ADDENDUM No. 1
January 31, 2020

RE: V.S.T.O.P. and Immersive Learning Office Suites – Oakwood Building
Ball State University
BSU Project No. 2020 – 012.01 OW

FROM: Ball State University
Facilities Planning and Management
Showalter Building
3401 North Tillotson Avenue
Muncie, Indiana 47306

TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated January 10, 2020 as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form Supplements. Failure to do so may subject Bidder to disqualification.

This Addendum is issued in accordance with the provisions of the Instructions to Bidders (AIA A701, 1997 Ed.) and Supplementary Instructions to Bidders Documents of the Project Manual.

This Addendum was created to address the following items.

CHANGES TO THE DRAWINGS

   a. Add Demolition General Note No. 7 which states “Refer to Mechanical Drawings for locations of roof top units (RTU) and associated curbs – Refer to Detail 7/A104 for roof infill and Detail 8/A104 for new openings. Protect the existing membrane roofing which is under warranty.”

2. Sheet No. A103 – FLOOR PLANS AND CEILING PLAN – IMMERSIVE LEARNING
   a. Add Demolition General Note No. 7 which states “Refer to Mechanical Drawings for locations of roof top units (RTU) and associated curbs – Refer to Detail 7/A104 for roof infill and Detail 8/A104 for new openings. Protect the existing membrane roofing which is under warranty.”

   a. Reissue sheet in its entirety
      i. Add Demolition General Note No. 7 which states “Refer to Mechanical Drawings for locations of roof top units (RTU) and associated curbs – Refer to Detail 7/A104 for roof infill and Detail 8/A104 for new openings. Protect the existing membrane roofing which is under warranty.”
      ii. Add Detail 7/A104 – Roof Infill Detail
      iii. Add Detail 8/A104 – Roof Curb Detail
4. Sheet No. E000 – ELECTRICAL SYMBOLS & ABBREVIATIONS
   a. Reissue sheet in its entirety.
   b. Revised General Notes and Fire Alarm Systems.

5. Sheet No. ED101 – ELECTRICAL FIRST FLOOR DEMOLITION PLAN – AREA B
   a. Replace sheet in its entirety.
   b. Removed keynotes #5 and #6 from Toilet Room adjacent Room 142A.

6. Sheet No. ED102 – ELECTRICAL FIRST FLOOR DEMOLITION PLAN – AREA C
   a. Replace sheet in its entirety.
   b. Revised titleblock info only.

7. Sheet No. ED103 – ELECTRICAL ROOF DEMOLITION PLAN
   a. Reissue sheet in its entirety.
   b. Revised keynote.

8. Sheet No. E101 – ELECTRICAL FIRST FLOOR LIGHTING PLAN – AREA B
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

10. Sheet No. E111 – ELECTRICAL FIRST FLOOR POWER PLAN – AREA B
    a. Reissue sheet in its entirety.
    b. Revised a couple of receptacle locations and keynotes.

11. Sheet No. E112 – ELECTRICAL FIRST FLOOR POWER PLAN – AREA C
    a. Reissue sheet in its entirety.
    b. Revised a couple of receptacle locations and keynotes.

12. Sheet No. E113 – ELECTRICAL ROOF POWER PLAN
    a. Reissue sheet in its entirety.
    b. Revised keynotes.

13. Sheet No. E501 – ELECTRICAL DETAILS
    a. Reissue sheet in its entirety.
    b. Revised elevation detail and added a card access wiring diagram.

    a. Reissue sheet in its entirety.
    b. Revised type F1 to 7200 lumen.

15. Sheet No. T101 – ELECTRICAL FIRST FLOOR SYSTEMS PLAN – AREA B
    a. Reissue sheet in its entirety.
    b. Revised data schedule.

16. Sheet No. T102 – ELECTRICAL FIRST FLOOR SYSTEMS PLAN – AREA C
    a. Reissue sheet in its entirety.
    b. Revised data schedule.
17. Sheet No. PFP000 – PLUMBING AND FIRE PROTECTION SYMBOLS & ABBREVIATIONS
   a. Reissue sheet in its entirety
   b. Revise Fire protection General Note No. 3.

18. Sheet No. FP100 – FIRE PROTECTION FIRST FLOOR PLAN – AREA B
   a. Reissue sheet in its entirety.

19. Sheet No. FP101 – FIRE PROTECTION FIRST FLOOR PLAN – AREA C
   a. Reissue sheet in its entirety.

20. Sheet No. PD101 – PLUMBING FIRST FLOOR DEMOLITION PLAN – AREA B
   a. Reissue sheet in its entirety.
   b. Added piping serving demolished sink in “Inactive 142” to show piping being demolished in the chase at the mains. Cut and patch wall as required to demo. and cap piping in chase.

21. Sheet No. PD102 – PLUMBING FIRST FLOOR DEMOLITION PLAN – AREA C
   a. Reissue sheet in its entirety.
22. Sheet No. P101 – PLUMBING FIRST FLOOR PLAN – AREA B
   a. Reissue sheet in its entirety.

23. Sheet No. P102 – PLUMBING FIRST FLOOR PLAN – AREA C
   a. Reissue sheet in its entirety.
   b. Revised general note No. B.
   c. Revised sheet keynote No. 1.

24. Sheet No. P110 – PLUMBING ROOF PLAN
   a. Reissue sheet in its entirety.
   b. Revised keynote No. 3 and No. 4.

25. Sheet No. P501 – PLUMBING DETAILS AND SCHEDULES
   a. Reissue sheet in its entirety.

26. Sheet No. M000 – MECHANICAL SYMBOLS & ABBREVIATIONS
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

27. Sheet No. M101 – MECHANICAL FIRST FLOOR DUCTWORK PLAN – AREA B
   a. Reissue sheet in its entirety.
   b. Removed keynote 1 for R-10 near room 142.
   c. Added “Existing” to existing 14x10 ductwork size tag.

28. Sheet No. M102 – MECHANICAL FIRST FLOOR DUCTWORK PLAN – AREA C
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

29. Sheet No. M103 – MECHANICAL ROOF DUCTWORK PLAN
   a. Reissue sheet in its entirety.
   b. Added sheet keynotes 1 and 2.
   c. Added keynote 1 to RTU-14 and RTU-15.
   d. Added keynote 2 to RTU-12 and RTU-13.

30. Sheet No. M111 – MECHANICAL FIRST FLOOR PIPING PLAN – AREA B
   a. Reissue sheet in its entirety.
   c. Added keynote 6 to new piping branch take-offs.

31. Sheet No. M112 – MECHANICAL FIRST FLOOR PIPING PLAN – AREA C
   a. Reissue sheet in its entirety.
   b. Added sheet keynote 3.
   c. Added keynote 3 to new piping branch take-offs.

32. Sheet No. M501 – MECHANICAL DETAILS
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

33. Sheet No. M502 – MECHANICAL DETAILS
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.
34. Sheet No. M601 – MECHANICAL SCHEDULES
   a. Reissue sheet in its entirety.
   b. Added note 1, 2, 3, and 4 to all (4) of the RTUs on the RTU schedule.

35. Sheet No. M701 – MECHANICAL CONTROL SCHEMATICS
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

36. Sheet No. MD101 – MECHANICAL FIRST FLOOR DUCTWORK DEMO PLAN – AREA B
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

37. Sheet No. MD102 – MECHANICAL FIRST FLOOR DUCTWORK DEMO PLAN – AREA C
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

38. Sheet No. MD103 – MECHANICAL ROOF DEMOLITION PLAN
   a. Reissue sheet in its entirety.
   b. Added sheet keynotes 2, 3, and 4.
   c. Added keynote to existing RTU-7 and existing RTU-8
   d. Added existing RTUs to be demolished with keynotes 1, 2, and 3.

39. Sheet No. MD111 – MECHANICAL FIRST FLOOR PIPING DEMO PLAN – AREA B
   a. Reissue sheet in its entirety.
   b. Updated general note A to change “should” to “to.”
   c. Updated sheet keynote 3 and 4.

40. Sheet No. MD112 – MECHANICAL FIRST FLOOR PIPING DEMO PLAN – AREA C
   a. Reissue sheet in its entirety.
   b. Revised titleblock info only.

ATTACHMENTS:

   Architectural Drawings:
   - Sheet No. A104

   Electrical, Mechanical, and Plumbing Drawings:
   - Sheet No. E000; ED101; ED102; ED103; E101; E102; E111; E112; E113; E501; E601; T101; T102; PFP000; FP100; FP101; PD101; PD102; P101; P102; P110; P501; M000; M101; M102; M103; M111; M112; M501; M502; M601; M701; MD101; MD102; MD103; MD111; and MD112

   Miscellaneous Information:
   - Pre-Bid Sign In Sheet
   - Pre-Bid Agenda
   - Roof Warranty

END OF ADDENDUM No. 1
AGENDA

V.S.T.O.P. and Immersive Learning Office Suites Oakwood Building
Ball State University
BSU Project No. 2020-012.01 OW
January 30, 2020

I. Project Team
   A. Owner’s Representative(s):
      Kelly Knable, Facilities Planning & Mgmt., 765-285-0585, email: kaknable@bsu.edu
      Ryan Koenker, Facilities Planning & Mgmt., 765-285-2821, email: rkkoenker@bsu.edu
      David Post, Facilities Planning & Mgmt., 765-285-2820, email: dspost@bsu.edu
      David Shepherd, Facilities Planning & Mgmt., 765-285-2873, email: dashepherd@bsu.edu
      June Sanders, Purchasing, 765-285-1548, email: asanders3@bsu.edu

   A. Availability of Contract Documents.
   B. Interpretation of Contract Documents.
   C. Addenda.
   D. Substitutions.

III. Bidding Procedures.
   A. Bidding Date:
      February 10, 2020 @ 1:00 P.M. EST
      Location:
      Purchasing Conference Room
      Service & Stores Building
      3401 N. Tillotson Avenue
      Muncie, Indiana 47306
   B. Bidding Form and Other Documents.
      1. Indiana Form 96 (Revised 2013).
         a. Fill out Part II., Section I. Experience Questionnaire
         b. Fill out Part II., Section II. Plan and Equipment Questionnaire.
         c. Attach Part II., Section III. Contractor’s Financial Statement.
         d. Fill out Part II., Section IV. Contractors Non – Collusion Affidavit
         e. Fill out Part II., Section V. Oath and Affirmation
      2. Bid Form Supplements, Document 00 43 00
         Appendix A.
            (1) Acknowledgment of Receipt of Addenda.
            (2) Project Completion – July 3, 2020
         Appendix B. Alternatives,
         Appendix C. Unit Prices, - N/A
         Appendix D. Principal Subcontractors
         Appendix E. Supplementary General Construction Information
         Appendix F. Supplementary Mechanical Information
         Appendix G. Supplementary Electrical Information
         Appendix H. Supplementary Telecommunications Information
      3. Representations and Certifications, Document 00 45 00
         Appendix 1. Nondiscrimination Compliance Statement
         Appendix 2. Contractors Certification of Self Performance
         Appendix 3. Contractors Certification of Authorized Employment
         Appendix 4. Contractors Certification of Training Program Compliance
         Appendix 5. Drug Testing Plan
         Appendix 6. Contractors Certification of Pre-Qualification Compliance
         Appendix 7. Bidder’s Check List
      4. MBE/WBE/Veteran Participation Plan, Document 00 45 39
         MBE / WBE / Veteran Subcontractor Plan
         Documentation of Effort to Meet MBE / WBE / Veteran Participation
         MBE / WBE / Veteran Letter of Intent to Perform
6. Documents that must be submitted by the Awarded Contractor prior to mobilization.
   Section 00 61 00 – Bond Forms: AIA Document A312 - Performance Bond and Payment Bond
   Section 00 73 73 – Escrow Agreement: Owner will provide document after the award of the project.

IV. Scope of Project.
   A. Summary of Work.
   B. Project Schedule.
   C. Access to Project Area.
   D. Coordination with Other Projects.
   E. Coordination with Owner Occupancy.

V. Questions.

VI. Tour of Project Site.

End of Agenda
V.S.T.O.P. and Immersive Learning Office Suites Oakwood Building
Ball State University
BSU Project No. 2020-012.01 OW
January 30, 2020

<table>
<thead>
<tr>
<th>NAME</th>
<th>REPRESENTING</th>
<th>PHONE NUMBER</th>
<th>EMAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V.S.T.O.P. and Immersive Learning Office Suites Oakwood Building  
Ball State University  
BSU Project No. 2020-012.01 OW  
January 30, 2020

<table>
<thead>
<tr>
<th>NAME</th>
<th>REPRESENTING</th>
<th>PHONE NUMBER</th>
<th>EMAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAME</td>
<td>REPRESENTING</td>
<td>PHONE NUMBER</td>
<td>EMAIL ADDRESS</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------------</td>
<td>--------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Ryan Konkler</td>
<td>BSU - FPM</td>
<td>765-285-2881</td>
<td><a href="mailto:rkonkler@bsu.edu">rkonkler@bsu.edu</a></td>
</tr>
<tr>
<td>Joe Schott</td>
<td>GEHLER FIRE PROT</td>
<td>317-672-8556</td>
<td><a href="mailto:jschott@gehlfire.com">jschott@gehlfire.com</a></td>
</tr>
<tr>
<td>Brenda Robert</td>
<td>Purchasing</td>
<td>765-285-6538</td>
<td><a href="mailto:lnrobert@bsu.edu">lnrobert@bsu.edu</a></td>
</tr>
<tr>
<td>Shane Stocker</td>
<td>Cogo, Ind</td>
<td>317-672-4929</td>
<td><a href="mailto:sstocker@coalgene.com">sstocker@coalgene.com</a></td>
</tr>
<tr>
<td>Chad Parrish</td>
<td>Magnum</td>
<td>765-589-8098</td>
<td><a href="mailto:cparrish@magnumgenes.com">cparrish@magnumgenes.com</a></td>
</tr>
<tr>
<td>Scott Baker</td>
<td>Pridemark Construction</td>
<td>765-744-3929</td>
<td><a href="mailto:sbaker@pridemarkconstruction.com">sbaker@pridemarkconstruction.com</a></td>
</tr>
<tr>
<td>Nick Sorensen</td>
<td>Pridemark Construction</td>
<td>765-744-7212</td>
<td><a href="mailto:nsorensen@pridemarkconstruction.com">nsorensen@pridemarkconstruction.com</a></td>
</tr>
<tr>
<td>Doug Featherston</td>
<td>Sidney Electric</td>
<td>765-808-9100</td>
<td><a href="mailto:dfeatherston@sidneyelectrical.com">dfeatherston@sidneyelectrical.com</a></td>
</tr>
<tr>
<td>Justin Wright</td>
<td>Summit Construction</td>
<td>510-495-5046</td>
<td><a href="mailto:jwright@summitconstruction.com">jwright@summitconstruction.com</a></td>
</tr>
<tr>
<td>T B Case</td>
<td>Atlin Construction</td>
<td>765-289-0171</td>
<td><a href="mailto:Tcase@atlinconstruction.com">Tcase@atlinconstruction.com</a></td>
</tr>
<tr>
<td>Brian Ballenger</td>
<td>WCI</td>
<td>765-966-6421</td>
<td><a href="mailto:bballenger@wci.com">bballenger@wci.com</a></td>
</tr>
<tr>
<td>Chet Seybold</td>
<td>Bowman Construction</td>
<td>765-860-7326</td>
<td><a href="mailto:cseybold@bowmanconstruction.com">cseybold@bowmanconstruction.com</a></td>
</tr>
<tr>
<td>Brian Gray</td>
<td>Bowman Construction</td>
<td>765-664-5561</td>
<td><a href="mailto:bgray@bowmanconstruction.com">bgray@bowmanconstruction.com</a></td>
</tr>
<tr>
<td>David Shepherd</td>
<td>BSU - FPM</td>
<td>765-285-2873</td>
<td><a href="mailto:dasher@bsu.edu">dasher@bsu.edu</a></td>
</tr>
<tr>
<td>Jan Blackmer</td>
<td>Immersive Learning</td>
<td>765-285-2783</td>
<td><a href="mailto:jblackmer@bsu.edu">jblackmer@bsu.edu</a></td>
</tr>
<tr>
<td>NAME</td>
<td>REPRESENTING</td>
<td>PHONE NUMBER</td>
<td>EMAIL ADDRESS</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------</td>
<td>--------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Suzanne Plesha</td>
<td>Immersive Learning</td>
<td>285-2785</td>
<td>splesha@bsu</td>
</tr>
<tr>
<td>David Post</td>
<td>BSU. FPM</td>
<td>385-2820</td>
<td>dpost@bsu</td>
</tr>
<tr>
<td>Clare Chatot</td>
<td>BSU- CSH Dean’s Office (VSTOP)</td>
<td>285-8827</td>
<td><a href="mailto:cchatot@bsu.edu">cchatot@bsu.edu</a></td>
</tr>
<tr>
<td>Bryan Byers</td>
<td>VSTOP</td>
<td>285-5981</td>
<td><a href="mailto:bbyers@bsu.edu">bbyers@bsu.edu</a></td>
</tr>
<tr>
<td>Kelly Knable</td>
<td>FPM - BSU</td>
<td>260-340-6910</td>
<td><a href="mailto:kknable@bsu.edu">kknable@bsu.edu</a></td>
</tr>
<tr>
<td>Troy Smith</td>
<td>Houston Electric</td>
<td>765-737-3240</td>
<td><a href="mailto:trys@houston-electric.com">trys@houston-electric.com</a></td>
</tr>
<tr>
<td>Chris Lehman</td>
<td>Summit Construction</td>
<td>317-780-7065</td>
<td><a href="mailto:lehman@summitconst.com">lehman@summitconst.com</a></td>
</tr>
</tbody>
</table>
CARLISLE

GOLDEN SEAL TOTAL ROOFING SYSTEM WARRANTY

SERIAL NO. 10163024

BUILDING OWNER: BALL STATE UNIVERSITY
NAME OF BUILDING: OAKWOOD FACILITY RE-ROOF
BUILDING ADDRESS: 2501 N. OAKWOOD AVE, MUNCIE, IN
DATE OF COMPLETION OF THE CARLISLE TOTAL ROOFING SYSTEM: 04/13/2018
DATE OF ACCEPTANCE BY CARLISLE: 04/27/2018

Carlisle Roofing Systems, Inc., (Carlisle) warrants to the Building Owner (Owner) of the above described building, that, subject to the terms, conditions, and limitations stated in this warranty, Carlisle will repair any leak in the Carlisle Golden Seal® Total Roofing System (Carlisle Total Roofing System) installed by a Carlisle Authorized Roofing Applicator for a period of 20 years commencing with the date of Carlisle's acceptance of the Carlisle Total Roofing System installation. However, in no event shall Carlisle's obligations extend beyond 20.5 years subsequent to the date of substantial completion of the Carlisle Total Roofing System. See below for exact date of warranty expiration.

The Carlisle Total Roofing System is defined as the following Carlisle brand materials: Membranes, Flashings, Adhesives and Sealants, Insulation, Cover Boards, Fasteners, Fastener Plates, Fastening Bars, Insulation Adhesives, and any other Carlisle brand products utilized in this installation.

TERMS, CONDITIONS, LIMITATIONS

1. Owner shall provide Carlisle with written notice via letter, fax or email within thirty (30) days of the discovery of any leak in the Carlisle Total Roofing System. Owner shall send written notice of a leak to Carlisle Warranty Services Department at the address set forth at the bottom of this warranty. By notifying Carlisle, the Owner authorizes Carlisle or its designee to investigate the cause of the leak. Should the investigation reveal the cause of the leak to be outside the scope of this Warranty, investigation and repair costs for this service shall be paid by the Owner.

2. If, upon inspection, Carlisle determines that the leak is caused by a defect in the Carlisle Total Roofing System's materials, or workmanship of the Carlisle Authorized Roofing Applicator in installing the same, Owner's remedies and Carlisle's liability shall be limited to Carlisle's repair of the leak.

3. This warranty shall not be applicable if, upon Carlisle's inspection, Carlisle determines that any of the following has occurred:
   (a) The Carlisle Total Roofing System is damaged by natural disasters, including, but not limited to, lightning, fire, insect infestations, earthquake, tornado, hail, hurricanes, and winds of (32 mph) or greater speeds of seventy-four mph or higher measured at 10 meters above ground; or
   (b) Loss of integrity of the building envelope and/or structure including, but not limited to, the roof substrate, wall, mortar, HVAC units, non-Carlisle brand metal work, etc., occurs and causes a leak, or otherwise damages the Carlisle Total Roofing System; or
   (c) Acids, oils, harmful chemicals and the like come in contact with the Carlisle Total Roofing System and cause a leak; or otherwise damage the Carlisle Total Roofing System;
   (d) The Carlisle Total Roofing System encounters leaks or is otherwise damaged by condensation resulting from any condition within the building that may generate moisture.

4. This Warranty shall be null and void if any of the following shall occur:
   (a) If, after installation of the Carlisle Total Roofing System by a Carlisle Authorized Roofing Applicator there are any alterations or repairs made on or through the roof or objects such as, but not limited to, structures, fixtures, solar panels, wind turbines, roof garden or utilities are placed upon or attached to the roof without first obtaining written authorization from Carlisle; or
   (b) Failure by the Owner to use reasonable care in maintaining the roof, such as maintenance to include, but not be limited to, items listed on Carlisle's Care & Maintenance Information sheet which accompanies this Warranty.

5. Only Carlisle brand insulation products are covered by this warranty. Carlisle specifically disclaims liability, under any theory of law, for damages sustained by or caused by non-Carlisle brand insulation products.

6. During the term of this Warranty, Carlisle shall have free access to the roof during regular business hours.

7. Carlisle shall have no obligation under this Warranty while any bills for installation, supplies, service, and warranty charges have not been paid in full to the Carlisle Authorized Roofing Applicator, Carlisle, or any material supplier.

8. Carlisle's failure at any time to enforce any of the terms or conditions stated herein shall not be construed to be a waiver of such provisions.

9. Carlisle shall not be responsible for the cleanliness or discoloration of Carlisle Total Roofing System caused by environmental conditions including, but not limited to, dirt, pollutants or biological agents.

10. Carlisle shall have no liability under any theory of law for any claims, repairs, restoration, or other damages including, but not limited to, consequential or incidental damages resulting directly or indirectly, to the presence of any irritants, contaminants, vapors, fumes, mold, fungus, bacteria, spores, mycotoxins, or the like in the building or in the air, land, or water serving the building.

11. This warranty shall be transferable upon a change in ownership of the building when the owner has completed certain procedures including a transfer fee and an inspection of the Roofing System by a Carlisle representative.

BY: Mark J. Long
AUTHORIZED SIGNATURE
TITLE: Director, Technical and Warranty Services
This Warranty Expires: April 26, 2038

CARLISLE DOES NOT WARRANT PRODUCTS UTILIZED IN THIS INSTALLATION WHICH IT HAS NOT FURNISHED; AND SPECIFICALLY DISCLAIMS LIABILITY, UNDER ANY THEORY OF LAW, ARISING OUT OF THE INSTALLATION AND PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY CARLISLE OR THE PRIOR EXISTING ROOFING MATERIAL OVER WHICH THE CARLISLE ROOFING SYSTEM HAS BEEN INSTALLED.

THE REMEDIES STATED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES FOR FAILURE OF THE CARLISLE TOTAL ROOFING SYSTEM OR ITS COMPONENTS. THERE ARE NO WARRANTIES EITHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHICH EXTEND BEYOND THE FACE HEREOF. CARLISLE SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGE TO THE BUILDING OR ITS CONTENTS UNDER ANY THEORY OF LAW.

Mark J. Long
### General Notes

1. This is a schematic drawing of the HVAC system for the Ball State University Clowes Hall. The drawing is designed to show the layout and connections of the various components of the HVAC system.

2. The drawing includes symbols and abbreviations used in HVAC systems. The general symbols are shown in the left column, and the pipe line symbols are shown in the middle column.

3. The pipe system abbreviations are shown in the middle column, and the equipment designation is shown in the right column.

4. The general abbreviations are shown in the lower right corner of the drawing.

5. The drawing includes information on the heating water supply, return air section down, and other HVAC components.

### General Abbreviations

- BTU: British thermal unit
- CWP: Chilled water pump
- FPF: Fins per foot
- MBH: Thousand British thermal units per hour
- MW: Megawatt
- MWOP: Megawatt heating water pump
- MV: Manual vent
- NPS: National pipe thread standard
- PFP: Fins per foot
- PIP: Pipe
- Q: Flow
- QM: Manual flow control
- R: Return
- SHWS: Shutoff valve
- TDD: Temperature difference
- TPD: Test point device
- TM: Temperature maintenance
- TP: Test point
- TR: Temperature range
- V: Valve
- WRO: Wrought copper fittings and soldered joints
- WTC: Welded copper fittings and soldered joints
- WVP: Vents per foot
- Z: Zone

### Pipe System Abbreviations

- A: Air duct
- C: Condenser
- CH: Chiller
- E: Economizer
- F: Filter
- G: Generator
- H: Heat pump
- H: Hot water
- I: Incubator
- L: Lower
- M: Main
- N: New
- R: Return
- S: Supply
- T: Temperature
- U: Upper
- V: Vent
- W: Water
- X: X-ray
- Y: Year

### Equipment Designation

- A/C: Air conditioning
- B/D: Back draft damper
- C/A: Control actuator
- C/H: Chiller
- D/H: Duct heater
- D/P: Draft pipe
- E/H: Electric heater
- F/P: Furnace pipe
- G/H: Gas heater
- H/P: Heat pump
- I/H: Indirect heater
- M/H: Manual handle
- M/V: Manual vent
- P/F: Pipe fitting
- P/H: Pipe heater
- P/L: Pipe length
- P/R: Pipe reducer
- P/S: Pipe swage
- P/W: Pipe wrench
- R/M: Return manifold
- R/V: Return valve
- S/P: Service pipe
- S/V: Supply valve
- T/H: Thermostat heater
- T/V: Thermostat
- W/G: Wrought copper fittings and soldered joints
- W/W: Water heater

### General Symbols

- A: Air conditioning
- C: Condenser
- CH: Chiller
- E: Economizer
- F: Filter
- G: Generator
- H: Heat pump
- H: Hot water
- I: Incubator
- L: Lower
- M: Main
- N: New
- R: Return
- S: Supply
- T: Temperature
- U: Upper
- V: Vent
- W: Water
- X: X-ray
- Y: Year

---

**WARNING:** The information provided in this document is intended for professional HVAC technicians and engineers. It should not be used as a substitute for comprehensive training and certification in HVAC systems. Always consult the latest industry standards and codes when working on HVAC systems.
1. Roofing manufacturers recommendations and specifications for roofing manufacturer and relating to, or intended to be used for, any part or parts of the engineering project to which this document refers. Prints sealed by the Engineer bear reports, documents or instruments not sealed by the Professional Engineer. The Professional Engineer will not be responsible for subsequent changes to this document, unless the changes are made by the Professional Engineer.
MECHANICAL FIRST FLOOR DEMOLITION PIPING PLAN - AREA C

1. DEMOLISH HOT WATER PIPING FOR UNIT VENTILATOR
2. DEMOLISH THERMOSTAT.

DATE DESCRIPTION
1/10/2020
1/29/2020 3:32:19 PM
MEETING BREAK ROOM
9' x 8'

RECEPT.
- 2

ACOUSTIC LINED TRANSFER DUCT TO BE OPEN ON
3

DATE DESCRIPTION

MECHANICAL FIRST FLOOR DUCTWORK PLAN - AREA B
WHEN THIS DRAWING IS AT TEMPERATURES ABOVE 35 PRIMARY THERMOSTAT T1 SHALL BE PRIMARY HVAC BALL STATE UNIVERSITY
3/4" HWR

AREA C

DRAWING NO.

8' x 8'

ISSUE DATE

M112

this document, assumes responsibility only for what appears hereon, and

reports, documents or instruments not sealed by the Professional Engineer

1/8" = 1'-0"

SHEET KEYNOTES

1

© ROSS & BARUZZINI, INC. 2020

OFF FROM MAIN IN CORRIDOR. VALVES TO BE

3/4" HWR

MECHANICAL FIRST FLOOR PIPING PLAN - AREA C

© ROSS & BARUZZINI, INC. 2020

OFF FROM MAIN IN CORRIDOR. VALVES TO BE

3/4" HWR

MECHANICAL FIRST FLOOR PIPING PLAN - AREA C

M112
**AIR HANDLING UNIT SCHEDULE**

<table>
<thead>
<tr>
<th>MFR.</th>
<th>MODEL</th>
<th>TYPE</th>
<th>DIMENSION</th>
<th>LOCATION</th>
<th>SERVICE</th>
<th>VOLTAGE</th>
<th>PHASE</th>
<th>AIRFLOW (CFM)</th>
<th>MOTOR</th>
<th>MAX TPD</th>
<th>WEIGHT (LBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AIR TERMINAL UNIT SCHEDULE**

<table>
<thead>
<tr>
<th>MFR.</th>
<th>MODEL</th>
<th>TYPE</th>
<th>DIMENSION</th>
<th>LOCATION</th>
<th>SERVICE</th>
<th>VOLTAGE</th>
<th>PHASE</th>
<th>AIRFLOW (CFM)</th>
<th>MOTOR</th>
<th>MAX TPD</th>
<th>WEIGHT (LBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FINNED TUBE RADIATION SCHEDULE**

<table>
<thead>
<tr>
<th>MFR.</th>
<th>MODEL</th>
<th>TYPE</th>
<th>DIMENSION</th>
<th>LOCATION</th>
<th>SERVICE</th>
<th>VOLTAGE</th>
<th>PHASE</th>
<th>AIRFLOW (CFM)</th>
<th>MOTOR</th>
<th>MAX TPD</th>
<th>WEIGHT (LBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AIR DEVICE SCHEDULE**

<table>
<thead>
<tr>
<th>MFR.</th>
<th>MODEL</th>
<th>TYPE</th>
<th>DIMENSION</th>
<th>LOCATION</th>
<th>SERVICE</th>
<th>VOLTAGE</th>
<th>PHASE</th>
<th>AIRFLOW (CFM)</th>
<th>MOTOR</th>
<th>MAX TPD</th>
<th>WEIGHT (LBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ALARM 1

ATU (VAV) ELECTRIC HEAT POINTS LIST

1. ATU-F-S SUPPLY AIR FLOW ●●
2. ATU-S-DMPR SUPPLY AIR DAMPER ●●
3. SPC-T SPACE TEMPERATURE ● ● ● ●

DIAGRAM

NOTE TO RECIPIENT:

1. ATU (VAV) ELECTRIC HEAT CONTROLS

DISCLAIMS RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, QUOTATIONS, AND INSTRUMENT SOFTWARE POINTS FOR EACH ATU PROVIDE THE FOLLOWING SOFTWARE POINTS:

- SETPOINT TO THE HEATING MAXIMUM AIR FLOW SETPOINT WHILE MAINTAIN THE DISCHARGE AIR SETPOINT STEADY AT THE LESSER OF 95°F OR 2°F ABOVE THE OUTSIDE AIR TEMPERATURE.
- DURING UNSETUP/SETBACK AND OPTIMUM START/MORNING WARM-UP STAGE HEAT.
- ALARMS
- AIR FLOWS SETPOINTS SHALL BE RESET TO ZERO; HEATING ZONE TEMPERATURE SETPOINT SHALL BE RESET LOWER; COOLING ZONE TEMPERATURE SETPOINT SHALL BE RESET TO MINIMUM.

The disclaimers responsibility for all other plans, specifications, estimates, quotations, and instrument software points.
GENERAL SHEET NOTES

1. Device indicates on the drawing and/or in the project file is to remain in place for the construction project. For changes, contact the Engineer.

2. All drawings, specifications, and other written communications are intended to remain for reuse.

3. The embossed or wet seal of the Engineer across the signature and date.

4. For additional information.

5. Professional Engineer. The Professional Engineer will not be responsible for subsequent changes to this document, unless the changes are made for subsequent changes to this document.

SHEET KEYNOTES

1. REMOVE DEVICE(S) AND CONDUCTORS BACK TO

2. DRAWING NO. 5. AREA C

3. DESTRUCTION PLAN - Area C

4. 2330 Haverstick Rd Suite 285, Indianapolis, IN 46240 T 314.918.8383 F 314.918.1766 www.rossbar.com

5. 5.

6. 4.

7. 3.

8. 2.

9. 1.

10. 12.

11. 7.

12. 6.

13. 5.

14. 4.

15. 3.

16. 2.

17. 1.

KEY PLAN

ELECTRICAL FIRST FLOOR
DESTRUCTION PLAN - Area C

DATE DESCRIPTION
ED102
ELECTRICAL FIRST FLOOR LIGHTING PLAN - AREA C
CEILING 18/6 WIRING 8250 Haverstick Rd Suite 285, Indianapolis, IN 46240 T 314.918.8383 F 314.918.1766 www.rossbar.com

DRAWING NO.: ROSS & BARUZZINI

for subsequent changes to this document, unless the changes are made

INSTALLED MEDIA MANAGEMENT PLATE.

120VAC POWER CONDUIT PROVIDE FULL CAPACITY

CBORD PROX ER (MDF) READERS

GANG DEEP BOX FOR OWNER FURNISHED AND

WHEN THIS DRAWING IS 7.

1656-09 © ROSS & BARUZZINI, INC. 2020

DOOR OPERATOR, REX, PROX READER, CARD SWIPE, ELEC STRIKE, AND POWER SUPPLY

DESCIGNED BY:

PROXIMITY 2" CONDUIT STUBBED TO SKELETAL CONDUIT SYSTEM

IDF OR MDF ROOM EQUIPMENT RACK ON THIS FLOOR.
### EQUIPMENT DATA SCHEDULE - ELECTRICAL

**DRAWING NO.:**

**EQUIPMENT DATA SCHEDULE - ELECTRICAL**

**CONDUCTOR SIZE:**

159C, 159D 23 4.5 208 1 23 26 P1 (2) #10, (1) #10G, 3/4"C NF1 30A 26 26 26

**Location:** Volts:

COMB1 - COMBINATION FULL VOLTAGE NON-REVERSING MAGNETIC STARTER WITH FUSED DISCONNECT SWITCH

**OTHER ACCEPTED MANUFACTURER COMMENTS**

DIVISION 26 - ELECTRICAL
FIRE PROTECTION FIRST FLOOR PLAN - AREA C
PLUMBING FIRST FLOOR DEMOLITION PLAN - AREA C
PLUMBING FIRST FLOOR PLAN - AREA B
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Type</th>
<th>Size</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Oakwood Building</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GAS CONNECTION AT**

![Diagram of gas connection]

Scale this bar = 1 inch