



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

# Request for Quotation

RFQ NUMBER  
 DNR209075

PAGE  
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:  
 FRANK WHITTAKER  
 304-558-2316

VENDOR

RFQ COPY  
 TYPE NAME/ADDRESS HERE

SHIP TO

DIVISION OF NATURAL RESOURCES  
 ELKINS OFFICE  
 RANDOLPH CENTER - SUITE 222  
 1200 HARRISON AVENUE  
 ELKINS, WV  
 26241

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
02/02/2009				

BID OPENING DATE: 04/09/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
***** ADDENDUM NO. 1 *****						
THIS ADDENDUM IS ISSUED TO PROVIDE THE ATTACHED VENDOR SIGN SHEET, VENDOR QUESTIONS AND AGENCY RESPONSES RESULTING FROM THE MANDATORY PRE-BID MEETING HELD ON 01/15/09.						
THIS ADDENDUM ALSO CONTAINS THE WV DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT AND BID BOND APPLICATION FORM. FAILURE TO SUBMIT THE DRUG FREE WORKFORCE CONFORMANCE AFFIDAVIT AND A VALID BID BOND WILL RESULT IN BID DISQUALIFICATION.						
THE DEADLINE FOR TECHNICAL QUESTIONS IS CHANGED TO: 03/20/2009.						
THE BID OPENING DATE IS CHANGED TO: 04/09/09 AT 1:30 PM						
0001	1	LS	968-42	GENERAL CONSTRUCTION		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

## GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
15. **WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT:** If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

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### INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in case of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
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LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
***** THIS IS THE END OF RFQ DNR209075 ***** TOTAL:						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE \_\_\_\_\_ TELEPHONE \_\_\_\_\_ DATE \_\_\_\_\_

TITLE \_\_\_\_\_ FEIN \_\_\_\_\_ ADDRESS CHANGES TO BE NOTED ABOVE

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# SIGN-IN SHEET

PROJECT: Blackwater Falls Lodge Restaurant HVAC

DATE: 1/15/2009 RFQ OR PO NO: 209075

COMPANY NAME	ADDRESS	<ul style="list-style-type: none"> <li>• PHONE</li> <li>• FAX</li> <li>• e-mail</li> </ul>
AIR Systems	303 North Otto Ave Chesksburg WV 26301	304-326-0072 (P) 304-326-0079 (F) brian@airsystems.com
Beckley Mechanical	301 George St. Beckley WV 25801	304-252-1539 304-253-1123 ericmhaffey@beckleymechanical.com
MSE (Consultant Eng.) * Craig Miller Shelby Mc Mahon		304 291 2284 cmiller@millereng.com
Dougherty Co. Luther Lasure	P.O. Box 1828 Charleston, WV 25327 lutherlasure@doughertyco.com	(P) 304-925-6664 (F) 304-925-4280
Tom Michel Michel Inc.	PO Box 1140 Bridgeport, WV 26330	304-622-7923 304-624-1252 Fax michelinc5@aol.com



**MEETING MINUTES/ ADDENDUM #1**  
**Blackwater Falls Lodge Dining Room HVAC Upgrade**  
**Pre-Bid Meeting: 15 Jan 2009**

**CALL TO ORDER:**

Meeting called to order by Don Smith of WVDNR.

**INTRODUCTIONS:**

Introduced the Owner's Personnel and Agents in attendance including:  
Don Smith PE – Engineer, WVDNR  
Craig Miller PE – President, Miller Engineering, Inc (MEI) – Consultant  
Shelby McMahon – Miller Engineering

**BIDDING / ADMINISTRATIVE:**

Contractors reminded that the pre-bid was mandatory and they are required to sign in to be eligible to submit a bid. Bids are due as indicated in the Request for Bids.

Don Smith reviewed the bidding procedures including the use of the provided bid forms, bid bond, contract time period, and liquidated damages, progress payments, and acknowledge of addenda. Failure to acknowledge any addenda will result in the bid not being accepted.

The project is a prevailing wage project and there is a project requirement to maintain certified payroll.

Don cautioned that all verbal comments made related to the project are subject to verification in writing through meeting minutes and addenda. The written minutes and addenda will be the basis of bidding.

All questions are to be in writing and directed to Frank Whittaker as indicated in the Invitation to Bid. Responses to questions are by written addendum only distributed to all bidders by WV Purchasing. The last day for questions is January 20, 2009.

The Acknowledgement of Addenda for the bid packet was omitted; it will be included in Addendum #1.

**TECHNICAL OVERVIEW:**

MEI presented a general review of the project scope.

The project is the demolition of the existing heating/ ventilating system and replacement with a new ground mounted air conditioning unit and chiller (chiller remote located) with associated piping and controls. The new unit requires a screen wall which will be CMU and have veneer stone to match the existing stone on the lodge. The design is based on 30% ethylene glycol for the chilled water system.

The work will include cleaning of the ducts and installation of a "wing" type steam heating coil in the bulkhead location of the existing heating unit. The new heating coil will be steam fired.

The work will include supporting electrical work; a new electrical main distribution panel was installed a few years ago and it has slots for new breaker to serve the chiller and AHU.

The work also includes supporting general trades work such as the demolition of the existing bulkhead and reconstruction of a larger bulkhead.

No work is to be performed in the dining room as part of this project except the duct cleaning.

#### TECHNICAL QUESTIONS:

The following Technical Questions were asked at the pre-bid:

1. Question: Please clarify the work schedule in the kitchen?

Answer: Work schedule in the kitchen will be reviewed with operations folks and addressed in addendum.

**SUBSEQUENT TO MEETING:** The work in the kitchen will be performed as scheduled evening work to minimize conflict with the Owner's operations. The kitchen work area will be sealed off using a "tuff wrap" type plastic and wooden studs to form a dust containment area. An exhaust fan will be installed to the exterior and the containment will be kept negative to the kitchen during demolition and construction. The contractor will use the necessary due care to prevent dust and dirt migration into the kitchen and will clean any incidental migrated material after the completion of each evenings work.

2. Question: Please clarify relocation of the transfer duct in the kitchen.

Answer: One of the two transfer duct will be demo. The second one will remain and be relocated beyond the new bulkhead.

3. Question: Please clarify the asbestos found in the area of work.

Answer: The Owner will review the existing asbestos reports and advise.

**SUBSEQUENT TO THE MEETING:** ACM was noted in the reports on the floor tile and the sprayed applied ceiling in the dining room. The dining room has spray applied ceilings but they are not to be disturbed under this project so that should not be a factor. Nothing was previously found in plaster walls or ceilings. However, during a boiler replacement a few years ago, the piping insulation in the

boiler room was noted to have ACM. As such the Owner is delaying the bidding to retain the services of a testing agency to clarify the situation and take appropriate action. (see below)

Questions asked subsequent to the pre-bid meeting:

1. Question: Please clarify what is required for each piece of equipment, duct, piping, etc., as it relates to Specification Section 15072 – Are we only to provide that which is specifically called for in other specification sections and/or shown on the drawings?

Answer: 3.01 A of 15072 clearly states: "provide vibration isolation for each air handling unit". The design basis unit typically has the isolation on the fan sled. Pads are called for to go between the unit and the field constructed steel frame.

2. Question: Does the contractor have the option of providing schedule 40 PVC piping for the underground chilled water piping and insulating the pipe and fittings in the field or does it have to be the pre-insulated, factory applied Perma-Pipe system?

Answer: Not at this time. However, if the contractor wishes to propose such a substitution request as generally described above it should be a detailed request indicated materials, manufacturers, and methods for insulating the piping to create a system comparable in nature and durability to the system specified. The engineer will review such a request and approve or disapprove it as addendum.

3. Question: Is there a soils report available for the areas where we are to install the underground lines/conduits are to be installed? If not, for estimating purposes are we to assume no rock will be encountered?

Answer: There is no soils report available. The contractor is to assume the rock is "rippable" using equipment appropriately sized to the excavation. Should rock be encountered, it will be dealt with on a change order basis. The contractor is to inform the Engineer if rock is encountered which is not "rippable" and the engineer will review the conditions prior to authorizing a construction change directive for rock. The rock amounts will be monitored by either the Owner or Engineer.

4. Question: Will an access panel be required in the new bulkhead?

Answer: 2 – roughly 24 x 24 hinged metal access panels will be required in the bulkhead. Final dimension will be coordinated in the field with the Engineer. One panel will likely be mounted horizontal (overhead) and one will likely be mounted vertical (wall).

End of Technical Questions

**LAST DAY FOR QUESTION:**

The last day for questions has been extended to March 20<sup>th</sup> 2009 at 3PM. All questions are still to be submitted in writing to Mr. Frank Whittaker at WV Purchasing as indicated

in the project documents.

**ATTACHMENTS:**

The Bid Form with the Acknowledgement of Addenda for the bid submission is attached (3 pages).

An Attendance Log/ Sign in Sheet is attached to these minutes for reference (1 page).  
Section 4200 of the project specification is attached (10 pages).

**BID DATE:**

The bid date has been extended to April 9<sup>th</sup> 2009. The bid time and location remain unchanged.

**ACKNOWLEDGEMENT:**

The above minutes are a true and accurate reflection of the meeting content to the best of our knowledge. Please contact Frank Whittaker at WV Purchasing with any concerns regarding these minutes by the cutoff date and time for bidding questions.

The minutes, questions, answers and comments detailed herein are part of the project documents for this project and are to be acknowledged as ADDENDUM #1.

Submitted this 22nd day of January, 2009, by Miller Engineering for distribution by WVDNR & WV Purchasing.



Craig Miller PE  
President  
Miller Engineering, Inc

Cc: Project file



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**SECTION 04200 - UNIT MASONRY****PART 1 - GENERAL****1.1 SUMMARY****A Section Includes:**

1. Concrete masonry units (CMU's)
2. Face brick
3. Building (common) brick.

**B Related Sections:**

1. Division 07 Section "Sheet Metal Flashing and Trim" for furnishing manufactured reglets installed in masonry joints.

**1.2 SUBMITTALS****A Product Data:** For each type of product indicated**B Samples for Verification:** For each type and color of exposed masonry unit and colored mortar.**C Material Certificates:** For each type and size of product indicated. For masonry units include data on material properties material test reports substantiating compliance with requirements**D Mix Designs:** For each type of mortar and grout. Include description of type and proportions of ingredients.

1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91 for air content
2. Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement

**1.3 QUALITY ASSURANCE****A Masonry Standard:** Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents**B Sample Panels:** Build sample panels to verify selections made under sample submittals and to demonstrate aesthetic effects. Comply with requirements in Division 01 Section "Quality Requirements" for mockups.

1. Build sample panels for each type of exposed unit masonry construction in sizes approximately 48 inches long by 36 inches high by full thickness.

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#### 1 4 PROJECT CONDITIONS

- A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
- B. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

#### PART 2 - PRODUCTS

##### 2 1 MASONRY UNITS, GENERAL

- A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.
- B. Fire-Resistance Ratings: Where indicated, provide units that comply with requirements for fire-resistance ratings indicated as determined by testing according to ASTM E 119, by equivalent masonry thickness, or by other means, as acceptable to authorities having jurisdiction.

##### 2 2 CONCRETE MASONRY UNITS

- A. Shapes: Provide shapes indicated and for lintels, corners, jambs, sashes, movement joints, headers, bonding, and other special conditions.
- B. Integral Water Repellent: Provide units made with liquid polymeric, integral water repellent admixture that does not reduce flexural bond strength for exposed units.
- C. CMUs: ASTM C 90
  - 1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2800 psi.
  - 2. Density Classification: Normal weight.

##### 2 3 STONE

- A. Source: M and S Stone Quarry, Grantsville, MD.
- B. General: Fabricate stone in sizes and shapes required to comply with requirements indicated and to match existing stonework.
- C. Cut Stone to produce pieces of thickness, size, and shape indicated and to comply with fabrication and construction tolerances recommended by applicable stone association or, if none, by stone source, for faces, edges, beds, and backs. Clean sawn backs of stone to remove rust stains and iron particles.

#### UNIT MASONRY

- D. Thickness of Stone Masonry Veneer: 4 inches plus or minus ½ inch.
- E. Dress joints (bed and vertical) straight and at right angle to face, unless otherwise indicated
- F. Shape stone for type of masonry (pattern) indicated
  - 1. Type of Masonry (Pattern): Split-bed, random-range ashlar with random course heights and random lengths (interrupted coursed) to match existing.
- G. Finish exposed faces and edges of stone to match existing stonework.

#### 2.4 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- B. Mortar Cement: U.B.C. Standard no. 21-14
  - 1. For pigmented mortars, use premixed, colored mortar cements of formulation required to produce color indicated, or if not indicated, as selected from manufacturer's standard formulations. Pigments shall not exceed 5 percent of mortar cement by weight for mineral oxides nor 1 percent for carbon black.
- C. Hydrated Lime: ASTM C 207, Type S
- D. Aggregate for Mortar: ASTM C 144; except for joints less than ¼ inch, use aggregate graded with 100 percent passing the No. 16 sieve
- E. Aggregate for Grout: ASTM C 404.
- F. Cold-Weathered Admixture: Not permitted
- G. Water: Potable
- H. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath in the joint below and rod mortar or grout into core
- I. Fill cores in hollow concrete masonry units with grout 24 inches under bearing plates, beams, lintels, posts, and similar items, unless otherwise indicated

## 2.5 REINFORCEMENT

- A. Uncoated Steel Reinforcing Bars: ASTM A 615/A 615M or ASTM A 996/A 996M, Grade 60 (Grade 420)
- B. Masonry Joint Reinforcement, General: ASTM A 951/A 951M.
  - 1. Interior Walls: Hot-dip galvanized, carbon steel.
  - 2. Exterior Walls: Hot-dip galvanized, carbon steel.
  - 3. Wire Size for Side Rods: 0.148-inch diameter
  - 4. Wire Size for Cross Rods: 0.148-inch diameter.
  - 5. Wire Size for Veneer Ties: 0.148-inch diameter.
  - 6. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than 16 inches o.c.
  - 7. Provide in lengths of not less than 10 feet.
- C. Masonry Joint Reinforcement for Single-Wythe Masonry: Either ladder or truss type with single pair of side rods

## 2.6 TIES AND ANCHORS

- A. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated.
  - 1. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A 82/A 82M; with ASTM A 153/A 153M, Class B-2 coating
- B. Wire Ties, General: Unless otherwise indicated, size wire ties to extend at least halfway through veneer but with at least 5/8-inch cover on outside face. Outer ends of wires are bent 90 degrees and extend 2 inches parallel to face of veneer
- C. Individual Wire Ties: Rectangular units with closed ends and not less than 4 inches wide.
  - 1. Wire: Fabricate from 1/4-inch-diameter, hot-dip galvanized steel wire
- D. Adjustable Masonry-Veneer Anchors:
  - 1. General: Provide anchors that allow vertical adjustment but resist tension and compression forces perpendicular to plane of wall, for attachment over sheathing to wood or metal studs, and as follows:
    - a. Structural Performance Characteristics: Capable of withstanding a 100-lbf load in both tension and compression without deforming or developing play in excess of 0.05 inch.
  - 2. Contractor's Option: Unless otherwise indicated, provide any of the following types of anchors:
  - 3. Screw-Attached, Masonry-Veneer Anchors: Units consisting of a wire tie and a metal anchor section

- a. Anchor Section: Rib-stiffened, sheet metal plate with screw holes top and bottom, having slotted holes for inserting wire tie.
- b. Fabricate sheet metal anchor sections and other sheet metal parts from 0.075-inch-thick, steel sheet, galvanized after fabrication
- c. Wire Ties: Triangular-, rectangular-, or T-shaped wire ties fabricated from 0.187-inch-diameter, hot-dip galvanized steel wire

## 2.7 MASONRY CLEANERS

- A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned

## 2.8 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.

- 1 Do not use calcium chloride in mortar or grout
- 2 Use portland cement-lime mortar unless otherwise indicated
- 3 For exterior masonry, use portland cement-lime mortar.
- 4 For reinforced masonry, use portland cement-lime mortar
- 5 Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.

- B. Mortar for Unit Masonry: Comply with ASTM C 270, Proportion Specification. Provide the following types of mortar for applications stated unless another type is indicated

- 1 For masonry below grade or in contact with earth, use Type M.
- 2 For reinforced masonry, use Type S
- 3 For mortar parge coats, use Type S
- 4 For exterior, above-grade, load-bearing and non-load-bearing walls and parapet walls; for interior load-bearing walls; for interior non-load-bearing partitions; and for other applications where another type is not indicated, use Type N
- 5 For interior non-load-bearing partitions, Type O may be used instead of Type N.

- C. Pigmented Mortar: Use colored cement product or select and proportion pigments with other ingredients to produce color required. Do not add pigments to colored cement products

- 1 Pigments shall not exceed 10 percent of portland cement by weight
2. Pigments shall not exceed 5 percent of masonry cement by weight.
3. Application: Use pigmented mortar for exposed mortar joints with the following units:
  - a Face brick

- D. Colored-Aggregate Mortar: Produce required mortar color by using colored aggregates and natural color or white cement as necessary to produce required mortar color.

1. Mix to match Architect's sample.
2. Application: Use colored aggregate mortar for exposed mortar joints with the following units:

a. Face brick.

E Grout for Unit Masonry: Comply with ASTM C 476.

- 1 Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with Table 1.15.1 in ACI 530 1/ASCE 6/TMS 602 for dimensions of grout spaces and pour height.
2. Proportion grout in accordance with ASTM C 476, Table 1
3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C 143/C 143M

### PART 3 - EXECUTION

#### 3.1 INSTALLATION, GENERAL

- A Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- B Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures
- C Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq in per minute when tested per ASTM C 67. Allow units to absorb water so they are damp but not wet at time of laying.

#### 3.2 TOLERANCES

A Dimensions and Locations of Elements:

- 1 For dimensions in cross section or elevation do not vary by more than plus 1/2 inch or minus 1/4 inch.
2. For location of elements in plan do not vary from that indicated by more than plus or minus 1/2 inch
- 3 For location of elements in elevation do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

B Lines and Levels:

- 1 For bed joints and top surfaces of bearing walls do not vary from level by more than 1/4 inch in 10 feet, or 1/2 inch maximum.
- 2 For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
3. For vertical lines and surfaces do not vary from plumb by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.
- 4 For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
- 5 For lines and surfaces do not vary from straight by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.

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C Joints:

- 1 For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
2. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch
- 3 For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch

3 3 LAYING MASONRY WALLS

- A Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.
- C Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- D Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.
- E Fill cores in hollow CMUs with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated

3 4 MORTAR BEDDING AND JOINTING

A Lay hollow concrete masonry units as follows:

- 1 With full mortar coverage on horizontal and vertical face shells.
  2. Bed webs in mortar in starting course on footings and in all courses of piers, columns, and pilasters, and where adjacent to cells or cavities to be filled with grout.
  3. For starting course on footings where cells are not grouted, spread out full mortar bed, including areas under cells
  4. Maintain joint widths indicated, except for minor variations required to maintain bond alignment. If not indicated, lay walls 3/8-inch joints
- B. Set stone units in full bed of mortar with vertical joints slushed full. Fill dowel, anchor, and similar holes solid. Wet stone-joint surface thoroughly before setting; for stone surfaces that are soiled, clean bedding and exposed surfaces with fiber brush and soap powder and rinse thoroughly with clear water.
- C. Tool exposed joints slightly concave with thumbprint hard, using a jointer larger than joint thickness, unless otherwise indicated.

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### 3.5 SETTING STONE MASONRY VENEER, GENERAL

- A. Execute stone masonry veneer by skilled masons experienced with the kind and form of stone and installation method indicated
  - 1. Employ skilled stone fitters at the Project site to do necessary field cutting as stone is set. Use power saws to cut stone. Produce lines cut straight and true, with edges eased slightly to prevent snipping.
  - 2. Arrange and trim stones for accurate fit with uniform joint widths, and to provide offset between vertical joints and indicated.
- B. Set stone to comply with requirements indicated on Drawings. Install anchors, supports, fasteners, and other attachments indicated or necessary to secure stone masonry veneer in place. Set stone accurately in locations indicated with edges and faces aligned according to established relationships and indicated tolerances.
- C. Maintain uniform joints widths, except for variations due to stone size variations and minor variations required to maintain bond alignment, if any. Lay walls with joints to match width of existing stonework.
- D. Provide expansion, control, and pressure-relieving joints of widths and at locations indicated.
  - 1. Sealing expansion and other joints is specified in Division 7 Section "Joint Sealants"
  - 2. Keep expansion joints free of mortar and other rigid materials

### 3.6 INSTALLING ANCHORED STONE MASONRY VENEER

- A. Anchor masonry veneer to unit masonry with metal ties embedded in horizontal mortar joints of unit masonry to comply with the following:
  - 1. Embed ties in veneer mortar to within 1 inch of face.
  - 2. Bend wire ties at a right angle to form a hook not less than 2 inches long
  - 3. Anchor wire ties by inserting pintles into eyes of masonry wall reinforcement projecting from horizontal mortar joints
  - 4. Space ties as indicated, but not more than 16 inches o c vertically and 18 inches o c horizontally. Install additional ties within 12 inches of openings and at intervals around perimeter not exceeding 12 inches
- B. Set stone in full bed of mortar with full head joints, unless otherwise indicated. Build anchors and ties into mortar joints as stone is set.
- C. Provide air space between stone masonry veneer and back-up construction, as indicated on Drawings.



### 3.7 MASONRY JOINT REINFORCEMENT

- A General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches
1. Space reinforcement not more than 16 inches o.c.
  2. Space reinforcement not more than 8 inches o.c. in foundation walls and parapet walls.
- B Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C Provide continuity at wall intersections by using prefabricated T-shaped units
- D Provide continuity at corners by using prefabricated L-shaped units

### 3.8 MASONRY VENEERS

- A Anchor masonry veneers to wall framing with masonry-veneer anchors to comply with the following requirements:
1. Fasten screw-attached and seismic anchors through sheathing to wall framing with metal fasteners of type indicated. Use two fasteners unless anchor design only uses one fastener.
  2. Embed tie sections in masonry joints. Provide not less than 2 inches of air space between back of masonry veneer and face of sheathing.
  3. Locate anchor sections to allow maximum vertical differential movement of ties up and down.
  4. Space anchors as indicated, but not more than 16 inches o.c. vertically and 24 inches o.c. horizontally with not less than 1 anchor for each 3.5 sq. ft. of wall area. Install additional anchors within 12 inches of openings and at intervals, not exceeding 36 inches, around perimeter.

### 3.9 FLASHING, WEEP HOLES, CAVITY DRAINAGE, AND VENTS

- A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated. Install flashing as follows unless otherwise indicated:
1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
  2. At lintels and shelf angles, extend flashing a minimum of 6 inches into masonry at each end. At heads and sills, extend flashing 6 inches at ends and turn up not less than 2 inches to form end dams.
  3. Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall and adhere flexible flashing to top of metal drip edge.
  4. Install metal flashing termination beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall and adhere flexible flashing to top of metal flashing termination.

- 
- B Install weep holes in head joints in exterior wythes of first course of masonry immediately above embedded flashing and as follows:
1. Use specified weep/vent products to form weep holes.
  2. Space weep holes 24 inches o.c unless otherwise indicated
  3. Cover cavity side of weep holes with plastic insect screening at cavities insulated with loose-fill insulation.
- C. Place cavity drainage material in cavities to comply with configuration requirements for cavity drainage material in "Miscellaneous Masonry Accessories" Article.

### 3 10 FIELD QUALITY CONTROL

### 3 11 REPAIRING, POINTING, AND CLEANING

- A In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- B Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
1. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes
  2. Protect surfaces from contact with cleaner
  3. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
  4. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.

### 3 12 MASONRY WASTE DISPOSAL

- A. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed
1. Do not dispose of masonry waste as fill within 18 inches of finished grade.
- B Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above, and other masonry waste, and legally dispose of off Owner's property

END OF SECTION 04200

**DINING HALL HVAC RENOVATION  
BLACKWATER FALLS  
DAVIS, West Virginia**

**BID OR PROPOSAL**

Name of Bidder:

Address of Bidder:

Phone Number of Bidder:

WV Contractors License No.

We, the undersigned, having examined the site and being familiar with the local conditions affecting the cost of the work and also being familiar with the general conditions to bidders, drawings, and specifications, hereby proposes to furnish all materials, equipment, and labor to complete all work in a workmanlike manner, as described in the Bidding documents.

Base Bid: Lump sum for all labor, materials, and equipment as stipulated in the Bidding Documents, written in numbers.

Base Bid: Lump sum for all labor, materials, and equipment as stipulated in the Bidding Documents, written in words.

**DINING HALL HVAC RENOVATION  
BLACKWATER FALLS  
DAVIS, West Virginia**

**BID OR PROPOSAL**

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The bidder understands that to the extent allowed by the West Virginia Code, the Owner reserves the right to waive any informality or irregularity in any Bid, or Bids, and to reject any or all Bids in whole or in part; to reject a bid not accompanied by the required bid security or by other data required by the Bidding Documents; to reject any condition of the bid by the Bidder that is in any way inconsistent with the requirements, terms and conditions of the Bidding Documents; or to reject a bid that is in any way incomplete or irregular

The Bidder, if successful and awarded the contract, agrees that all work is to be complete within 150 consecutive calendar days following receipt of the Owner's written Notice to Proceed. For each calendar day of delay in achieving completion, the Contractor shall be liable for, and shall pay the Owner liquidated damages in the amount of \$100 per day.

Any work performed or any materials contracted for prior to the receipt of the Owner's written Notice to Proceed, shall be at the Bidder's risk.

**PROGRESS PAYMENTS** - The CONTRACTOR will make current estimates in writing once each month on AIA Forms G702 and G703 on or before the date set by the OWNER at the time of starting the WORK. The progress payments shall be a true estimate of the materials complete in place and the amount of WORK performed in accordance with the CONTRACT during the preceding month and the value thereof figured at the CONTRACT unit prices or based on the approved schedule of value. Should there be any doubt of the OWNER as to the integrity of any part of the COMPLETED work, the estimates for that portion will not be allowed modified by the CONTRACTOR accordingly. CONTRACTOR shall submit evidence to document the extent of progress payments as required by the OWNER.

Progress payments will not be made when the total value of the WORK done since the last estimate amounts to less than Five Hundred Dollars (\$500.00) From the total of the amounts ascertained as payable, an amount equivalent to and in accordance with Article 9 of A201-1997 Supplementary Conditions of the State of West Virginia will be deducted and retained by the OWNER until completion of the entire CONTRACT in an acceptable manner. The balance, less all previous payments, will be certified for payment by the OWNER

When the WORK under contract has been completed and its acceptance is recommended by the OWNER, the retainage shall be released and paid to the CONTRACTOR.

**DINING HALL HVAC RENOVATION  
BLACKWATER FALLS  
DAVIS, West Virginia**

**BID OR PROPOSAL**

**ADDENDUM ACKNOWLEDGEMENT**

I hereby acknowledge receipt of the following checked addendum and have made the necessary revisions to my bid or proposal.

Addendum No.	Date

I understand that failure to confirm the receipt of the Addendum is cause for rejection of my bid or proposal.

Respectfully submitted:

Date:

WV Vendor  
Registration Number:

By: (signature in ink)

Title:

Firm Name:

Firm Address:



State of West Virginia  
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT  
West Virginia Code §21-1D-5

STATE OF WEST VIRGINIA,

COUNTY OF \_\_\_\_\_, TO-WIT:

I, \_\_\_\_\_, after being first duly sworn, depose and state as follows:

1. I am an employee of \_\_\_\_\_; and,  
(Company Name)

2. I do hereby attest that \_\_\_\_\_  
(Company Name)

maintains a valid written drug free workplace policy and that such policy is in compliance with **West Virginia Code §21-1D-5.**

The above statements are sworn to under the penalty of perjury.

\_\_\_\_\_  
(Company Name)

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Taken, subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_.

By Commission expires \_\_\_\_\_

(Seal)

\_\_\_\_\_  
(Notary Public)

**THIS AFFIDAVIT MUST BE SUBMITTED WITH THE BID IN ORDER TO COMPLY WITH WV CODE PROVISIONS. FAILURE TO INCLUDE THE AFFIDAVIT WITH THE BID SHALL RESULT IN DISQUALIFICATION OF THE BID.**

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, \_\_\_\_\_  
of \_\_\_\_\_, \_\_\_\_\_, as Principal, and \_\_\_\_\_  
of \_\_\_\_\_, \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_  
with its principal office in the City of \_\_\_\_\_, as Surety, are held and firmly bound unto the State  
of West Virginia, as Obligee, in the penal sum of \_\_\_\_\_ (\$ \_\_\_\_\_) for the payment of which,  
well and truly to be made, we jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the  
Department of Administration a certain bid or proposal, attached hereto and made a part hereof, to enter into a contract in writing for  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOW THEREFORE,

- (a) If said bid shall be rejected, or
- (b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal attached  
hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform the  
agreement created by the acceptance of said bid, then this obligation shall be null and void, otherwise this obligation shall remain in full  
force and effect It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event,  
exceed the penal amount of this obligation as herein stated.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no  
way impaired or affected by any extension of the time within which the Obligee may accept such bid, and said Surety does hereby  
waive notice of any such extension

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations  
have caused their corporate seals to be affixed hereunto and these presents to be signed by their proper officers, this  
\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

Principal Corporate Seal

\_\_\_\_\_  
(Name of Principal)

By \_\_\_\_\_  
(Must be President or  
Vice President)

\_\_\_\_\_  
(Title)

Surety Corporate Seal

\_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
Attorney-in-Fact

**IMPORTANT – Surety executing bonds must be licensed in West Virginia to transact surety insurance Raised corporate seals  
must be affixed, a power of attorney must be attached.**

BID BOND PREPARATION INSTRUCTIONS

AGENCY (A)
RFQ/RFP# (B)

Bid Bond

- (A) WV State Agency (Stated on Page 1 "Spending Unit") Request for Quotation Number (upper right corner of page #1)
(C) Your Company Name
(D) City, Location of your Company
(E) State, Location of your Company
(F) Surety Corporate Name
(G) City, Location of Surety
(H) State, Location of Surety
(I) State of Surety Incorporation
(J) City of Surety Incorporation
(K) Minimum amount of acceptable bid bond is 5% of total bid. You may state "5% of bid" or a specific amount on this line in words.
(L) Amount of bond in figures
(M) Brief Description of scope of work
(N) Day of the month
(O) Month
(P) Year
(Q) Name of Corporation
(R) Raised Corporate Seal of Principal
(S) Signature of President or Vice President
(T) Title of person signing
(U) Raised Corporate Seal of Surety
(V) Corporate Name of Surety
(W) Signature of Attorney in Fact of the Surety

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, (C) of (D), (E) as Principal, and (F) of (G), (H), a corporation organized and existing under the laws of the State of (I) with its principal office in the City of (J), as Surety, are held and firmly bound unto The State of West Virginia, as Obligee, in the penal sum of (K) (\$ (L)) for the payment of which, well and truly to be made, we jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns.

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the Department of Administration a certain bid or proposal, attached hereto and made a part hereof to enter into a contract in writing for (M)

NOW THEREFORE

(a) If said bid shall be rejected, or
(b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal attached hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform the agreement created by the acceptance of said bid then this obligation shall be null and void, otherwise this obligation shall remain in full force and effect. It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated

The Surety for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of time within which the Obligee may accept such bid: and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be affixed hereto and these presents to be signed by their proper officers, this (N) day of (O), 20 (P).

Principal Corporate Seal

(R)

Surety Corporate Seal

(U)

(Q)
(Name of Principal)
By (S)
(Must be President or Vice President)
(T)
Title
(V)
(Name of Surety)
(W)
Attorney-in-Fact

IMPORTANT - Surety executing bonds must be licensed in West Virginia to transact surety insurance. Raised Corporate Seals must be affixed and a Power of Attorney must be attached.