

City of Lynchburg  
Procurement Division  
900 Church Street  
Lynchburg, Virginia 24504  
Telephone No.: (434) 455-3970  
Fax No.: (434) 845-0711

**Addendum for Invitation for Bids  
Lynchburg Regional Airport New Air Traffic Control Tower  
2016-0018**

Date: 09/25/2015  
From: Lisa Moss, Buyer VCA  
RE: Addendum No. 2

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This Addendum supplements and amends the original Plans and Specifications and shall be taken into account in preparing proposals and shall become a part of the Contract Documents. The Bidder shall indicate receipt of this Addendum and all previously issued Addenda on the Bid Form.

1. The wage rates published with Addendum #1 were the heavy & highway rates, which don't list common commercial building personnel such as plumbers, sprinkler fitters, pipe fitters, electricians, etc. Could you also provide the commercial wage rates for this project that list these various trades?

**These are attached to the addendum.**

2. Per the structural drawings, the tower appears to be a Seismic Design Category "C" building, which usually means that the fire sprinkler system must be designed for seismic conditions. However, I do not see anything in the fire protection plans or specifications calling for this seismic design. Please advise if the fire sprinkler system for this project must be designed for seismic conditions?

**Yes, the sprinkler system must be designed for seismic. Revise Note 11 on Sheet FP-001 to read: "Provide hangar in accordance with NFPA 13. Hangars shall be attached to the top cord of beams or joints. Install pipping and supports in accordance with the NFPA 13 Seismic requirements."**

3. Schedule D – Airfield Lighting and Cable Modifications, Item L-127-5.1, Airfield Lighting Control and Monitoring Systems Mods:

- Is this a new ALCMS or is it modifications to existing? It appears to be new.
- If it is existing, who is the manufacturer?
- On plan page E-604, ALCMS Block Diagram, what is the number of regulators and non-regulated items (ATS, generator, etc.) that need to be controlled? The drawing reads, "Contractor to field verify quantity".

**The ALCMS is an existing system. Please replace Specification L-127 with revised Section L-127 Modification of Airfield Lighting Control System. Remove plan sheet E-604 ALCMS Block Diagram from the plan set. The revised Specification is attached to this addendum.**

4. Please confirm that the highest standpipe hose valve is going to be on the intermediate landing between the 3<sup>rd</sup> & 4<sup>th</sup> floor and that we are not to provide a hose valve at the control room floor or on the roof?

**It is confirmed that a hose valve is not required in the control tower or on the roof.**

5. Will the fire alarm control panel be used for the electrical release of the preaction valve for the 3<sup>rd</sup> floor double-interlock preaction system or does the fire sprinkler contractor need to furnish a separate releasing panel?

**A separate releasing panel is not required provided the fire alarm control panel is a listed releasing panel.**

6. Page 1 of 84413: 1.3 System Description A. is calling for factory fabricated system :With this having to be the factory fabricated system and not shop fabricated by installer this creates a very lengthily lead time with the manufacture- 28 weeks total from start to finish to ship (which includes manufacturer doing the shops, engineering) With this job only having roughly 31 weeks of time start to finish- factory fabricated is not feasible- We would need an extension of time or a change allowing the framing to be shop fabricated. A502 detail 2 and 3 shows depth of curtainwall to be 3-1/2"- the manufacturer says it has to be at least a 6" system. All information is coming from Kawneer (basis of design)

**Specification 084413: Revision: Delete Factory from Section 1.2-A-1**

**Specification 084413: Revision: Delete Section 1.3 in its entirety.**

**Glazed aluminum curtain wall system shall be permitted to be shop fabricated.**

**2/A502 & 3/A502: Change leader from 3 1/2" to 3 1/2" min.**

**Specification 084413 Section 1.4-A indicates that the Contractor's Engineer shall design the system..to resist the required loadings. Section 1.4-C indicates that the Contractor shall design, engineer, fabricate and install the glazed aluminum curtain wall system to withstand the effects of all wind loads. Section 1.5-C indicates that the Contractor show any adaptations of manufacturer's glazed curtain wall system to the project and Section 1.5-C-3 indicates that the curtain wall system calculations be signed and sealed by a professional engineer.**

7. Section 1 on A-403 indicates some light gauge metal framing below the catwalk supporting a sloping soffit. Neither the structural drawings nor the architectural drawings define this metal framing, the connections of the various pieces, spacing, or much of anything else. Can this framing be defined more fully?

**Revised 1/A-403: Leader pointing to soffit shall be changed from Stucco over 3/4" exterior sheathing type "x" on paper backed metal lath on 6" galvanized metal framing to Stucco over 3/4" exterior sheathing type "x" on paper backed metal lath on 6" CFMF (See specification 054000) attach to precast panels with galvanized expansion bolts.**

**Section 1/A-403 intention was to convey soffit framing was CFMF and not light gage. Per Specification 054000 Cold-Formed Metal Framing section 1.2-A, the manufacturer of the cold-formed metal framing system shall assume undivided responsibility for the design of the system and connection to structure.**

8. Section 1 on A-403 also indicates a stucco finish attached to the metal framing in the above question. I have not been able to find any specification for this stucco. Might it be direct-applied stucco finish by STO or something similar? Further definition is requested.

**Specification 092400-Portland Cement Plaster is attached to this addendum and is to be added as part of the Project Manual Specifications for this project.**

9. Regarding Curtain Wall systems: "Shop fabricated curtain wall systems currently have a 196 day lead time for delivery from the time the submittals are approved. The project duration is currently 220 days. This will not allow us time to install the units and complete our finishes within the project schedule. Can we allow field fabricated curtain wall systems from the specified manufacturers or extend the project duration?"

**See response to Item 6.**

10. Cummins Atlantic , a specified pre-approved generator supplier is submitting a quotation for the 175 KW standby Diesel Generator. We have 2 questions that need to be passed along to RS&H so that we can make certain our bid is in compliance.

- Drawing note below infers that the Generator enclosure is to be 4X; We would propose an aluminum enclosure for the generator housing , but the outdoor generator enclosures do not carry Nema designations; Also the spec page 8 para 2.11 calls for “walk in” . This is not at all typical for a unit of this size because maintenance can so easily be conducted on a non walk in type enclosure; Pls advise if a **NON walk in Aluminum** enclosure is acceptable; see attached info on our very excellent factory built enclosure

**Non-Walk in is acceptable.**

- ATS section lists several Manufacturers, but Cummins is not among them. The Cummins ATS will meet and exceed in all respects the ATS specification requirement. Is Cummins a pre-approved ATS supplier? See attached data on the Cummins OTPC ATS

**Cummins is acceptable.**

11. There is grading and a 6” curb detail shown on the drawings, but I don’t see items in the bid schedule for the costs to be put in. Can these be added or where the cost should go be clarified?  
**Site grading associated with the new tower shall be included in the cost of P-001-1 Air Traffic Control Tower. All costs associated with the 6” curb adjacent to proposed sidewalk shall be included in the cost for 033000-2 Sidewalk. Pages 1 and 23 of Technical Specification 033000 have been updated to reflect this and are attached to this addendum.**

**C'tgxlugf 'dlf 'lj ggvl'lcwcej gf 'vq'vj kl'cf f gpf wo 0'**

12. The fire pump representatives are telling me that there is not a domestic vertical inline motor available for the specified vertical inline fire pump for this project to satisfy the “Buy American” requirements. The two options that they gave me are:

1. They could furnish a domestic horizontal split-case pump and motor instead of a vertical inline.
- 2 The could furnish a domestic U.L. listed vertical inline pump with a domestic non-listed motor, but NFPA 20 requires the pump motors to be listed, so this this would not be totally code compliant. Please advise which way we should proceed with pricing the fire pump for this project?

**A horizontal split-case pump and motor is an approved substitution in lieu of a vertical inline, provided it meets the 500 GPM at 100 PSI requirements noted in the plans.**

13. **Changes in Drawings: Sheet C312 Chain Link Fence Note 4: Change reference to NCDOT Specification Section 866 to Technical Specification P-610 Structural Portland Cement Concrete.**

Name: \_\_\_\_\_ Address: \_\_\_\_\_ Date: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Print Name: \_\_\_\_\_ Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

General Decision Number: VA150089 01/02/2015 VA89

Superseded General Decision Number: VA20140089

State: Virginia

Construction Type: Building

Counties: Campbell and Lynchburg\* Counties in Virginia.

\*INDEPENDENT CITY

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/02/2015

\* BOIL0045-004 10/01/2013

	Rates	Fringes
BOILERMAKER.....	\$ 32.36	27.62

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SUVA2010-094 09/20/2010

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 23.29	10.09
BRICKLAYER.....	\$ 22.74	5.65
CARPENTER.....	\$ 14.18	1.20
CEMENT MASON/CONCRETE FINISHER...	\$ 14.89	0.00
ELECTRICIAN.....	\$ 15.21	1.72
IRONWORKER, ORNAMENTAL.....	\$ 24.00	10.16
IRONWORKER, STRUCTURAL.....	\$ 15.21	0.89
LABORER: Common or General.....	\$ 10.50	0.00
LABORER: Landscape.....	\$ 10.64	0.00
LABORER: Mason Tender - Brick...	\$ 10.90	2.35

LABORER: Mason Tender - Cement/Concrete.....	\$ 11.84	3.12
LABORER: Pipelayer.....	\$ 14.44	2.35
OPERATOR: Backhoe.....	\$ 12.99	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 15.62	2.40
OPERATOR: Bulldozer.....	\$ 21.50	4.80
OPERATOR: Crane, All Types.....	\$ 18.65	7.99
OPERATOR: Excavator.....	\$ 14.58	2.47
OPERATOR: Forklift.....	\$ 18.02	7.28
OPERATOR: Loader.....	\$ 19.82	3.30
OPERATOR: Mechanic.....	\$ 15.38	0.89
OPERATOR: Roller.....	\$ 21.50	4.80
PAINTER: Brush and Roller.....	\$ 17.34	5.59
PAINTER: Spray.....	\$ 21.01	6.91
PIPEFITTER, Includes HVAC Pipe and Unit Installation.....	\$ 21.60	10.24
PLUMBER.....	\$ 19.49	9.67
ROOFER.....	\$ 14.50	2.58
SHEET METAL WORKER, Includes HVAC Duct Installation.....	\$ 19.11	8.38
TILE FINISHER.....	\$ 17.32	6.72
TILE SETTER.....	\$ 21.12	7.68
TRUCK DRIVER: Dump Truck.....	\$ 12.07	2.06

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the

cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

## **SECTION L-127 MODIFICATION OF AIRFIELD LIGHTING CONTROL SYSTEM**

### **DESCRIPTION**

**127-1.1** This item shall consist of modifying the existing airfield lighting control system (ALCS) in accordance with this specification and the applicable FAA Advisory Circulars. This item shall include relocation of the existing L-821 control panel from the existing tower cab to the new tower cab and the furnishing and installing of all equipment, materials, services, and incidentals necessary to modify the ALCS.

### **EQUIPMENT AND MATERIALS**

#### **127-2.1 GENERAL.**

- a. Airport lighting equipment and materials covered by advisory circulars (AC) shall be approved under the Airport Lighting Equipment Certification Program per AC 150/5345-53, current version.
- b. All other equipment and materials covered by other referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification, when requested by the Engineer.
- c. Manufacturer's certifications shall not relieve the Contractor of the responsibility to provide materials per these specifications. Materials supplied and/or installed that do not comply with these specifications shall be removed (when directed by the Engineer) and replaced with materials that comply with these specifications at the Contractor's cost.
- d. All materials and equipment used to construct this item shall be submitted to the Engineer for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify products or models applicable to this project. Indicate all optional equipment and delete any non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment to which they apply on each submittal sheet. Markings shall be made bold and clear with arrows or circles (highlighting is not acceptable). The Contractor is solely responsible for delays in the project that may accrue directly or indirectly from late submissions or resubmissions of submittals.
- e. The data submitted shall be sufficient, in the opinion of the Engineer, to determine compliance with the plans and specifications. The Contractor's submittals shall be neatly bound in a properly sized 3-ring binder, tabbed by specification section. The Engineer reserves the right to reject any and all equipment, materials, or procedures that do not meet the system design and the standards and codes, specified in this document.
- f. Only Third Party certified manufacturers, listed in AC 150/5345-53, Appendix 3 Addendum (as required) and meeting the BUY AMERICAN preference requirements can provide equipment and materials specified in the Contract Documents. Documentation certifying compliance with the BUY AMERICAN preference rules for Airport Improvement Program (AIP) cited in 49 USC §50101) shall be included with each equipment and material submittal.
- g. All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least twelve (12) months from final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

### **CONSTRUCTION METHODS**

**127-3.1 Installation.** The L-821 Control Panel to be relocated shall be done carefully to prevent damage. Prior to relocation, report in writing to the Engineer any broken components, lamp burnouts, or other defects found at the time of relocation. It shall be the Contractor's responsibility to safely and properly store the equipment and to repair or replace any damaged equipment during relocation. The L-821 Control Panel shall be installed in the proposed tower cab in the same manner as in the existing tower cab. Coordinate with the control console manufacturer to ensure space is provided for the L-821 Control Panel. Connect the control cable to the L-821 Control Panel.

**127-3.2 Inspection and Testing.** Perform a visual inspection of the relocated L-821 Control Panel at the completion of installation and before energizing. Determine if all switches, buttons, knobs and nameplates are installed correctly and ensure that all cables have been installed. After the L-821 Control Panel has been installed in the new tower cab, energize the panel and step through the functions of each switch, button and knob to determine if the correct equipment is functioning and at the correct brightness step, if applicable. Contractor shall submit results of test in writing to the Engineer.

### **METHOD OF MEASUREMENT**

**127-4.1** The modification of the existing ALCS shall be measured as a lump sum item completed and accepted.

### **BASIS OF PAYMENT**

**127-5.1** Payment for this item shall be at the contract lump sum price for the completed work. This price shall be full compensation for the relocation of the L-821 Control Panel and for furnishing all materials, for all preparation, assembly, installation of materials, and for all labor, equipment, tools and incidentals necessary to complete the item.

Payment will be made under:

Item L-127-5.1      Modification of ALCS - per lump sum

### **MATERIAL REQUIREMENTS**

AC 150/5345-3      Specification for L-821, Panels for the Control of Airport Lighting

**END OF ITEM L-127**

## **SECTION 09.24.00 – PORTLAND CEMENT PLASTER**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

#### **1.2 SUMMARY**

- A. This section includes the following:
  - 1. Metal lath and portland cement stucco where indicated on drawings.
- B. Related Sections: The following sections contain requirements that relate to this section:
  - 1. Division 5, Section 054000 - COLD-FORMED METAL FRAMING for load-bearing steel studs and joists.

#### **1.3 SUBMITTALS**

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product Data for each product specified.
- C. Samples for initial selection in the form of manufacturer's color charts consisting of actual units or sections of units at least 12 inches square showing the full range of colors, textures, and patterns available for each type of finish indicated.
  - 1. Where finish involves normal color and texture variations, include Sample sets composed of 2 or more units showing the full range of variations expected.
  - 2. Include similar samples of material for joints and accessories involving color selection.
- D. Material Certificates: Submit certificate signed by manufacturer for each kind of plaster aggregate certifying that materials comply with requirements.

#### **1.4 QUALITY ASSURANCE**

- A. Mockups: Prior to installing plaster work, construct panels for each type of finish and application required to verify selections made under Sample submittals and to demonstrate aesthetic effects as well as qualities of materials and execution. Build mockups to comply with the following requirements, using materials indicated for final unit of work.

1. Locate mockups on-site in the location and of the size indicated or, if not indicated, as directed by Architect.
2. Erect mockups 48 by 48 inches by full thickness in presence of Architect using materials, including lath, support system, and control joints, indicated for final work.
3. Notify Architect 7 days in advance of the dates and times when mockups will be constructed.
4. Demonstrate the proposed range of aesthetic effects and workmanship.
5. Obtain Architect's approval of mockups before start of plaster work.
6. Retain and maintain mockups during construction in an undisturbed condition as a standard for judging the completed portland cement plaster work.
  - a. When directed, remove mockups from project site.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver cementitious materials to project site in original packages, containers, or bundles, labeled with manufacturer's name, product brand name, and lot number.
- B. Store materials inside, under cover, and dry, protected from weather, direct sunlight, surface contamination, aging, corrosion, and damage from construction traffic and other causes.

#### 1.6 PROJECT CONDITIONS

- A. Environmental Requirements, General: Comply with requirements of referenced plaster application standards and recommendations of plaster manufacturer for environmental conditions before, during, and after plaster application.
- B. Cold-Weather Requirements: Provide heat and protection, temporary or permanent, as required to protect each coat of plaster from freezing for at least 24 hours after application. Distribute heat uniformly to prevent concentration of heat on plaster near heat sources; provide deflection or protective screens.
- C. Warm-Weather Requirements: Protect plaster against uneven and excessive evaporation and from strong flows of dry air, both natural and artificial. Apply and cure plaster as required by climatic and job conditions to prevent dry out during cure period. Provide suitable coverings, moist curing, barriers to deflect sunlight and wind, or combinations of these, as required.
- D. Exterior Plaster Work: Do not apply plaster when ambient temperature is below 40 degrees F.
- E. Protect contiguous work from soiling and moisture deterioration caused by plastering. Provide temporary covering and other provisions necessary to minimize harmful spattering of plaster on other work.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Expanded-Metal Lath:
    - a. Alabama Metal Industries Corp. (AMICO).
    - b. Dale//Incor Industries, Inc.
    - c. Dietrich Industries, Inc.
    - d. National Gypsum Co.
    - e. Unimast, Inc.
    - f. United States Gypsum Co.
    - g. Western Metal Lath Co.
  2. Metal Accessories:
    - a. Alabama Metal Industries Corp. (AMICO).
    - b. California Expanded Metal Products Co.
    - c. Dale//Incor Industries, Inc.
    - d. Delta Star, Inc.
    - e. Flannery, Inc.
    - f. Fry Reglet Corporation.
    - g. Gordon, Inc.
    - h. Metalex (Keene Products).
    - i. MM Systems Corp.
    - j. National Gypsum Co.
    - k. Pittcon Industries.
    - l. Stockton Products.
    - m. Unimast, Inc.
    - n. United States Gypsum Co.
    - o. Western Metal Lath Co.
  3. Stucco:
    - a. California Stucco Products Corp.
    - b. Highland Stucco.
    - c. IPA Systems, Inc.
    - d. United States Gypsum Co.

## 2.2 LATH

- A. Expanded-Metal Lath: Comply with ASTM C847 for material, type, configuration, and other characteristics indicated below.
1. Material: Fabricate expanded-metal lath from sheet metal conforming to the following:
    - a. Galvanized Steel: Structural-quality, zinc-coated (galvanized) steel sheet complying with ASTM A653, G60 minimum coating designation, unless otherwise indicated.

2. Diamond-Mesh Lath: Comply with the following requirements:
  - a. Configuration: Flat.
    - 1) Weight: 2.5 lb/sq. yd.

### 2.3 ACCESSORIES

- A. General: Comply with material provisions of ASTM C1063 and the requirements indicated below; coordinate depth of accessories with thicknesses and number of plaster coats required.
  1. Galvanized Steel Components: Fabricated from zinc-coated (galvanized) steel sheet complying with ASTM A653, G40 minimum coating designation.
- B. Metal Corner Reinforcement: Expanded, large-mesh, diamond-metal lath fabricated from zinc-alloy or welded-wire mesh fabricated from 0.0475-inch-diameter, zinc-coated (galvanized) wire and specially formed to reinforce external corners of portland cement plaster on exterior exposures while allowing full plaster encasement.
- C. Cornerbeads: Small nose cornerbeads fabricated from the following metal, with expanded flanges of large-mesh diamond-metal lath allowing full plaster encasement.
  1. Galvanized Steel: Minimum 0.0172 inch thick.
- D. Casing Beads: Square-edged style, with expanded flanges of the following material:
  1. Galvanized Steel: Minimum 0.0172 inch thick.
- E. Curved Casing Beads: Square-edged style, fabricated from aluminum coated with clear plastic, preformed into curve of radius indicated.
- F. Control Joints: Prefabricated, of material and type indicated below:
  1. Galvanized Steel: Minimum 0.0172 inch thick.
  2. One-Piece Type: Folded pair of nonperforated screeds in M-shaped configuration, with expanded or perforated flanges.
- G. Lath Attachment Devices: Material and type required by ASTM C1063 for installations indicated.

### 2.4 PLASTER MATERIALS

- A. Base-Coat Cements: Portland cement, ASTM C150, Type I.
- B. Job-Mixed Finish-Coat Cement: Portland cement, ASTM C150, Type I.
- C. Cement Color: White.

- D. Lime: Special hydrated lime for finishing purposes, ASTM C206, Type S; or special hydrated lime for masonry purposes, ASTM C207, Type S.
- E. Sand Aggregate for Base Coats: ASTM C897.
- F. Aggregate for Finish Coats: ASTM C897 system and as indicated below:
  - 1. Manufactured or natural sand, white in color.

## 2.5 MISCELLANEOUS MATERIALS

- A. Water for Mixing and Finishing Plaster: Potable.
- B. Bonding Agent: ASTM C932.
- C. Line Wire: 0.0475-inch-diameter, zinc-coated (galvanized), soft, annealed steel wire.
- D. Steel drill screws complying with ASTM C1002 for fastening metal lath to wood or steel members less than 0.033 inch thick.
- E. Steel drill screws complying with ASTM C954 for fastening metal lath to steel members 0.033 to 0.112 inch thick.

## 2.6 PLASTER MIXES AND COMPOSITIONS

- A. General: Comply with ASTM C926 for base- and finish-coat mixes as applicable to plaster bases, materials, and other requirements indicated.
- B. Base-Coat Mixes and Compositions: Proportion materials for respective base coats in parts by volume per sum of cementitious materials for aggregates to comply with the following requirements for each method of application and plaster base indicated. Adjust mix proportions below within limits specified to attain workability.
- C. Three-Coat Work over Metal Lath: Base-coat proportions as indicated below:
  - 1. Scratch Coat: 1 part portland cement, 0 to 3/4 parts lime, 2-1/2 to 4 parts aggregate.
  - 2. Brown Coat: 1 part portland cement, 0 to 3/4 parts lime, 3 to 5 parts aggregate.
- D. Job-Mixed Finish Coats: Proportion materials for finish coats in parts by volume for cementitious materials and parts by volume per sum of cementitious materials to comply with the following requirements:
  - 1. Proportions using sand aggregates as indicated below:
    - a. 1 part portland cement, 3/4 to 1-1/2 parts lime, 3 parts sand.

## 2.7 MIXING

- A. Mechanically mix cementitious and aggregate materials for plasters to comply with applicable referenced application standard and with recommendations of plaster manufacturer.

## PART 3 - EXECUTION

### 3.1 INSTALLATION OF LATH AND FURRING, GENERAL

- A. Standards: Comply with ML/SFA 920, "Guide Specifications for Metal Lathing and Furring," and with requirements of ASTM C1063.
- B. Install supplementary framing, blocking, and bracing at terminations in work and for support of fixtures, equipment services, heavy trim, grab bars, handrails, furnishings, and similar work to comply with details indicated or, if not otherwise indicated, to comply with applicable written instructions of lath and furring manufacturer.
- C. Isolation: Where lathing and metal support system abuts building structure horizontally and where partition or wall abuts overhead structure, sufficiently isolate from structural movement to prevent transfer of loading from building structure. Install slip- or cushion-type joints to absorb deflections but maintain lateral support.
  - 1. Frame both sides of control joints independently and do not bridge joints with furring and lathing or accessories.
- D. Install additional framing, furring, runners, lath, and beads, as required to form openings and frames for other work as indicated. Coordinate support system for proper support of framed work that is not indicated to be supported independently of metal furring and lathing system.

### 3.2 LATHING

- A. Install metal lath for the following applications where plaster base coats are required. Provide appropriate type, configuration, and weight of metal lath selected from materials indicated that comply with referenced ML/SFA specifications and ASTM lathing installation standards.
  - 1. Suspended and furred ceilings using 2.5-lb/sq. yd. minimum weight, diamond-mesh lath.

### 3.3 PREPARATIONS FOR PLASTERING

- A. Clean plaster bases and substrates for direct application of plaster, removing loose material and substances that may impair the work.
- B. Install temporary grounds and screeds to ensure accurate rodding of plaster to true surfaces; coordinate with scratch-coat work.

### 3.4 INSTALLATION OF PLASTERING ACCESSORIES

- A. General: Comply with referenced lathing and furring installation standards for provision and location of plaster accessories of type indicated. Miter or cope accessories at corners; install with tight joints and in alignment. Attach accessories securely to plaster bases to hold accessories in place and in alignment during plastering. Install accessories of type indicated at following locations:
  - 1. External Corners: Install corner reinforcement at external corners.
  - 2. Terminations of Plaster: Install casing beads, unless otherwise indicated.
  - 3. Control Joints: Install at locations indicated.

### 3.5 PLASTER APPLICATION

- A. Plaster Application Standard: Apply plaster materials, composition, and mixes to comply with ASTM C926.
- B. Do not use materials that are frozen, caked, lumpy, dirty, or contaminated by foreign materials.
- C. Do not use excessive water in mixing and applying plaster materials.
- D. Flat Surface Tolerances: Do not deviate more than plus or minus 1/8 inch in 10 feet from a true plane in finished plaster surfaces, as measured by a 10-foot straightedge placed at any location on surface.
- E. Sequence plaster application with installation and protection of other work so that neither will be damaged by installation of other.
- F. Corners: Make internal corners and angles square; finish external corners flush with cornerbeads on interior work, square and true with plaster faces on exterior work.
- G. Number of Coats: Apply plaster of composition indicated, to comply with the following requirements:
  - 1. Three Coats: Over metal lath.
- H. Finish Coats: Apply finish coats to comply with the following requirements:
  - 1. Float Finish: Apply finish coat to a minimum thickness of 1/8 inch to completely cover base coat, uniformly floated to a true even plane with medium sand float finish to match existing construction.

### 3.6 CUTTING AND PATCHING

- A. Cut, patch, replace, repair, and point up plaster as necessary to accommodate other work. Repair cracks and indented surfaces. Point-up finish plaster surfaces around items that are built into or penetrate plaster surfaces. Repair or replace work to eliminate blisters, buckles, check cracking, dry outs, efflorescence, excessive pinholes, and similar defects. Repair or replace work as necessary to comply with required visual effects.

3.7 CLEANING AND PROTECTING

- A. Remove temporary covering and other provisions made to minimize spattering of plaster on other work. Promptly remove plaster from door frames, windows, and other surfaces not to be plastered. Repair surfaces stained, marred or otherwise damaged during plastering work. When plastering work is completed, remove unused materials, containers, equipment, and plaster debris.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer that ensure plaster work is without damage or deterioration at the time of Substantial Completion.

END OF SECTION 092400

## **SECTION 033000 – CAST-IN-PLACE CONCRETE**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. All concrete work shown within the Air Traffic Control Tower buildings is governed by this section. Refer to Section P-610 for structural Portland Cement Concrete applicable to drainage structures, drainage pipe, chain link fence footings, and electrical/utility encasements.
- B. Concrete strength not otherwise designated shall be 4000 psi, as determined by the use of ASTM C31 and C39.

#### **1.2 SUBMITTALS**

- A. Shop Drawings: Submit shop drawings for fabrication, bending, and placement of concrete reinforcement. Comply with ACI Manual 315 "Manual of Standard Practice for Detailing Reinforced Concrete Structures" showing bar schedules, stirrup spacing, diagrams of bent bars, arrangement of reinforcement. Show location of planned construction joints.
- B. Manufacturer's Data: Submit manufacturer's product data, specifications with application and installation instructions for proprietary materials and items, including admixtures, bonding agents, waterstops, joint systems, curing and sealing compounds, chemical hardeners and dry shake finish materials.
- C. Mix Design Test Reports: Submit proportions and testing facility reports for each proposed mix. Tests for mixes to be placed by pumping shall be made on samples from discharge end of similar pumping equipment. The submittal shall demonstrate compliance with ACI 318 Chapter 5. Concrete placed prior to approval of the mix shall be subject to removal and replacement as directed by the Architect-Engineer.
- D. Field Test Reports: The independent testing laboratory shall provide reports as described herein.
  - 1. Field test results shall be reported in writing to the Architect-Engineer and Contractor on the same day that tests are made.
  - 2. Reports of compressive strength tests shall contain the project title and AEP file number, date of concrete placement, name of Contractor, name of concrete supplier and truck number, name of concrete testing service, concrete mix number, location of concrete batch in the structure, batch time, placement time, quantity of any added water, slump, design and actual compressive strength and type of break for both 7-day tests and 28-day tests.
  - 3. If core tests become necessary, the core test results shall include the project identification name and number, date, name of Contractor, name of concrete testing service, location of test core in structure, concrete mix number represented by core sample, nominal maximum size aggregate, design compressive strength, compression breaking strength and type of break (corrected for length-diameter ratio, direction of applied load to core with respect to horizontal plan of the concrete as placed and the moisture condition of the core at time of testing).

#### **1.3 QUALITY ASSURANCE**

PART 4 - METHOD OF MEASUREMENT

4.1 CURB AND GUTTER

- A. Curb and gutter will be measured for payment, by the linear foot.

4.2 SIDEWALK

- A. Concrete sidewalk shall be measured for payment, by the square yard.

PART 5 - BASIS OF PAYMENT (Payment will be made under the following:)

- 5.1 30" CURB AND GUTTER (CG-6) - This price shall be full compensation for furnishing all materials and for all preparation, placing, and acceptance of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

5.1.1 Payments will be made under:

Item 033000 – 1: 30" Curb and Gutter (CG-6) - Per linear foot.

- 5.2 SIDEWALK - This price shall be full compensation for furnishing all materials and for all preparation, placing, and acceptance of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item. Cost for constructing adjacent curb shall be included in the price for Sidewalk pay item.

5.2.1 Payments will be made under:

Item 033000 – 2: Sidewalk - Per square yard

END OF SECTION 033000

**ADDENDUM #2 REVISED BID FORM**

Lisa Moss Procurement Division  
City of Lynchburg  
Third Floor, City Hall  
900 Church Street  
Lynchburg, Virginia 24504

Dear Ms. Moss:

The undersigned, as bidder, hereby declares that the only persons interested in this bid as principal, or principals, is or are named herein and that no person other than herein mentioned has any interest in this bid or in the Construction Agreement to be entered into; that this bid is made without connection with any other person, company, or parties making a bid; and that it is in all respects fair and in good faith, without collusion or fraud.

**The undersigned, having visited and examined the site and having carefully studied all the Contract Documents, including without limitation, all drawings and specifications pertaining to “Lynchburg Regional Airport New Air Traffic Control Tower” for the City of Lynchburg, Virginia, hereby proposes to furnish all labor, equipment, materials, and services and to perform all operations necessary to execute and complete the Work required for the project, in strict accordance with the Contract Documents together with Addenda numbered \_\_\_ through \_\_\_ issued during bidding period and hereby acknowledged, subject to the terms and conditions of the Construction Agreement for the sum as listed in the BID SCHEDULE.**

**LYNCHBURG REGIONAL AIRPORT - BID SCHEDULE  
REVISED BID SHEET ADDENDUM #2**

**Airport: LYNCHBURG REGIONAL AIRPORT**

**Project: New Air Traffic Control Tower**

**RS&H Project No. 222-0264-001**

**BID SHEET**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Individual Price</b>	<b>Total Price</b>
<b>Schedule A - ATC Tower</b>					
P-001-1	AIR TRAFFIC CONTROL TOWER	LS	1		
263213-1	EMERGENCY GENERATOR SYSTEM	LS	1		
024100-1	DEMO OF EXISTING ATCT	LS	1		
<b>TOTAL SCH. A</b>					
<b>Schedule B - ATCT Equipment</b>					
275000-1	ATCT EQUIPMENT PACKAGE	LS	1		
<b>TOTAL SCH. B:</b>					
<b>Schedule C - Sitework and Utilities</b>					
P-100.3-1	MOBILIZATION AND GENERAL CONDITIONS	LS	1		
P-102-10.1	SAFETY AND SECURITY	LS	1		
P-104-5.1	PROJECT SURVEY AND STAKEOUT	LS	1		
P-105-5.1	TEMPORARY CONSTRUCTION ITEMS	LS	1		
P-156-5.1a	DIVERSION DIKE	LFT	310		

P-156-5.1b	SILT FENCE	LFT	385		
P-156-5.1c	INLET / OUTLET PROTECTION	EACH	3		
024119-1	ASPHALT PAVEMENT REMOVAL	SYD	90		
033000-1	30" CURB & GUTTER (CG-6)	LF	110		
<b>033000-2</b>	<b>SIDEWALK</b>	<b>SYD</b>	<b>160</b>		
034100-1	CONCRETE WHEEL STOP	EA	2		
334100-1	12-INCH CLASS III RCP	LFT	70		
334100-2	24-INCH CLASS III RCP	LFT	120		
334100-3	8-INCH HDPE STORM PIPE	LFT	20		
334100-4	6-INCH HDPE STORM PIPE	LFT	85		
334100-5	INLET	EA	2		
334100-6	STORM MANHOLE	EA	1		
334100-7	STORM PIPE CLEAN-OUT STACK	EA	2		
334100-8	CONVERT MANHOLE TO INVERT	EA	1		
321723-1	HANDICAP PARKING SIGN	EACH	2		
321723-2	PAINTED PAVEMENT MARKING (WHITE OR BLUE)	SFT	200		
321723-3	ROADWAY DELINEATOR	EACH	1		
321723-4	24" SOLID WHITE THERMOPLASTIC	LFT	32		
329300-1	LANDSCAPE	LS	1		
331113-1	6-INCH DI CLASS 50 WATER LINE & FITTINGS	LFT	350		
331113-2	3-INCH RPZ BACKFLOW PREVENTER	EACH	1		
331113-3	6 X 6 TAPPING SLEEVE AND VALVE	EACH	1		
333000-1	4-INCH SANITARY SEWER LINE	LFT	100		
F-162-5.1	8-FOOT HIGH CHAIN LINK FENCE WITH BARBED WIRE	LFT	580		
F-162-5.2a	VEHICLE GATE	EACH	1		
F-162-5.2b	PEDESTRIAN GATE	EACH	1		
F-162-5.3	CHAIN LINK FENCE REMOVAL	LFT	210		
T-901-5.1	SEEDING	ACRE	1.2		
T-905-5.1	TOPSOILING, OBTAINED ON SITE OR REMOVED FROM STOCKPILE	CYD	540		
T-908-5.1	MULCHING	ACRE	1.2		
L-101-5.1	AIRPORT ROTATING BEACON	LS	1.0		
L-105-7.1	REMOVE AND RELOCATE BEACON	LS	1		
012100-1	AEP UTILITY ALLOWANCE	ALLOW	1	\$20,000.00	\$20,000.00
012100-2	VERIZON UTILITY ALLOWANCE	ALLOW	1	\$15,000.00	\$15,000.00
				<b>TOTAL SCH. C:</b>	
<b>Section D - Airfield Lighting &amp; Vault Modifications</b>					
L-108-5.1	3-1/C NO. 6 AWG, L-824C CABLE, INSTALLED IN DUCT BANK OR CONDUIT	LFT	1,130		
L-108-5.2	AIRFIELD LIGHTING CONTROL CABLE, 25 PR	LFT	270		
L-110-5.1	ELECTRICAL CONDUIT 2-WAY, 2" PVC, SCHEDULE 40	LFT	180		

L-110-5.2	ELECTRICAL CONDUIT 2-WAY, 3" PVC, SCHEDULE 40	LFT	40		
L-110-5.3	ELECTRICAL CONDUIT 4-WAY, 2-3", 2-4" PVC, SCHEDULE 40	LFT	490		
L-115-5.1	ELECTRICAL HANDHOLE - VEHICLE RATED	EACH	7		
L-127-5.1	AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM MODS	LS	1		
<b>TOTAL SCH. D:</b>					
<b>Schedule E - Communication and Technology Package (CTP) Allowance</b>					
012100-3	COMMUNICATION AND TECHNOLOGY PACKAGE (CTP) ALLOWANCE	ALLOW	1	\$75,000.00	\$75,000.00
<b>TOTAL SCH E:</b>					
<b>TOTAL BASE BID (SCH. A-E)</b>					
<b>ALTERNATE #1: (ALTERNATE IS NOT CONSIDERED AS PART OF THE BASE BID AND THERE IS NO GUARANTEE OF AWARD)</b>					
<b>Schedule F - Alternate #1: Split Face Thin Block Finish</b>					
012300-1	SPLIT FACE THIN BLOCK FINISH	LS	1		
<b>TOTAL SCH. F</b>					

- 1. Price: Includes all labor, materials, and equipment, etc. required to complete project.**
- 2. In submitting this bid, I certify:**
  - a. Items bid are in exact accordance with specifications, unless noted in bid.**
  - b. Prices in this bid have been arrived at independently, without consultation or agreement with any competitor for purpose of restricting competition.**
- 3. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal, which includes initials on each bid form sheet, shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.**

**END OF BID SCHEDULE**

It is understood and agreed that the Owner, in protecting its best interests, reserves the right to reject any or all bids or waive any defects. Any changes, erasures, modifications, deletions in the bid form, or alternate proposals not specified in the Advertisement for Bids may make the bid irregular and subject to rejection.

The listed bid items are to contain all necessary costs required for completion of the Work in accordance with the Contract Documents.

If the Construction Agreement is for unit prices and not for a lump sum price, it is understood that all quantities listed on the following pages are estimated quantities, and the Owner reserves the right to raise, lower, or eliminate any quantity or item, and in any case, the unit prices shall be used in determining partial and final payment. It is further understood that costs to cover all components of the Work as described in the Contract Documents are included in this bid, even in cases where specific line items are not identified.

We are properly equipped to execute all work of the character and extent required by the Contract Documents, and we will enter into the Construction Agreement for the execution and completion of the Work in accordance with the Contract Documents; and we further agree that, if awarded the Construction Agreement, we will commence the Work on the date stated in the "Notice to Proceed" and will maintain a work force large enough to execute the Work and all obligations no later than the completion date stated in the Contract Documents.

Enclosed herewith is the following Security, offered as assurance that the undersigned will enter into the Construction Agreement for the execution and completion of the Work in accordance with the Contract Documents:

Bidder's Certified Check issued by \_\_\_\_\_ (name of bank) in the amount of:

\$ \_\_\_\_\_ (5% of Base Bid amount)

Bidder's Bid Bond for 5% of Base Bid Amount Issued by \_\_\_\_\_  
(name of surety authorized to do business in Virginia).

The undersigned hereby agrees, if awarded the Construction Agreement, to execute and deliver to the City within ten (10) days after his receipt of the Notice of Award, a performance bond and a payment bond, in forms satisfactory to the City, from sureties authorized to do business in Virginia satisfactory to the City, in the amount of one hundred (100) percent of the Base Bid.

The undersigned further agrees that, in case of failure on his part to execute the said Construction Agreement within the ten (10) days after written notice being given on the award of the Construction Agreement or the failure to deliver the required performance and payment bonds within the ten (10) days, the monies payable by the Security accompanying this bid shall be paid to the City of Lynchburg, Virginia, as liquidated damages for such failure; otherwise the Security accompanying this Bid shall be returned to the undersigned.

Attached herewith are completed Statement of Experience and Statement of Resources forms which include the information requested.

The undersigned further certifies that this bid is not the result of, or affected by, any act of collusion with another person engaged in the same line of business, or any act punishable under the Virginia Governmental Frauds Act, or other law.

This bid remains valid and may not be withdrawn for a period of 120 days from this date.

CURRENT VIRGINIA CLASS A CONTRACTOR'S LICENSE/ REGISTRATION NO.: \_\_\_\_\_

Respectfully submitted,

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
DATE

\_\_\_\_\_

\_\_\_\_\_  
ADDRESS

BY: \_\_\_\_\_

ITS: \_\_\_\_\_  
(Title)