DATE:             August 13, 2020

TO:   Potential Respondents

FROM:  Elaine Robbins – Construction Solicitation Coordinator

SUBJECT:  Addendum #1
RFQ769-20-10499ER
UNTD College of Law Leak Remediation

This Addendum #1 is being issued to provide DryTec Moisture Protection Technology Consultants Addendum No.1 that modifies the Project Manual.

______________________________
Signature

______________________________
Date
August 12, 2020

UNTD COLLEGE OF LAW LEAK REMEDIATION
UNT DALLAS LAW CENTER
106 S. HARWOOD STREET
DALLAS, TEXAS 75201

ADDENDUM NO. 1

THE FOLLOWING MODIFIES THE CONTRACT DOCUMENTS JUNE 23, 2020

Project Manual

1. Section 012200: Add the following to 3.1:
   E. Unit Price 5 - Repair of cracks in terra cotta
      1. Description: Repair of cracks in existing terra cotta.
      2. Unit of Measurement: cost per lineal foot.

2. Section 012300: Add the following sentence to 3.1.B:
   Remove and replace existing electronic bird deterrent to include underlayment and all other
   components required for proper functioning of the system.

3. Section 040100:
   A. 1.8.C: Replace "brick" with limestone and terra cotta.
   B. 3.4.1: Replace "brick" with limestone.
   C. Replace existing text with the following: The Base Bid will include the tuckpointing of 1,600 lineal
      feet of mortar joints in the scheduled limestone and 1,000 lineal feet of mortar joints in the
      scheduled terra cotta with the actual cost of each being determined on the basis of unit pricing.

4. Section 045910 - Terra Cotta Masonry Restoration: Add this Section to the Project Manual.

General

1. The attached set of historical documents are provided as a reference only. Any information obtained
   or relied on from these documents shall be done at the sole risk of the Contractor.
2. Remove and replace (not reinstall) the existing bird deterrent netting to match existing.
3. Remove and replace existing electronic bird deterrent to include underlayment and all other
   components required for proper functioning of the system.
END OF ADDENDUM NO. 1
SECTION 045910
TERRA COTTA MASONRY RESTORATION

PART 1  GENERAL

1.1 SUMMARY OF WORK
A. Minor terra cotta masonry restoration shall be performed on exterior wall areas indicated on the drawings.
   1. Contractor shall inspect terra cotta masonry at exterior wall surfaces to determine extent of repairs
   2. Repoint open and deteriorated mortar joints in terra cotta masonry.
   3. Repair cracked terra cotta.
   4. The Base Bid shall include the repair of 300 linear feet of the subject terra cotta. The actual cost
      will be adjusted on the basis of unit pricing in accordance with Sections 040100 and 040511.

1.2 RELATED SECTIONS
A. Section 040100 – Masonry Restoration and Cleaning.
B. Section 000511 - Masonry Mortaring and Grouting.
C. Section 071900 – Water Repellant.

1.3 SUBMITTALS
A. Procedures for Submittals: Section 013300.

1.4 QUALITY ASSURANCE
A. Restoration Specialist Qualifications: Engage an experienced masonry restoration and cleaning firm to
   perform work of this Section. Firm shall have completed work similar in material, design, and extent to that
   indicated for this Project with a record of successful in-service performance. Experience installing standard
   unit masonry is not sufficient experience for masonry restoration work.
B. Section 000511 - Masonry Mortaring and Grouting.
C. Section 071900 – Water Repellant.

1.5 DELIVERY, STORAGE, AND HANDLING
A. Deliver products to Project Site and store where approved by Owner.
B. Deliver other materials to Project site in manufacturer's original and unopened containers, labeled with
   manufacturer's name and type of products.
C. Section 071900 – Water Repellant.

1.6 PROJECT CONDITIONS
A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit
   terra cotta restoration work to be performed according to manufacturers' written instructions and specified
   Requirements.
B. Cold-Weather Requirements: Comply with the following procedures for masonry repair and mortar-joint
   pointing unless otherwise indicated
   1. When air temperature is below 40 deg F (4 deg C), heat mortar ingredients, masonry repair
      materials, and existing masonry walls to produce temperatures between 40 and 120 deg F (4 and
      49 deg C.
   2. When mean daily air temperature is below 40 deg F (4 deg C), provide
      enclosure and heat to maintain temperatures above 32 deg F (0 deg C)within the enclosure for 7
      days after repair and pointing.
C. Hot-Weather Requirements: Protect masonry repair and mortar-joint pointing when temperature and
   humidity conditions produce excessive evaporation of water from mortar and repair materials. Provide
   artificial shade and wind breaks and use cooled materials as required to minimize evaporation. Do not
   apply mortar to substrates with temperatures of 90 deg F (32 deg C) and above unless otherwise
D. For manufactured repair materials, perform work within the environmental limits set by each manufacturer.

1.7 WARRANTY

A. Contractor’s Warranty: Contractor shall furnish written warranty agreeing to replace defective work due to material failure or workmanship for a period of TWO (2) years after date of substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURED REPAIR MATERIALS

A. Masonry Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching masonry.
   1. Products: Subject to compliance with requirements, provide available products that may be incorporated into the Work include, but are not limited to, the following:
      a. Cathedral Stone Products, Inc.; Jahn M100 Terra Cotta and Brick Repair Mortar.
      b. Conproco Corporation; Mimic, Matrix
      c. Edison Coatings, Inc.; Custom System 45
   2. Use formulation that is vapor- and water permeable (equal to or more than the masonry unit), exhibits low shrinkage, has lower modulus of elasticity than the masonry units being repaired, and develops high bond strength to all types of masonry.
   3. Use formulation having working qualities and retardation control to permit forming and sculpturing where necessary.
   4. Formulate patching compound used for patching terra cotta in colors and textures to match each masonry unit being patched. Provide sufficient number of colors to enable matching the color, texture, and variation of each unit.

B. Terra Cotta Glaze Replacement: A high-solids, nonyellowing, fade-resistant, waterborne polyurethane or epoxy coating intended for exterior use as terra cotta glaze replacement. Product shall be custom mixed by manufacturer to match color and gloss of existing terra cotta glaze.
   1. Products: Subject to compliance with requirements, provide available products that may be incorporated into the Work include, but are not limited to, the following:
      a. Cathedral Stone Products, Inc.; Jahn M100 TerraCoat with SpanCoat primer.
      b. Conproco Corporation; Terra Cotta Finish
      c. Edison Coatings, Inc.; Aquathane UA-210, Aqua-Spex 220 Multi-Color Finish System
      d. Or approved equal.

2.2 CRACK INJECTION MATERIALS

A. Cementitious crack filler shall be an ultra-fine, super plasticized, polymermodified injection grout. Cementitious grout shall be suitable for application in wet or dry cracks, shall develop direct tensile bond strength of 200 psi minimum, shall exhibit less than 0.06% drying shrinkage, and shall have a linear coefficient of thermal expansion of 0.000005 to 0.000008 inches/inch per degree Fahrenheit.
   1. Products: The following shall be assumed to meet the quality and performance requirements specified:
      a. PUMP-X53i, as manufactured by Edison Coatings, Inc., Waterbury, CT, Phone (800) 697-8055, or approved equal.
      b. Flexible epoxy crack filler shall be an ultra-low viscosity, twocomponent, 100% solids elastomeric epoxy, suitable for injection into dry or damp cracks. Product shall have a minimum of 100% elongation, 1200 psi tensile strength and 300 psi direct tensile bond strength. Mix viscosity shall not exceed 200 cps at 75 degrees Fahrenheit.
   2. Products: The following shall be assumed to meet the quality and performance requirements specified:
      a. FLEXI-SEAL 510, as manufactured by Edison Coatings, Inc., Waterbury, CT, Phone (800) 697-8055.
      b. Or approved equal.

2.2 REINFORCING MATERIALS

A. Adhesive: Adhesive shall be a two component, flexibilized epoxy gel, with minimum 4% elongation, 300 psi direct tensile bond strength, 10,000 psi tensile strength. Product shall be applicable to metals, masonry, concrete and other substrates as required, and shall be appropriate for use at ambient temperatures from zero degrees to 100 degrees Fahrenheit (-18 to 38 degrees Centigrade).
   1. Products: Subject to compliance with requirements, provide the following:
a. FLEXI-WELD 520T, as manufactured by Edison Coatings, Inc., Waterbury, CT (800) 697-8055.

b. Or approved equal.

PART 3 EXECUTION

3.1 PROTECTION

A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work.

1. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of restoration and cleaning work.

B. Perform terra cotta repairs prior to the replacement of existing sealant joints below.

C. Provide temporary rain drainage during Work to direct water away from building.

3.2 REPAIRING CRACKS AND VOIDS IN ORNAMENTAL TERRA COTTA

A. Prepare cracked area in accordance to manufacturer’s written instructions. Typical procedures are outlined in this section and shall be modified according to approved materials manufacturer.

B. Crack repair for hairline and microscopic cracks:

1. Inject flexible epoxy crack repair material into designated cracks, using syringes, grouting pumps, or other types of injection apparatus suitable for size of crack, distance crack injection material must travel and viscosity of material used. Seal surfaces as required to prevent crack injection material from leaking out and to facilitate pumping. Take caution not to strain the face of adjacent surfaces.

2. Immediately wipe spills off surfaces with clean rag and compatible solvent and allow injection material to cure as required.

C. Crack repair for cracks larger than 1/16” and voids larger than 1/8” mm:

1. Remove loose and spalling materials, cut into crack to a minimum depth of 3/8 inches and a width of 3/16 inch. If embedded reinforcements are rusted then cut material deep enough to expose the rusting reinforcements and remove material around reinforcement to provide a minimum of ¾ inch clearance for patch material.

2. Clean and coat exposed reinforcements at patch work with an approved rust preventative agent.

3. Fill enlarged areas of crack repair with patching material, following repair procedures outlined in this section under Part 3. “Patch for typical repair work” and/or Part 3. “Patching for deep or overhanging repair”.

D. Inject cementitious crack repair material into designated voids and cracks, using syringes, grouting pumps, or other types of injection apparatus suitable for size of crack, distance crack repair material must travel and viscosity of material used. Seal surfaces as required to prevent crack injection material from leaking out and to facilitate pumping. Take caution not to strain the face of adjacent surfaces. Immediately wipe spills off surfaces with clean rag and compatible solvent.

E. Unacceptable patches are defined as those with hairline cracks or showing separation from repair edges. Remove patches and refill to provide patches free of those defects.

3.3 PATCHING TERRA COTTA

A. Patching terra cotta:

1. Remove deteriorated material as determined by sounding gently with a small hammer. Carefully remove additional material so patch will not have feathered edges but will have square or slightly undercut edges on area to be patched and will be at least 1/4 inch (6 mm) thick, but not less than recommended by patching compound manufacturer.

2. Where mortar joints adjacent to patch are open, tuck-point as specified in Sections 040100 and 040511.

3. Mask adjacent mortar joint or rake out for repointing if patch will extend to edge of unit.

4. Rinse surface to be patched and leave damp, but without standing water.

5. Brush-coat surfaces with slurry coat of patching compound according to manufacturer's written instructions.

6. Place patching compound in layers as recommended by patching compound manufacturer, but not less than 1/4 inch (6 mm) or more than 2 inches (50 mm) thick. Roughen surface of each layer to provide a key for next layer.

7. Do not apply patching compound over mortar joints. If patching compound bridges mortar joints, cut
out joints after patching compound hardens.

8. Trowel, scrape, or carve surface of patch to match texture, details, and surrounding surface plane or contour of terra cotta. Shape and finish surface before or after curing, as determined by testing to best match existing terra cotta.

9. Keep each layer damp for 72 hours or until patching compound has set.

10. After final layer of patching compound has cured, apply glaze replacement according to manufacturer’s written instructions. Apply two or more coats, as needed, to match glaze of adjacent terra cotta units. Glaze shall be applied to entire terra cotta unit repaired.

3.4 CLEANING TERRA COTTA

A. Clean terra cotta in accordance with the requirements set forth in Section 040100.

END OF SECTION 045910