ADDENDUM NO. 1

PROJECT: ORANGE COAST COLLEGE
Student Health Center Roof Rehabilitation
BID NO: 2058

NOTICE TO BIDDERS ON THE ABOVE PROJECT:

This addendum forms a part of the contract documents and modifies the original bidding documents as noted below. Please acknowledge the receipt of this addendum in the space provided on the bid proposal. Failure to do so may subject the bidder to disqualification.

This addendum consists of:

1. CHANGES TO SPECIFICATIONS
   a. Attached please find revised roofing specifications which supersede original specifications included in the bid documents.

2. REVISED BID BOND FORM
   a. Bid form has been revised to correct project name

All other terms and conditions remain the same.

John Eriksen, Director of Purchasing

May 18, 2015
SECTION 07 01 50.74 – REHABILITATION OF BUILT-UP ROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Roof re-coating preparation including roof patching and cleaning preparation for coating.
   2. Application of fluid-applied roof membrane and flashings over existing modified bituminous membrane and single ply roofing.

1.2 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA’s "The NRCA Roofing Manual" for definition of terms related to roofing work in this Section.

B. Existing Roofing System: SBS-modified bituminous and single ply roofing, and components and accessories between deck and roofing membrane.

C. Roofing Re-Coating Preparation: Existing roofing that is to remain and be prepared to accept restorative coating application.

1.3 PERFORMANCE REQUIREMENTS

A. General: Provide recoated roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
   1. Accelerated Weathering: Roofing system shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.

B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.

C. Solar Reflectance Index: Solar reflectance index not less than 90 for not less than 75 percent of the roof surface, when calculated according to ASTM E 408 based on testing identical products by a qualified testing agency.

D. Energy Performance: Roofing system shall have an initial solar reflectance index of not less than 0.70 and an emissivity of not less than 0.75 when tested according to CRRC-1.

E. Exterior Fire-Test Exposure: ASTM E 108, Class A; for application and roof slopes indicated, as determined by testing identical membrane roofing materials by a qualified testing agency. Materials shall be identified with appropriate markings of applicable testing agency.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product specified.
B. Qualification Data: For Installer, Manufacturer, and Roofing Inspector.
   1. Letter written for this Project indicating manufacturer approval of Installer to apply specified products and provide specified warranty.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing rehabilitation system.

D. Warranties: Unexecuted sample copies of special warranties.

E. Inspection Reports: Daily reports of Roofing Inspector. Include weather conditions, description of work performed, tests performed, defective work observed, and corrective actions required and carried out.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: To include in maintenance manuals.

B. Warranties: Executed copies of approved warranty forms.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a full-time on-site supervisor with a minimum of five years experience installing products comparable to those specified, able to communicate verbally with Contractor, Architect, and employees, and the following:
   1. Qualified by the manufacturer to install manufacturer's product and furnish warranty of type specified.

B. Manufacturer Qualifications: Approved manufacturer listed in this Section with minimum five years experience in manufacture of specified products in successful use in similar applications.

C. Roofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified roofing system, qualified to perform roofing observation and inspection specified in Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. The Roofing Inspector shall be one of the following:
   1. An authorized full-time technical employee of the manufacturer.

D. Roofing Rehabilitation Preinstallation Conference: Review methods and procedures related to roofing system.
   1. Meet with Owner; roofing re-coating materials manufacturer's representative; roofing re-coating Installer including project manager and foreman; and installers whose work interfaces with or affects re-coating including installers of roof accessories and roof-mounted equipment requiring removal and replacement as part of the Work.
   2. Review methods and procedures related to re-coating preparation, including membrane roofing system manufacturer's written instructions.
   3. Review temporary protection requirements for existing roofing system that is to remain, during and after installation.
   4. Review roof drainage during each stage of re-coating and review roof drain plugging and plug removal procedures.
5. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
6. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect re-coating.
7. Review HVAC shutdown and sealing of air intakes.
8. Review shutdown of fire-suppression, protection, and -alarm and -detection systems.
10. Review governing regulations and requirements for insurance and certificates if applicable.
11. Review existing conditions that may require notification of Owner before proceeding.

1.7 PROJECT CONDITIONS

A. Owner will occupy portions of building immediately below re-coating area. Conduct re-coating so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.

B. Protect building to be rehabilitated, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from rehabilitation operations.

C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.

D. Weather Limitations: Proceed with rehabilitation work only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.
   1. Store all materials prior to application at temperatures between 60 and 90 deg. F.
   2. Apply coatings within range of ambient and substrate temperatures recommended by manufacturer. Do not apply materials when air temperature is below 50 or above 110 deg. F.
   3. Do not apply roofing in snow, rain, fog, or mist.

1.8 WARRANTY

A. Special Warranty for Roof Rehabilitation: Written warranty in which Manufacturer agrees to repair roof rehabilitation installations that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Membrane failures including rupturing, cracking, or puncturing.
      b. Deterioration of membranes, coatings, metals, metal finishes, and other associated materials beyond normal weathering.
   2. Limit of Warranty Coverage for Repair of Roof Rehabilitation: Not to exceed original purchase price of manufacturer's recoating materials, except that manufacturer may elect to apply the limit amount toward the following:
      a. Purchase of a new replacement roof within the first 5 years following completion of rehabilitation work.
   3. Qualified Installer Requirement: Installer must meet requirements of Quality Assurance Article.
   4. Installation Inspection Requirement: By Roofing Inspector in accordance with requirements of Part 3 Field Quality Control Article.
   5. Annual Manufacturer Inspection and Preventive Maintenance Requirement: By manufacturer's technical representative, to report maintenance responsibilities to Owner necessary for preservation of Owner's warranty rights. The cost of manufacturer's annual inspections and preventive maintenance is included in the Contract Sum. Inspections to occur in Year 2, 5, 10, and 15 following completion.
   6. Warranty Period: 20 years from date of completion of rehabilitation work.
PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Manufacturer/Product: The roof system specified in this Section is based upon products of Tremco, Inc., Beachwood, OH, (800) 562-2728, www.tremcoroofing.com that are named in other Part 2 articles.

2.2 MATERIALS

A. General: Re-coating materials recommended by roofing system manufacturer for intended use and compatible with components of existing membrane roofing system.

B. Temporary Roofing Materials: Selection of materials and design of temporary roofing is responsibility of Contractor.

C. Infill Materials: Where required to replace test cores and to patch existing roofing, use infill materials matching existing membrane roofing system materials, unless otherwise indicated.

2.3 FLUID-APPLIED ROOFING MEMBRANE

A. Polyurethane Elastomeric Fluid-Applied System: ASTM D 7311, elastomeric, two-coat single-component moisture triggered polyurethane fluid-applied roofing formulated for application to existing built-up roofing, with the following minimum physical properties:

1. Aliphatic Urethane Base Coat:
   b. Asbestos Content, EPA/600/R-93/116: None.
   c. Volatile Organic Compounds (VOC), ASTM D 3960: Not greater than 40 g/L.
   d. Percent solids (by weight), ASTM D 1644: Not less than 85 percent.

2. Aliphatic Urethane Top Coat: UV-stabilized, chemical-resistant top coat:
   b. Asbestos Content, EPA/600/R-93/116: None.
   c. Volatile Organic Compounds (VOC), ASTM D 3960: Not greater than 45 g/L.
   d. Elongation at break, ASTM D 7311: Not less than 340 percent
   e. Tensile Strength, ASTM D 7311: Not less than 1,400 lbf/sq. in.
   f. Tear Resistance, ASTM D 7311: Not less than 150 lbf/in.
   g. Accelerated Weathering, 5000 hour, ASTM D 7311: Pass, no cracking or checking.
   h. Percent solids (by weight), ASTM D 1353: Not less than 85 percent.
   i. Color: [White, with Solar Reflectance Index meeting performance requirements] [As selected by Architect from manufacturer's standard colors].

B. Fiberglass Reinforcement: Medium to fine fiber, rapid wetting chopped strand glass mat for fluid-applied membrane and flashing.


2.4 AUXILIARY ROOFING COATING MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with existing roofing system and fluid-applied roofing system.
B. Metal Surface Primer: Single-component, water based primer to promote adhesion of base coat to metal surfaces.

C. Asphalitic Surfaces Primer: Single-component, multi-substrate primer to promote adhesion of base coat to surfaces recommended by manufacturer.

D. Single Ply Primer: Single-component, multi-substrate primer to promote adhesion of base coat to surfaces recommended by manufacturer.

E. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.

2.5 METAL COATING MATERIALS

A. Roof Coating: ASTM D 6083, solar-reflective acrylic elastomer emulsion coating.
   2. Solar Reflectance Index (SRI), white, ASTM E 1980: 105 initial; 100 aged.
   3. Volatile Organic Compounds (VOC), maximum, ASTM D 3960: Less than 50 g/L.

B. Metal Primer: Water based acrylic metal primer that provides a tough, flexible film for the protection of steel against corrosion. Must be VOC compliant.
   1. Basis of design product: Tremco, Solargard Rust Primer WB.

C. Mastic: Elastomeric acrylic-based compound providing a highly flexible seal.
   2. Asbestos Content, EPA/600/R-93/116: None.
   4. Elongation, ASTM D 2370: 430%.

D. Reinforcement Ply: Polyester ply for use with mastics on metal roofs.

E. Metal Roof Seam Tape: Polyester fabric laminated to a modified butyl rubber adhesive.

F. Polyurethane sealant: Single component, high solids, moisture cure aliphatic polyurethane elastomer.

G. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.
PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine existing roofing substrates, with Installer present, for compliance with requirements and for other conditions affecting application and performance of roof coatings.

1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance.
2. Verify compatibility of approved re-coating system with and suitability of substrates.
3. Verify that substrates are visibly dry and free of moisture.
4. Verify that roofing membrane surfaces have adequately aged to enable proper bond with re-coating system base coat.
5. Verify that existing roofing membrane is free of blisters, splits, open laps, indications of shrinkage, and puncture damage or other indications of impending roof system failure.
6. Application of fluid-applied re-coating membrane indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Protect existing roofing system that is indicated not to be rehabilitated, and adjacent portions of building and building equipment.

1. Mask surfaces to be protected. Seal joints subject to infiltration by coating materials.
2. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
3. Maintain temporary protection and leave in place until replacement roofing has been completed.

B. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.

1. Do not permit water to enter into or under existing membrane roofing system components that are to remain.

3.3 ROOFING RE-COATING PREPARATION

A. Membrane Surface Preparation:

1. Remove blisters, ridges, buckles, and other substrate irregularities from existing roofing membrane that would inhibit application of uniform, waterproof coating.
2. Repair membrane at locations where irregularities have been removed.
3. Broom clean existing substrate.
4. Clean substrate of contaminants such as dirt, debris, oil, and grease that can affect adhesion of coating by power washing at maximum 800 psi. Allow to dry thoroughly.
5. Verify that existing substrate is dry before proceeding with application of coating. Spot check substrates with an electrical capacitance moisture-detection meter.

3.4 FLASHING REPAIR

A. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings of same metal, weight or thickness, and finish.

B. Repair flashings, gravel stops, copings, and other roof-related sheet metal and trim elements. Reseal joints, replace loose or missing fasteners, and replace components where required to leave in a watertight condition.
C. Roof Drains: Remove drain strainer and clamping ring. Grind metal surfaces down to clean, bare, metal.

D. Prime metal surfaces with manufacturers recommended primer.

3.5 FLUID-APPLIED MEMBRANE APPLICATION

A. Base Coat: Apply base coat to flashing surfaces in accordance with manufacturer's written instructions. Back roll to achieve minimum wet mil coating thickness of 48 mils unless otherwise recommended by manufacturer; verify thickness of base coat as work progresses.
   1. Apply base coat on prepared and primed surfaces and spread coating evenly.
   2. Embed fiberglass reinforcement into wet base coat. Lap adjacent flashing pieces of fiberglass minimum 3 inches along edges and 6 inches at end laps.
   3. Roll surface of fiberglass reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
   4. Allow base coat to cure prior to application of top coat.
   5. Following curing of base coat and prior to application of top coat, sand raised or exposed edges of fiberglass reinforcement.

B. Fluid-Applied Flashing Application: Complete base coat and fiberglass reinforcement at parapets, curbs, penetrations, and drains prior to application of field of fluid-applied membrane.
   1. Extend coating minimum of 8 inches up vertical surfaces and 4 inches onto horizontal surfaces.
   2. Roof Drains: Install base coat onto surrounding membrane surface, metal drain bowl flange, and through drain bowl. Install target piece of fiberglass reinforcement immediately into wet base coat and roll to fully embed and saturate fabric. Reinstall clamping ring and strainer following application of top coat. Replace broken drain ring clamping bolts.

C. Top Coat: Apply top coat uniformly in a complete installation to field of roof and flashings.
   1. Prime base coat prior to application of top coat if top coat is not applied within 72 hours of the base coat application, using manufacturer's recommended primer.
   2. Apply top coat to flashings extending coating up vertical surfaces and out onto horizontal surfaces 4 inches. Install top coat over field base coat and spread coating evenly.
   3. Back roll to achieve wet mil thickness of 48 mils unless otherwise recommended by manufacturer.
   4. Avoid foot traffic on new fluid-applied membrane for a minimum of 24 hours.

3.6 ADDITIONAL FLASHING INSTALLATION

A. Edge metal:
   1. Cut back and dispose of roofing two inches from rise.
   2. Secure edge metal laps with two pan head screws.
   3. Clean and prime metal and four inches onto the field of the roof system.
   4. Three-course edge metal and roofing with base coat and fiberglass reinforcement.

B. Clad metal walls:
   1. Do not restore clad metal walls. Seal all exposed fasteners and seams with new PVC membrane.

C. Coping:
   1. Remove coping to install flashings up and over the top of the parapet wall. Remove sealant at outside base of coping.
   2. Clean, prime, and install new sealant matching the color of the coping at outside base of coping.
   3. Reinstall coping.
4. Prepare coping for coating according to manufacturer’s written instructions.
5. Prime and seal all coping joints with Polytape.
6. Prime and coat coping metal with 2.0 gallons of metal coating in a two coat applications. Tint coating to match color selected by Orange Coast College representative.

D. Ducts, pans, and other metal components:
1. Prepare metal for coating according to manufacturer’s written instructions. Duct work with external insulation will be addressed by Orange Coast College.
2. Prime and seal all seams and fasteners with a three-course application of acrylic seam sealer and polyester reinforcement.
3. Prime and coat metal with 2.0 gallons of metal coating in a two coat applications.

E. Drains:
1. Replace damaged or plastic drain screens and drain rings with new cast iron drain screens matching existing size and fitting.
2. Replace any missing or damaged drain bolts and washers with new.
3. Coat drain screens and rings with metal coating.

F. Replace all wood blocks with new rubber blocks with steel channels. Support lines every 10 feet on pipe runs along with support on each side of every union, junction, and direction change.

3.7 WALKWAY INSTALLATION

A. Slip-Resistant Walkway Topcoat: Apply walkway second topcoat following application and curing of top coat. Locate as indicated, or as directed by Owner/Architect.
1. Mask walkway location with tape.
2. Prime first top coat prior to application of walkway top coat if walkway top coat is not applied within 72 hours of the first top coat application, using manufacturer's recommended primer.
3. Back roll to achieve wet mil thickness of 20 mils unless otherwise recommended by manufacturer.
4. Broadcast 20 to 30 lbs. per 100 sq. ft. of Slip-Resistant Top Coat Aggregate in wet top coat.
5. Back roll sand and top coat creating even dispersal of sand. Remove masking immediately.

3.8 FIELD QUALITY CONTROL

A. Roof Inspection: Contractor shall engage roofing system manufacturer's technical personnel to inspect roofing installation, and submit report to the Architect. Notify Architect or Owner 48 hours in advance of dates and times of inspections. Inspect work as follows:
1. Upon completion of preparation of first component of work, prior to application of re-coating materials.
2. Following application of re-coating to flashings and application of base coat to field of roof.
3. Upon completion of re-coating but prior to re-installation of other roofing components.

B. Repair fluid-applied membrane where test inspections indicate that they do not comply with specified requirements.

C. Arrange for additional inspections, at Contractor's expense, to verify compliance of replaced or additional work with specified requirements.

3.9 PROTECTING AND CLEANING

A. Protect roofing system from damage and wear during remainder of construction period.
B. Correct deficiencies in or remove coating that does not comply with requirements, repair substrates, and reapply coating.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 07 01 50.74
BID BOND

KNOW ALL PERSONS BY THESE PRESENT, that we_________________________ as Principal, and __________________________ as Surety, a California admitted surety insurer, are held and firmly bound unto the COAST COMMUNITY COLLEGE DISTRICT, hereinafter called the DISTRICT, in the sum of ___________ TEN PERCENT (10%) OF THE TOTAL AMOUNT OF THE BID of the Principal submitted to the said DISTRICT for the work described below for the payment of which sum in lawful money of the United States, well and truly to be made, we jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is such that whereas the Principal has submitted the accompanying bid dated ______________, for OCC Student Health Center Roof Rehabilitation, Bid 2058

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening of the same, or, if no period be specified, within sixty (60) days after said opening; and if the Principal is awarded the contract, and shall within the period specified therefore, or, if no period be specified, within Five (5) working days after the notice of award of the contract, or as otherwise requested in writing by the DISTRICT, enter into a written contract with the DISTRICT, in accordance with the bid as accepted and give bonds with good and sufficient surety or sureties, as may be required for the faithful performance and proper fulfillment of such contract and for the payment for labor and materials used for the performance of the contract, furnish certificates and endorsements evidencing the required insurance is in effect and furnish and deliver to the DISTRICT the Workers’ Compensation Certificate, Drug-Free Work Place Certification, the Contractor’s Certificate Regarding Non-Asbestos Containing Materials, if applicable, then the above obligation shall be void and of no effect, otherwise the bond amount shall be forfeited to the DISTRICT.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this bond by the DISTRICT and judgment is recovered, the Surety shall pay all costs incurred by the DISTRICT in such suit, including reasonable attorney's fees to be fixed by the court.
IN WITNESS HEREOF, the parties have executed this bond under their several seals this __ day of _____________, 2014, the name and corporate seal of each corporate party being hereto affixed and duly signed by its undersigned authorized representative.

(Corporate Seal of Principal, if Corporation)

Principal (Proper Name of Bidder)

By: ______________________________

Signature

_________________________________

Print Name

_________________________________

Title

(Corporate Seal of Surety)

Surety

By: ______________________________

Signature

_________________________________

Print Name

_________________________________

Title

Address

Telephone No.

Facsimile No.