
- C. Provide decisions and information from Owner and other consultants in a timely fashion.
- D. Provide geotech report (if available).
- E. Client shall provide Samiotes with copies (and/or AutoCAD drawing files if available) of plans including permit plans, existing conditions plans, utility plans etc. that may facilitate the most efficient performance of our work.

VI – RATE SCHEDULE

Time & Expense work and Additional Services will be billed hourly at the following rates:

Principal/President	\$230.00 per Hour
Expert Witness	\$275.00 per Hour
Civil Senior Project Manager/Senior Associate	\$150.00 per Hour
Registered Professional Land Surveyor (Director):	\$180.00 per Hour
Registered Professional Engineer:	\$140.00 per Hour
Registered Professional Land Surveyor:	\$140.00 per Hour
Survey Field Crew (2-person):	\$175.00 per Hour
Survey Field Crew (1-person)	\$125.00 per Hour
Survey Field Crew (Construction Layout):	\$2,200.00 per Day
	\$1,100.00 per one-half Day
Civil Project Manager:	\$120.00 per Hour
Soil Evaluator:	\$115.00 per Hour
3D Scan Processing:	\$115.00 per Hour
Project Engineer:	\$ 85.00 – \$100.00 per Hour
Project Surveyor:	\$ 85.00 – \$100.00 per Hour
Survey Technician:	\$ 75.00 per Hour
Professional Staff:	\$ 67.50 per Hour
Administrative Staff:	\$ 52.50 per Hour
Archive Retrieval Fee	\$150.00 Flat Fee for up to one (1) hour

Additional services will be performed only upon Authorization to Proceed.

AUTHORIZATION TO PROCEED: Execution of this proposal constitutes Authorization to Proceed. Work will not proceed until this Proposal is executed and a signed copy is returned to this office.

VALIDITY: The prices quoted in this proposal are valid for sixty (60) days.

COST: Rates are re-evaluated on an annual basis. Once a proposal is signed, the fees and terms shall be in effect until the end of the calendar year. If the project continues beyond that time, Samiotes' hourly rates and fees will be revised to conform to Samiotes' standard hourly rates for that calendar year. If additional services are contracted, the Client will be notified of the updated rate schedule.

Page 6
SCI #18074.00
June 26, 2019
South Middle School – Braintree, MA (DD-CA)

TERMS AND CONDITIONS: The attached *Terms and Conditions of Agreement* is hereby incorporated into this agreement by reference.

ACCEPTANCE: This Proposal for Professional Consulting Services is hereby accepted and executed by a duly authorized signatory who, by execution hereof, warrants that he/she has full authority to act in the name of and on behalf of

MILLER DYER SPEARS

By: _____ Title: _____

Printed Name: _____ Date: _____

Agreed:

SAMIOTES CONSULTANTS, INC.

By: _____ Title: President
Stephen R. Garvin, PE, LEED AP

Please return a copy of the executed proposal as Authorization to Proceed. Thank you for this request for civil engineering services.

P:\Proposals\2015 Proposals\15045.00 East Middle School - Braintree, MA (DD-CA).doc



33 Moulton Street
Cambridge MA 02138
617 499 8000
acentech.com

June 20, 2019

William Spears, AIA LEED AP
Miller Dyer Spears
99 Chauncy Street
Boston, MA 02111
wspears@mds-bos.com

Subject **Proposal for Acoustical Consulting Services, DD through CA**
Braintree South Middle School
Braintree, MA
Acentech Proposal No. 630592B

Dear Will:

At your office's request, we have prepared the following proposal for additional consulting services for the Braintree South Middle School project, for the DD through CA phases. Our work will build on our previous services performed during the Feasibility and Schematic Design phases, and will address room acoustics, sound isolation and HVAC systems noise control. Our work will conform to our best practices and will be tailored toward compliance with the LEED v4 acoustical prerequisite. We assume the enhanced acoustical performance credit will not be pursued.

SCOPE OF SERVICES

Design Development

We will review a set of your final SD plans or early progress DD, in preparation for a meeting with you at your office or online. During this meeting, we will confirm the programmed requirements of acoustically-sensitive spaces, and we will discuss the planned hierarchy of sound-isolating constructions, as well as more specific options for room finishes. Following this meeting, we will update our acoustical narrative, submitted originally during the SD phase, to include more specific recommendations, and descriptions of constructions and finishes, with schematic details and product information sheets, as needed, to make our recommendations clear.

Later during this phase, we will review more developed DD documents and provide additional comments in the form of drawing mark-ups and/or a written memo.

Construction Documents

We will review your drawings and specifications at two design milestones, to check for compliance with our guidelines and to provide more detailed recommendations, as needed. We will submit a letter report and/or PDF markups following each of these acoustics reviews.

We are available throughout the course of the design phases for email correspondence and web conferences with you, the mechanical engineer and others, as needed.

LEED Documentation

We will review your final set of documents to confirm that the project complies with the LEED v4 Standard and fill out the LEED documentation online.

During the USGBC review period, we will be available to answer IEQp3 questions from the reviewers if

necessary.

Construction Administration

During the CA phase, we will, at your direction, respond to RFIs and review and comment on shop submittals for acoustics-related items. We have not budgeted for site visits, but we are available to perform these as Additional Services.

Site Noise Survey

If the Town of Braintree requires proof that the project will comply with the MA-DEP community noise guidelines, we will install two or more sound level meters at the closest property lines, which will measure the sound levels continuously during a period of two to three days. In conformance with local industry standards, we will report the measured "L90" sound levels in terms of A-weighted decibels¹.

We will provide a letter report summarizing our observations at the site and the results of this survey, which will serve as a basis for noise control recommendations relative to community noise impact.

TERMS AND FEES

We propose to work on this project on a fixed fee basis in accordance with the same contractual arrangements observed on the base project. For the services discussed above, we propose the following fees, listed by project phase/task:

Phase/Task	Fee
Design Development	\$ 6,000
Construction Documents	\$10,000
Construction Administration	\$ 4,000
LEED documentation services	\$ 5,000
Site Noise Survey and Evaluation	\$ 4,500
Total	\$29,500

Construction Documents Task
Design Development Task

If this proposal is acceptable as written, please sign in the space below and return a copy to us as authorization to begin work. Please call me at 617.499.8069 if you have any questions or would like to suggest any modifications to suit your needs better.

Sincerely,



Jonah Sacks
Principal Consultant

CC: Ioana Pieleanu, Acentech

Accepted for **Miller Dyer Spears**:

Name (Print): _____

Signature: _____

Title: _____

Date: _____

¹ The "L90" value is that which is exceeded 90% of the time during the measurement period, or in other words, it represents the quietest 10% over the course of any given measurement period. "A-weighted" decibels are a weighted sum of sound levels across the audible frequency spectrum, with weightings based on the sensitivity of human hearing.



6/20/2019

Margaret Clark, RA, LEED AP BD+C
MDS / Miller Dyer Spears
99 Chauncy Street
Boston, MA 02111

Dear Margaret,

Thank you for requesting a proposal from our firm regarding phase II of the Braintree South Middle School project. Attached, please find our proposal for food service consulting. This proposal is based on Phase I findings, the information provided by your office and the following assumptions:

1. There will be approximately a population of 800 students in the building, grades 5-8.
2. This proposal is for Design Development through Construction Administration.
3. Based on the MSBA guidelines, there will be approximately 2,100 square feet of foodservice equipped space including the kitchen and serving areas.
4. Foodservice consulting services apply to foodservice equipped spaces only; our services do not include the design of seating space or architectural, interior or MEP services.
5. Should the scope and/or square footage change at any time during the project, we reserve the right to adjust our proposal and fee accordingly.
6. We have included a maximum of eight meetings in our fee proposal. Any meetings that are required over and above the (8) included would be considered an additional service and billed hourly along with travel time.

We look forward to the possibility of working with you on this project. If you have any questions regarding our proposal or the assumptions outlined above, please contact our office.

Thank you for your consideration!

Sincerely,

A handwritten signature in black ink, appearing to read 'Edward Arons', is written over a faint, illegible typed name.

Edward Arons, FCSI
Principal / Managing Director

cc: Chandra Comfort, ccomfort@colburnguyette.com

PROPOSAL FOR FOOD SERVICE CONSULTING AND DESIGN

I. SCOPE OF SERVICES

A. DESIGN DEVELOPMENT

1. 1/4 INCH SCALE EQUIPMENT PLANS:

We will prepare drawings in full detail, using Revit or AutoCAD of all food service equipment. We will coordinate all information with the Design Team.

2. EQUIPMENT CUTBOOK:

We will prepare a food service equipment cutbook in PDF format. Each item will have a coversheet identifying items by number, quantity, manufacturer and model number. Each coversheet will be followed by a manufacturer's cutsheet.

3. UTILITY REQUIREMENTS:

We will prepare and submit a schedule of all utility requirements, including building conditions, plumbing, mechanical, electrical and other building construction considerations pertaining to the food service operation.

4. REGULATORY AGENCY SUBMITTALS:

We will prepare for submission, in preliminary form, a Public Health Review Package for preliminary review and approval by the Local Board of Health. This will be initiated and recorded with the appropriate Health Department officials to obtain their input and approval. If necessary, we will adjust our documents as necessary to reflect concerns expressed by the Health Department's review.

5. BUDGET:

We will prepare and submit an itemized preliminary equipment budget for use in determining overall job costing. This budget is based on the more defined information at this point in the design process and costs for each item will be reflected.

B. CONSTRUCTION DOCUMENTS

Upon finalization of Design Development Drawings, we will prepare and issue final 1/4-inch scale drawings for all areas within our scope of responsibilities.

1. UTILITY REQUIREMENTS:

We will prepare and submit schedule of all utility requirements and other building construction considerations pertaining to the food service operation.

2. BUILDING CONDITIONS PLANS:

These documents will identify and locate all building requirements to accommodate equipment, such as floor depressions, critical clearances, conduit or sleeve locations, raised pads, exhaust duct connection sizes and locations, etc.

B. FOODSERVICE EQUIPMENT (CONT.)

3. PLUMBING/ELECTRICAL CONNECTION PLANS:

These documents will identify size, and location, of all connection requirements for water, gas, steam, drains, and electrical utilities.

4. SPECIFICATIONS:

We will prepare project specifications to be included as part of the bid package. Document will adhere to all format requirements and contain standard provisions including general and supplementary conditions, general requirements for fabrication/construction perimeters and itemized detailed information for all foodservice equipment specified.

5. FABRICATION DETAILS:

We will prepare detailed elevations and sections as required, of special or custom fabricated equipment including stainless steel work tables and counters in the foodservice areas.

6. MILLWORK DETAILS:

We will prepare detailed elevations and sections, as required, of millwork counters in the foodservice areas. These drawings and details will be based on the design from the Architect. The drawings will coordinate the fabrication of the millwork with respect to equipment being installed under, on top, or dropped into the millwork counter. All utilities and ventilation will be coordinated with the drawings and called out to ensure a successful installation.

C. CONSTRUCTION ADMINISTRATION

1. BID REVIEWS:

We will assist the design team in reviewing Foodservice Equipment Dealer bids and provide comment on the compliance with specifications and drawings in the bid. If necessary, we will attend the interview of prospective foodservice contractors to assist in the award process.

2. SUBMITTAL REVIEW/APPROVAL:

We will review contractor's rough-in drawings, fabrication shop drawings, equipment cutbook's, service manuals and other data submitted in connection with the Food Service Equipment specifications.

3. BULLETINS AND CHANGE ORDERS:

We will prepare bulletins and change orders to adapt to field conditions and provide coordination as required.

4. SITE VISITS:

We will conduct site visits to verify the Foodservice Subcontractor's compliance with specifications and drawings and approved submittals. We will prepare report of our findings during required site visit.

II. DESIGN FEES

We propose to accomplish services for a fixed fee based on the following phases:

A. BASIC SERVICES	
SERVICES	FEE
A. Design Development.....	\$7,500
B. Construction Documents	\$8,500
C. Construction Administration.....	\$3,000
TOTAL DESIGN FEES:	\$19,000

B. BILLINGS

Billings will be made monthly, based on our degree of completion.

C. REIMBURSABLE EXPENSES

Reimbursables have been accounted for in the lump sum fee with the exception of the following, which would be billed at cost, should they be requested and or required:

- High-resolution photo-realistic Rendering and/or physical models.
- Fees paid to authorities to obtain permits and/or obtain approvals.
- The expense of professional liability insurance dedicated exclusively to this project or the expense of additional insurance coverage or limits if the Owner requests such insurance in excess of what we currently carry.

D. ADDITIONAL SERVICES

Any service not specifically stated to be part of basic services shall be considered an Additional Service; billed hourly at the rates presented below:

Principal	\$175.00/hour
Associate	\$150.00/hour
Project Manager	\$100.00/hour
Out of State Travel Time	\$85.00/hour
Project Administration.....	\$75.00/hour

E. CARRYING COSTS

Our invoices are due upon receipt. Any receivable (in part or full) that remains unpaid for more than thirty (30) days after our invoice date is subject to a charge of 1 1/2% per month.

III. EXPECTATIONS

As a member of the project design team, the contracting firm will acknowledge the professional services provided by Colburn Guyette Foodservice Design Consultants and include a description of our role in all project-related media. Including but not limited to pre and post construction press releases, project award submissions, and industry publications. We expect to be notified of any opportunities to obtain professional photographs of the completed space and we reserve the right to secure images on our own, following written consent from the Project Owner.

IV. TERMINATION

We reserve the right to terminate this contract at any time, for any reason, or for no reason, without incurring any penalty or damages on account of such termination. In the event of such termination, Colburn Guyette Foodservice Design Consultants shall be paid in full for services performed up to the termination date, including reimbursable expenses.

V. INSURANCE

The following is an outline of the limits of our current insurance coverage. Certificates can be provided upon approval of this proposal:

<u>Type of Coverage</u>	<u>Company</u>	<u>Limits</u>
Errors & Omissions	Complete Equity Markets	\$3,000,000
General Liability	Burgin Platner Hurley	\$2,000,000
Combined Umbrella	Burgin Platner Hurley	\$1,000,000
Automobile Insurance	Burgin Platner Hurley	\$1,000,000
Workman's Compensation	Burgin Platner Hurley	\$1,000,000

Requests to be named Additional Insured are subject to an additional charge of fifty dollars (\$50.00) to be paid by the requester.

VI. ACCEPTANCE

Upon review and acceptance of this proposal, please sign this document below and return to our office. If you do not provide a signed copy of this document but proceed with the project as outlined, your actions will be viewed as acceptance of our fee, terms, and conditions outlined in this proposal.

(signature)

Date

(Printed name and title)

A.M. Fogarty

& Assoc., Inc. "Construction Cost Consultants"

175 Derby St., Suite 5, Hingham, MA 02043

TEL: (781) 749-7272 FAX: (781) 740-2652

ptim@amfogarty.com

June 21, 2019

Will Spears
MDS|Miller Dyer Spears
99 Chauncy Street
Boston, MA 02111

RE: Braintree South Middle School, Braintree MA

Dear Will:

A.M. Fogarty and Associates proposes to provide cost estimating services for the above referenced project as follows:

FEE SCHEDULE:

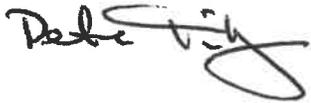
Design Development	\$ 19,500
60% Construction Document	\$ 16,500
90% Construction Document	\$ 10,000

Our work will entail providing quantity surveys and pricing for all civil, architectural, structural, mechanical and electrical work. We will provide an estimate in the **CSI Master Format and/or Uniformat** including sub-totals by division.

Our fees includes assistance with Value Engineering, if appropriate.

If this proposal is acceptable, please sign below and return to our office.

Sincerely,



Peter T. Timothy
President

PTT/bkr

Accepted By: _____
MDS|Miller Dyer Spears

Date: _____



19 June 2019

Mr. Will Spears, AIA, LEED AP BD+C, MCPPO
Principal
Miller Dyer Spears
99 Chauncy Street
Boston, MA 02111
T | 617.338.5350
E | wspears@mds-bos.com

Re: Braintree South Middle School Rider 1 DD-CA / Braintree, MA

Dear Mr. Spears:

We are pleased to submit this Proposal for Professional Services as lighting designers for the above project. This Proposal is based on an email and RFP received on 13 June 2019. We understand the project to be an approximate 145,000 square foot new middle school with an estimated construction budget of \$69 million and a targeted completion date of June 2022. We are aware of the client's sustainability goal and will work with the team to design a project targeting LEED-S or NE-CHPS and exceed Massachusetts Energy base code by 10% within our scope of services.

Scope of Work

The Proposal covers the following areas:

- Entry Canopy
- Lobby
- Corridors
- Auditorium
- Music Room
- Gym
- Locker Rooms
- Classrooms
- Wood Shop
- Art Rooms
- Media Commons
- Cafeteria & Kitchen
- Faculty Dining
- Administrative Office Suite
- Nurse's Office
- Teacher's Lounge
- Restrooms
- Stairs
- Egress Doors
- Site
 - Expanded Parking
 - Expanded Bus Loop
 - Sidewalks & Pathways
 - Court & Basketball Security Lighting

HLB's scope of work does not include back of house and MEP areas, sports/field lighting, or internally illuminated signage, and is assumed to be the responsibility of others. These areas may be added at the request of the Architect – additional fee or an added service with written authorization may be required.

Note: This proposal assumes that static lighting effects will be selected for all lighting effects. If dynamic/programmable or RGB lighting concepts are selected, additional design, coordination and programming will require an additional service, depending on the complexity.

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233 Lewis Wharf, Boston, MA 02110 | 617.229.5190 | HLBlighting.com

Scope of Services

The following services are included in the fee.

Phase I (Design Development) will consist of the following:

- 1.1 Participate in design conferences in Boston, MA with the Owner, Architect and other Consultants. Time for six (6) hours of meetings, teleconferences, or web-based conferences is included in the fee.
- 1.2 Prepare electric lighting calculations for typical representative space types as required for in-house verification of design concepts. Calculations are used as a design tool to study quality and quantity of luminaires and are not intended to create photo-realistic presentation renderings.
- 1.3 Prepare preliminary design and layouts of proposed luminaires by the creation of a local Revit lighting model file based on 3D Revit electronic backgrounds provided by the Architect in the DD Phase when ceiling information has been sufficiently resolved (heights and types of ceilings). HLB will provide luminaire layouts as Revit linked-views for incorporation into the architectural model for use by Architect and Electrical Engineer in creating their drawing sheets. Lighting families provided by HLB will be as provided by lighting manufacturers or created by HLB. Luminaire families will contain simple geometrical shapes for generic coordination only and not for clash detection, specifications, lighting schedules, energy data or renderings. We will provide three issuances at 60% DD, 90% DD and 100% DD. REVIT services such as clash detection, renderings, specifications, schedules, energy data or the development of customized luminaire families are not part of this agreement, but may be added as additional services, with fees negotiated accordingly.
- 1.4 Prepare a preliminary lighting fixture schedule, spec sheets, and preliminary sketch recommendations for critical architectural mounting details.
- 1.5 Provide assistance with establishing allowances or budgetary probable costs (material costs only) of specified luminaires to the Architect for preparation of a preliminary cost estimate by others. It is assumed that the final budget prepared in Design Development is the agreed upon lighting budget if no other lighting budget direction is provided.
- 1.6 Prepare preliminary Lighting Control Intent Narrative, including written narrative and supplemental diagrams if needed, describing the desired performance of the lighting controls within HLB's scope. This narrative shall be reviewed by the Owner, the design and engineering team, and shall be incorporated into the design of the lighting control system specified by the Electrical Engineer. Electrical Engineer shall be responsible for specifying lighting controls, and reviewing and verifying all dimming protocols and compatibility with the Lighting Control Narrative.
- 1.7 Provide assistance with confirmation of compliance with maximum allowable connected load for lighting as dictated by Lighting Section of applicable Energy Code including preparation of documentation (or materials) required for filing with building permit application. Spot checks of typical areas will be performed during this phase to ensure that the design is on track with energy compliance goals.
- 1.8 Prepare reviews of Design Development documents as prepared by the Architects and his/her Consultants, and as related to the lighting. Time for one (1) review is included in the fee.

Deliverables in this phase:

- Three (3) issuances of lighting documentation – including lighting layers or drawing mark-ups and/or luminaire packages. Time to produce materials for additional issuances will be charged on a time and materials basis, if requested and will require additional written authorization.

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- Preliminary control intent narrative / zoning

Phase II (Contract Documents) will consist of the following:

- 2.1 Participate in conferences in Boston with the Owner, Architect and other Consultants. Time for eight (8) hours of meetings, teleconferences, or web-based conferences is included in the fee.
- 2.2 Provide assistance with coordination of lighting design with architectural and electrical design.
- 2.3 Perform updated electric lighting calculations as required to confirm final lighting design solutions with final architectural aspects.
- 2.4 Prepare updated design and layouts of proposed lighting luminaires in Revit. We will provide two (2) updated issuance during Construction Documents, one at 60% CD, 90% CD and one at 100% CD. Revit related services such as clash detection, renderings, specifications, schedules, energy data or the development of customized luminaire families are not part of this agreement, but may be added as an additional service, with fees negotiated accordingly.
- 2.5 Prepare final lighting fixture schedule, spec sheets, and sketch recommendations for architectural mounting details.
- 2.6 Prepare general specification Section 26 5113 Light Fixtures, Lamps, Ballasts for the architectural luminaires (in CSI format).
- 2.7 Update Lighting Control Intent Narrative for inclusion in the final CD specifications, either as an appendix within the HLB-issued luminaire specification section, or in the Lighting Control specification section provided by the Electrical Engineer.
- 2.8 Prepare final energy code documentation. This information will be provided to the Architect and Electrical Engineer in the form of a ComCheck Lighting Report and a "cck" file, or input watts for each luminaire provided to the energy modeler. Note that HLB cannot sign and seal drawings to meet the requirements for documentation, but we can provide the necessary ComCheck calculations for our portion of the scope.
- 2.9 Prepare reviews of final Contract Documents as prepared by the Architect and his/her Consultants, and as related to the lighting. Time for two (2) reviews is included in the fee.

Deliverables in this phase:

- Three (3) issuances of lighting documentation – including lighting layers or drawing mark-ups and/or luminaire packages. Time to produce materials for additional issuances will be charged on a time and materials basis, if requested and will require additional written authorization.
- Specification Section 26 5113
- Final control intent narrative / zoning
- Final energy code documentation

Phase III (Bidding) will consist of the following:

- 3.1 Provide assistance to the Client in evaluating bids for the luminaire and control equipment we specify.
- 3.2 Participate in Bid review conferences with the Owner, Architect and the Contractor. Time for up to two (2) hours of teleconferences, or web-based meetings is included in the fee

HLB Lighting Design

Phase IV (Construction) will consist of the following:

- 4.1 Participate in web-based conferences with the Owner, Architect and the Contractor. Time for six (6) hours of teleconferences, or web-based meetings is included in the fee.
- 4.2 Respond to Requests for Information/Clarification by the Owner, Architect and the Contractor to the extent that they do not extend our scope of work or require re-design. Time for sixteen (16) hours of response is included in the fee.
- 4.3 Review shop drawings and/or submittals of lighting equipment specified by HLB. Time for two (2) reviews of shop drawings and/or submittals is included in the fee. Time for additional shop drawings/submittal reviews will be billed on a time & materials basis, as required and if requested will require additional written authorization.
- 4.4 Participate in the final review of the completed lighting installation, including observation of focusing of adjustable luminaires. Time for eight (8) hours to the project site is included in the fee. The electrical contractor will supply personnel and all equipment to perform this work after dark and in compliance with local laws and union agreements.
- 4.5 Prepare written site observation reports summarizing the conditions found during site observation. Note: This proposal assumes that the Commissioning Agent is responsible for recording and supplying the Owner with all the final calibration settings of lighting controls.

Deliverables in this phase:

- Written response to RFI's as needed
- Review of Shop Drawing Submittals
- Written site observation Report

LEED

LEED Base Services: Project is intended to achieve a LEED Silver Rating under the BD+C - NC v4 system.

HLB will work with the Architect, LEED Consultant and/or the Whole Building Energy Simulation Consultant and provide assistance and review for the following LEED credits, if sought:

- IP credit: Integrative Process – Lighting-related items only as they relate to energy use and the energy model
- EA pr: Fundamental Commissioning of Building Energy Systems - Lighting Control Intent Narrative only
- EA pr: Minimum Energy Performance – LPD and Control Intent Narrative only
- EA credit: Optimize Energy Performance – LPD and Control Intent Narrative only
- EQ Credit: Interior Lighting - Option 1 Lighting Control (HLB Control Intent Narrative only)

This does not include entry of data in LEED On-Line. Additional points are available under optional services below. An upgrade from Silver to Gold or Gold to Platinum will require a modified scope and fee proposal.

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Fees

Our fees will be based on the following hourly rates:

Senior Principal	\$265 per hour
Principal	\$255 per hour
Associate Principal	\$245 per hour
Senior Associate	\$195 per hour
Associate	\$185 per hour
Senior Designer	\$175 per hour
Designers	\$150 per hour
Project Assistants	\$90 per hour
Administrative	\$75 to \$125 per hour

The estimated maximum fee will be as follows:

Phase I	\$27,040	Design Development
Phase II	\$34,640	Construction Documents
Phase III	\$2,570	Bid
Phase IV	\$24,315	Construction Admin
Total	\$88,565	

The estimated fee for reimbursables will be \$4,420.

Optional Fee

Lighting Control Design, Specification and Coordination: \$18,000

The proposal assumes all areas of the project will be authorized and will proceed on a concurrent schedule. If areas or issuances of documents for the project are not authorized or proceed on a non-concurrent schedule, the proposal will be subject to further negotiation.

Invoices for accumulated time and expenses will be submitted monthly and will be payable within thirty (30) days. It is assumed that the project will be billed on a percent complete basis unless another format such as hourly billing is requested. All invoices not paid within thirty days of submission will be assessed a finance charge of 1.5% of the remaining balance per month.

Time spent in out-of-town travel is not anticipated and is therefore not included in the maximum fee.

Reimbursable Expenses

All incidental expenses such as travel, lodging and meals, prints, messengers, express mail services, photocopies, mockup materials and all approved equipment used exclusively in the development of this project are not included in the estimated maximum fee and will be billed at cost times a multiplier of 1.15. Charges for in-house plotting will be billed at \$5.00 per sheet independent of size. Black and white copying/printing will be charged at \$0.15 per page. Color copying/printing will be charged at \$1.40 per page.

A complete summary of all-reimbursable expenses will be provided with each invoice. Original documentation will not be supplied for reimbursable expenses unless requested. If documentation is required, time spent for preparation will be invoiced at \$40.00 per hour as a reimbursable expense.

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Optional Services

The following services are not included in the above fee, but may be added at the discretion of the Client:

1. Preparation of specialized 3D and 2D renderings and other visual presentation elements not noted in the Scope of Services above.
2. Advanced REVIT services, including clash detection, custom luminaire families, luminaire schedules, specifications, energy data or renderings.
3. Research, verification and preparation of a 3-name lighting specification to meet project goals.
4. LEED: Additional credits for LEED Certification design and/or preparation of compliance documentation to obtain LEED Gold Certification Level. Due to the nature of this process, this service must be discussed during Phase I and implemented as design criteria during Phase II. LEED Gold Certification design coordination and compliance documentation can be provided for the following LEED BD+C NC New Construction Version 4 credits:
 - EQ Credit: Interior Lighting - Option 2 Lighting Quality. Four strategies are required and will require design team discussion to arrive at best approach for project. First four strategies (photometrics, CRI, life, direct/indirect approach) can be provided by HLB if the required lighting solutions are agreed to with the design team. Calculations related to strategies 5 and 6, (average surface reflectances) are typically done by the architect or interior designer. The last two strategies 7 and 8, (illuminance ratio calculations) can be provided depending on complexity and number of unique spaces.
 - EQ Credit: Daylight – HLB will select and perform only one of the following Options: Option 1: Annual Spatial Daylight Autonomy (sDA) and Annual Sunlight Exposure (ASE) calculations (2-3 points). Automated shading may be required to comply with ASE; Option 2: Illuminance Calculations on two Equinox dates. (1-2 points) Option 3 – On-site measurement twice a year if project is under 100,000 sf. (2-3 points). If Option does not comply using the method selected, other Options may be provided for additional fee.
 - SS Credit: Light Pollution Reduction. Verify responsibility for documentation.
5. Daylighting:
 - Daylighting calculations (availability, shadowing, sunlight penetration, interior illuminances and luminances).
 - Design, construction or observation of construction, testing and evaluation of physical daylighting models.
 - Preliminary daylighting recommendations for fenestration configurations and/or treatments.
6. Lighting Control Design, Specification and Coordination:
 - a. Provide load schedules for all rooms with pre-set controls. Indicate dimming ballasts or types of dimming drivers in luminaire schedules (eg 0-10, MLV, ELV, linear). This will require coordination, input and review by the Electrical Engineer.
 - b. Participate in meetings for coordination of controls with luminaires and electrical engineers documents.
 - c. Assist the Owner with establishing schematic Sequence of Operations documentation for typical areas within our scope (this will require detailed Owner input and review of space schedules and functionality).
 - d. Provide prototypical layout of daylight and occupancy sensors.
 - e. Provide manufacturer's wiring diagrams for stand-alone systems.
 - f. Prepare specification Section 26 0923 Architectural Lighting Control Devices in CSI format. This section will contain performance specifications for occupancy sensors, multi-scene presets, daylight harvesting dimming and/or stepped switching.
 - g. Assist with layouts of front-of-house control equipment, text for keypads, shop drawing exceptions, and commissioning.

HLB Lighting Design

- h. The Architect shall contract with the Electrical Engineer for the electrical and emergency aspects of lighting controls specified by HLB, and services not covered by HLB.
7. Commissioning of addressable lighting controls.
8. Preparation of additional or out of sequence issuances of documents, Addenda, attendance at "page-turning" meetings, pre-bid or post-bid conferences or walk-throughs.
9. Comparative life-cycle cost analysis for electric lighting schemes, as required.
10. Design and development of custom luminaires, testing and evaluation of prototypes.
11. Time for the selection of decorative luminaires beyond four (4) hours of time that is assumed to be included in the base scope of work.
12. Preparation of documentation compliance as related to the lighting for public utility rebate programs.
13. Design, observation of construction, testing and evaluation of full-scale mockups.
14. Review and testing of luminaire and/or control system substitutions proposed by others in our lighting laboratory, on site or at the manufacturer's facilities.
15. Coordination or design of lighting in media walls, custom LED applications, signage, photovoltaics, or other specialized applications or special effects.
16. Focusing diagrams for adjustable luminaires on backgrounds provided by the Architect.
17. Lighting for theatrical, televised broadcast, filming, video-taping or other production functions.
18. Value Engineering and/or redesign services, if construction cost estimate for lighting equipment is within project budget for lighting equipment.
19. Room-by-room punch-listing of lighting items.
20. Analysis and calculations associated with Light Trespass for new and existing conditions (including Community Board meetings, presentations, site lighting survey of surrounding neighborhood).

General

- a. The parties understand and agree to the following: Architectural lighting design is not a licensed profession, and the services performed by the Lighting Designer, whether included in this contract or not, do not require a licensed professional. Further, the Lighting Designer does not provide architectural or engineering services, regardless of the existence of licensed architects or engineers as officers, employees or sub-consultants of the firm. In particular, the Lighting Designer will not be responsible for the selection, designation, design, specification, or calculation of luminaires for emergency or exit lighting or filing documents with municipal and regulatory agencies.
- b. The Lighting Designer does not guarantee that credit for any specific LEED point will be obtained.
- c. The Lighting Designer does not guarantee the survival of plants. The Owner shall provide criteria for lighting levels and color spectra for such purposes, and that shall form the basis for the daylighting and electric lighting

HLB Lighting Design

- concepts. The Lighting Designer will design to those criteria, or inform the Owner of the extent to which the design may differ from those criteria.
- d. Should building department or similar audits be required, they shall be viewed as additional services and we shall charge on a time and material basis.
 - e. When maximum electrical lighting loads permitted by code are determined by others, the Lighting Designer will not commence any layouts until written information is received defining these loads or be responsible for any delays resulting therein, nor will the Lighting Designer be responsible for or assume the cost of any re-design resulting from error in such calculations performed by others.
 - f. The Lighting Designer will design to the best of his or her ability according to building codes but will be dependent upon the licensed professionals (Architect or Engineer) for notification of non-compliance prior to approval of lighting luminaire submittals and will not be responsible for problems which arise during construction due to non-compliance with codes.
 - g. The Lighting Designer will not be responsible for design of emergency, egress or exit lighting systems or for designation of luminaires for emergency, egress or exit lighting systems.
 - h. The Lighting Designer will not be responsible for any changes in his final drawings and specifications unless approved by the Lighting Designer. Changes include, but are not limited to, substitutions of and/or by manufacturers, variations in layouts, quality and quantity of luminaires, etc.
 - i. The Lighting Designer will not be responsible for any errors, equipment failures or delays caused by manufacturers, contractors, shippers, installers or users; nor is the Lighting Designer responsible for a contractor's failure to carry out the construction in a workmanlike manner or in accordance with contract documents or recommendations.
 - j. Existing conditions: The Architect shall provide the Lighting Designer, in writing, with information about any existing ceiling conditions that could affect luminaire selection and/or location, prior to issuance of Lighting Designer's design development drawings. If this information is not provided, the Lighting Designer will assume that no restrictions exist and will proceed accordingly. If conditions are found during construction that necessitate changes, additional services will have to be authorized by the Architect for the Lighting Designer to make these changes.
 - k. The Architect/Construction Manager/Owner shall provide the Lighting Designer, in writing, with information about the required lighting budget. If this information is not provided, it is assumed that the final budget reviewed and approved in Design Development is the agreed upon lighting budget. If the lighting must be redesigned due to changes in the agreed upon lighting budget or for other overall project budget reasons, this redesign work will be considered an extra service.
 - l. This Proposal will remain valid for thirty (30) days after the date it is written. If the accepted Proposal has not been received in the Lighting Designer's office by the end of this period, its terms and conditions will be open for further negotiations.
 - m. It is assumed that the Lighting Designer's work will be completed according to a mutually agreed upon schedule. If consulting work is stopped for more than ninety (90) calendar days, consecutive or in the aggregate, over the term of this Agreement, the Consultant shall be compensated for all services performed and reimbursable expenses incurred prior to the receipt of notice of suspension. In addition, upon resumption of services, the Client shall compensate the Consultant for expenses incurred as a result of the suspension and resumption of its services, and the Consultant's schedule and fees for the remainder of the Project shall be equitably adjusted.

HLB Lighting Design

- n. This agreement is subject to cancellation by either party at any time upon ten days written notice. In the event of cancellation, all accrued charges become due for work completed to that point.
- o. In an effort to resolve any conflicts that arise during the design and construction of this project or following the completion of this project, all parties agree that all disputes between them shall be submitted to non-binding mediation unless the parties mutually agree otherwise. In the event the parties to this agreement are unable to reach a settlement of any dispute in accordance with mediation, then the dispute may be resolved with an alternate method only if agreed upon by both parties. The prevailing party shall be entitled to recover from the non-prevailing party all reasonable costs incurred, including staff time, court costs, attorney's fees, and all other related expenses in such litigation.
- p. All publicity about the project where credits are given shall include the name of Horton Lees Brogden Lighting Design Inc. as Lighting Designers.

We trust the above meets with your approval and would appreciate your signing a copy of this Proposal and returning it to us at your earliest convenience. The returned copy will serve as our authorization to proceed.

Very truly yours,



Carrie Hawley, IALD, MIES, LEED AP
Senior Principal
HORTON LEES BROGDEN LIGHTING DESIGN INC.

Accepted for: _____

Authorized Signature: _____ Date: _____

Print Name: _____ Print Title: _____

HLB Lighting Design

new york | san francisco | los angeles | boston | miami | denver | austin
233 Lewis Wharf, Boston, MA 02110 | 617.229.5190 | HLBlighting.com



Design and Specification Agreement

This Agreement is between:

Date: 06/24/2019

Lighthouse Productions, Inc.
d/b/a Port Lighting Systems
24 London Lane
Seabrook, NH 03874
(P) 603-474-2110
(F) 603-474-2227

Project Name: Braintree South Middle School

And Customer:

Name: MILLER DYER SPEARS
Address: 99 CHAUNCY STREET, 8TH FLOOR
City, State, ZIP: BOSTON, MA 02111

This Agreement shall confirm Customer's order of design and specification work relating to Braintree South Middle School Cafetorium as per Exhibit A ("Design and Specification Order"). Port Lighting will furnish all labor and materials for the above referenced Design and Specification Order in accordance with the General Terms and Conditions of this Agreement (see reverse side).

Terms: Customer agrees to pay Port Lighting the total sum of \$15,560. A non-refundable deposit of \$7,780 along with this signed Agreement is due by **TBD** to confirm the order. A payment of \$6,224 is due upon delivery of the design and specification documents to the Customer. The balance of \$1,556 is due upon project completion as determined by Port Lighting. Any changes to this order will require a written and signed change order and may result in additional costs and/or delayed delivery. Additional time spent addressing these changes will be billed at the standard rate of \$125.00 per hour. Additional travel expenses will be billed at \$85.00 per hour.

Timeline: Port Lighting will deliver the design documents and drawings outlined in the Design Order to the Customer on or before **TBD**. Estimated timelines for review and award, installation, and project completion are included in Exhibit A. The timeline of delivery is based on availability of materials, equipment and personnel at the time the deposit and signed agreement are received and is subject to change.

Note: Port Lighting also provides installation services and reserves the right to bid on installation work relating to this project.

Customer's Signature:

Port Lighting Systems:

By: _____

Print Name:

Dated:

Dated:

The prices given in all quotations are those currently in effect. In the event of price increase of material, supply, or equipment occurring between the date of this proposal and the first day of performance of the contracted work through no fault of Port Lighting, the contract sum shall be equitably adjusted by change order(s) to reflect the price increase(s).



GENERAL TERMS AND CONDITIONS

- a. **WORK.** Port Lighting will furnish all labor and materials, the specified design and specification work (the "Work"), and provide all costs by this Agreement and any amendments thereto. Work called for herein is to be performed during regular working hours. All work performed outside of such hours shall be charged for at the rates or amounts agreed upon by the parties at the time overtime is authorized.
- b. **START DATE.** Port Lighting shall be given reasonable time in which to commence and complete the performance of the contract. Port Lighting shall not be responsible for delays or defaults where occasioned by causes of any kind and extent beyond its control, including but not limited to: delays caused by the Customer, delays in transportation, shortage of raw materials, internet outages, civil disorders, labor difficulties, fires, floods, accidents and acts of God.
- c. **INSURANCE.** Port Lighting will carry workman's compensation insurance covering Port Lighting's employees, property insurance for its equipment and general liability insurance.
- d. **CUSTOMER'S RESPONSIBILITY.** The Customer will periodically examine the Work in progress as requested, as well as upon completion, to ascertain the extent to which the design and specifications conform to the requirements of the order. The Customer agrees to comply with all reasonable requests of Port Lighting, its employees and its subcontractors necessary to Port Lighting's performance under this Agreement.
- e. **INDEMNIFICATION.** Each party agrees to indemnify, protect and save harmless the other party to this Agreement and its officers, employees and subcontractors ("Indemnified Parties") from and against any and all expenses, damages, claims, suits, actions, judgments, liabilities, penalties and costs whatsoever, including reasonable attorney's fees (collectively, "Damages"), arising out of, or in any way connected with, any third party claim or action to the extent resulting from the negligence, willful misconduct and/or material breach of this Agreement by the Indemnifying Party and/or any of the Indemnifying Party's officers, employees or authorized subcontractors, provided that such Damages are not the result of any negligent act, willful misconduct or material breach of this Agreement on the part of Indemnified Party, or any of the Indemnified Party's officers, employees or subcontractors. The Parties agree that the indemnification provisions contained in this paragraph shall survive the expiration of this Agreement.
- f. **CHANGE CONDITIONS.** If unexpected conditions are encountered during the Work, or if the Customer or Customer's agent directs additional or modifications to the Work and the conditions adversely affect the cost or progress of Work, Port Lighting will notify the Customer immediately, and an adjustment to the price under this agreement shall be made accordingly.
- g. **OWNERSHIP.** Port Lighting shall be deemed the sole author and owner of designs, plans, drawings, graphics and data, and their attendant intellectual Property Rights, that are created or acquired by Port Lighting and incorporated into any Work delivered under this Agreement. The Parties expressly recognize that any Work delivered under this Agreement is not "work made for hire." Provided however, Port Lighting shall not obtain any right in Customer-supplied data, trademarks, logos or other graphics or unique text or information pertinent to Customer's business.
- h. **RELATIONSHIP OF PARTIES.** Neither party shall represent itself to be the agent, employee, partner, or joint venture of the other party and may not obligate the other party or otherwise cause the other party to be liable under and contract or otherwise.
- i. **LIMITED WARRANTY.** EXCEPT AS SET FORTH BELOW, PORT LIGHTING MAKES NO WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE DESIGN AND SPECIFICATION ORDER, WHICH CUSTOMER ACCEPTS "AS IS". PORT LIGHTING WILL INCUR NO LIABILITY TO CUSTOMER RELATING TO THIRD PARTY INSTALLATION UNDER THE DESIGN AND SPECIFICATION ORDER. PORT LIGHTING WARRANTS FOR A PERIOD OF ONE (1) YEAR FROM COMPLETION OF THE DESIGN AND SPECIFICATION ORDER, THAT IT SHALL BE WITHOUT DEFECT IN WORKMANSHIP. PORT LIGHTING'S ONLY LIABILITY FOR BREACH OF THAT WARRANTY WILL BE TO CORRECT THE DEFECT WITHOUT CHARGE TO CUSTOMER. PORT LIGHTING WILL INCUR NO OTHER LIABILITY TO CUSTOMER WITH RESPECT TO THE DESIGN AND SPECIFICATION ORDER OR THE SERVICES OR MATERIALS THAT IT FURNISHES. PORT LIGHTING MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE DESIGN AND SPECIFICATION ORDER AND THE MATERIALS OR SERVICES THAT IT FURNISHES, ALL OF WHICH CUSTOMER ACCEPTS "AS IS".
- j. **LIMITATION OF LIABILITY.** THE LIABILITY OF PORT LIGHTING, ITS AGENTS, AND EMPLOYEES UNDER THIS CONTRACT SHALL BE LIMITED TO THE AMOUNT OF THE FEE PAID TO PORT LIGHTING BY CUSTOMER. UNDER NO CIRCUMSTANCES SHALL PORT LIGHTING OR ITS AGENTS OR ASSIGNS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING LOST REVENUES OR LOST PROFITS, EVEN IF PORT LIGHTING WAS ADVISED OR AWARE OF THE POSSIBILITY OF SUCH DAMAGES.
- k. **WAIVER.** No failure or delay on the part of any party to this Agreement in exercising any right or remedy under this Agreement shall operate as a waiver; nor shall any single or partial exercise of any such right or remedy preclude any other or further exercise of any other right or remedy. No provision of this Agreement may be waived except in writing signed by the party granting such waiver.
- l. **ASSIGNMENT.** Neither party will assign, transfer, or subcontract any of its rights, obligations, or duties hereunder without the prior written consent of the other party, with the exception of assignments by operation of law.
- m. **INTEGRATION CLAUSE and GOVERNING LAW.** This document and all documents incorporated by reference constitute the parties' entire agreement. No other agreements, oral or written, regarding the Work to be performed under this agreement exist between the parties. This agreement shall be construed in accordance with and governed by, the laws of the State of New Hampshire.

Exhibit A

Design and Specification Order

[The Design and Specification Order and any subsequent change orders related thereto entered into under the terms of this Agreement are hereby incorporated by reference under this Exhibit]

Services to be provided:

Scope of Work:

- A. Design Theatrical Lighting, Rigging, and AV system to control stage and house lights in the cafetorium at the Braintree South Middle School.
- B. Work with Engineer and Architect to ensure all components of the house lighting (provided by others) and dimming control system conform to UL924 for emergency Egress (if applicable).
- C. Provide CAD drawings and specification documents as required throughout the design process
- D. Review documents and drawings by others as required and as it pertains to the Theatrical Lighting, Rigging, and AV systems

Design Services:

- A. Design Development \$6,560
 1. Provide CAD drawings for all theatrical systems to be incorporated into the MDS drawing set
 2. Provide budget estimates for proposed Theatrical Lighting, Rigging, and AV systems.
 3. Review drawings provided by others that pertain to the Theatrical Lighting, Rigging, and AV systems.
 4. Work with building lighting designer and engineer on house lighting control and switch locations
- B. Construction Documents \$6,000
 1. Provide CAD drawings for all theatrical systems to be incorporated into the MDS drawing set
 2. Provide Specification documents for all items shown in the drawing set
 3. Review drawings provided by others that pertain to the Theatrical Lighting, Rigging, and AV systems.
 4. Review of RFI's if they pertain to the Theatrical Lighting, Rigging, and AV systems.
- C. Bid Phase \$0
 1. Review of RFI's if they pertain to the Theatrical Lighting, Rigging, and AV systems.
 2. Review of bids for the Theatrical Lighting, Rigging, and AV systems to be sure all necessary items have been included.

D. Construction Administration \$3,000

1. Review of RFI's if they pertain to the Theatrical Lighting, Rigging, and AV systems
2. Review Submittals for Theatrical Lighting, Rigging, and AV systems
3. Site visits throughout construction as needed. Up to 2
4. Punch list walkthrough upon completion of construction
5. Final signoff upon completion of punch list items and training

Project Exclusions:

- A. Design and calculation for house lighting fixtures
- B. Integration and programming of the lighting control systems
- C. Design of power system for Theatrical Lighting, Rigging, and AV systems (Electrical Engineering)
- D. Review of Loads for Theatrical Lighting, Rigging, and AV systems (Structural Engineering)

Reimbursables:

- A. Reimbursable expenses will be billed monthly at cost for the following: jobsite parking; overnight delivery; and printing costs. We estimate a reimbursable budget of \$250 will be required.



June 21, 2019

Via Electronic Mail: wspears@mds-bos.com

Will Spears
Principal
Miller Dyer Spears
99 Chauncy Street
Boston, MA 02111

Re: Braintree South Middle School
Code Consulting for DD through CA
AKF Project #181027-000

Dear Will,

We are pleased to submit this proposal to provide additional code consulting services for the Braintree South Middle School project. These additional services will be provided in accordance with our original agreement dated June 15, 2018, all terms of which are specifically incorporated by reference into this agreement.

Our scope of work for the Design Development phase through Construction Administration are summarized below:

1. Design Development Code Review:

- a. Attend one (1) Work session with the design team.
- b. Provide up to sixteen (16) hours of general code consulting for continued collaboration with the design team to address code compliance throughout the design development phase. This may include plan review, code research, written correspondence, conference calls, and/or meetings to discuss any code questions that arise.
- c. One (1) review of the proposed architectural design development drawings in accordance with the Building Code of Record and Accessibility Code of Record.
- d. Provide plan review comments to the design team addressing any code compliance concerns.
- e. Update the Code Report based on the architectural design development drawings.
- f. Update Life Safety Plans based on the architectural design development drawings.



Braintree South Middle School
Code Consulting: DD – CA
181027-000

June 21, 2019
Page 2

2. Construction Documents Code Review:

- a. Attend one (1) Work session with the design team.
- b. Provide up to sixteen (16) hours of general code consulting for continued collaboration with the design team to address code compliance throughout the construction documents phase. This may include plan review, code research, written correspondence, conference calls, and/or meetings to discuss any code questions that arise.
- c. One (1) review of the proposed architectural construction documents at 60% CD, 90% CD, and 100% CD in accordance with the Building Code of Record and Accessibility Code of Record.
- d. Provide plan review comments to the design team at 60% CD, 90% CD, and 100% CD addressing any code compliance concerns that need to be resolved prior to permit submission.
- e. Update the Code Report based on the architectural construction documents.
- f. Update Life Safety Plans based on the architectural construction documents at 60% CD, 90% CD, and 100% CD.

3. Construction Administration:

- a. Provide up to twenty-five (25) hours of general code consulting during construction which may include code research, written correspondence, conference calls, and/or meetings to discuss any code questions that arise.

Estimated Fee:

AKF proposes a lump sum fee of **\$22,000.00** for the Code Consulting services outlined above. This Fee will be invoiced in proportion to the work completed for each of the following phases:

Code Consulting Fee Breakdown		MDS Breakdown
A. Building and Accessibility Code Review		
(1) Design Development	\$7,500.00	\$10,000
(2) Construction Documents	\$9,500.00	\$10,000
(3) Construction Administration Code Support	\$5,000.00	\$ 2,000
B. Approvals and Permitting Code Support	Pricing Available Upon Request	
C. Fire Modeling	Pricing Available Upon Request	



Braintree South Middle School
Code Consulting: DD – CA
181027-000

June 21, 2019
Page 3

D. Building Code Variance	Pricing Available Upon Request
E. Accessibility Code Variance	Pricing Available Upon Request
F. NFPA 241 Construction Fire Safety & Impairment Plans	Pricing Available Upon Request
G. NFPA 285 Engineering Judgement	Pricing Available Upon Request
H. Spray-Applied Fire Resistance Material Special Inspections	Pricing Available Upon Request
I. Fire-Stopping Special Inspections	Pricing Available Upon Request
J. Hourly Code Consulting	Pricing Available Upon Request
TOTAL	\$22,000.00

Attendance at periodic field meetings or scope in addition to the effort described above will be paid for as an Additional Service.

If you have any questions or concerns, please don't hesitate to reach out. We look forward to continued collaboration on this project.

Sincerely,
Very truly yours,

Caitlyn Angelini, PE
Project Manager/ Senior Code Consultant
AKF

PAMELA PERINI CONSULTING
20 FREEMONT TERRACE, WALTHAM, MA 02452
617-447-0081 - PPERINI1234@HOTMAIL.COM

June 21, 2019

William Spears, Principal
MDS/Miller Dyer Spears, Inc.
99 Chauncy Street, 8TH Floor
Boston, MA 02111

RE: Confidential Security Consulting Proposal (0326.XX)
Braintree South Middle School
Design Documentation thru Commissioning

Dear Mr. Spears;

Per your request, Pamela Perini Consulting is pleased to submit a Scope of Services and Proposed Fee for the above referenced project. Per our discussion, the proposal includes a DIV28 Specification to work in conjunction with Security Drawings being provide by the GGD Team.

The proposed scope of basic services for this project includes the following:

In accordance with your request, Pamela Perini Consulting is pleased to submit the following scope of services and proposed fee for the aforementioned project

Scope of Services

Pamela Perini Consulting will provide Security Consulting and support to the MDS Team during the DD, CD and Construction Administration phases. This support to include Meetings as needed and specification documents that are written for DIV28 Specifically. Any reference for direction to other specification sections will be reference only and will not be included that actual division or specification. This proposal does not include DIV8, DIV26, DIV27 or any other specification sections. All DIV1 General Terms shall be applicable to this proposal.

Pamela Perini Consulting shall provide the specification package that is complimentary to the systems and Drawings that are to be produced by GGD and David Perriera, PE. This proposal shall include specification documentation submissions at DD, 60% CD, 90% CD, 100% CD and one (1) additional submission.

Electronic Security Scope of Services shall include:

- Continuation of the needs assessment for system requirements.
- Support with documentation and information of any proprietary system requirements for the School Committee or the Inspector General's Office.
- Be present at any and all Executive Sessions and Public meetings needed for Security Discussions (advanced notice of scheduling required by MDS to PPC)
- Written specification Section 2800000 to include; Access Control, CCTV, Intrusion Detection, Video Intercom and Intercom.
- Proposal excludes any risk assessment or program components outside of the Security Systems.
- Specifications to include School related performance functions for systems such as Lock Down and Shelter in Place.
- Review and capture information for the future Security System preparation for bid in Chapter 149.

Construction Administration Services:

- Respond to RFI's as appropriate in conjunction with GGD.
- Assist Commissioning Agent in preparation of Security Systems Cx..
- Review Shop Drawings to assess adherence to Specifications.
- Additional design/project management due to expansion of the scope of this project is not included beyond the scope of the building being 145,559 sq ft and site.

Project Assumptions:

- We assume that value engineering specification revisions are not required and not included in this proposal.
- All electronic door locking device hardware will be provided under the door hardware scope of work.
- All glazing will be provided under window/glass vendor.
- Fire Systems and code review not included; integration of Access Control included.
- Building penetrations and fire stopping under separate specification division.
- Blocking, if needed to be covered under carpentry and not included in this section.
- Elevator travel cable requirements to be provided under separate trade documents if needed for system components in elevator cab.
- We assume that all Risk and Threat Analysis for Physical Security System design will be provided by owner, but is available upon request.
- We assume that all space power and signal programming will be provided to us for review through the Architect by GGD.
- We assume that any active wireless propagating signal strength survey is not required as part of these design deliverables.

The cost of the above scope/services to be performed is \$35,700.00 and will incrementally billed through the project phases. If this proposal is acceptable kindly sign and date below to officially begin engagement. Proposal does not include printing or additional out of the ordinary expenses.

Net 30 Payment. The above stated scope will be provided in accordance with PPC's Standard Terms and Conditions.

If Pamela Perini Consulting is requested to provide additional services to MDS or the owner, we will prepare and submit a separate proposal or Service Authorization Form which will contain the proposed scope and fee for the additional services.

If you agree with the scope and terms in this proposal, please sign in the space provided below and return a signed copy for our files.

Thank you for the opportunity to present this proposal. If you have any questions or need additional information, please feel free to call.

Sincerely, I remain,

Pam

Pam Perini, PSP

Pamela Perini Consulting

MDS Fee Breakdown

Design Development	\$ 9,000
Construction Docs	\$16,000
Bid	\$ 1,700
CA	<u>\$ 9,000</u>
TOTAL:	\$35,700

July 17, 2019



MDS | Miller Dyer Spears
Attn: Will Spears, AIA, LEED AP BD+C
99 Chauncey Street
Boston, MA 02111

Re: Braintree South M. S., 232 Peach St. – Braintree, MA (Survey) V3 SCI #18074.01

Dear Will:

Samiotes Consultants, Inc. (Samiotes) is pleased to present this proposal for land surveying services for the Braintree South Middle School located at 232 Peach Street in Braintree, Massachusetts. Our proposal is as follows:

I – SCOPE OF WORK / TASKS

- A. **Limited Topographic Survey & Plan:** Samiotes will conduct a limited topographic survey including topography and utility research and compilation for the above referenced site, limited as shown in the attached "Survey Limits" sketch. Existing underground utilities will be shown at a Quality Level C of the Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data (38-02) by the American Society of Civil Engineers. Please note the setting of markers at lot corners is not considered a part of this service.

II – FEE FOR SERVICES (*Invoice Tasks in Italics*)

- A. **Limited Topographic Survey & Plan (*Task 1*)**
Fixed Fee – \$19,350.00 COMPLETED
Method of Billing – Lump Sum billed monthly based on a percentage of Task completion.

EXPENSES: Reimbursable Expenses are included in the fees listed above.

ADD. ALTERNATE (Fees may be refined as Scope is better defined.)

- | |
|---|
| <ul style="list-style-type: none">A. Boundary Retracement Survey: If required, Samiotes will conduct a boundary retracement survey for the property located at 232 Peach Street in Braintree, Massachusetts.
Approximate Fee – \$16,750.00 |
|---|

III – ADDITIONAL SERVICES

Additional services are those services not listed above. If necessary, additional services will be performed upon receipt of authorization to proceed and may include, but are not limited to, the following:

- A. **Boundary Retracement Survey.**

Samiotes Consultants, Inc.
Civil Engineers + Land Surveyors

20 A Street
Framingham, MA 01701-4102

T 508.877.6688
F 508.877.8349

www.samiotes.com

- B. This contract assumes reasonable recoverability and congruity between field and record monumentation. Additional work due to an unanticipated degree of difficulty encountered in performing said services, errors/omissions in record plans, lost or disturbed monumentation, vague deeds, delay created within or by approving agencies, or unforeseen circumstances not covered by this proposal will be billed in accordance with our hourly rates.
- C. Additional fieldwork and/or calculations due to unanticipated site constraints will be billed in accordance with our hourly rates.
- D. Additional Survey Plans required for any proposed improvements to the property (e.g. Consolidation Plan, Certified Plot Plan, ALTA/NSPS Land Title Plan, Subdivision Plan, Easement Plans, etc.)
- E. In the event of any legal action (excluding non-payment of outstanding balances) associated with the specific project, Samiotes will be reimbursed in accordance with our hourly rates for any efforts involved in preparing for and/or appearing at any court proceedings.
- F. Reports to financial institution or others.
- G. Underground fuel tank storage application or assessment of any type.
- H. Hazardous waste assessment of any type including those associated with MGL Ch. 21E.
- I. The price quoted in this proposal assumes this is not a prevailing wage project. Samiotes Consultants, Inc. reserves the right to adjust our estimate and Rate Schedule if this project is subject to prevailing wages.

IV – CLIENT RESPONSIBILITIES

- A. Client shall provide a copy of the current locus deed and mortgage survey plan (if available).
- B. Client shall provide safe access and working conditions for Samiotes employees.
- C. Client shall provide access and permission to enter the property and, if available, a place to park a survey van.
- D. Client shall provide Samiotes with copies (and/or AutoCAD drawing files if available) of plans including permit plans, existing conditions plans, ALTA/NSPS Land Title Plans, etc. that may facilitate the most efficient performance of our work.
- E. Provide to Samiotes all documents and information known to Client that relate to the identity, location, quantity, nature or characteristic of any hazardous waste at, on or under the site. In addition, Client will provide reports, data, studies, plans, specifications, documents and other information on surface and subsurface site conditions required by Samiotes Consultants, Inc. for proper performance of its services. Samiotes shall be entitled to rely upon Client provided documents and information in performing the services required under this Agreement; however, Samiotes Consultants assumes no responsibility or liability for their accuracy or completeness. Client provided documents shall remain the property of the Client.

V – RATE SCHEDULE

Hourly work and Additional Services will be billed hourly at the following rates:

Principal/President	\$230.00 per Hour
Expert Witness	\$275.00 per Hour
Civil Senior Project Manager/Senior Associate	\$155.00 per Hour
Registered Professional Land Surveyor (Director)	\$185.00 per Hour
Registered Professional Engineer	\$145.00 per Hour
Registered Professional Land Surveyor	\$145.00 per Hour
Survey Field Crew (3-person)	\$260.00 per Hour
Survey Field Crew (2-person)	\$175.00 per Hour
Survey Field Crew (1-person)	\$130.00 per Hour
2-Person Survey Field Crew (Construction Layout)	\$2,350.00 per Day
	\$1,350.00 per one-half Day
3-Person Survey Field Crew (Construction Layout)	\$3,250.00 per Day
	\$1,850.00 per one-half Day
Civil Project Manager	\$122.50 per Hour
Soil Evaluator	\$125.00 per Hour
3D Scan Processing	\$115.00 per Hour
Project Engineer	\$ 85.00 – \$100.00 per Hour
Project Surveyor	\$ 85.00 – \$100.00 per Hour
Survey Technician	\$ 75.00 per Hour
Professional Staff	\$ 70.00 per Hour
Administrative Staff	\$ 55.00 per Hour
Archive Retrieval Fee (Up to 1 hour)	\$150.00 Flat Fee

NOTE: If Samiotes Employees are required to be at a job site during a weekend or holiday, the Client will be charged hourly rates at time and a half during weekends and double time on holidays.

Additional services will be performed only upon Authorization to Proceed.

AUTHORIZATION TO PROCEED: Execution of this proposal constitutes Authorization to Proceed. Work will not proceed until this Proposal is executed and a signed copy is returned to this office.

VALIDITY: The prices quoted in this proposal are valid for sixty (60) days.

COST: Rates are re-evaluated on an annual basis. Once a proposal is signed, the fees and terms shall be in effect until the end of the calendar year. If the project continues beyond that time, Samiotes' hourly rates and fees will be revised to conform to Samiotes' standard hourly rates for that calendar year. If additional services are contracted, the Client will be notified of the updated rate schedule.

TERMS AND CONDITIONS: The attached *Terms and Conditions of Agreement* is hereby incorporated into this agreement by reference.

ACCEPTANCE: This Proposal for Professional Consulting Services is hereby accepted and executed by a duly authorized signatory who, by execution hereof, warrants that he/she has full authority to act in the name of and on behalf of

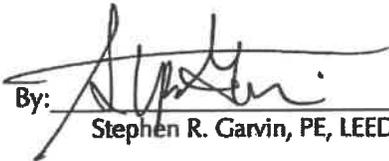
MDS | MILLER DYER SPEARS

By: _____ Title: _____

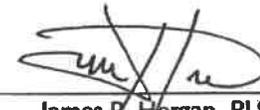
Printed Name: _____ Date: _____

Agreed:

SAMIOTES CONSULTANTS, INC.

By:  _____
Stephen R. Garvin, PE, LEED AP

Title: President

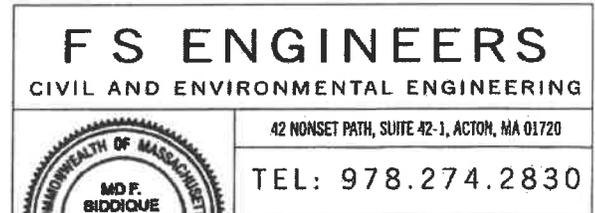
By:  _____ Title: Survey
James P. Horgan, PLS Project Manager

Please return a copy of the executed proposal as Authorization to Proceed. Thank you for this request for land surveying services.

SURVEY SCHEDULE
Limited Topographic Survey & Plan

In accordance with 250 CMR, Section 6.0 "Land Surveying Procedures and Standards", Paragraph 6.01 "Elements Common to all Surveys", Samiotes will:

- 1.1 Perform research at the relevant municipal, state, and county agencies to obtain record information concerning the project area.
- 1.2 Reference the project horizontally to the Massachusetts State Plane Coordinate System North American Datum of 1983 and vertically to the North American Vertical Datum of 1988 (NAVD 88) by RTK GPS observations. Locate the following on-site observable surface features within the limits of the project area: (Features will be selected to provide for accurate contouring at a 1-foot contour interval).
 - o Buildings, sidewalks, landscape structures and street furniture;
 - o Edges of pavement (bituminous, concrete, brick, paving blocks, cobblestone, etc.);
 - o Pavement markings (traffic lane striping, stop lines, crosswalks, parking spaces, etc.);
 - o Utility, traffic and light poles, signs and bollards;
 - o Utility covers, meters, control boxes and other structures;
 - o Catch basins, area drains, manholes and culverts;
 - o Walls, curbing, tree wells, traffic islands and fences;
 - o Outline of thickly wooded areas;
 - o High and low ground points;
 - o Outline & spot grades at ledge outcroppings;
 - o Trees of 6" caliper and above with spot elevation in open areas only;
 - o Limits of shrubbery & other planting areas;
 - o Test Pits/Borings (to be marked in field by others if present during the field survey);
 - o Wetland Flags (placed in the field by others).
- 1.3 Prepare a plan entitled "Limited Topographic Plan" at a scale of 1" = 20' showing the following information:
 - o Observable site features such as those listed in section 1.4;
 - o Vertical contours at a one foot interval;
 - o Spot elevations at high/low points and in areas of little or no slope;
 - o Spot elevations at building corners, driveway corners, top & bottom of walls, top & bottom of curbing at 50 foot intervals;
 - o Subsurface utilities in the abutting streets located as accurately as possible from observable surface structures and plans of record;
 - o Size and invert elevation of gravity flow pipes and culverts at accessible junction points;
 - o Elevations on hard surfaces, manholes and catch basin rims will be shown to nearest 0.01'; spot grades on soft surfaces to the nearest 0.1';
 - o Location and elevation of established benchmarks; (A minimum of two benchmarks per site will be provided)
 - o Assessor's references: map, parcel, lot number and owners' names for site and abutting parcels;
 - o FEMA Flood Insurance Rate Map (FIRM) flood zone, community number, panel number and effective date;
 - o Location of any 100 year flood plain districts if they exist on the site in accordance with FEMA;
 - o Legend of symbols and abbreviations used on the plan;
 - o North arrow and its basis;
 - o Graphic scale in feet.



June 20, 2018

Mr. Gary Coccoluto, RA, NCARB
Associate
MDS/Miller Dyer Spears Inc.
99 Chauncy Street, 8th Floor
Boston, MA 02111

Re: Proposal for an ASTM Phase I Environmental Site Assessment and Preliminary Soils Characterization at the Braintree South Middle School, Braintree, MA

Dear Mr. Coccoluto:

FS Engineers, Inc. (FSE) is pleased to present this proposal for professional services at the Braintree South Middle School site in Braintree, Massachusetts. FSE will prepare an *ASTM Phase I Environmental Site Assessment* (ESA) for the property in accordance with ASTM standard E1527-13. In addition, a *Preliminary Soils Characterization* will also be performed. In preparing this proposal, FSE spoke with Mr. Madjid Lahlaf of LGCI to coordinate our efforts to provide cost savings to the project. FSE will conduct field investigations and collect soil samples from geotechnical borings performed by LGCI. This cooperative effort will minimize the overall project drilling costs while meeting the project goals. FSE and LGCI have partnered and coordinated on numerous public school projects similar to this one.

This proposal is based on information provided by you. FSE has not conducted a site reconnaissance to prepare this scope of work. Our understanding is that there is no past history of a documented release of oil or hazardous materials (OHM) at this site. The intent of the sampling program is to provide sufficient information to support a feasibility analysis for a preferred school building option.

The purpose of the investigation is to prepare an *ASTM Phase I ESA Report* and characterize the site soil quality to assist in the determination, from an environmental standpoint only, of appropriate soil reuse and disposal options. FSE's soil characterization is not intended, and should not be used, to make any geotechnical evaluations or conclusions. The soil characterization scope of work is based on performing two (2) days of field work in order to obtain soil samples for laboratory analysis. The *Preliminary Soils Characterization Report* will be a separate report from the *Phase I ESA report*. The soil characterization report will contain laboratory reports, tabulated data, sample locations on a site plan, and recommendations.

FSE is prepared to commit the necessary resources to ensure the timely completion of

this project. The project team will be led by Mr. Farooq Siddique, PE, LSP, as Principal and Mr. Michael Hudson, as Project Manager. Both Mr. Siddique and Mr. Hudson have more than 30 year's professional experience in environmental site assessment and remediation.

Our proposal includes the Scope of Services, Schedule of Services, Fee for Services, Basis of Proposal, and Agreement for Professional Services.

1.0 SCOPE OF SERVICES

The following is a list of tasks to be performed under this Agreement:

1.1 ASTM Phase I ESA - Visual Survey, Research and Report

- (a) Obtain readily available records of previous site use and zoning history to identify recognized environmental conditions. Review historical aerial photos online to evaluate the site development history.
- (b) Check readily available plans and interview knowledgeable persons concerning information on utilities (e.g. electric, gas, oil, water, sewer, etc.) and chemical storage, use, and disposal and complete a transaction screen questionnaire.
- (c) Examine files of federal and state agencies (e.g. DEP, CERCLA, ERNS, and NPL) regarding local releases of oil or hazardous material.
- (d) Conduct a site reconnaissance and evaluate for visual and olfactory evidence of contamination (e.g. stained soil, odors, liquid on ground, empty chemical containers, improper solid or hazardous waste disposal, site uses).
- (e) Assimilate and interpret information from the historical research, site reconnaissance, and public records and prepare a *Phase I Environmental Site Assessment Report*.

1.2 Soil Sample Collection

- (a) Review past environmental and/or geotechnical reports provided to FSE (if any). Prepare a soil sampling plan based upon the information reviewed, and the results

of the *Phase I ESA*. The soil sampling plan will be coordinated with the geotechnical sampling plan being developed by LGCI.

- (b) Observe the geotechnical soil borings to be conducted by LGCI, the geotechnical engineer. Submit selected soil samples from each boring for laboratory analyses. LGCI will be responsible for obtaining a Digsafe permit, pre-marking the boring locations for utility clearance, and retaining the drilling contractor.

- (c) Field screen soil samples from each boring for total volatile organic compounds (VOC) using a photoionization detector (PID). Based upon the PID field screening, collect up to eight (8) soil samples (one from each boring) and submit for laboratory analysis as follows:
 - EPH with target PAHs (8 samples)
 - VOCs (8 samples)
 - MCP 14 metals (8 samples)
 - PCBs (4 samples)
 - TCLP Lead (4 samples)

A site plan of the property showing the soil boring locations will be provided to FSE by LGCI.

- (d) Prepare a *Preliminary Soils Characterization Report* that describes the soil sampling procedures, presents the tabulated laboratory soil sample analysis results, and contains the laboratory reports and a site plan which will be provided by Client.

2.0 SCHEDULE OF SERVICES

FSE is prepared to commence work on this project upon receipt of written authorization to proceed.

3.0 FEES FOR SERVICES

For this project as defined in Section 1.0, "Scope of Services", compensation shall be the Fixed Fee as presented below:

**Phase I ESA and Preliminary Soil Characterization Proposal
Braintree South Middle School, Braintree, MA**

Phase I Environmental Site Assessment Report - \$2,500.00 COMPLETED

Preliminary Soils Characterization Report - \$9,500.00

Additional services will be billed hourly according to the following rates:

LSP Services:	\$ 132.00
Project Manager:	\$ 121.00
Project Engineer:	\$ 80.00
Subcontractor:	Cost + 15%

4.0 BASIS OF PROPOSAL

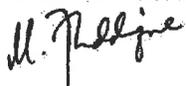
- (a) We have assumed that all existing site information will be made available.
- (b) We have assumed that any previous studies conducted on the site will be made available.
- (c) We have assumed that access to the site will be provided by the client.

5.0 AGREEMENT FOR PROFESSIONAL SERVICES - Attached herewith.

Please sign two copies of this Agreement. Retain a copy for your files and return the other to us; the receipt of which shall constitute Notice-to-Proceed. If you have any questions, please do not hesitate to contact us. We look forward to working with you on this important project. Thank you for considering FS Engineers, Inc.

Very truly yours,

FS ENGINEERS, INC.



Digitally signed by Farooq Siddique
DN: cn=Farooq Siddique, o=FS
Engineers, Inc., ou,
email=fsiddique@fsengrs.com, c=US
Date: 2018.06.20 09:17:27 -0400

Farooq Siddique, PE, LSP
Principal

AGREED AND ACCEPTED BY CLIENT:

Name William Spears

Title Principal

Date 4-18-19

Hold on Preliminary Soils
Characterization until notified

FS ENGINEERS, INC.



June 28, 2019

Ms. Nereyda Rodriguez, RA, NCARB
Miller Dyer Spears Inc.
99 Chauncy Street
Boston, MA 02111
Phone: (617) 338-5350
Fax: (617) 338-0033
E-mail: nrodriguez@mds-bos.com

**Re: Proposal for Design Phase and Construction Geotechnical Field Services
Proposed Braintree South Middle School
Braintree, Massachusetts
LGCI Proposal No. 19056**

Dear Ms. Rodriguez:

Lahlaf Geotechnical Consulting, Inc. (LGCI) appreciates the opportunity to submit this proposal to provide geotechnical services during the design and construction phases of the proposed Braintree South Middle School in Braintree, Massachusetts. This proposal is based on your request for proposal (RFP) dated June 23, 2019 and on information you provided to us in subsequent e-mail communications.

Background and Project Understanding

The site of the existing Braintree South Middle School is located at 232 Peach Street in Braintree, Massachusetts. The site is occupied by the existing one- to two- story building. The existing building is located on the southern side of the site. Athletic fields, including a basketball court, tennis courts, and grass fields are located on the northern side of the site, north of the existing building.

We understand that the proposed building will have a somewhat rectangular shape with a center courtyard and will have a length of about 460 feet and a width that varies between about 190 and 290 feet, i.e., a footprint of about 95,000 square feet. The proposed building will be constructed on the northern side of the existing building.

LGCI previously performed preliminary subsurface explorations at the site including six (6) borings. The previous borings generally indicated topsoil, overlying fill, overlying natural sand. The existing fill extended to depths ranging between 2 and 5 feet beneath the ground surface. Refusal on apparent rock was encountered at the bottom of the sand layer in all previous borings. The depth of sampler or auger refusal ranged between 2.8 and 11.3 feet beneath the ground surface and rock was confirmed with two (2) rock cores in two (2) borings (one each).

LGCI preliminarily recommended removing the topsoil and the existing fill and supporting the proposed building on shallow footings bearing on Structural Fill placed directly on top of the natural sand.

Scope of Work

1. Explorations and Report

1.1 Mark Boring and Test Pit Locations and Utility Clearance – LGCI will mark the exploration locations in the field by taping the distances from the corners of the proposed building. We request that the corners of the proposed building be staked in the field by others. We will contact the utility clearance agency, Dig Safe Systems, Inc. (Dig Safe) and the City of Braintree to assist the owner in locating underground utilities at the site. We request that you provide us with a current utility plan. We also request that a representative of the owner observe our marked exploration locations to clear them for private utilities. LGCI will not assume responsibility for damage to underground features.

1.2 Test Pits – We will engage an excavation subcontractor for two (two) days to advance up to twelve (12) test pits, including six (6) test pits requested by the project civil engineer. The test pits will be excavated at locations approved by the owner. The test pits will extend to depths of up to 12 feet. After the test pits are completed, the excavations will be backfilled with the excavated materials which will be placed and tamped in place using the excavator bucket in 18- to 24-inch lifts. We have not included in this proposal a fee for loaming, seeding, raking, or mulching the test pit locations.

1.3 Drilling Subcontractor for Borings and Groundwater Observation Wells – We will engage a drilling for five (5) days of drilling. We anticipate that in five (5) days the drilling subcontractor will complete up to sixteen (16) soil borings. The borings will be advanced to depths of 20 feet. The drilling subcontractor will perform standard penetration tests (SPT) in the borings and will obtain split-spoon samples at 5-foot intervals and at perceived strata changes in accordance with ASTM D-1586. Our drilling subcontractor will also obtain rock cores to confirm and characterize the bedrock in up to six (6) borings.

The boreholes will be backfilled with the soil cuttings, and the ground surface will be restored with asphalt cold patch in paved areas.

We have assumed that the borings will be performed during normal day working hours using a track-mounted drill rig.

Our drilling subcontractor will install two (2) groundwater observations in two (2) borings (one each).

1.4 Geotechnical Field Engineer to Observe Borings and Test Pits, and to Monitor Groundwater Observation Wells – We will provide a field engineer at the site to coordinate and observe the



**Proposal for Design Phase and Construction Geotechnical Field Services
Proposed Braintree South Middle School
Braintree, Massachusetts
LGCI Proposal No. 19056**

test pits and the drilling, collect soil samples, and prepare field logs. We have also included time to perform four (4) visits to monitor the groundwater observation wells.

Based on our discussion with the civil engineer double ring infiltrometer tests will not be required in the test pits.

1.5 Laboratory Testing – We will submit fourteen (14) soil samples from the borings and test pits for grain-size analyses. The purpose of these tests is to assess whether the onsite fill and natural sand can be reused as backfill.

1.6 Geotechnical Reports – We will submit our report electronically. Our report will include the following:

- Summary of the subsurface investigation methods used;
- Description of the subsurface conditions;
- Description of previous borings;
- LGCI's boring and test pit logs;
- Plan showing boring and test pit locations;
- Depth to refusal, if encountered;
- Groundwater data;
- Laboratory test results;
- Recommendations for feasible foundation;
- Recommendations for bearing capacity of foundations;
- Seismic design recommendations in accordance with the Massachusetts State Building code, 9th Edition;
- Recommendations for rock removal;
- Construction considerations, including subgrade preparation, groundwater control, temporary earth-support system, if needed, rock blasting, and backfill recommendations including removal of unsuitable soils.

2. Design Phase Services

2.1 Review Drawings – We will coordinate with the structural engineer and we will review the geotechnical aspect of the foundation drawings and we will provide written comments. We have budgeted ten (10) hours for this task.

2.2 Prepare Specifications – We will prepare the earth moving specifications. We have budgeted sixteen (16) hours for this task.

2.3 Consultation – We have budgeted twenty (20) hours for general consultation with you during the design phase.



3. Construction Phase Services

- 3.1 Kickoff Meeting – We will attend a kickoff meeting with the contractor to discuss scheduling and the contractor’s construction sequence. We have budgeted six (6) hours for this task.
- 3.2 Contractor Submittals and RFIs – LGCI will assist Miller Dyer Spears Inc. (MDS) with the review of requests for information (RFIs) and contractor submittals related to geotechnical issues. We have budgeted forty (40) hours for this task.
- 3.3 Site Visits to Observe the Subgrade of Footings and Slabs – We will provide a geotechnical engineer to observe the removal of the existing fill and organic soil, and to observe the subgrade of footings and slabs, including removal of the existing fill. We have not included in this proposal observing the subgrade of roadways or utility trenches. Our engineer will provide recommendations about the suitability of backfill materials. In addition, we would be pleased to attend site meetings regarding the foundation work, if requested. Our scope does not include observation of backfilling operations and field density testing. We understand that the owner will retain a separate testing agency to perform these services. We have assumed that the earthwork operations will require forty-five (45) visits. We have budgeted nine (9) hours per visit, including travel to and from the site.
- 3.4 Field Observation Reports, Review, and Coordination – We will provide a geotechnical engineer to consult with you and with the contractor during earthwork operations. Our engineer will also review the earthwork-related daily field reports prepared by the testing agency engaged by you and which you request that we review. Our engineer will prepare daily field reports containing a summary of our observations and a summary of the geotechnical recommendations made in the field. Our reports will be submitted weekly at the beginning of the week following our visits. We have budgeted about one (1) hour per field report and one (1) per day for a senior engineer for coordination and review.

LGCI’s scope of services does not include an environmental assessment for the presence or absence of wetlands, or analytical testing for hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site. Any statements regarding odors, colors, or unusual or suspicious items or conditions are strictly for the information of the client.

Recommendations for unsupported slopes, stormwater management, erosion control, pavement design, and detailed cost or quantity estimates are not included in our scope of work.

Proposed Schedule

LGCI will begin work upon receiving authorization. Assuming that there are no delays with site access or other factors, such as permitting, LGCI will begin scheduling our explorations upon receiving authorization in the form of a signed copy of this proposal. Our drilling subcontractor can mobilize at the site within about three (3) to four (4) weeks after the exploration locations are marked and the site is cleared for utilities. LGCI can provide you with preliminary boring logs



**Proposal for Design Phase and Construction Geotechnical Field Services
Proposed Braintree South Middle School
Braintree, Massachusetts
LGCI Proposal No. 19056**

and preliminary geotechnical recommendations within one week of completing the explorations. We will provide our geotechnical report within about three (3) weeks after the end of our explorations.

Generally, we require a one-week notice for the first visit. During construction, we will coordinate our work with the contractor. We request a minimum a 2-day notice before each visit.

Project Fee

We will perform our services on a time-and-expenses basis using a rate of \$97/hour for a field engineer, \$107/hour for a geotechnical engineer, and \$133/hour for a senior geotechnical engineer. Expenses, if any, will be billed at cost plus 15 percent.

We recommend budgeting **\$103,410** for our services as shown below.

1.1	Mark Borings and Utility Clearance	\$1,400	
1.2	Test Pits (2 days)	\$4,380	
1.3a	Drilling Subcontractor (M/D+5 days+ prev. Wages)	\$17,090	
1.3b	Groundwater Observation Wells	\$900	
1.4a	Geotech. Eng. to Observe Borings	\$7,890	
1.4b	Monitor Groundwater Observation wells	\$1,550	
1.5	Laboratory Testing	\$1,385	
1.6	Boring Logs and Letter Report	\$3,660	\$38,255
Design Phase Services			
2.1	Review Geo. Aspect of Found. Drwgs	\$1,330	
2.2	Specifications	\$2,200	
2.3	Consultation	\$2,660	\$6,190
Construction Services			
3.1	Kickoff meeting	\$760	
3.2	Review Geotech. Aspect of Contractor's Submittals and RFIs	\$5,320	
3.3	Field Services	\$42,535	
3.4	Field Reports and review	\$10,350	\$58,965
			\$103,410
			\$44,445

No services beyond those described above would be provided without your prior knowledge and approval. If site conditions or your needs require a change in the scope of work, we will prepare for your approval a change order request that summarizes the changes to the project scope and fee.

Terms and Conditions

We propose to perform our work in accordance with the terms and conditions of our existing agreement dated June 13, 2018 and signed by Ms. Margaret Clark of MDS on August 13, 2018. Your acceptance of this proposal by signing and returning one complete copy will form our



**Proposal for Design Phase and Construction Geotechnical Field Services
Proposed Braintree South Middle School
Braintree, Massachusetts
LGCI Proposal No. 19056**

agreement for these services, and will serve as written authorization to proceed with the described scope of work.

LGCI trusts that the above proposal will be sufficient to meet your needs. If this proposal is acceptable, please sign and return a complete copy of this proposal to LGCI. If you have any questions, please call us at (978) 330-5912.
Sincerely,

LAHLAF GEOTECHNICAL CONSULTING, INC.



Abdelmadjid M. Lahlaf, Ph.D., P.E.
Principal Engineer

Enclosures: LGCI's Standard Conditions for Engagement

Agreed to by (please type name): _____ **on (date):** _____

Company Name: _____

Signature: _____



July 19, 2019



MDS | Miller Dyer Spears
Attn: Will Spears, AIA, LEED AP BD+C
99 Chauncey Street
Boston, MA 02111

Re: Braintree South M. S., 232 Peach St. – Braintree, MA Add. #2 (V2) SCI #18074.01

Dear Will:

Samiotes Consultants, Inc. (Samiotes) is pleased to present this addendum for Test Pit and Boring layout services for the Braintree South Middle School located at 232 Peach Street in Braintree, Massachusetts. Our addendum is as follows:

I - SCOPE OF SERVICES

- A. **Test Pit and Boring Layout Services:** Samiotes will perform office calculations and on-site layout services at the Braintree South Middle School. Samiotes surveyors will use previously established survey control points and layout proposed test pit and boring locations as provided by Lahlaf Geotechnical Consulting, Inc. (LGCI). Sketches showing layout established in the field will be provided if required. This task assumes up to (2) full days in the field and up to twenty-eight (28) test pit and/or borehole locations.

II – FEE FOR SERVICES (*Invoice Tasks in Italics*)

- | |
|--|
| A. Test Pit and Boring Services (<i>Task 22</i>)
Approximate Fee – \$4,000.00 - \$5,000.00
Method of Billing – Lump Sum billed monthly as a percentage of task completion. |
|--|

EXPENSES: Reimbursable Expenses are included in the fees listed above.

III – RATE SCHEDULE

Hourly work and Additional Services will be billed hourly at the following rates:

Principal/President	\$250.00 per Hour
Expert Witness	\$300.00 per Hour
Civil Senior Project Manager/Senior Associate	\$160.00 per Hour
Registered Professional Land Surveyor (Director)	\$190.00 per Hour
Registered Professional Engineer	\$150.00 per Hour
Registered Professional Land Surveyor	\$150.00 per Hour
Survey Field Crew (3-person)	\$265.00 per Hour
Survey Field Crew (2-person)	\$180.00 per Hour
Survey Field Crew (1-person)	\$135.00 per Hour
2-Person Survey Field Crew (Construction Layout)	\$2,500.00 per Day
	\$1,500.00 per one-half Day
3-Person Survey Field Crew (Construction Layout)	\$3,500.00 per Day
	\$2,000.00 per one-half Day
Civil Project Manager	\$125.00 per Hour
Soil Evaluator	\$130.00 per Hour
3D Scan Processing	\$130.00 per Hour

Samiotes Consultants, Inc.
Civil Engineers + Land Surveyors

20 A Street
Frammingham, MA 01701-4102

T 508.877.6688
F 508.877.8349

www.samiotes.com

Project Engineer	\$ 85.00 – \$110.00 per Hour
Project Surveyor	\$ 85.00 – \$110.00 per Hour
Survey Technician	\$ 75.00 per Hour
Professional Staff	\$ 70.00 per Hour
Administrative Staff	\$ 62.50 per Hour
Archive Retrieval Fee (Up to 1 hour)	\$150.00 Flat Fee

NOTE: If Samiotes Employees are required to be at a job site during a weekend or holiday, the Client will be charged hourly rates at time and a half during weekends and double time on holidays.

Additional services will be performed only upon Authorization to Proceed.

AUTHORIZATION TO PROCEED: Execution of this addendum constitutes Authorization to Proceed. Work will not proceed until this addendum is executed and a signed copy is returned to this office.

VALIDITY: The prices quoted in this addendum are valid for sixty (60) days.

COST: Rates are re-evaluated on an annual basis. Once an addendum is signed, the fees and terms shall be in effect until the end of the calendar year. If the project continues beyond that time, Samiotes' hourly rates and fees will be revised to conform to Samiotes' standard hourly rates for that calendar year. If additional services are contracted, the Client will be notified of the updated rate schedule.

TERMS AND CONDITIONS: The *Terms and Conditions of Agreement* of our original contract remain in effect.

ACCEPTANCE: This addendum for Professional Consulting Services is hereby accepted and executed by a duly authorized signatory who, by execution hereof, warrants that he/she has full authority to act in the name of and on behalf of

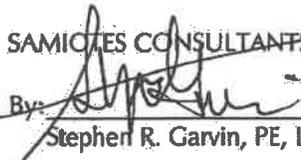
MDS | MILLER DYER SPEARS

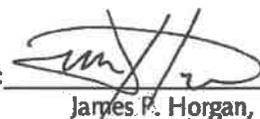
By: _____ Title: _____

Printed Name: _____ Date: _____

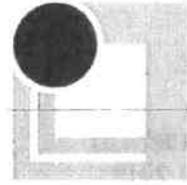
Agreed:

SAMIOTES CONSULTANTS, INC.

By:  Title: President
Stephen R. Garvin, PE, LEED AP

By:  Title: Survey Project Manager
James P. Horgan, PLS

Please return a copy of the executed addendum as Authorization to Proceed. Thank you for this request for additional land surveying services.



29 June 2019

Will Spears
Principal
Miller Dyer Spears
99 Chauncy Street, 8th Floor
Boston, MA 02111

Re: Furniture & Equipment Design/Procurement
Braintree South Middle School

Will:

This is a proposal to provide design, procurement and installation services for furniture and equipment for the above-named project. This proposal is based on an estimated cost of \$960,000 based on MSBA guidelines, for all new furniture and common equipment found in a typical Middle School with a projected enrollment of 800 students.

Services to be provided:

Phase 1 – Architectural Phase – DD/FFE Layouts/Estimate

1. Participate in Owner/User interviews - solicit needs (types and quantities of furniture/equipment) coordinating with the project drawings and layouts as prepared by MDS and consultants
2. Compile and maintain a FFE Project Manual to include cuts of all proposed furniture and equipment
3. Review and update floor plans to incorporate needs
4. Coordinate with MEP and other project consultants – as required
5. Prepare a preliminary estimate by room – to incorporate both new and existing furniture and equipment
6. Review plans/estimate with MDS/Project Manager
7. Review plans/estimate with Owner – as required

Phase 2 – Architectural Phase – CD/FFE Preliminary Selection

1. Based on information gathered – make preliminary selections of all items
2. Review with users for function, design and required types of finishes
3. Revise and update FFE Project Manual
4. Coordinate with MEP and other project consultants – as required

5. Revise and update selections, plans and estimate
6. Review plans/estimate with MDS/Project Manager
7. Review plans/estimate with Owner – as required

Phase 3 – Architectural Phase – CA/FFE Final Selection

1. Make final selections of all items with color/finishes – prepare presentation materials and arrange for samples of any items requiring viewing prior to acceptance
2. Revise and update FFE Project Manual
3. Review with MDS/Project Manager/Users/Owner for final acceptance
4. Revise and update selections, plans and estimate

Phase 4 – FFE Procurement – Bid Documents/Bid Period

1. Prepare documents – front end/specifications/drawings - for public bidding and/or State Contract procurement
2. Review with Owner pertinent legal requirements – bid advertisements, insurance, bid/performance bonds, etc. and Purchase Order procedures and responsibilities for approval/payment
3. Issue Bid Documents
4. Answer bidders questions – prepare and issue any required addenda
5. Participate in bid opening
6. Prepare Bid Tabulation – indicating conformance to specifications or alternates
7. Arrange for any required samples of alternates – prior to acceptance – and review with Owner/Users
8. Review with MDS Project Manager – as required
9. Present recommendations to Owner/Users for award
10. Prepare required information to Owner for issuance of Contracts/Purchase Orders

Phase 5 – FFE Procurement – Installation/Closeout

(The project may require up to three delivery/installation periods due to the add/reno scheduled completion dates)

1. Prepare schedule for delivery – by Vendor and item
2. Confirm dates with Vendor – coordinating with the project building schedule
3. Distribute schedule and installation drawings to Owner/MDS/Project Manager/Building Contractor (as required)
4. Provide **full time** coordination/observation of vendors while on site delivering and installing procured furniture and equipment
5. Monitor and create a punch list of any observed damages to the site/building caused by any vendor during the delivery/installation period
6. Upon Vendors stated completion of Contract – confirm conformance and performance according to Contracts – confirm quantities, locations, inspect for damages, etc.

7. Issue punch list of deficiencies to Vendors
8. Monitor punch list resolution and inform Owner/Users as to status (limited to 90 days after Vendors substantial completion)
9. Make recommendations to Owner for payment – based on Vendor’s completion of Contract

For the above stated services, Point Line Space, Inc. proposes the following fee:

<i>Phase</i>	<i>Description</i>	<i>Fee</i>
Phase 1	Architectural Phase – DD/FFE Layouts/Estimates	\$8,200.00
Phase 2	Architectural Phase – CD/FFE Preliminary Selection	\$12,200.00
Phase 3	Architectural Phase – CA/FFE Final Selection	\$24,480.00
Phase 4	FFE Procurement – Bid Documents/Bid Period	\$16,320.00
Phase 5	FFE Procurement – Installation/Closeout	\$20,400.00
	Total Fee	\$81,600.00

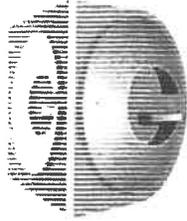
All travel and incidental printing is included in the proposed fee. The cost of reproduction and distribution of the bid package to bidders (specification book and drawings) and any required advertising (if not paid directly by the Owner or MDS) shall be reimbursable, and billed at cost with backup provided. Should the scope, services, or date of completion substantially be changed, proposals for additional services will be prepared, negotiated and accepted, prior to providing these added services.

Thank you for the opportunity of submitting this proposal and we look forward to working with MDS, you, the users and owner on this project.

Regards,
POINT LINE SPACE, Inc.



Peter S. Constable
Principal



Garcia, Galuska & DeSousa

Consulting Engineers Inc.

370 Faunce Corner Road, Dartmouth, MA 02747-1217

L#67211
Proposal

June 20, 2019

Miller Dyer Spears, Inc.
99 Chauncy Street
Boston, MA 02111

Attn: Will Spears, AIA

Re: Braintree South Middle School
Technology Equipment Procurement
Braintree, MA

Dear Mr. Spears:

Per your request we are pleased to submit our proposal for equipment procurement services for the technology system for the above referenced project. This contract is in addition to the previous infrastructure contract.

THE PROJECT

The design work shall include the preparation of specifications for technology equipment as follows: Wireless network electronics; network switches; computers & basic software (Microsoft Office); servers & server racks; printers/scanners; interactive projectors or flat panel touch screens; video message boards; document cameras; portable projectors; telephone system and handsets.

The following systems and equipment are excluded from this proposal: Language lab (where PC's are required, the PC will be included); TV Studio; MIDI Lab or electronic music equipment; POS system, software and cash registers; library cataloging system and software; copiers; industrial printers (laser engraver/3D printers etc.); shop equipment.

BASIC SERVICES

1. Technology system shall include equipment types and specification of equipment as indicated above. Floor plans shall be produced indicating locations of the various equipment to be installed. In addition, we will coordinate work with Owner and vendor so that we are a single point of contact for both parties.
2. We will meet at various times to discuss equipment selections prior to bid, not to exceed four meetings. Attendance at meetings beyond four will be considered additional service and billed on a time and material basis.
3. We will organize receipt of vendor quotes, review and distribute with our recommendations.
4. Service entrance coordination with utility company is included in this proposal. Ordering of internet/telephone/CATV services is not included in the proposal and will be considered and additional service under a time and material basis.
5. We will assist in selecting a vendor or multiple vendors and provide recommendations. We will also assist in coordination with each vendor during phasing. Our scope includes aiding Owner's Project Manager in determining payment of requisitions and purchase orders.

6. We will provide an up-to-date cost estimate to keep the equipment purchased within the budget amount using state contract pricing until the equipment packages are procured.
7. We will coordinate with other system vendors (such as furniture, charging stations, computer equipment, etc.) where appropriate to facilitate equipment.
8. We will furnish floor plans for Owner review showing indication of equipment type proposed.
9. Documents will consist of REVIT (latest version) drawings with 8½" x 11" paper specifications.
10. The project will be procured as one package. All work will be part of a new contract subject to State Bid List requirements.
11. Services during construction include review of equipment; document interpretation and clarification as may be required. Periodic observations of the construction work and reports thereon are included to a maximum of two per phase of the project. Site observations are to determine general conformance of the work to the intent of the Documents.
12. Printing of bid sets and additional sets required for permitting and construction will be an additional reimbursable expense.

COMPENSATION AND PAYMENT:

In consideration of the above, we propose a lump sum fee of Forty-Three Thousand Dollars (**\$43,000.00**), detailed as follows:

20% Document Submission	\$ 9,000.00
50% Document Submission	\$10,500.00
90% Document Submission	\$15,000.00
100% Bid Documents Package	\$ 3,500.00
Construction Administration Package	\$ 5,000.00
TOTAL	\$43,000.00

Payment for the fee shall be made within 30 days of billing. Billings shall be rendered monthly in proportion to the services performed in the preceding 30-day period.

EXTRA SERVICES

Extra services shall be confirmed and authorized in writing prior to rendering of same and may be compensated either by hourly reimbursement or on a mutually agreed upon fixed fee. Hourly compensation shall be in accordance with the following:

Principal	\$150.00/hr
Senior Engineer	\$125.00/hr
Engineer	\$105.00/hr
Draftsmen	\$ 70.00/hr
Clerical	\$ 50.00/hr
Site Visits	\$500.00/visit

REIMBURSABLE EXPENSES

Reimbursable expenses; such as mailing, shipping, and printing; whether they are in connection with the Basic Services or Extra Services shall be billed at cost plus 15% for handling charge.

Garcia, Galuska & DeSousa
Consulting Engineers Inc.

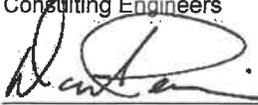
L#67211
Proposal
Page 3

We provide complete insurance coverage which includes \$4,000,000 aggregate Professional Liability Insurance coverage. Upon acceptance of this proposal, we will provide you with proper certification.

If the above meets with your approval, please return a signed copy to our office. This will act as our agreement and notice to proceed.

Very truly yours,

Garcia, Galuska & DeSousa
Consulting Engineers Inc.



David M. Pereira, P. E.

Miller Dyer Spears, Inc.

Will Spears, AIA

DMP: ja

Date

