HOUSEMAN
ARCHITECTURE

September 4, 2020

Embry-Riddle Aeronautical University
1 Aerospace Boulevard
Daytona Beach, FL 32114

Re: **Embry-Riddle Aeronautical University Fitness Complex**
Addendum 1 –Narrative
Project Number: 20-001

Addendum 1 Narrative:

This Addendum is being issued to provide clarifications and additional information to the Contractors bidding the ERAU Fitness Complex project. The following narrative describes changes to the Issue for Permit documents that need to be included in the bid:

Architectural:

1. Sheets A8.103, A8.104, E1.123 & E1.124 – Provide seven (7) additional P1 pendant light fixtures in Fitness 202 and Seating 201. Layout of fixtures will be revised so all fixtures will be equally spaced.

2. Sheets A8.104 & E1.124 – Delete three (3) RF1 fixtures from Stair 99. Add one (1) WA wall mounted fixture. Lighting in Stair 99 will consist of three wall mounted fixtures; none in the ceiling.

Structural:

1. Sheets S2.201 & S2.202 – hexagon note 8 will read "composite beam connections to be designed by a specialty engineer per general structural notes section 011000"

2. Sheets S2.401 & S2.402 – All beams deeper than 21" will taper down after the support closest to the cantilevered end to 21" at the perimeter of the high roof. Bottom flange thickness will be maintained along the taper.

3. Sheets S2.201 & S2.202 – Additional beam information to be provided in the issued for construction set. This information will include headed stud count, camber, and end loads for connection design. The counts and loads will be similar to beams of similar length and spacing.

4. Sheet S2.302 – Coordinate Final Mat hoist loads with bar joist design.

Hardscape:

1. **Pedestrian concrete paving:** 4" depth increased to 6" depth concrete slab on grade at sidewalk location on East side of Eagle Fitness Center building. This 6" depth increase applies only to the 10'-0" wide sidewalk, and sidewalk extensions below ramps and plaza entry steps. 4" concrete depth shall remain unchanged at upper plaza entry and all pool area concrete sidewalks.

2. **Pool egress gates**:
    a. Addition of one (1) 42" emergency egress gate, and approx. 100 sf of 4" deep concrete sidewalk on south side of turf lawn. Install with Von Duprin 98/99 Special Pool Exit Device, w/ security key lock
    b. Increase gate width of 36" pool maintenance gate (SW side of pool) in bid drawing to 42" wide. Match new gate Von Duprin hardware above.
    c. Change controlled access gate hardware (NE side of pool) in bid drawing to match new gate Von Duprin hardware above.

3. **Synthetic turf specification**:
   Disregard the synthetic turf specification from PREBID RFI #406-092 and shown in bid drawing detail 9/H1.202. Use the following:
   Manufacturer: Southwest Greens - 'GB-085' Low Pile Rec Turf – Color: Olive Blend
   (Provide Hydro-Chill Silica Sand Infill and Acrylic Coated Colored Granule Top Dressing)
   Install turf over 2" deep 89 Stone top base, and 4" deep 57 Stone sub-base, with composite 2x4 nailboards per manufacturer's recommendation.

4. **Hose Bibs:** Two hose bibs are located on the pool deck, connected to potable water source re: Civil.
   a. One (1) hose bib box installed in patio concrete retaining wall:
      Manufactured by Murdock
      Stainless Steel wall mounted hydrant box with integral vacuum breaker
      Model # M-3509QT-R w/ wall thickness 12"
   b. One (1) hose bib box flush mounted on pool deck pavers:
      Manufactured by Murdock
      Non-Freeze Ground-mounted hydrant box with hinged cover
      Model # M-3811-SAP w/'mild climate' bury depth

Pool:

1. **Pool Equipment:**
   a. Plate & Frame Heat exchanger added for pool water cooling. Additional valves, controls and temperature sensors will be required for complete system operation and maintaining water temperature range required by ERAU facilities.
      Manufactured by Taco : Model # PF205-35-2-NH
   b. Custom Heat Exchanger enclosure required for exterior installation.
      Fiberglass cabinet with ventilation louvers, hinged access with lock. Approximately 5' L x 3'-6" WD x 4'-2" HT. Mounted on 6'x9' concrete pad.
   c. Replace existing filtration pumps with (2) Marlow 4SPC 20 EC, 10.63" impeller, 20 hp, 6" suction, 4" discharge. Provide VFDs for new pumps. Pump operating permit is 450 gpm @ 85 ft TDH (each).
   d. Replace existing National horizontal sand filters (42-050-275, 27.5 SF, 416 gpm capacity each) with (2) Neptune Benson 4284SSHF horizontal sand filters (27.4 SF, 548 gpm capacity each), in side by side configuration. Include 6" face piping with single lever linkage, valves, and backwash site glass.

2. **Pool Depth:**
   Increase the depth of the competition pool from 14 ft along the east side of the pool to 15 ft. The ultimate depth will be 15'6" at the main drains in the competition pool. The 15 ft depth will replace the 14 ft "flat" area along the eastern lap lane in the original bid drawings.

Mechanical:

1. Specification Section 233113, Metal Ducts, Paragraph 3.9 Duct Schedule: Delete paragraphs A and B in their entirety and use the following:

A. Fabricate ducts with galvanized sheet steel and as follows:

1. Ducts Connected between Air Handling Units and VAV Terminal Units: Galvanized Steel
   a. Pressure Class: Positive 4-inch wg.
   b. Minimum SMACNA Seal Class: A.
   c. SMACNA Leakage Class for Rectangular: 3.
   d. SMACNA Leakage Class for Round: 3.

2. Ducts downstream of all VAV Terminal Units: Galvanized Steel
   a. Pressure Class: Positive 2-inch wg.
   b. Minimum SMACNA Seal Class: A.
   c. SMACNA Leakage Class for Rectangular: 3.

d. SMACNA Leakage Class for Round: 3.

3. Ducts Connected to Equipment Not Listed Above: Galvanized Steel

a. Pressure Class: Positive 2-inch wg.

b. Minimum SMACNA Seal Class: A.

c. SMACNA Leakage Class for Rectangular: 6.

d. SMACNA Leakage Class for Round: 6.

4. Exposed Supply Ductwork in open ceilings: Double Wall Spiral Galvanized Steel

a. Pressure Class: Positive 4-inch wg.

b. Minimum SMACNA Seal Class: A.

c. SMACNA Leakage Class for Rectangular: 6.

d. SMACNA Leakage Class for Round: 6.

e. Primed and painted color selected by architect.

B. Return Ducts:

1. All Return Ductwork: Galvanized Steel

a. Pressure Class: Positive or negative 2-inch wg

b. Minimum SMACNA Seal Class: A.

c. SMACNA Leakage Class for Rectangular: 12.

d. SMACNA Leakage Class for Round: 12.

2. Exposed Ductwork in open ceilings: Double Wall Spiral Galvanized Steel

a. Pressure Class: Positive 2-inch wg.

b. Minimum SMACNA Seal Class: A.

c. SMACNA Leakage Class for Rectangular: 6.

d. SMACNA Leakage Class for Round: 6.

e. Primed and painted color selected by architect.

3. Ducts Connected to Equipment Not Listed Above: Galvanized Steel

a. Pressure Class: Positive or negative 2-inch wg.

b. Minimum SMACNA Seal Class: A.

c. SMACNA Leakage Class for Rectangular: 3.

d. SMACNA Leakage Class for Round and Flat Oval: 6.

2. Sheet M-100: Relocate terminal unit temperature sensors as follows:
    a. Relocate terminal unit VAV-1.03 temperature sensor from current location to Office Suite 114; on the wall plan west of the reception desk.
    b. Relocate terminal unit VAV-1.08 temperature sensor from current location to directly across Corridor 108A.
    c. Relocate terminal unit VAV-1.09 temperature sensor from current location to the west wall of the control desk.
    d. Relocate terminal unit VAV-1.10, VAV-1.11, and VAV-1.12 temperature sensors from current locations to west exterior wall.
    e. Relocate terminal unit VAV-2.01 temperature sensor from current location to corridor wall adjacent to glass storefront, in line with column line D.
    f. Relocate AHU-3 temperature sensor from current location to the other side of the drinking fountains, opposite the wall from terminal unit VAV-2.02 temperature sensor.

Plumbing:

1. Sheet P0.001 add fixture number L-3 to the Plumbing Fixture Connection Schedule. The waste, trap, CW and HW pipe connections shall be the same as L-2.

2. Specification section 224000, Plumbing Fixtures, Paragraph 2.1 Lavatory Faucets, Paragraph A, add L-3.

3. Specification section 224000, Plumbing Fixtures, 2.7 Fixture Support, Paragraph C, add L-3.

4. Specification section 240000, Plumbing Fixtures, 2.10 Lavatories, add Paragraph C and copy lavatory L-2 specifications and change the model number to American Standard 0495.221.

Electrical:

1. Sheets E0.010, E4.101, E6.101 - Delete feeder from MDP in main electric room to disconnect at the swimming pool equipment building including:
   a. 200A 3 pole circuit breaker in MDP.
   b. 200A feeder conduit and conductors from MDP to the pool equipment building.
   c. 200A 600V 3 phase NEMA 3R fused disconnect on the back of the pool equipment building.

2. Provide 400A 480V 3 phase service to the swimming pool equipment building from the existing FPL utility transformer located approximately 250 feet away on the north side of the Tine Davis Fitness Center. Refeed new and existing pool equipment from this service to include:
   a. 250 feet of (3) 600 Kcmil Cu, (1) 600 Kcmil Cu neutral in 4" conduit. Include all hand dug trenching and backfill to install conduit underground.
   b. (1) 400A 480V 3 phase utility approved CT can.
   c. (1) utility approved CT meter socket.
   d. (1) 400A 480/277V 3 phase 4 wire main breaker panel in NEMA 3R enclosure. Panel shall have (1) 100A 3 pole, (4) 80A 3 pole, (1) 30A 3 pole and (4) 20A 1 pole circuit breakers. Panel to be installed on structure within sight from new swimming pool heat pump equipment in equipment yard.
   e. 1/0 Cu service ground system with (3) 3/4" x 20' Cu clad ground rods in a delta configuration. Rods to be no closer than 30' apart with a ground well at each location.
   f. Refeed existing 480V pool equipment panel in building with 100A 3 phase 4 wire feeder.
   g. Provide 80A 3 phase feeder to (4) heat pumps in pool equipment yard with final connection to units.
   h. Provide surge protection unit at new panel per the project specifications.
   i. Provide (2) new 3 phase circuit breakers in existing pool equipment panel to refeed new swimming pool circulation pumps.
   j. Provide connection to (2) new VFDs and (2) new circulation pumps in pool equipment building as required.

3. Sheet E0.010 - Provide (2) 4" PVC conduits from the TTB in the MDF room to the in-ground communications pull box 300' away on the southeast side of the pool equipment building. Install pull string in one conduit and identify for possible future use. In the second conduit install existing fiber optic cable rolled up in pull box to TTB in MDF room.

4. Provide (2) 4" conduits with pull string from the TTB in the MDF room to the inground communications pull box located in sidewalk approximately 280' away on the east side of the building towards the Welcome Center. Conduits to utilized for installation of communications cables by others.

END OF ADDENDUM 1 NARRATIVE