ADDENDUM

ADDENDUM NO: #2

DATE: March 12, 2018

PROJECT NAME: Ball State University 2018 Reroofing Work at BSU-Service and Stores Building / Phase III

PROJECT NUMBER: #2018-025.01 SV

PROJECT LOCATION: Ball State University, Muncie, Indiana

CREATED BY: Rodney Wiedenkeller

The following is a summary of changes to the Construction Documents that shall be considered as part of your Bid. Receipt of this Addendum shall be acknowledged on the Bid Proposal Form.

This Addendum consists of 1 Page(s). 3 Attachment(s).

SUMMARY OF ADDENDUM:

SPECIFICATIONS:

1. Replace: APPENDIX B – ALTERNATIVES 00 43 00 – 4 with the attached APPENDIX B – ALTERNATIVES 00 43 00 – 4.
2. Replace: SECTION 22 14 26 - ROOF DRAINS with the attached SECTION 22 14 26 - ROOF DRAINS.

DRAWINGS:

1. Delete: General Note No.12 on sheet RP1, “Once roof membrane is installed on Roof #2 clean all three sections of the roof as recommended by manufacturer, including Roof #1, Roof #2 and Roof #3 to like new condition.”
2. Add: General Note No.12 on sheet RP1, Replace existing roof drains with new cast iron roof drains of equal size, inspect existing drain piping for defects, reuse existing piping (typical for 3 drains).
3. Replace: Detail L/D3, Tie-In Between Existing PVC and New PVC Roof Systems, with the attached Detail L/D3, Tie-In Btwn. Existing PVC & New PVC Roof Systems sketch.

Please note that the bid date and time remain unchanged.

END OF ADDENDUM
APPENDIX B - ALTERNATIVES

The following amounts shall be added to or deducted from the Base Bid Sum. Refer to Section [01 20 00 - Price and Payment Procedures] [01 23 00 - Alternates]: Schedule of Alternates.

Alternate No. 1

Once roof membrane is installed on Roof #2, clean all three sections of the roof as recommended by manufacturer, including Roof #1, Roof #2 and Roof #3 to like new condition for the lump sum of:

(Add) (Deduct) $ __________________
PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Metal Roof Drains

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):


D. National Fire Protection Association (NFPA).


1.3 SUBMITTALS

A. Submit under provisions of Section 01 30 00 Administrative Requirements.
   1. Product Data: Each drain type of product.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications:
   1. Minimum 5 years manufacturing similar products.

B. Installer Qualifications:
   1. Licensed Plumber
   2. Minimum 2 years of experience installing similar products.
PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Jay R. Smith Manufacturing Company, Montgomery, AL.

B. Tyler Pipe/Wade Division, Tyler, TX.

C. Zurn Industries, Inc., Erie, PA.

2.2 PRODUCTS

A. Cast-iron roof drain, no hub style outlet, size to match the size of the existing units where damaged units are replaced. Install no smaller than a three (3) inch unit. Match existing drain sizing were applicable. Drains to include cast iron drain strainers. (Plastic drain strainers are not acceptable):

1. Model 1010 (by Smith).
3. Series 3000 Roof Drain (by Tyler).
4. Model Z-100 (by Zurn).
5. Roof drain assembly options:
   a. Cast-iron clamping ring.
   b. Cast-iron or cast-aluminum strainer (not plastic).
   c. Steel sump receiver (where required by opening in poured deck).
   d. Under-deck clamping ring.
   e. Drain inserts are not acceptable.

B. Drain receiver plates: 20 gauge galvanized sheet metal, AISA-G90 Extra Smooth, minimum spangle, tension leveled, hot-dipped galvanized conforming to ASTM A653. Receiver plate shall be flush with top of roof deck. Fasten sheet metal plate to deck on eight (8) inch maximum centers.

C. Cast-iron drainage piping:

1. Shall be cast-iron pipe conforming to ASTM A74, CISPI-301, Service Class; use Schedule 40 pipe in heated spaces, Schedule 80 pipe in unheated spaces.
   a. Shall match drain outlet diameter, minimum four (4) inches.
   b. Shall be bell and spigot, modified hub, or plain end (no-hub) as required by selected jointing method.

2. Joints: Provide any one of the following types to suit pipe furnished:
   a. Lead and okum, caulked by hand.
b. Double seal, compression-type molded neoprene gasket. Gaskets shall suit class of pipe being jointed.

c. Mechanical: Shall meet the requirements and criteria for pressure, leak, deflection, and shear tests as outlined in Factory Mutual No. 1680 for Class 1 couplings.

1.) Stainless steel, clamp-type coupling of elastomeric sealing sleeve, ASTM C564 and a Series 300 stainless steel shield and clamp assembly. Sealing sleeve with center-stop to prevent contact between pipes/fittings being joined shall be marked ASTM C564.
2.) Cast-iron coupling with neoprene gasket and stainless steel bolts and nuts.

D. Piping accessories:

1. Provide piping expansion joints, hangers, anchors, etc. as necessary for proper installation of drainage piping system.
2. Pipe insulation: Shall be one (1) inch thick, sized to fit piping; provide mitered sections of same material, with jointing tape to cover fittings and drain bowl.

   a. Preformed Fiberglas #25 ASJ (by Owens-Corning Corporation, Toledo, OH).
   b. Approved equal.

E. Drain Strainers: All drain strainers are to be cast iron. Plastic strainers are not acceptable.

PART 3 - EXECUTION

3.1 EXAMINATION

A. The Contractor shall inspect each existing drain line for defects prior to installing the new roof drain; if the lines are defective, notify the owner and consultant for approval of replacement prior to commencement of work.

3.2 INSTALLATION

A. General requirements:

1. A Plumbing Contractor that is licensed in the state where the project is located shall perform all Work of this section.
3. Existing drain lines are to be utilized unless found to be defective.
4. Pipe where required for replacement shall be round and straight. Cutting shall be done with proper tools. Cast-iron pipe shall be reamed to full size after cutting.
5. All pipe runs required for replacement shall be laid out to avoid interference with other work.
6. All piping shall be supported to conform with the National Standard Plumbing Code, Chapter No. 8. If the vertical distance exceeds 20 feet for cast-iron pipe, additional support shall be provided in the center of that span. Provide all necessary auxiliary steel to provide that support.
7. Piping four (4) inches or larger in diameter shall be installed with minimum 1/8 inch per foot slope-to-drain.
8. Where pipes pass through fire partitions, firewalls, smoke partitions, or floors, install an approved fire stop material to provide a barrier against the spread of fire, smoke, and gases. Completely fill and seal clearances between raceways and openings with the fire stopping materials.

B. Drain Replacement:

1. Demo all plaster, wood and masonry as needed to access the work. Note repair work to return disturbed interior finishes is to be included in this contract at no additional charge to the owner, unless otherwise directed by owner.
2. Disconnect and remove the existing roof drain head.
3. Install receiver plate as recommended by the drain manufacturer and as shown in the Contract Drawings.
4. Install new drain bowl; shim to the proper height with threaded rod and galvanized pipe shims, relative to the roof deck surface, to match the specified insulation thickness at the drain.
5. Connect the drain bowl to the existing drainage piping on the building interior.
6. Inspect existing piping for damage and deterioration.
7. Flood test the roof drains to help insure a watertight application and to insure existing drain lines to remain are not cracked and leaking in the highly leak sensitive data centers.
8. Insulate the roof drain and drainage piping from the drain bowl to the vertical drop.
9. Repair all associated walls, ceilings and interior finishes to a condition greater than or equal to pre-construction conditions, unless otherwise directed by owner.

C. Final adjustments:

1. After installation of new roof membrane, install the drain detailing, flashing and cast-iron clamping ring and tighten clamping bolts. Re-tighten after membrane has “acclimated” for thirty (30) days. Follow roof manufacturer’s recommendations.
2. All drains shall be replaced and provided with an undamaged, matching cast-iron or cast-aluminum strainer. Install strainer and secure in place. No plastic strainers shall be accepted.

END OF SECTION 22 14 26
NOTE: CUT ALONG EDGE OF COATED METAL ON EPDM SIDE (ROOF #2) LEAVING COATED METAL, CLEAN FREE OF EPDM AND TAPE ETC. TO PROVIDE PROPER WELDING SURFACE.

TIE-IN BTWN. EXISTING PVC & NEW PVC ROOF SYSTEMS