

## ADDENDUM NO. I

**Date:** January 31, 2024

**Project Name:** Apiculture Facility

**Project No.:** 132  
SCO ID: 22-24494-01A Code: 42124 Item: 315  
NCSU: 202220007

The following clarifications, amendments, additions, deletions, revisions, and modifications are hereby made a part of the Contract Documents and change the original documents only in the manner and to the extent stated below.

### ADDITIONAL SITE VISIT

A site visit of the existing house that is to be demolished will be offered on Tuesday February 4, 2025 at 1:30pm. Bidders are advised that asbestos is present in the building and may be dangerous.

### BIDDING QUESTIONS AND RESPONSES

1. **Question:** “What is your intended Notice to Proceed Date for the project?”

**Response:** The Notice to Proceed is intended to occur as soon as possible after contract execution.

2. **Question:** “What is the expected start date of construction?”

**Response:** Construction may start immediately after the Notice to Proceed. We are unable to anticipate that date due to the many variables involved, including producing proper documents by the successful bidder and Owner and State Construction Office review and approval.

3. **Question:** “Please provide a detail for the Barn Quilt Panels.”

**Response:** Refer to Details 1 and 2/A407 and Specification Section 10 1423 “Panel Signage.”

4. **Question:** “Are bee hives to be provided by Owner and installed by Contractor, or provided and installed by Owner?”

**Response:** Hives will be provided and installed by the Owner.

5. **Question:** “Please confirm all exterior seating to be provided and installed by owner.”

**Response:** All exterior seating will be provided and installed by the Owner.

6. **Question:** *“Please provide details for the AHU Pads”*

**Response:** Refer to Detail I4/S301.

7. **Question:** *“The drawings contradict who is responsible for the landscape. Please confirm if the owner is providing and GC installs, if the owner provides and installs, or if the GC is to be responsible for the entire scope.”*

**Response:** Planting is provided and installed by the Owner. Refer to General Note 2 on Sheet L7.00.

8. **Question:** *“Please confirm if the decomposed granite walkway is to be included in the landscape scope of work or the earthwork scope of work (owner or GC responsibility)”*

**Response:** Granite Screening Walk is to be provided in the GC or LC scope of work; not by Owner.

9. **Question:** *“On Drawing L7.00 Note 3 mentions LCS to provide tree protection. Please provide a contact for coordination and qty purposes.”*

**Response:** Sheet C0.10 General Notes: Demolition Notes #11 “Tree Protection Fencing shall be in place prior to beginning demolition.” Sheet C2.00 Demolition Plan, Sheet C4.01 Erosion Control Plan, Sheet C5.00 Grading, Storm Drainage Plan, Sheet C6.00 Utility Plan, and Sheet L7.00 Landscape Plan shows location of the Tree Protection Fencing – quantities can be taken from the plans. Sheet C4.90 Erosion Control Detail #14 shows the Tree Protection Fencing Detail.

10. **Question:** *“Storage Room 107C Finish Plans calls out flooring to be two different alternate flooring types. Please confirm what the Base scope flooring type is to be.”*

**Response:** Base bid flooring and base is to be PFT-2 and PTB-2. The alternate price should not include any flooring or base.

11. **Question:** *“Please confirm all base scope sealed concrete is to be polished concrete under the alternate 7”*

**Response:** All concrete that is exposed (i.e. no additional flooring finishes) shall be polished as part of the Alternate.

12. **Question:** *“Please provide a detail and specification on the tube rail shown on A101 in Room 106 Education Hive.”*

**Response:** Refer to Detail 2/A404.

13. **Question:** *“Meeting room 102 calls out the flooring to be tile - please confirm this is the correct flooring for this room”*

**Response:** The tile finish indicated for Meeting Room 102 on I/A221 is correct.

14. **Question:** “A701 Detail 1 shows a trash chute in counter but contradicts other details showing just waste receptacles. Please confirm if a trash shoot is needed on top of a waste receptacle in the bathrooms”

**Response:** 1/A701 indicating “trash chutes” are correct. We assume the bidder is referring to Details 1 and 2/A702 indicating a waste receptacle, which is for Toilet 107C and is correct.

15. **Question:** “In Education Hive there are countertops shown - are these to be part of base scope, alternate 1 lab casework or provided by owner?”

**Response:** Casework in Education Hive 106 as shown on Detail 2/A404 and in Observation Hive 104A shown on Details 2 and 4/A703 are base bid.

16. **Question:** “A705 Detail 4 calls out MDF to be behind the Acoustical Wall paneling. Please confirm if the elevation should be showing either or AWP-1 or MDF 2”

**Response:** 4/A705 is correct. The finish shall be MDF-2. The Detail does not indicate MDF behind an acoustical product as stated in the question.

17. **Question:** “Please confirm the wall covering surrounding the FEC on A705 Detail 4”

**Response:** The finish in the “alcove” shall be PT-4 as indicated on Detail 1/A221.

18. **Question:** “C3.0 calls out the sidewalk to the landscape benches to reference detail 5/ C3.90 as concrete pavement dumpster pad. This looks like it should be detail 4 pedestrian sidewalk. Please confirm.”

**Response:** Note on C3.0 is incorrect. Please see L7.0 for locations of concrete walks, decomposed granite paths, and detectable warning mats. Details for concrete walks 4/C3.90, Decomposed Granite 9/L7.20 and 10/L7.20, and Detectable Warning Mats 8/L7.20.

19. **Question:** “If both Alternate 4 and Alternate 5 are accepted - then the ceramic tile number will include Room 107C. Base Alternate 4 would not include this room and base Alternate 5 would not include Ceramic Tile walls. If both alternates are accepted - how should the cost of adding ceramic wall tile to Room 107C be presented? In Alternate 4 or Alternate 5?”

**Response:** Alternate Nos 4 and 5 shall be treated separately with no overlap. Alternate No. 4 applies only to Men 108 and Women 109. Alternate No. 5 only applies to Toilet 107C as indicated on Sheet A221.

20. **Question:** “Per the specs trees will need to soak thoroughly at the root regularly. Please confirm if any irrigation will be part of scope to achieve this or if hand watering is all that is needed”

**Response:** No irrigation is in the scope. Planting is by Owner including installation and maintenance.

21. **Question:** *“Per the landscaping spec, there is a maintenance period of 12 months from CO. Please confirm if maintenance of the plants should be bought out in this scope or if NCSU will be taking care of this.”*

**Response:** Planting is by Owner including installation and maintenance.

22. **Question:** *“In the formed metal wall panel spec section the metal thickness is called to be 0.052”. This thickness is not available from the manufacturer listed as well as other similar manufacturers. Typical metal thickness is 24 gage steel. Please confirm what thickness shall be used.”*

**Response:** Refer to revised Specification Section 07 4213.13 “Formed Metal Wall Panels.”

23. **Question:** *“The drawings and specs have minimal information of telecom/data. Please confirm where / how much telecom should be assumed.”*

**Response:** Refer to the electrical Drawings for telecom /data scope. In general, the electrical contractor will be providing empty conduit and boxes with pull strings except where specifically indicated as part of the scope. The Owner will perform cabling and device installation.

24. **Question:** *“Please confirm where the underground data conduit is coming from. The drawings show Data 111 closet at Inwood Road, but no reference of where this location is. Please provide a distance or drawing showing where this is.”*

**Response:** The Owner will be providing extension of the ductbank from Inwood road to their service. The Contractor will be responsible for the telecom ductbank from this building to the location indicated on Sheet E101 and E102.

25. **Question:** *“Please confirm if the house that is shown to be demolished as the alternate could be used as a job site trailer for the GC. If yes, please confirm if the house has operating utilities, or if utilities would have to be brought in.”*

**Response:** The existing house has been condemned and is not suitable for occupancy. It cannot be used as a “job-site trailer”.

26. **Question:** *“Should the footings be removed at the house that’s being demoed?”*

**Response:** Yes, the footings should be removed as part of the demolition scope and the excavated areas filled.

## **SPECIFICATIONS (attached)**

07 4213.13 “Formed Metal Wall Panels.

**-- END OF ADDENDUM NO. 1 --**

## SECTION 074213.13 - FORMED METAL WALL PANELS

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Concealed-fastener, lap-seam metal wall panels.

## 1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

## B. Sustainable Design Submittals:

1. Product Data: For recycled content, indicating postconsumer and preconsumer recycled content and cost.

- C. Shop Drawings: Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, and accessories; and special details.

- D. Samples: For each type of metal panel indicated.

## 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

## 1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal panel systems that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Two years from date of Final Completion.

- B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Finish Warranty Period: 20 years from date of Final Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 25 percent.
- B. Structural Performance: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E1592:
  1. Wind Loads: As indicated on Drawings.
  2. Other Design Loads: As indicated on Drawings.
  3. Deflection Limits: For wind loads, no greater than 1/240 of the span.
- C. Air Infiltration: Air leakage of not more than 0.06 cfm/sq. ft. when tested according to ASTM E283 at the following test-pressure difference:
  1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- D. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E331 at the following test-pressure difference:
  1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- E. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
  1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

### 2.2 CONCEALED-FASTENER, LAP-SEAM METAL WALL PANELS

- A. Provide factory-formed metal panels designed to be field assembled by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners and factory-applied sealant in side laps. Include accessories required for weathertight installation.
- B. Reveal-Joint, Concealed-Fastener Metal Wall Panels : Formed with vertical panel edges and a flat pan between panel edges; with narrow reveal joint between panels.
  1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. CENTRIA, a Nucor Brand?.
    - b. Morin - A Kingspan Group Company.

- c. PAC-CLAD; Petersen Aluminum Corporation; a Carlisle company.
2. Metallic-Coated Steel Sheet: Zinc-coated (galvanized) steel sheet complying with ASTM A653/A653M, G90 coating designation, or aluminum-zinc alloy-coated steel sheet complying with ASTM A792/A792M, Class AZ50 coating designation; structural quality. Prepainted by the coil-coating process to comply with ASTM A755/A755M.
    - a. Nominal Thickness: **\*0.052-inch 22 gage.**
    - b. Exterior Finish: Two-coat fluoropolymer.
    - c. Color: As indicated by manufacturer's designations.

### 2.3 MISCELLANEOUS MATERIALS

- A. Miscellaneous Metal Subframing and Furring: ASTM C645, cold-formed, metallic-coated steel sheet, ASTM A653/A653M, G90 hot-dip galvanized coating designation or ASTM A792/A792M, Class AZ50 aluminum-zinc-alloy coating designation unless otherwise indicated. Provide manufacturer's standard sections as required for support and alignment of metal panel system.
- B. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.
  1. Closures: Provide closures at eaves and rakes, fabricated of same metal as metal panels.
  2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
  3. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- thick, flexible closure strips; cut or premolded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.
- C. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bases, drips, sills, jambs, corners, endwalls, framed openings, rakes, fasciae, parapet caps, soffits, reveals, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.
- D. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide exposed fasteners with heads matching color of metal panels by means of plastic caps or factory-applied coating. Provide EPDM or PVC sealing washers for exposed fasteners.
- E. Panel Sealants: Provide sealant type recommended by manufacturer that are compatible with panel materials, are nonstaining, and do not damage panel finish.
  1. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C1311.

## 2.4 FABRICATION

- A. Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.
- B. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.
- C. Fabricate metal panel joints with factory-installed captive gaskets or separator strips that provide a weathertight seal and prevent metal-to-metal contact, and that minimize noise from movements.
- D. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.

## 2.5 FINISHES

- A. Panels and Accessories:
  - 1. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent polyvinylidene fluoride (PVDF) resin by weight in color coat.
  - 2. Concealed Finish: White or light-colored acrylic or polyester backer finish.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Miscellaneous Supports: Install subframing, furring, and other miscellaneous panel support members and anchorages according to ASTM C754 and metal panel manufacturer's written recommendations.

### 3.2 INSTALLATION

- A. Lap-Seam Metal Panels: Fasten metal panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.
  - 1. Lap ribbed or fluted sheets one full rib. Apply panels and associated items true to line for neat and weathertight enclosure.
  - 2. Provide metal-backed washers under heads of exposed fasteners bearing on weather side of metal panels.
  - 3. Install screw fasteners with power tools having controlled torque adjusted to compress washer tightly without damage to washer, screw threads, or panels. Install screws in predrilled holes.
  - 4. Flash and seal panels with weather closures at perimeter of all openings.



## B. Watertight Installation:

1. Apply a continuous ribbon of sealant or tape to seal lapped joints of metal panels, using sealant or tape as recommend by manufacturer on side laps of nesting-type panels; and elsewhere as needed to make panels watertight.
2. Provide sealant or tape between panels and protruding equipment, vents, and accessories.
3. At panel splices, nest panels with minimum 6-inch end lap, sealed with sealant and fastened together by interlocking clamping plates.

C. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

D. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that are permanently watertight.

## 3.3 CLEANING

- A. Remove temporary protective coverings and strippable films, if any, as metal panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal panel installation, clean finished surfaces as recommended by metal panel manufacturer. Maintain in a clean condition during construction.

END OF SECTION