T34 - PUBLIC WORK IN MASSACHUSETTS, UNDERSTANDING CHAPTER 149 AND CHAPTER 149A

PANELISTS:
Deborah Anderson, Esq.
Office of the Attorney General
Laura Wernick, FAIA, REFP, LEED AP
HMFH Architects, Inc.
John Nunnari, Assoc. AIA
AIA Massachusetts

MODERATOR:
Jay Ford, CSI, CCS, LEED AP
Kalin Associates, Inc.
SESSION OVERVIEW

- HISTORY
- DESIGNER SELECTION
- DOCUMENTATION
- BID PROCESS & LAWS
Legislative History of Chapter 149 and 149A

Chapter 480 of the Acts and Resolves of 1939
An Act Requiring Fair Competition for Bidders on the Construction, Reconstruction, Alteration, Remodeling or repair of Certain Public Works by the Commonwealth or any Political Subdivision Thereof

Chapter 699 of the Acts and Resolves of 1941
An Act Relative to the Furnishing of Certain Performance bonds in connection with Contracts for Certain Public Works, and Relative to Fair Competition for Bidders on the Construction, Reconstruction, Alteration, Remodeling or repair of Certain Public Works by the Commonwealth or any Political Subdivision Thereof

Chapter 679 of the Acts and Resolves of 1956
An Act Further Regulating the Award of contracts for Public Bidding Projects by Competitive Bidding

Report title: Commission Concerning State and Counties Buildings in Massachusetts

Chapter 55 of the Acts and Resolves of 2003
An Act Making Appropriations for Fiscal Year 2003 To Provide for Supplementing Certain Existing Appropriations and for Certain Other Activities and Projects

Chapter 193 of the Acts and Resolves of 2004
An Act Making Further Regulating Public Construction in the Commonwealth
DESIGNER SELECTION
Fees over $10,000/Construction est. over $100,000

DCAM Division of Capital Asset Management

DHCD Department of Housing and Community Development

Have received exemptions
Massachusetts Convention Center Authority
Massachusetts Port Authority
MSBA Massachusetts School Building Authority

Exempt from DSB jurisdiction
UMBA University of Mass Building Authority
MSCBA Massachusetts State College Building Authority
Commonwealth of Massachusetts

Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated February 2013)

1. Project Name/Location For Which Firm Is Filing:
   Edward Devotion School
   Brookline, MA

2. Project #

   This space for use by Awarding Authority only.

3a. Firm (Or Joint-Venture) - Name And Address Of Primary Office To Perform The Work:
    HMFH Architects, Inc.
    130 Bishop Allen Drive
    Cambridge, MA 02139
    t 617 492 2200
    f 617 876 9775
    www.hmfh.com

3b. Date Present And Predecessor Firms Were Established:
    1969

3c. Federal ID #:
    042455798

3d. Name And Title Of Principal-In-Charge Of The Project (MA Registration Required):
    George Metzger, AIA
    Senior Principal
    MA reg. 3563

3e. Name Of Proposed Project Manager:
    For Study: Pip Lewis, AIA, LEED AP
    For Design: Pip Lewis, AIA, LEED AP

3f. Name And Address Of Other Participating Offices Of The Prime Applicant, If Different Than Item 3a Above:
    N/A

3g. Name And Address Of Parent Company, If Any:
    N/A

3h. Check Below If Your Firm Is Either:
    (1) SDO Certified Minority Business Enterprise (MBE)
    (2) SDO Certified Woman Business Enterprise (WBE)
    (3) SDO Certified Minority Woman Business Enterprise (MWBE)

4. Personnel From Prime Firm Included In Question #3a Above By Discipline (List Each Person Only Once, By Primary Function -- Average Number Employed Throughout The Preceding 12-Month Period. Indicate Both The Total Number In Each Discipline And, Within Brackets, The Total Number Holding Massachusetts Registrations):

<table>
<thead>
<tr>
<th>Admin. Personnel</th>
<th>6 ( )</th>
<th>Ecologists ( )</th>
<th>Licensed Site Prof. ( )</th>
<th>Other ( )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architects</td>
<td>21 (20)</td>
<td>Electrical Engrs. ( )</td>
<td>Mechanical Engrs. ( )</td>
<td>Graph Design ( )</td>
</tr>
<tr>
<td>Acoustical Engrs.</td>
<td>( )</td>
<td>Environmental Engrs. ( )</td>
<td>Planners: Urban./Reg. ( )</td>
<td>( )</td>
</tr>
<tr>
<td>Civil Engrs.</td>
<td>( )</td>
<td>Fire Protection Engrs. ( )</td>
<td>Specification Writers ( )</td>
<td>( )</td>
</tr>
<tr>
<td>Code Specialists</td>
<td>( )</td>
<td>Geotech. Engrs. ( )</td>
<td>Structural Engrs. ( )</td>
<td>( )</td>
</tr>
<tr>
<td>Construction Inspectors</td>
<td>( )</td>
<td>Industrial Hygienists ( )</td>
<td>Surveyors ( )</td>
<td>( )</td>
</tr>
<tr>
<td>Cost Estimators</td>
<td>( )</td>
<td>Interior Designers ( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Drafters</td>
<td>3 ( )</td>
<td>Landscape Architects ( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

   Total: 31
6. List ONLY Those Prime And Sub-Consultant Personnel Specifically Requested In The Advertisement. This Information Should Be Presented Below In The Form Of An Organizational Chart. Include Name Of Firm And Name Of The One Person In Charge Of The Discipline, With Mass. Registration Number, As Well As MBE/WBE Status, If Applicable:

MSBA
Town of Brookline, MA
Tony Guigli

HMPH Architects, Inc.
Principal-In-Charge
George Metzger, AIA
Reg. # 3563

Project Manager
Pip Lewis, AIA, LEED AP
Reg. # 8725
HMPH Architects, Inc.

Project Architect
Vassiliou Valverde, AIA, LEED AP
Reg. # 9288
HMPH Architects, Inc.

Sustainability / Green Design / Renewable Energy
Chin Lin, AIA, LEED AP
Reg. # 10697
HMPH Architects, Inc.

Educational Programming / Library/Media Consultant
Laura Wernick, AIA, REFP, LEED AP
Reg. # 6008
HMPH Architects, Inc.

2: Environmental Permitting
4: Civil Engineering
21: Traffic
Nitsch Engineering, Inc.
WBE Certified
Joshua Alston, PE, LEED AP
MA Reg. 4517
Stephen D. Farr, PE, LEED Green Associate
MA Reg. 39783

3: Hazardous Materials
Universal Environmental Consultants
Ammar M. Dib
MA Reg. 903326 [AO], 506320 [AM]

5: Structural Engineering
Foley Buhl Roberts & Associates, Inc.
Jonathan D. Buhl, PE
MA Reg. 30173

6: Landscape Architecture
Carol R. Johnson Associates, Inc.
Catherine Offenberg, ASLA
MA Reg. 1399

7, 6, 9: Fire Protection, Plumbing, HVAC
10, 11, 24: Electrical, Data/Communications, Security
Garcia, Gutuska, DeSousa, Inc.
MBE Certified
Carlos G. DeSousa, PE—Electrical, Data/Communications & Security
MA Reg. 41003
Christopher M. Garcia, PE—Plumbing, Fire Protection
MA Reg. 43204, Certified Plumbing Designer
Dominick B. Punziello, PE, DEN, LEED AP—Mechanical
MA Reg. 48326

12, 13, 20: Food Service, Laboratory, PFI & E Consultant
Tavares Design Associates, Inc.
MBE Certified
Manuel J. Tavares
Robert T. Fogarty

14, 17: Acoustical, Theatrical
Cavanaugh Toci Associates, Inc.
Lincoln B. Berry
Alexander G. Bagnall

15: Specifications
Kalin Associates, Inc.
Mark Kalin, FAIA, FCSI, LEED AP
MA Reg. 4457

19: Cost Estimating
Project Management & Cost
Peter Bradley, LEED AP
Maria McKenna

20: Accessibility
Kessinger McGuinness & Associates, LLC
Katherine McGuinness

23: Code
R.W. Sullivan Engineering
Kevin S. Hastings, PE, LEED AP
MA Reg. 41651
7. **Brief Resume of ONLY those Prime Applicant and Sub-Consultant personnel requested in the Advertisement.** Confine responses to the space provided on the Form and limit Resume to only one page per discipline requested in the Advertisement. Include Resumes of Project Managers. Resumes should be consistent with the persons listed on the Organizational Chart in Question 1. Additional sheets should be provided only as required for the number of Key Personnel requested in the Advertisement and they must be in the format provided. By including a Firm and Consultant, the Prime Applicant certifies that the listed Firm has agreed to work on this Project, should the team be selected.

<table>
<thead>
<tr>
<th>a. Name And Title Within Firm:</th>
<th>a. Name And Title Within Firm:</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Metzger, AIA, President, Senior Principal</td>
<td>Pip Lewis, AIA, LEED AP, MCPPO, Principal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Project Assignment:</th>
<th>b. Project Assignment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Director</td>
<td>Project Manager</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. Name And Address Of Office In Which Individual Identified In 7a Resides:</th>
<th>c. Name And Address Of Office In Which Individual Identified In 7a Resides:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMFH Architects, Inc.</td>
<td>HMFH Architects, Inc.</td>
</tr>
<tr>
<td>130 Bishop Allen Drive</td>
<td>130 Bishop Allen Drive</td>
</tr>
<tr>
<td>Cambridge, MA 02139</td>
<td>Cambridge, MA 02139</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>d. Years Experience: With This Firm:</th>
<th>d. Years Experience: With This Firm:</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e. Education: Degree(s)/Year/Specialization</th>
<th>e. Education: Degree(s)/Year/Specialization</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>f. Active Registration: Year First Registered/Discipline/Mass Registration Number</th>
<th>f. Active Registration: Year First Registered/Discipline/Mass Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973/Architecture/3563</td>
<td>1986/Architecture/8725</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>g. Current Work Assignments And Availability For This Project:</th>
<th>g. Current Work Assignments And Availability For This Project:</th>
</tr>
</thead>
<tbody>
<tr>
<td>In his capacity as Senior Principal, Mr. Metzger is overseeing a number of projects in the office currently. He is immediately available to direct the Devotion School project.</td>
<td>Mr. Lewis is currently Project Manager for the New Fairhaven Elementary School project, which is now in construction. He is immediately available to undertake the proposed role as Project Manager for the Devotion School.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>h. Other Experience And Qualifications Relevant To The Proposed Project:</th>
<th>h. Other Experience And Qualifications Relevant To The Proposed Project:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Metzger has overseen numerous school study and design projects, including the LEED Gold targeted renovation of the Cambridge Rindge and Latin School. His relevant experience includes:</td>
<td>Mr. Lewis has been a key team member on the design of new and renovated educational facilities. He is particularly skilled at reconciling ambitious educational programs with tricky renovated spaces, as well as with project budget requirements. His relevant experience includes:</td>
</tr>
<tr>
<td>Boston Latin School Renovation/Addition</td>
<td>Hanover High School</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>Hanover, MA</td>
</tr>
<tr>
<td>Cambridge Rindge and Latin School Renovations</td>
<td>Baldwin (Agassiz) School</td>
</tr>
<tr>
<td>Cambridge, MA</td>
<td>Cambridge, MA</td>
</tr>
<tr>
<td>Carlisle K-8 Addition &amp; Renovation</td>
<td>Brookline Town Hall</td>
</tr>
<tr>
<td>Carlisle, MA</td>
<td>Brookline, MA</td>
</tr>
<tr>
<td>Tahanto Regional Middle/High School</td>
<td>Visual &amp; Performing Arts Center</td>
</tr>
<tr>
<td>Bayston, MA</td>
<td>Beaver Country Day School</td>
</tr>
<tr>
<td>Boston Renaissance Charter Public School</td>
<td>Chestnut Hill, MA</td>
</tr>
<tr>
<td>Hyde Park, MA</td>
<td>McGlynn PK-8 / Andrews Middle School</td>
</tr>
<tr>
<td>Wayland High School</td>
<td>Medford, MA</td>
</tr>
<tr>
<td>Wayland, MA</td>
<td></td>
</tr>
<tr>
<td>Manthala George, Jr. School</td>
<td></td>
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<tr>
<td>Mary E. Baker School</td>
<td></td>
</tr>
<tr>
<td>Brookline, MA</td>
<td></td>
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<tr>
<td>East Fairhaven Elementary School</td>
<td></td>
</tr>
<tr>
<td>Fairhaven, MA</td>
<td></td>
</tr>
<tr>
<td>Bates Elementary School Renovations/Additions</td>
<td>Wellesley, MA</td>
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<tr>
<td>Wellesley, MA</td>
<td></td>
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<tr>
<td>Neighborhood House Charter School Reuse</td>
<td></td>
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<tr>
<td>Dorchester, MA</td>
<td></td>
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<tr>
<td>Clarke / Diamond Middle School</td>
<td></td>
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<tr>
<td>Lexington, MA</td>
<td></td>
</tr>
</tbody>
</table>
### Project Name and Location

<table>
<thead>
<tr>
<th>Project Name and Location</th>
<th>Client's Name, Address and Phone Number (Include Name of Contact Person)</th>
<th>Completion Date (Actual or Estimated)</th>
<th>Project Cost (in Thousands of Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sprague Elementary School Addition / Renovation Wellesley, MA</td>
<td>Wellesley Public Schools 40 Kingsbury Street Wellesley, MA 02181 Matthew King Former Superintendent of Schools, current Head of the Rashi School 617-949-4444</td>
<td>2002</td>
<td>$12,822</td>
</tr>
</tbody>
</table>

### Brief Description of Project and Services (Include Reference To Relevant Experience)

The 1920s Sprague School, closed for 30 years, was restored and expanded to house Wellesley's growing elementary population. Roof lines and massing in the addition are scaled to match the original building and blend into the residential surroundings. A parking lot was replaced with a playground for neighborhood use, and pedestrian paths and a restored entrance serve neighborhood children who walk to school. At the heart of the restored building, HMFH designed a library that opens up the attic space, exposing the original roof trusses above the vaulted ceiling. An interior clock references the exterior clock tower and fills the base of the tower. A new cafeteria, music, and special education rooms also occupy the original building. Administration, nine classroom pairs with shared project rooms, art, and a gymnasium with a separate exterior entrance for after-hours use, comprise the addition.

- Addition / Renovation
- Expanded to accommodate Wellesley's growing elementary population
- Sensitive to surrounding residential neighborhood
EXTERIOR WALL TYPE B DETAIL

GENERAL NOTES

1. EXTERIOR DETAIL GENERAL NOTES APPLY TO SHEETS A6.0 THROUGH A6.X.
2. SEE BUILDING ELEVATIONS FOR SPECIFIC MASONRY TYPES, PATTERNS, AND CONFIGURATIONS.
3. ALL WOOD BLOCKING AND PLYWOOD USED AT THE ROOF AND EXTERIOR WALL CONDITIONS SHALL BE PRESSURE TREATED.
4. ALL FLASHING AND AIR BARRIER MATERIALS SHALL BE BE LAPPED "SHINGLE STYLE" TO PROMOTE POSITIVE DRAINAGE.
   TYPICAL THROUGHOUT.
5. ALL PENETRATIONS THROUGH THE EXTERIOR WALL SYSTEM SHALL BE SEALED AIRTIGHT, AND WATERTIGHT TYPICAL THROUGHOUT.

KEYNOTE LIST

042000.58  COMPRESSIBLE FILLER
042000.60  SEALANT
051200.08  STEEL BENT PLATE
054000.04  6" STRUCTURAL METAL STUDS
054000.08  DEFLECTION TRACK
054000.13  BUILT-UP HEADER
061000.02  2X CONTINUOUS WOOD FRAMING LUMBER
061000.09  3/4" PLYWOOD
061000.16  WOOD BLOCKING, SIZE AS REQUIRED
061000.18  WOOD SHIM(S) AS REQUIRED
072100.01  RIGID THERMAL INSULATION
072100.04  SPRAY FOAM INSULATION/SEALANT
072100.07  SPRAYED-IN THERMAL INSULATION
072100.10  MINERAL WOOL INSULATION
072500.01  AIR BARRIER FIELD MEMBRANE
072500.02  AIR BARRIER MEMBRANE STRIP
072500.09  BACKEROD
072500.11  COUNTER FLASHING STRIP
075300.01  MEMBRANE ROOFING
075300.04  TAPERED INSULATION EDGE STRIP
075300.05  PROTECTION BOARD
075300.07  MEMBRANE FLASHING
075300.12  LAP SEALANT
076200.09  METAL FLASHING (ZINC ALLOY)
076200.10  METAL CounterFLASHING (ZINC ALLOY)
076200.19  2" WIDE METAL CLIPS @ 24" O.C.
076200.35  TERMINATION BAR - SET IN A CONTINUOUS BED OF SEALANT
076200.45  SHEET METAL FASCIA W/ DRAIN EDGE (ZINC ALLOY)
076200.58  SHEET METAL GRAVEL STOP AND FASCIA (ALUMINUM)
079200.02  EXTERIOR SEALANT AND BACKEROD
092900.13  7/8" HAT-SHAPED RIGID FURRING CHANNEL
092900.32  5/8" FIRE-RESISTANT RIGID FURRING CHANNEL
092900.43  ACOUSTICAL SEALANT
DOCUMENTATION

- Who
- Equals
- Performance Data
PART 2 - PRODUCTS

2.1 ACOUSTICAL PANELS, GENERAL

A. Products: Subject to compliance with specified requirements, provide as indicated in Section 090000 – FINISH SCHEDULE.

B. Recycled Content: Minimum 70 percent pre-consumer recycled content;

C. Ceiling Type-C/1A: ACT at Typical Classrooms, Offices (sloped portions):
   1. Manufacturer and Model Number:
      a. USG, Mars Climaplus No. 88985 with FLB edge.
      b. Certainteed, Symphony M No. 1220-OVT-1 with Narrow Reveal edge
t      c. Armstrong, Ultima No. 1915, with Beveled Tegular edge.
   3. Panel Mounting: Revealed edge/ shadow edge molding, typical; USG MS174 or equal
   4. Noise Reduction Coefficient (NRC): Not less than 0.70.
   5. Ceiling Attenuation Class (CAC): Not less than 35.
   8. Grid Face Width: 9/16 inch.
   9. Grid Type:
      a. Main Tees: Profiled flange, USG Indentitee DXI MT or equal.
      b. Cross Tees: Flat Flange, USG Centricitee DXT or equal.
Filed Sub-Bid/Trade Sections
Filed Sub-Bid/Trade Preamble

SECTION 040001
MASONRY WORK
(FILED SUB-BID REQUIRED)

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 1 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

B. Time, Manner and Requirements for Submitting Sub-Bids:

1. Sub-bids for work under this Section shall be for the complete work and shall be filed in a sealed envelope with the __________________________ at a time and place as stipulated in the "NOTICE TO CONTRACTORS". The following should appear on the upper left hand corner of the envelope:
   NAME OF SUB-BIDDER: __________________________
   MASS. STATE PROJECT: __________________________
   SUB-BID FOR SECTION: 040001 – MASONRY WORK

2. Each sub-bid submitted for work under this Section shall be on forms furnished by the __________________________ as required by Section 44F of Chapter 149 of the General Laws, as amended. Sub-bid forms may be obtained at the office of the __________________________, or may be obtained by written or telephone request; telephone __________________________.

3. Sub-bids filed with the __________________________ shall be accompanied by BID BOND or CASH or CERTIFIED CHECK or TREASURER’S CHECK or CASHIER’S CHECK issued by a responsible bank or trust company payable to the __________________________ in the amount of five percent of the sub-bid. A sub-bid accompanied by any other form of bid deposit than those specified will be rejected.

C. Sub-Sub-Bid Requirements: (None required under this Section.)

D. Reference Drawings: The Work of this Filed Sub-Bid is shown on the following Contract Drawings: To be inserted with final documents.

1.2 DESCRIPTION OF WORK

A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:

1. All Work of Section 034500 – ARCHITECTURAL PRECAST CONCRETE
2. All Work of Section 040120 – CLAY MASONRY RESTORATION AND CLEANING
3. All Work of Section 042000 – UNIT MASONRY
4. All Work of Section 044200 – EXTERIOR STONE CLADDING
5. All Work of Section 047200 – CAST STONE MASONRY

B. Alternates: Not Applicable.
UNIT MASONRY
04200 - 1

PART 1 - GENERAL

1.1 GENERAL PROVISIONS
A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.2 DESCRIPTION OF WORK
A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
1. Standard and decorative concrete masonry units.
2. Mortar and grout.
3. Reinforcing steel, masonry joint reinforcement, ties and anchors.
4. Embedded fastening.
5. Thermal insulation behind masonry veneer.
7. Cutting and patching masonry construction as required for the work of all trades.

B. Sustainable Design Intent: Comply with project requirements measured and documented according to the Massachusetts Collaborative for High Performance Schools - (MA-CHPS). Project scores will be verified by a third party certifier.
1. Refer to section 01110 - Sustainable Design Requirements, for material, procedure, and documentation submittal requirements.
2. Refer to section 01115 - Indoor Air Quality Requirements for material and procedure requirements.

C. Items To Be Installed Only: Install the following items as furnished by the designated Sections:
1. Key box for Fire Department, furnished by electrical contractor.
2. Section 03400 - PRECAST ARCHITECTURAL CONCRETE
   a. Precast concrete items.
3. Section 06500 - METAL FABRICATIONS:
   a. Linlits, miscellaneous metal and iron sleeves, anchors, inserts, and plates to be built into masonry walls.
4. Section 06100 - ROUGH CARPENTRY:
   a. Wood nailing and blocking built into masonry.
5. Section 21000 - FIRE PROTECTION:
   a. Access doors in masonry openings.
6. Section 22000 - PLUMBING:
   a. Access doors in masonry openings.
7. Section 23000 - HEATING, VENTILATING, AND AIR CONDITIONING:

UNIT MASONRY
04200 - 1

SECTION 056000
METAL FABRICATIONS
(Part of Work of Section 05001 - MISCELLANEOUS AND ORNAMENTAL IRON. Filled Sub-Bid Required)

PART 1 - GENERAL

1.1 GENERAL PROVISIONS
A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.2 DESCRIPTION OF WORK
A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
1. All Work in this Section, including Schedule in Paragraph 2.1 of this Section.
B. Sustainable Design Intent: Comply with project requirements measured and documented according to the Massachusetts Collaborative for High Performance Schools - (MA-CHPS). Project scores will be verified by a third party certifier.
1. Refer to section 01113 - Sustainable Design Requirements, for material, procedure, and documentation submittal requirements.
2. Refer to section 01115 - Indoor Air Quality Requirements for material and procedure requirements.

C. Related Work: The following items are not included in this Section and will be performed under the designated Sections:
1. Section 033000 - CAST-IN-PLACE CONCRETE for concrete fill in metal pan stairs and platforms and fixed steel bollards.
2. Section 05100 - STRUCTURAL STEEL FRAMING for structural steel items.
3. Section 06700 - DECORATIVE FORMED METAL for column and beam covers.
4. Section 10100 - SIGNAGE for exterior signage.
5. Section 12900 - SITE FURNISHINGS for site bollards.
6. Section 30000 - SITE UTILITIES for electrical equipment bollard detail.

D. Items To Be Furnished Only: Furnish the following items for installation by the designated Sections:
1. Section 03300 - CAST-IN-PLACE CONCRETE:
   a. Linlits, sleeves, anchors, inserts, plates and similar items.
2. Section 042000 - UNIT MASONRY:
   a. Linlits, miscellaneous metal and iron sleeves, anchors, inserts and plates to be built into masonry walls.

METAL FABRICATIONS
05600 - 1
Keynotes

HOLD ROOF EDGE BLOCKING AT A CONSTANT ELEVATION AS SHOWN.

FACE OF BLOCKING
FACE OF PLYWD
TOP OF PLYWOOD
WRAP OVER PLYWD

SLOPE TOP OF WOOD BLOCKING 1/2":12" MIN

HEIGHT OF TAPERED ROOF SYSTEM VARIES PER CONDITION;
HOLD ROOF EDGE BLOCKING AT A CONSTANT ELEVATION AS SHOWN.
STEP DOWN INSULATION AS REQUIRED AT SLOPES PARALLEL TO ROOF EDGE

3" METAL ROOF DECK

ALLOW FOR DEFLECTION
DO NOT FASTEN SHEATHING OR TIES TO DEFLECTION TRACK.

See Plans/Elevations for Locations & Glazed Units

WA1 - SECTION DETAIL @ ROOF EDGE - BLOCK VENEER FLAT ROOF DECK

3" = 1'-0"
**KEYNOTE LIST**

- **042000.30**  SOLID CONCRETE BLOCK AS REQUIRED
- **042000.45**  WEEP/VENT
- **042000.46**  CAVITY DRAINAGE MATERIAL
- **042000.63**  LIPPED BLOCK
- **042000.66**  CONTINUOUS MEMBRANE THROUGH WALL FLASHING
- **042000.67**  CONTINUOUS STAINLESS STEEL THROUGH WALL FLASHING & DRIP EDGE
- **054000.13**  BUILT-UP HEADER
- **054000.14**  BUILT-UP SILL
- **055000.11**  LOOSE LINTEL ANGLE
- **061000.18**  WOOD SHIM(S) AS REQUIRED
- **064020.09**  SHIM(S) AS REQUIRED
- **064020.12**  3/4" PLYWOOD
- **064020.20**  SEALANT AS REQUIRED
- **064020.46**  SOLID SURFACING WINDOW STOOL
- **072100.01**  RIGID THERMAL INSULATION
- **072100.04**  SPRAY FOAM INSULATION/SEALANT
- **072500.01**  AIR BARRIER FIELD MEMBRANE
- **072500.02**  AIR BARRIER MEMBRANE STRIP
- **072500.11**  COUNTER FLASHING STRIP
- **072500.13**  SEALANT AND BACKER ROD
- **079200.02**  EXTERIOR SEALANT AND BACKEROD
- **085110.01**  ALUMINUM WINDOW SYSTEM
- **085110.30**  BUTYL TAPE
- **085110.31**  SILICONE SEALANT
- **085110.32**  EXTR UDED ALUMINUM ADAPTER
- **085110.33**  SILICONE EXTRUSION
- **085110.34**  ADHESIVE
- **089000.01**  ALUMINUM LOUVER
- **089000.03**  ALUMINUM SUBSILL WITH ENDDAMS
- **089000.04**  CONTINUOUS CLIP ANGLE ANCHOR, SET IN A CONTINUOUS BEAD OF SEALANT TO FORM AN AIRTIGHT SEAL
- **089000.05**  SHIM AS REQUIRED
- **089000.06**  BIRD SCREEN
- **089000.09**  INSULATED ALUMINUM BLANK-OFF PANEL
- **092900.50**  CORNER BEAD
- **092900.51**  J-TRIM
- **092900.55**  BULLNOSE TRIM
- **092900.56**  REVEAL TRIM
- **230000.28**  INSULATED PLENUM
- **230000.34**  MODIFY & INSTALL BLANK-OFF PANEL. SEAL PLENUM TO BLANK-OFF PANEL TO FORM AN AIRTIGHT SEAL
Waterproofing, Dampproofing and Caulking

MGL CH. 149, Section 44F: .....customarily performed in that sub-trade....
Glass and Glazing
CONSTRUCTION DOCUMENTS
PROJECT MANUAL

RENOVATIONS TO THE RINDGE, MEDIA AND ARTS BUILDING
AT THE CAMBRIDGE RINDGE AND LATIN SCHOOL

VOLUME 1

DIVISION 00 – BIDDING AND CONTRACTING REQUIREMENTS

Document:
001000 Invitation to Bid
001600 Abbreviations, References, Permits, and Fees
002100 Instructions to Bidders
002210 City of Cambridge Employment Plan
002220 City of Cambridge Responsible Employer Plan
002230 Supplemental Equal Employment Opportunity & Affirmative Action Program
002240 Living Wage Ordinance
002241 Living Wage Ordinance Fact Sheet
002250 Americans with Disabilities Act

DIVISION 00A – BID FORMS AND REQUIREMENTS

Document:
004100 Form for General Bid
004110 Form for Sub-Bid
004313 Bid Bond
004339 MBE WBE Forms
004600 General Contractor’s Certification
004610 Subcontractor’s Certification
004620 Projected Workforce Certification
004630 Cambridge Responsible Employer Plan
004631 General Contractor’s Certification - Bid Form
004640 Cambridge Responsible Employer Plan - General Contractor’s Certification - Weekly Form
004641 Cambridge Responsible Employer Plan
004642 Cambridge Responsible Employer Plan
004650 Non Sub-Bidder’s Certification - Weekly Form
004651 General Contractor’s Certification – OSHA Form
004652 Sub-Bidder’s Certification – OSHA Form
004660 CORI Requirements
004661 CORI Ordinance
004662 CORI/SORI Clearance Requirements
004663 CORI Compliance Form

** These forms must be submitted with the bid proposals. Bid Form packets containing duplicate forms listed above are provided to all bidders, yellow for General Contractors and blue for Sub-Bidders. DCAM Certification and Update Statement forms must also be included with all bids.

* Filed Sub-Bid Required

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DIVISION 00B – CONTRACT FORMS AND REQUIREMENTS

Document:
004070 Certificate of Authority
005000 Agreement
006100 Performance Bond
006200 Payment Bond
006700 Division of Occupational Safety Prevailing Wage Rates
Minimum Wage Rates For Apprentices
Weekly Payroll Records Report And Statement of Compliance

DIVISION 00C – GENERAL AND SUPPLEMENTAL CONDITIONS

Document:
007200 General Conditions
007300 Supplemental General Conditions

** SPECIFICATIONS

DIVISION 01 - GENERAL REQUIREMENTS

Section:
011100 Summary of Work
011400 Work Restrictions
Appendix: 011401 Electronic Release Form
Logistics Plan
012200 Unit Prices
Appendix: 012201 Unit Price Proposal Sheet 1 (** To be included with bid.)
012202 Unit Price Proposal Sheet 2 (** To be included with bid.
012300 Alternates
012400 Schedule of Values
013100 Project Management and Coordination
013190 Project Meetings
013200 Construction Progress Documentation
013300 Submittal Procedures
Appendix: 013301 Submittal Or Equal Request Form
013500 Environmental Procedures
014000 Quality Requirements
015000 Temporary Facilities and Controls
017329 Cutting and Patching
017400 Cleaning and Waste Management
017700 Closeout Procedures
017839 Project Records
018100 Commissioning
018113 Sustainable Design Requirements
Appendix: LEED Checklist
MA-CHPS Scorecard
018119 Indoor Air Quality Requirements

* Filed Sub-Bid Required

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TC - 2
Construction Bidding Basics

Presented by Deborah Anderson, Office of the Attorney General

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Public Building Construction Law (M.G.L. c. 149, §§ 44A-M)

Applies to:

- construction, reconstruction, installation, demolition, maintenance or repair
- on a building (a structure with four walls and a roof)
- estimated to cost $10,000 or more
Public Building Construction Law
(M.G.L. c. 149, §§ 44A-M)

Procedure

$100,000 or more
Invite sealed bids
Advertise: local newspaper, Central Register, and your bulletin board or website
5% bid deposit
100% payment bond
100% performance bond
DCAM certification for generals and filed subs
Pay prevailing wage
Filed Sub-bids
Requirements

• Must be a building project under M.G.L. c. 149, except a modular building
• Entire project must be worth over $100,000
• Estimated cost of filed sub-bid is more than $20,000. Good faith estimate
• Sub-bid falls into statutory classification
Statutory Classifications

- Roofing & flashing
- Waterproofing, dampproofing and caulking
- Lathing & plastering
- Marble
- Terrazzo
- HVAC
- Painting
- Masonry
- Sprinkler fitter [FP]
- Glass & glazing
- Plumbing
- Electrical
- Elevators
- Metal windows
- Misc. and ornamental iron
- Acoustical tile
- Resilient floors
Certification

• Filed sub-bidders must be DCAM-certified if the project is worth more than $100,000 and the sub-bid is worth more than $20,000
DCAM certification

- Must have certification even if you bid lower than the thresholds
- Owner may ask for DCAM certification even if the project is less than $100,000
- If prime certification is needed, filed sub-bid certification will not be accepted
DCAMM Cert. Requirements

- One year in business
- Licensed
- Three successful projects in the last 3 years, minimum $20,000
- Financial stability
- Resume’s of principals and management
Relationship to G.C.

• General contractors do not get to choose their own filed sub-contractors in the first instance
• Filed sub-bids are first considered by the awarding authority
• Filed sub-bidders can restrict their bids to certain general contractors
• Responsible and eligible filed sub-bidders are placed on a tabulation sheet that is sent to the general contractors
• General contractors must choose from the tabulation sheet. General contractors do not have to list the lowest filed sub-bidder in their bids.
Subcontract

• Filed sub-bidder’s contract is with the general contractor, not the awarding authority.

• Filed sub-bidder has five days from presentation of contract to execute it and supply 100% payment and performance bonds if required by the general contractor or if subject to prequalification.
• General contractor can list itself as a filed sub-bidder if it customarily performs that trade with employees on its payroll, is qualified to perform the work and is DCAM-certified in that sub-trade.

• General contractor must use its own filed sub-bid unless it uses lowest eligible filed sub-bid that is not restricted to the general contractor or other general bidders.
General Contractor Certification

- One year in business
- Licensed
- 5 successful projects in 5 years, minimum $80,000
- Financial stability
- Resume’s of principals and management
Prequalification

- Mandatory for projects over $10 million
- Optional for projects $100,000 to $10 million
- For general contractors and subs over $20,000
- RFQ, SOQ process; only prequalified contractors can bid on project
Exempt Agencies

- DCAMM
- MassPort
- MWRA
- MSCBA
- UMBA

- These agencies can elect to prequalify
CM at Risk

- M.G.L. c. 149A
- Vertical projects over $5 million
- Needs IG approval
- Combines construction management and general contractor roles
- Allows for early packages before design is complete
First Steps

- Select an OPM
- Contract with Designer
- Obtain authorization from governing body for CM contract and procedures
- Submit Application to Proceed to the IG
- IG has 60 days to approve
Selecting the CM

• 2 phase process for selecting CM
• Prequalification committee issues RFQ and selects at least 3 qualified firms to receive RFP; must re-advertise or use c. 149 if fewer than 3
• Selection committee reviews and evaluates technical and price proposals in the RFP
• Price proposals must include fee for preconstruction services, construction services and cost of general conditions
• Awarding authority contracts with the highest ranked firm with which the committee concludes successful non-fee negotiations
CM Contract

- Cost-plus contract with Guaranteed Maximum Price (GMP)
- Awarding authority pays the CM the actual cost of the work plus an agreed-upon fee up to the GMP
- GMP must be based on design documents that are at least 60% complete
- Work can begin before the GMP is agreed upon; this is an amendment to the CM contract [early packages]
Trade Contracts

• Same 18 categories as filed sub-bids under c. 149, § 44F.
• Prequalification required
• Prequalified contractors receive RFBs
• Bids must be accompanied by Update Statements and DCAMM files must be examined by awarding authority
• Award goes to the lowest prequalified bidder, BUT
• Awarding authority can find the bidder not responsible based on Update Statement and DCAMM file (Lighthouse v. Rockland, 3/23/11)
• If fewer than 3 bids are received and the lowest bid exceeds the estimate, CM must try to negotiate with lowest bidder; estimate cannot be arbitrary [*West v. Ayer-Shirley*, 2/11/14]
• Negotiations must be in good faith
• Once the estimate is offered by the bidder, negotiations should stop [*Cogswell v. Springfield*, 6/8/12]
• If scope is revised, must bid to the prequalified bidders first [*West v. Ayer-Shirley*, 2/11/14]
• If unsuccessful, procure as non-trade contract
Other Subcontractors

- Not trade contractors
- Work exceeds $20,000
- CM submits list of qualifications and 3 subs
- Awarding authority can omit or add to list
- CM invites bids from approved subs
- CM presents bids and decisions, with explanation, to awarding authority
Subcontracts <$20,000

• CM may use any selection method approved by the awarding authority
QUESTIONS?

THANK YOU!

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