

Central Community College – Kearney Center

Addendum 1

Kearney, Nebraska
1501

Wilkins Architecture Design Planning
2908 West 39th Street, Suite A
Kearney, Nebraska 68845
308-237-5787

Date Issued: February 12, 2016
Bid Date: February 23, 2016

TO ALL BID DOCUMENT HOLDERS OF RECORD:

Acknowledge receipt of this addendum by inserting its number in the space provided on the BID FORM. Failure to do so may subject Bidder to disqualification. This Addendum forms a part of the BIDDING DOCUMENTS and modifies them as follows.

Addendum 1 – 1 SAMPSON CONSTRUCTION BIDDING CLARIFICATION

- Sampson Construction will not be providing specific scopes of work for bidders. Include specification section(s) and name or a general description of work on the bid form and attach clarifications as necessary on the attached bid form.
- Bids for third party testing will not be evaluated or accepted at this time. The owner will have a separate, future bidding time frame and process to solicit these bids directly through CCC's purchasing department.

Question Clarifications:

- Who is to provide and install A/V? Audio-Visual bids are to be submitted similar to all other scope of work.
- Does A/V pricing and installation bid directly to the owner? No, submit bids to Sampson Construction.
- Do bidders bid each specification sections as prime contractor? No, Specification sections to be bid as a subcontractor or supplier to Sampson Construction. List specification section(s) and/or scope of work to be bid utilizing bid form (see addendum 1 for updated bid form) and attach clarifications as necessary.
- Is a Bid Bond required? No, Bid Bond is required
- Is a Performance & Payment Bond required? On bid form show separate add amount to your base bid to provide Performance & Payment bonds. Sampson Construction will review the bidders to decide if bonds will be required.
- Who supplies and installs the Solatubes? Solatubes can be bid separately or in combination with another scope of work such as electrical. If the Solatubes are bid separately, the electrical subcontractor will need to include any required electrical hookup of the Solatubes.

Addendum 1 – 2 Project Manual Volume 1 and 2 – Table of Contents

At DIVISION 10 add reference to Specification Section 10 2213 WIRE MESH PARTITIONS

Addendum 1 – 3 Project Manual Volume 1 and 2 – Table of Contents

At DIVISION 11 add reference to Specification Section 11 5100 AUDIO-VISUAL COMMUNICATION SYSTEMS

Addendum 1 – 4 Specification Section 00 4100 BID FORM

Replace Bid Form with the attached BID FORM document.

- Addendum 1 – 5 Specification Section 00 2113 INSTRUCTIONS TO BIDDERS**
At paragraph 4.1.A, Bids shall remain open to acceptance and shall be irrevocable for a period of **forty five (45) days** after the bid closing date in lieu of 30 days.
- Addendum 1 – 6 Specification Section 01 2100 ALLOWANCES**
At paragraph 1.5, clarification: The Construction Manager will hold the Soils and Concrete Testing Allowance and the Interior Room Sign Allowance. The Electrical Subcontractor will hold the Video Surveillance Equipment Allowance.
- Addendum 1 – 7 Specification Section - 01 2100 ALLOWANCES**
At 1.5.C.1., add the following:
The allowance includes all labor and equipment provided by the Video Surveillance Equipment contractor. The allowance does not include costs associated with coordinating and supervising the work of the Video Surveillance Equipment contractor. The Electrical contractor will need to include costs to coordinate with Video Surveillance Equipment contractor.
- Addendum 1 – 8 Specification Section - 07 4213 METAL WALL PANELS**
At 1.6 MOCK-UP add the following paragraph:
C. Mock-up for MP-3 Metal Panel with custom perforation pattern can be part of final construction as shown and detailed on drawings. Coordinate mock-up size and location with architect prior to construction.
- Addendum 1 – 9 Specification Section - 08 7100 DOOR HARDWARE**
At Hardware Schedule
Set: 10.0 delete door 334
Set: 11.0 add door 334
- Addendum 1 –10 Specification Section - 10 2213 WIRE MESH PARTITIONS**
Add specification section in its entirety
- Addendum 1 –11 Specification Section - 11 5100 AUDIO-VISUAL COMMUNICATION SYSTEMS**
Add specification section in its entirety
- Addendum 1 –12 Specification Section - 23 2113 HYDRONIC PIPING**
The following manufacturers have been approved for the listed items. **All items shall meet the requirements of the construction documents, specifications and are subject for review during shop drawing submittal:**
Nexus “Automatic Flow Control Valves”
PRO Hydronic Specialties “Automatic Flow Control Valves”
Elbi “Expansion Tanks”
Wheatley “Air / Dirt Separators”
- Addendum 1 –13 Specification Section - 23 2115 GROUND LOOP HEAT PUMP PIPING**
The following manufacturers have been approved for the listed items. **All items shall meet the requirements of the construction documents, specifications and are subject for review during shop drawing submittal:**
Uponor “Pre-manufactured Geothermal Valve Vault”
- Addendum 1 –14 Specification Section - 23 3113 METAL DUCTS AND ACCESSORIES**
The following manufacturers have been approved for the listed items. **All items shall meet the requirements of the construction documents, specifications and are subject for review during shop drawing submittal:**
Leader Industries “Fire/Smoke Dampers”
- Addendum 1 –15 Specification Section - 23 3423 POWER VENTILATORS**
The following manufacturers have been approved for the listed items. **All items shall meet the requirements of the construction documents, specifications and are subject for review during shop drawing submittal:**
Aerovent “Exhaust Fans”

Addendum 1 –16 Specification Section - 23 5216 CONDENSING BOILERS

The following manufacturers have been approved for the listed items. **All items shall meet the requirements of the construction documents, specifications and are subject for review during shop drawing submittal:**

Fulton “Condensing Boilers”

Addendum 1 –17 Specification Section - 23 7314 ENERGY RECOVERY VENTILATION UNITS

The following manufacturers have been approved for the listed items. **All items shall meet the requirements of the construction documents, specifications and are subject for review during shop drawing submittal:**

Greenheck “Energy Recovery Ventilation Units”

Addendum 1 –18 SPECIFICATION SECTION 26 2726 – WIRING DEVICES

All receptacles in the following areas shall be P&S DuraShield GFCI (#2095DSBK): Exterior (all WP devices), Equipment Storage 150, Construction Lab 108, Tool Room 114, Mechanical Mezzanine M102, Air Compressor M101, Tool Room 116, and Advanced Manufacturing Lab 106.

Addendum 1 –19 SPECIFICATION SECTION 27 5223 – NURSE CALL SYSTEM

Subject to compliance with specifications, West Com Nurse Call System’s Novus System is an approved equal.

Addendum 1 –20 SPECIFICATION SECTION 28 1300 – VIDEO SURVEILLANCE

Refer to architectural specifications for security camera allowance. This allowance includes all labor and equipment provided by the Video Surveillance Equipment contractor. The allowance does not include costs associated with coordinating and supervising the work of the Video Surveillance Equipment contractor. The allowance and all other associated costs to coordinate with Video Surveillance Equipment contractor shall be included as part of the electrical contractor’s bid. Note on bid tap that allowance and associated coordination and supervision of this specification section is included.

- Addendum 1 –21 Sheet AC1.3 Code Plan – Area C**
At 1/AC1.3 CODE PLAN – AREA C, at ELEC 334 add 1 HR FIRE BARRIER line designation at all perimeter walls
- Addendum 1 –22 Sheet C1.2 SITE PAVING PLAN**
Refer to Sheet C1.2 and add to the following note: “9. DETECTABLE WARNING PANELS SHALL COMPOSITE AND SHALL BE YELLOW IN COLOR.”
- Addendum 1 –23 Sheet C1.6 SITE UTILITY PLAN**
Remove and replace sheet C1.6 in its entirety with attached C1.6 with Addendum #1 revisions
- Addendum 1 –24 Sheet C1.9 CIVIL DETAILS**
Add attached sketch CSK-01 to sheet C1.9
- Addendum 1 –25 Sheet A1.1 Floor Plan – Area A**
At 1/A1.1 FLOOR PLAN – AREA A, in MECHATRONICS LAB 107, see attached sketch ASK-06 for updated layout and dimensions for floor trenches, trench covers, and grommet locations
- Addendum 1 –26 Sheet A1.3 Floor Plan – Area C**
At 1/A1.3 FLOOR PLAN – AREA C, in LOUNGE 304 add reference to sketch 1/ASK-05 for interior elevation of Electric Water Cooler (EWC) wall adjacent to TEAMING ROOM 325
- Addendum 1 –27 Sheet A1.3 Floor Plan – Area C**
At 1/A1.3 FLOOR PLAN – AREA C, at EMT STORAGE 329 see attached sketch ASK-12 for updated layout and extents of wire mesh partition system
- Addendum 1 –28 Sheet A3.0 Reflected Ceiling Plan – Area A**
At 1/A3.0 REFLECTED CEILING PLAN – GROUND FLOOR – AREA A, in LECTURE HALL 131, add reference to sketch ASK-07 for ceiling detail at teaching wall on east exterior wall.
- Addendum 1 –29 Sheet A3.2 Reflected Ceiling Plan – Area C**
At 1/A3.2 REFLECTED CEILING PLAN – GROUND FLOOR – AREA C, in CORRIDOR 302 adjacent to PREP 313 and PREP 315, update ceiling detail reference to be 1/ASK-04 in lieu of 4/A3.0
- Addendum 1 –30 Sheet A5.3 Enlarged Exterior Elevations**
At 12/A5.3 ENLARGED EXTERIOR ELEVATION – SCREEN WALL, change individual dimensions of METAL PLATE WALL PANELS to be 8'-0" in lieu of 5'-4" and add reference “MP-3” to start of note “ALUMINUM METAL PLATE WALL PANELS...”
- Addendum 1 –31 Sheet A5.3 Enlarged Exterior Elevations**
At 8/A5.3 NORTH ELEVATION – MONUMENT SIGN, at note “LED DISPLAY” add the following text:
Size 5' x 9' with 12mm pitch
Color Processing 281 Trillion available Colors RGB
Viewing angle 140 / 70
Average LED lifetime 100,000 hours
Graphic capabilities Text, Animation, Picture and Video
Video frame rate 60 FPS
Video refresh rate 60 - 1000Hz (adjustable)
Contrast enhancement Non-reflective louvers
Contrast enhancement Non-reflective louvers
Dimming 100 levels (automatic, scheduled or manual control)
Cabinet Construction Aluminum (UV and corrosion resistant)
Serviceability Front or Rear
Waterproofing (front/rear) IP65 / IP54 manufacturing Quality standard ISO 9001
Compliance ETL / UL48

Operating temperature -30°F to 130°F
Manufacturer Optec, or approved equal

- Addendum 1 –32 Sheet A7.7 Wall Sections – Area B and C**
At 1/A7.7 and 2/A7.7 add reference “MP-3” to start of note “CUSTOM PERFORATED METAL WALL PANEL...”
- Addendum 1 –33 Sheet A7.7 Wall Sections – Area B and C**
Add attached sketch ASK-11 WIRE MESH PARTITION
- Addendum 1 –34 Sheet A9.0 – Room Finish Schedule**
At MECHATRONICS LAB 107, add reference to RB-2/HPC-1 at FLOOR FINISH reference column. RB-2 to be installed at trench covers only. Trench extents shown on Sheet A9.1
- Addendum 1 –35 Sheet A9.1 – Room Finish Schedule – Area A**
At MECHATRONICS LAB 107, add reference to RB-2/HPC-1 at FLOOR FINISH reference column. RB-2 to be installed at trench covers only. Trench extents shown on 1/A9.1 FINISH FLOOR PLAN – AREA A
- Addendum 1 –36 Sheet A9.4 – Interior Elevations**
At 4/A9.4 INTERIOR ELEVATION – MECHATRONICS LAB 107; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-03. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed.
- Addendum 1 –37 Sheet A9.4 – Interior Elevations**
At 4/A9.4 INTERIOR ELEVATION – SKILLS TRAINING CLASSROOM 110; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-01. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed. Width of recessed area to be 7'-4" in lieu of 8'-0".
- Addendum 1 –38 Sheet A9.5 – Interior Elevations**
At 3/A9.5 INTERIOR ELEVATION – COMPUTER LAB 130; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-01. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed. Width of recessed area to be 7'-4" in lieu of 8'-0".
- Addendum 1 –39 Sheet A9.5 – Interior Elevations**
At 6/A9.5 INTERIOR ELEVATION – GENERAL CLASSROOM 125; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-01. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed. Width of recessed area to be 7'-4" in lieu of 8'-0".
- Addendum 1 –40 Sheet A9.5 – Interior Elevations**
At 6/A9.5 INTERIOR ELEVATION – GENERAL CLASSROOM 125; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-09.
- Addendum 1 –41 Sheet A9.10 – Interior Elevations**
At 5/A9.10 INTERIOR ELEVATION – CLASSROOM TEACHING WALL (TYP); Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-01. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed. Width of recessed area to be 7'-4" in lieu of 8'-0".
- Addendum 1 –42 Sheet A9.13 – Interior Elevations**
At 1/A9.13 INTERIOR ELEVATION – CHEMISTRY LAB 312; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-02. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed.
- Addendum 1 –43 Sheet A9.15 – Interior Elevations**
At 1/A9.5 and 3/A9.15 INTERIOR ELEVATION – BIOLOGY / AP LAB 314; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-08.

Change TV mounting height, and adjust cabinetry above TVs as shown.

- Addendum 1 –44 Sheet A9.17 – Interior Elevations**
At 1/A9.17 INTERIOR ELEVATION – NURSING CLASSROOM 320; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-01. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed. Width of recessed area to be 7'-4" in lieu of 8'-0".
- Addendum 1 –45 Sheet A9.18 – Interior Elevations**
At 2/A9.18 INTERIOR ELEVATION –CLASSROOM 328; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-01. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed. Width of recessed area to be 7'-4" in lieu of 8'-0".
- Addendum 1 –46 Sheet A9.19 – Interior Elevations**
At 3/A9.19 INTERIOR ELEVATION – NURSES AID LAB 321; Revise notes and dimension references to reflect changes detailed in revised detail 1/ASK-01. Change AP-1 panel sizes, TV mounting height, and recessed opening as detailed. Width of recessed area to be 7'-4" in lieu of 8'-0".
- Addendum 1 –47 Sheet A9.20 Interior Elevations**
At 1/A9.20 INTERIOR ELEVATION – EMT STORAGE 329, replace with attached sketch ASK-10
- Addendum 1 –48 Sheet A9.20 Interior Elevations**
Add sketch ASK-05 to sheet.
- Addendum 1 –49 Sheet A9.8 Interior Elevations**
At 4/A9.8 INTERIOR ELEVATION – LEARNING COMMONS 220, delete FLAT SCREEN TVs. See A/V for updated scope.
- Addendum 1 –50 Sheet S2.4 Mechanical Floor Framing**
2/S2.4- Add Sheet note to read "verify location and avoid all prestressing strand when drilling penetrations for electrical conduit"
- Addendum 1 –51 Sheet S2.4 Mechanical Floor Framing**
3/S2.4- Add Sheet note to read "verify location and avoid all prestressing strand when drilling penetrations for electrical conduit"
- Addendum 1 –52 Sheet S2.4 Mechanical Floor Framing**
4/S2.4- Add Sheet note to read "verify location and avoid all prestressing strand when drilling penetrations for electrical conduit"
- Addendum 1 –53 Sheet FP1.1 - FIRE PROTECTION PLAN – AREA A**
Revise general note G to read "NOT USED."
Revise fire sprinkler head type in VESTIBULE 105 and VESTIBULE 101 to type D.
- Addendum 1 –54 Sheet FP1.2 - FIRE PROTECTION PLAN – AREA B**
Revise general note G to read "NOT USED."
- Addendum 1 –55 Sheet FP1.3 - FIRE PROTECTION PLAN – AREA C**
Revise general note G to read "NOT USED."
- Addendum 1 –56 Sheet M0.1 - MECHANICAL SITE PLAN**
See attached sketch MSK-01 for revised well field layout.
- Addendum 1 –57 Sheet M1.1 - HVAC PLAN – AREA A**
1. Revise general note K to reference detail 4/M5.3.
 2. Delete reference to Galvanized ductwork in Advanced Manufacturing Lab 106. Note M105 will apply. All ductwork located in rooms where the ductwork is indicated to be painted in the Architectural Reflected Ceiling Plans will be

- provided with paint grip finish.
3. Revise register R-3 in rooms 120, 121, and 119 to R-1.

Addendum 1 –58 Sheet M1.2 - HVAC PLAN – AREA B

1. Revise general note K to reference detail 4/M5.3.
2. Revise note M111 as not typical. Note only applies to HP-239 supply and return air ductwork serving Classroom 239. All other supply and return ductwork in this area will be routed above structural precast planking.
3. Revise supply air diffuser tags in Classroom 236, Learn Lab 234, and Learn Lab 233 to 200 CFM.
4. Revise supply air diffuser tags in Classroom 210 to 310 CFM.

Addendum 1 –59 Sheet M1.3 - HVAC PLAN – AREA C

Revise general note K to reference detail 4/M5.3.

Addendum 1 –60 Sheet M2.1 - MECHANICAL PIPING PLAN – AREA A

Add note to HP-117: Provide condensate pump. Route 3/8" pumped condensate to floor drain in Mechanical Room M102. Condensate pump to be plenum rated Hartel AS-X-1965, 115, 3.5 amps, capable of 5 GPM at 8 ft of head, or equal. Provide with integral check valve and float control. Pump shall be furnished with integral safety switch, interlocked to shut heat pump off based on high water level.

Addendum 1 –61 Sheet M2.2 - MECHANICAL PIPING PLAN – AREA B

Revise flow rate at HP-209 to be 7.5 GPM.

Addendum 1 –62 Sheet M2.3 - MECHANICAL PIPING PLAN – AREA C

Revise refrigerant pipe routing at main data 311. Piping to enter Main Data 311 below the precast plank deck above.

Addendum 1 –63 Sheet M3.1 - ENLARGED MECHANICAL PLANS

1. Revise vertical heat pump detail reference in 8/M3.1 to refer to 1/M5.3. Detail is typical to all vertical heat pump installations.
2. Revise the following heat pump flow rates: HP-303 to be 16.0 GPM, HP-321 to be 7.5 GPM, HP-328 to be 7.5 GPM, HP-202 to be 16.0 GPM, HP-220 to be 16.0 GPM, HP-226 to be 2.3 GPM, HP-225 to be 10.5 GPM, HP-230 to be 3.0 GPM, HP-106A to be 12.5 GPM, HP-106B to be 12.5 GPM, HP-136 to be 7.5 GPM, HP-130 to be 9.0 GPM, HP-210 to be 9.0 GPM.
3. Add detail reference 2/M5.1 to heat pump loop piping drops in 2/M3.1,

Addendum 1 –64 Sheet M4.1 - MECHANICAL RISER DIAGRAMS

Add a chemical bypass feeder to HPLP-1B.

Addendum 1 –65 Sheet M5.1 - MECHANICAL DETAILS

Revise note under 4/M5.1, wellfield to consist of one-hundred and two (102) total bores, consisting of three (3) circuits of thirty-four (34) bores.

Addendum 1 –66 Sheet M5.3 - MECHANICAL DETAILS

Revise CABINET UNIT HEATER DETAIL reference to 3/M5.3.

Details 8 and 9/M5.3. Remove specific duct size references. The sizes indicated on the HVAC plans govern.

Addendum 1 –67 Sheet M5.4 - MECHANICAL DETAILS

Detail 4/M5.4, base mounted pumps are shown with a suction diffuser with a strainer in addition to a separate strainer. Only the strainer with the suction diffuser is required. Delete the separate strainer shown in the detail. Delete the balance valve on the discharge side of the pump, this is not required.

Addendum 1 –68 Sheet M6.1 - MECHANICAL SCHEDULES

1. See revised VARIABLE FREQUENCY DRIVE SCHEDULE sketch MSK-02
2. EXHAUST ARM SCHEDULE: Add "Carmon" as an acceptable manufacturer,

- subject to compliance with the specifications.
3. Revise MINI-SPLIT SYSTEM SCHEDULE "NOMINAL CAPACITY (TONS) 3.5 for AC-1A, AC-1B, AC-2A, AC-2B. Revise note 8 to the following: PROVIDE EACH MINI-SPLIT SYSTEM WITH A STAND-ALONE 7-DAY PROGRAMMABLE THERMOSTAT. THE THERMOSTATS SHALL BE PROGRAMMED WITH A 2 DEGREE F OFFSET TO PREVENT SIMULTANEOUS OPERATION. PROGRAM SO THE LEAD UNIT ALTERNATES DAILY. A SEPARATE ROOM SENSOR WILL MONITOR THE TEMPERATURE OF THE ROOM AND PROVIDE A HIGH TEMPERATURE ALARM, SEE SPECIFICATIONS.
 4. PUMP SCHEDULE: Revise HHWP-1A control device to be VFD-HHWP-1A. Revise HHWP-1B control device to be VFD-HHWP-1B.

Addendum 1 –69 Sheet P1.1 - UNDERGROUND PLUMBING PLAN – AREA A
Revise General Note 'C' to "NOT USED".

General note E: Remove reference to attic.

Addendum 1 –70 Sheet P1.2 - UNDERGROUND PLUMBING PLAN – AREA B
Revise General Note 'C' to "NOT USED".

General note E: Remove reference to attic.

Addendum 1 –71 Sheet P1.3 - UNDERGROUND PLUMBING PLAN – AREA C
Revise General Note 'C' to "NOT USED".

General note E: Remove reference to attic.

Addendum 1 –72 Sheet P2.1 - PLUMBING PLAN – AREA A
Revise General Note 'C' to "NOT USED".

General note E: Remove reference to attic.

Addendum 1 –73 Sheet P2.2 - PLUMBING PLAN – AREA B
Revise General Note 'C' to "NOT USED".

General note E: Remove reference to attic.

Addendum 1 –74 Sheet P2.3 - PLUMBING PLAN – AREA C
Revise General Note 'C' to "NOT USED".

General note E: Remove reference to attic.

Addendum 1 –75 Sheet P6.2 - PLUMBING SCHEDULES
See revised water softener and RO schedules, sketch PSK-01.

Addendum 1 –76 SHEET E1.1 – LIGHTING PLAN – AREA A
Lights in Equipment Storage 150 to route to Panel 'G' in room.

Addendum 1 –77 SHEET E2.1 – FLOOR PLAN – AREA A
Provide Panel 'G' surface mounted on north wall of Equipment Storage 150 between door and overhead door. All circuits in outbuilding shall route to panel. Do not bond neutral at panel per NEC 250.32 (B) (1). Provide the following supplemental grounding at outbuilding from panel ground bar: #6CU to 5/8"DIA x 10'-0" copper clad driven ground rod, #4CU Ufer (30LF bare copper in bottom 2" of outbuilding concrete footing), Burndy compression fitting to bond Ufer ground to outbuilding steel, and #6Cu to outbuilding structural steel with Burndy lug-type connection.

Addendum 1 –78 SHEET E2.1 – FLOOR PLAN – AREA A

480V busway in Advanced Manufacturing Lab 106 to be 225A in lieu of 100A. AIC rating of 225A, 480V busway to be minimum 25K. AIC rating of 100A, 208V busway to be minimum 10K AIC. Connect 480V busway to new 225A/3P, 35K AIC enclosed circuit breaker in Electrical Room 115. Provide 4-#4/0, #4G, 2-1/2" C. from Main Switchboard 'MSB' to enclosed circuit breaker and from breaker to busway.

- Addendum 1 –79 SHEET E2.1 – FLOOR PLAN – AREA A**
Delete three 480V welding receptacles (one outside, one in Advanced Manufacturing Lab 106, and one in Construction Lab 108). Provide eight new weather-proof, outdoor rated welding receptacles on exterior wall centered between doors 108.3 and 107.1. Provide 3-#6, #10G, 1" C. from each receptacle to Panel 'HL'. Receptacle to match 3765C plug provided with welder.
- Addendum 1 –80 SHEET E2.2 – FLOOR PLAN – AREA B**
Provide conduit and wiring as required to connect two sets of sliding doors in Vestibule 201 to emergency power (Panel 'EB').
- Addendum 1 –81 SHEET E3.2 – SPECIAL SYSTEMS PLAN – AREA B**
IP Classroom 239 concrete hollowcore ceiling is below adjacent room ceiling heights. Conduit sleeves into room shall radius down and enter through ceiling. Verify location of hollowcore strands prior to making penetrations.
- Addendum 1 –82 SHEET E3.3 – SPECIAL SYSTEMS PLAN – AREA C**
Main Data 311 concrete hollowcore ceiling is below adjacent room ceiling heights. Conduit sleeves into room shall radius down and enter through concrete ceiling. Verify location of hollowcore strands prior to making penetrations.
- Addendum 1 –83 SHEET E3.3 – SPECIAL SYSTEMS PLAN – AREA C**
Locate nurse call master control panel in Storage 319. Provide power and data connection to panel. Connect circuit to spare 20/1 breaker in Panel 'C2P'.
- Addendum 1 –84 SHEET E3.3 – SPECIAL SYSTEMS PLAN – AREA C**
Delete all data jacks and outlet boxes at six student tables in Chemistry Lab 312.
- Addendum 1 –85 SHEET E4.2 – ELECTRICAL ENLARGED PLANS**
Delete all data jacks and outlet boxes at six student tables in Chemistry Lab 312.
- Addendum 1 –86 SHEET E6.1 – ELECTRICAL RISER DIAGRAM – NORMAL**
From 'MSB' stub out three 4" conduits to west green space outside of building footprint for future PV array. Cap conduits with water tight fitting below grade and stake location.
- Addendum 1 –87 SHEET E6.1 – ELECTRICAL RISER DIAGRAM – NORMAL**
Provide additional 225A/3P circuit breaker in 'MSB' for 480V busway in Advanced Manufacturing Lab 106 (circuit routed via enclosed circuit breaker in Electrical 115).
- Addendum 1 –88 SHEET E6.1 – ELECTRICAL RISER DIAGRAM – NORMAL**
Main circuit breaker at Main Switchboard 'MSB' shall be 100% rated 2000A breaker in lieu of 80% rated 2500A. Main breaker shall be GFCI and rated for 2-way power flow (terminals not labeled line and load).
- Addendum 1 –89 SHEET E6.1 – ELECTRICAL RISER DIAGRAM – NORMAL**
Circuit MSB-15 (1000A/3P breaker feeding 'DPH') shall be GFCI and rated for 2-way power flow (terminals not labeled line and load).
- Addendum 1 –90 SHEET E6.1 – ELECTRICAL RISER DIAGRAM – NORMAL**
Distribution Panel 'DPH' buss shall be rated 1200A in lieu of 1000A.
- Addendum 1 –91 SHEET E6.1 – ELECTRICAL RISER DIAGRAM – NORMAL**
Feeder to Panel 'C1L' to be 60-4 in lieu of 100-4.

- Addendum 1 –92 SHEET E6.1 – ELECTRICAL RISER DIAGRAM – NORMAL**
Add Panel 'G' fed from Panel 'A1P'. Provide 60-4 feeder to panel.
- Addendum 1 –93 SHEET E6.3 – ELECTRICAL RISER DIAGRAM – SUB METERS**
Provide additional sub meter to monitor 480V busway circuit from 'MSB'.
- Addendum 1 –94 SHEET E7.2 – ELECTRICAL SCHEDULES**
Panel 'A1P' – Add 60/3 circuit breaker to feed Panel 'G'.
- Addendum 1 –95 SHEET E7.2 – ELECTRICAL SCHEDULES**
Panel 'B2L' shall be 60A in lieu of 100A.
- Addendum 1 –96 SHEET E7.2 – ELECTRICAL SCHEDULES**
Add Panel 'G' – 120/208V, 3P, 4W, 60A MCB, Surface mounted, 25K AIC, eight 20/1 circuit breakers, and eight future spaces.
- Addendum 1 –97 SHEET E7.3 – ELECTRICAL SCHEDULES**
Panel 'HL' – Delete two 30/3 and one 60/3 welder circuit breakers. Delete 100/3 480V busway circuit breaker. Add eight 50/3 welder circuit breakers.
- Addendum 1 –98 SHEET E7.3 – ELECTRICAL SCHEDULES**
Panel 'EBH' – Circuit EBH-7 should be Panel 'EB' in lieu of 'EC'.
- Addendum 1 –99 Sheet AV1.0F, AV1.0C, AV2.0F, AV2.0C, AV3.0F, AV3.0C**
Overall view of section A changes
- Addendum 1–100 Sheet AV1.3**
Input moved in Skills Classroom 110
- Addendum 1–101 Sheet AV2.3**
Learning Commons B & C, remove systems entirely.
- Addendum 1–102 Sheet AV2.4, AV2.9, AV3.5**
Digital signage switcher changes, cable tuner added, Lobby touch screen and input relocated. Break Room 241 display added to digital signage system.
- Addendum 1–103 Sheet AV2.5, AV2.6,**
Input added, loudspeaker and power amplifier model changes, USB extender location corrected, ceiling document camera mounting location changes
- Addendum 1–104 Sheet AV2.8**
Microphone and plate added.
- Addendum 1–105 Sheet AV3.4**
Biology 314, Student table inputs relocated, flat panel model numbers changed.
- Addendum 1–106 Sheet AV2.0F**
See attached sketch AVSK-2F for revisions
- Addendum 1–107 Sheet AV2.0C**
See attached sketch AVSK-2C for revisions
- Addendum 1–108 Sheet AV2.3**
See attached sketch AVSK-2.3 for revisions
- Addendum 1–109 Sheet AV2.4**
See attached sketch AVSK-2.4 for revisions
- Addendum 1–110 Sheet AV2.5**
See attached sketch AVSK-2.5 for revisions

- Addendum 1–111 Sheet AV1.0F**
See attached sketch AVSK-1F for revisions
- Addendum 1–112 Sheet AV1.0C**
See attached sketch AVSK-1C for revisions
- Addendum 1–113 Sheet AV1.3**
See attached sketch AVSK-1.3 for revisions
- Addendum 1–114 Sheet AV2.6**
See attached sketch AVSK-2.6 for revisions
- Addendum 1–115 Sheet AV2.8**
See attached sketch AVSK-2.8 for revisions
- Addendum 1–116 Sheet AV2.9**
See attached sketch AVSK-2.9 for revisions
- Addendum 1–117 Sheet AV3.0F**
See attached sketch AVSK-3F for revisions
- Addendum 1–118 Sheet AV3.0C**
See attached sketch AVSK-3C for revisions
- Addendum 1–119 Sheet AV3.4**
See attached sketch AVSK-3.4 for revisions
- Addendum 1–120 Sheet AV3.5**
See attached sketch AVSK-3.5 for revisions

PRE-BID ATTENDEES

See attachment.

I. Attendance Sheet

II. Introductions

- A. Owner – Central Community College
- B. Architect – Wilkins Architecture Design Planning
- C. Civil Engineer – Olsson Associates
- D. Landscape Architect – Big Muddy Workshop
- E. Structural Engineer – Lange Structural Group
- F. MEP Engineer – Morrissey Engineering
- G. Construction Manager/General Contractor – Sampson Construction, Brett Chapman, 402-434-3937, brett.chapman@sampson-construction.com, Joe Nerud, 402-416-8493, joe.nerud@sampson-construction.com

III. Project Overview

- A. Approximately 65,000 SF, one story building.
- B. Project Site: West 16th Street and 30th Avenue, Kearney, NE 68845
- C. Project issued in two Bid Packages. Previous package was for precast.

IV. Invitation to Bid

- A. Project Delivery Method – CM/GC, Sampson will hold the contracts. All bidders will be subcontractors or suppliers.
- B. Bid Documents – Contact Sampson: Electronic copies are available through SmartBidNet. Hard copies are available through A&D Technical.
- C. Bid Time – Tuesday, February 23, 2016 at 2:00 PM Local Time at Sampson’s Lincoln office.
- D. Emailed Bids – estimating@sampson-construction.com
- E. Faxed Bids – (402)-434-7425
- F. Bids received after the designated time will not be considered.
- G. Bidding Requirements – Bid security not required, project is tax exempt, CM to determine if bonds will be required.
- H. Subcontract Form – Using Sampson’s standard forms. Forms are available for review prior to bid.
- I. Insurance – Traditional insurance, Builder’s Risk by Sampson, insurance requirements are listed in Sampson’s standard subcontract template, and reference Specifications for any additional insurance requirements.
- J. Safety – All Subcontractors will be required to follow CCC / Sampson’s safety program.
- K. Hoisting – Hoisting by Subcontractors
- L. Permits – Building Permit by Sampson, all other permits by Subcontractors.
- M. Jobsite Hours – Typically 7:30 AM – 4:00 PM. May be adjusted with approval of Sampson’s Superintendent.
- N. Testing and Inspections – Special inspections by Owner. All other inspections to be coordinated with governing authorities by Subcontractor.
- O. Survey/Layout – At least one (2) benchmarks and gridlines will be established by the CM/GC. All other layout work will be the responsibility of the Subcontractor performing that work.
- P. Soils Report – Included in Specifications Project Manual
- Q. Substitution Requests – All product substitution requests must be submitted for review. Acceptable substitutions will be issued in an addendum.

V. Milestone Schedule

- A. Mobilize – starting April 1, 2016
- B. Site grading & excavation
- C. Foundations
- D. Start precast and structural steel
- E. Substantial Completion – June 14, 2017

VI. Project Specific Items

- A. Site Access – Will establish entrance/exit.
- B. Parking – Will establish temporary rock parking lot.
- C. Security – No security services will be provided.

VII. Questions and Discussion

VIII. Review Jobsite

BID FORM

Owner: Central Community College
Project: Central Community Center - Kearney Center
Construction Manager: Sampson Construction

Bid Package No. 2

Bid Package Title: 100% Construction Documents

Summary of Work (Please indicate the bid scope(s) you are bidding):

[] _____
[] _____
[] _____
[] _____
[] _____

Company Name _____
Address _____
City/State/Zip _____
Contact: _____
Telephone: _____
FAX: _____
E-mail Address: _____

Bid Proposal Amounts:

The undersigned, having examined the Contract Documents and the site of the proposed Work and being familiar with all the conditions affecting the construction of the proposed project, hereby proposes and agrees to provide and furnish all labor, material, equipment, supervision, and other items necessary to perform and complete, in a workmanlike manner, all Work required by the Contract Documents at the prices stated below. Stated sums include fees, insurance, payroll taxes, and all other charges applicable to materials, appliances, labor, and all charges that may be levied.

This Bid excludes sales tax.

In the following proposals, the amounts shall be shown in both words and figures. In the case of discrepancy between the words and the figures, the words shall govern.

Bid Bulletin:

The Bidder hereby acknowledges receipt and inclusion in the bid proposal the following Bid Bulletins:

Bid Bulletin _____ Dated: _____
Bid Bulletin _____ Dated: _____
Bid Bulletin _____ Dated: _____

BASE BID:

(Dollars) (\$ _____)

PERFORMANCE AND PAYMENT BONDS - ADD TO BASE BID:

(Dollars) (\$ _____)

Alternates:

Alternate No. 1:

Add or Deduct Alternate: Provide and install 102219.02 Demountable Partitions - Treadwall in lieu of specified 102219.01 Demountable Partitions - Allsteel

(Dollars) (\$ _____) (Add/Deduct)

Alternate No. 2:

Add or Deduct Alternate: Under 088836.21 Electrochromic Tintable Glass, provide and install View, Inc. - Dynamic Glass in lieu of Electrochromics, Inc. - Sage Glass.

(Dollars) (\$ _____) (Add/Deduct)

Unit Prices : (None)

Changes in the Work:

Changes in the work shall be as established in the Contract Documents. The following fees shall be used for lump sum pricing and actual cost pricing of additions and deletions to that Work included in the Bid, namely:

	<u>Not to Exceed</u>
a. To Subcontractor for work performed by their own forces.	10%
b. To Subcontractor for work performed by other than their own forces.	5%
c. To Subcontractor's Subcontractor/Material supplier for work performed by Subcontractor's Subcontractor/Material Supplier own forces.	10%
d. To Subcontractor's Subcontractor/Material supplier for work performed by other than Subcontractor's Subcontractor/Material Supplier own forces.	5%
● Fee includes general requirements, all supervision, overhead and profit.	

Time of Commencement, Completion, and Damages:

- a. The Bidder agrees that if awarded the Contract, he will Substantially Complete the Work in accordance with the schedule developed by the Construction Manager.
 - 1. The Bidder hereby agrees to commence work under the Contract within seven (7) days after the date of a "Notice to Proceed", unless otherwise stipulated in that notice.
 - 2. Shop drawing submittals shall be assembled immediately upon the Notice to Proceed and forwarded to the Construction Manager within fourteen (14) calendar days of said notice.

- b. Time is expressly declared to be of the essence in completion of the Work covered by these Contract Documents, and the Successful Bidder shall be liable for actual damages for delay in completion of Work. Where additional time is allowed under the Agreement for the completion of the Work, the new time limits shall be of the essence of the Agreement.
- c. Substantial Completion of the Work: The undersigned will have the Work ready for either the following Contractor's work or the Final Inspection and Owner's acceptance within the time limit established in the Construction Milestone Schedule.

General Agreements:

- a. The Bidder agrees that he has had an opportunity to examine the site of the Work and has examined the Contract Documents, and that he has carefully prepared his proposal upon the basis thereof and that he has carefully examined and checked this Bid and the materials, equipment, and labor required thereunder, the cost thereof, and his figures therefore, and hereby states that the amount or amounts set forth in this Bid is, or are, correct and that no mistake or error has occurred in this Bid or in the Bidder's computations upon which this Bid is based and the Bidder agrees that he will make no claim for reformation, modification, rescission, or correction of this Bid after the scheduled closing time for receipt of Bid.
- b. The Bidder acknowledges that the Owner reserves the right to waive informalities and to reject any or all Bids.
- c. The Bidder agrees that Bid shall not be withdrawn or altered for a period of **forty five (45)** calendar days after the last date scheduled for the submission of Bids.
- d. By signing this Bid, each Bidder certifies that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

The undersigned Bidder agrees that, when these requirements have been completed, he will execute an agreement with the Construction Manager on the Standard Form of Agreement Between Contractor and Subcontractor/Supplier on the Agreement included in the Bidding Documents.

DATED THIS _____ DAY OF _____, 2016.

Name of Firm

City, State and Zip

Address

By: Signature of Authorized Officer

SECTION 10 2213

WIRE MESH PARTITIONS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Wire mesh system for walls.
- B. Access door.

1.2 REFERENCE STANDARDS

- A. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2013.
- B. ASTM A510/A510M - Standard Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel; 2013.
- C. ASTM A510M - Standard Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel (Metric); 2008.
- D. AWS D1.1/D1.1M - Structural Welding Code - Steel; American Welding Society; 2011 w/Errata.

1.3 DESIGN REQUIREMENTS

- A. Design partition system to provide for movement of components without damage, undue stress on fasteners or other detrimental effects, when subject to design loads.
- B. Design system to accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.

1.4 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data for screen materials, finishes.
- C. Shop Drawings: Indicate plan and vertical dimensions, elevations, component details; head, jamb, and sill details; location of hardware. Provide component details, anchorage, and type and location of fasteners.
 - 1. Show field measurements on shop drawings.
- D. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than five (5) years of documented experience.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Wire Mesh Partitions:
 - 1. Acorn Wire and Iron Works, Inc: www.acornwire.com.
 - 2. The G-S Company: www.g-sco.com.

3. Miller Wire Works, Inc: www.millerwireworks.com.
4. WireCrafters, LLC: www.wirecrafters.com.

2.2 WIRE MESH PARTITIONS

- A. Wire Mesh Partitions: Factory-fabricated modular assemblies of wall panels, doors, anchors, and accessories as required to provide a complete system and as indicated.
 1. Installed Wall Assembly: Resist a lateral load of 200 lbs without damage or permanent set.
 2. Hinged Door and Panel in Open Position: Resist a downward load of 200 lbs without damage or permanent set.

2.3 MATERIALS

- A. Framing Members: ASTM A500/A500M, Grade B cold-formed steel tubing, square and rectangular shaped.
- B. Woven Screen Wire: ASTM A510/A510M uncoated crimped steel wire; conforming to the following:
 1. Fill Wire Size: 10 gage, 0.1019 inch.
 2. Mesh Size: 2 by 2 inch.
- C. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.

2.4 FASTENERS

- A. Bolts, Nuts and Washers: Hot dip galvanized.
- B. Anchorage Devices: Provide power driven, powder actuated, and drilled expansion bolts.
- C. Exposed Mechanical Fastenings: Flush countersunk screws or bolts, unobtrusively located, consistent with design of structure.

2.5 ACCESSORIES

- A. Bracing: Formed sheet steel, thickness determined for conditions encountered, manufacturer's standard shapes, same finish as framing members.
- B. Plates, Gussets, Clips: Formed sheet steel, thickness determined for conditions encountered, manufacturer's standard shapes, same finish as framing members.
- C. Floor and Ceiling Pilaster Shoe: Manufacturer's standard.
- D. Floor Base: Manufacturer's standard.

2.6 HARDWARE

- A. Mortise lock: Manufacturer's standard with keyed lock.

2.7 FABRICATION

- A. Fit and assemble in largest practical sections for delivery to site, ready for installation.
- B. Make exposed joints flush or tight.
- C. Provide components required for anchorage to adjacent construction.
- D. Frame openings made for penetrating mechanical and electrical components.
- E. Fabricate door for hinged operation in dutch door configuration with shelf.

2.8 FINISHES

- A. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
- B. Prime paint items with one coat. Do not prime surfaces in direct contact with concrete or where field welding is required.
- C. Shop Finished Surfaces: Powder Coat.
 - 1. Color: As selected by Architect from manufacturers standard colors.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that substrate surfaces and required openings are ready to receive work.

3.2 PREPARATION

- A. Clean substrate surfaces.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install items plumb and level, accurately fitted, free from distortion or defects.

3.4 ADJUSTING

- A. Adjust hinged doors to achieve free movement.

3.5 CLEANING

- A. Remove temporary protection to prefinished surfaces.

END OF SECTION

SECTION 11 5100

AUDIO-VISUAL COMMUNICATION SYSTEMS

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

- A. This scope of work includes complete audio/visual presentation, audio/video capture, video conferencing, audio conferencing, sound reinforcement, digital signage, audio-visual control, remote monitoring cameras and sound masking systems. The systems are integrated through the owner's network. Areas of work are detailed in the construction drawings. The drawings include device locations and one-line diagrams to show how equipment is connected and integrated.
- B. The intent of this specification is to provide a scope of work and comprehensive list of major equipment needed to meet the functional needs for a complete audio/visual system(s). The AV contractor should review the contract documents which include all construction drawings, specifications and standards published by Central Community College to familiarize themselves with the complete scope of work. Both the drawings and specifications represent the complete system. Where items may be omitted on the drawings and are listed in the specification, or, omitted in the specification and shown on the drawings, the AV contractor is responsible for all complete systems and all equipment. All addendums issued by the architect are binding construction documents.
- C. It is the responsibility of the AV contractor to provide complete and functional systems, with complete professional services. This includes but is limited to all equipment, AV furniture, connectivity cables and connectors, mounting hardware, wall backing, cabling, cable management, software, current & proven firmware, device drivers, programming code and files, network coordination, project management, installation, predefined factory services, engineering, licensed structural engineer approvals, submittals, drafting, programming, commissioning, training, workmanship warranty equipment warranties and factory required maintenance services.
- D. The scope of work excludes major wire raceways, conduit, junction boxes, 120VAC outlets and data network jacks and cabling. Refer to the electrical and low voltage specification sections for the related work.
- E. Field coordinate the associated AV system conduit, back boxes, junction boxes and power provided by the electrical contractor. This infrastructure is shown in detail on the electrical drawings.
- F. The AV contractor is responsible for installing their own wall mount backing and structural support for projectors, loudspeakers, projection screens, flat panel displays. This work shall be coordinated with the general contractor and electrical contractor during rough-in and framing.
- G. The AV contractor shall coordinate through the general contractor and communicate through the communication channels and protocols established by the architect.
- G. Coordinate with the owner's IT staff to establish a virtual local area network (VLAN) for audio/visual system and distance learning components. IP addresses will be on the owner's network, not a private AV network. Coordinate with owner IT for SIP phone system integration to provide audio conferencing in rooms which have microphones.
- H. Equipment racks and the associated room electronics are specified and detailed in the construction drawings. All equipment shall be installed with proper attention to cable management, intuitive labeling scheme and long term serviceability.

- I. Provide Crestron Fusion RV for all rooms with Crestron control systems. This should include asset tracking, monitoring of all devices and remote control for the owners building maintenance staff.
- J. Program digital signal processor(s), Crestron Digital Media system(s), AV control system(s). All equipment should be programmed with the most current software and firmware versions available at the time of commissioning.
- K. The AV contractor shall cooperate with all trades and work in the best interest of the owner.
- L. Programming includes but may not be limited to the following:
 - 1. "Hot plug" automatic turn on when a laptop is connected to an input source.
 - 2. System ON/OFF
 - 3. Automated turn off at 12am.
 - 4. AV source selection
 - 5. Remote Transport controls
 - 6. Audio Conferencing Controls – Dialing and audio controls
 - 7. Distance Learning – Video Conferencing Controls
 - 7. Audio level controls – mute, volume
 - 8. Lighting control – On, Off & Presets
 - 9. Crestron Fusion RV for all rooms & AV devices. Visible on owner's network.
 - 10. Lecture 131 Capture system controls
 - 11. Biology 314 Student and Instructor Presentation Control Modes
- M. Coordinate with owner's IT staff to open a network port which will allow the AV contractor to VPN into the system for troubleshooting, programming changes and technical support. This service provided by the AV contractor is to be available to the owner for the duration of the one (1) year warranty period.
- N. Conduct coordination, engineering, installation, programming, testing, adjustments and equalization for the AV and sound reinforcement system. The system shall be tuned to provide reasonable levels for sound reinforcement of wireless microphones without any feedback. The use of feedback exterminators is not permitted.
- O. Digital Media Commissioning – Generate and present a commissioning report for the Crestron Digital Media System. This report shall comply with the standards set by Crestron Electronics.
- P. TRAINING - Provide AV system training to owner. Provide and coordinate training until the owner has agreed that all necessary personnel have been properly trained. Training shall be included & available to the owner for the duration of the one (1) year warranty period.
- Q. Warranty the AV system installation for the period of one (1) year after owner acceptance. This shall include programming changes & training as required to the original system design. Equipment shall be subject to the manufactures warranties. On-site service response time is expected to be no later than 48 hours from the time of the initial call.
- R. Programming files and code shall be property of the owner.

1.2 EXISTING CAMPUS WIDE DISTANCE LEARNING CONDITIONS

- A. The owner has previously installed and established working audio-visual infrastructure for campus wide distance learning classroom management. The new systems will be connected to these existing control and management systems through the campus wide network. The AV contractor shall coordinate with the owners IT and Media Services department as required to add to this existing IT infrastructure.
- B. Existing video infrastructure includes codecs endpoints, multipoint control units (MCU), call gateways, management/control application and servers, call recording and video delivery system. These are currently deployed in Grand Island, Hastings, Columbus & Kearney.

1.3 LIGHTING INTEGRATION

- A. Coordinate with the specified lighting system equipment and electrical contractor to integrate the Crestron control system to the lighting control system. This will be done via TCP/IP.

1.4 CONTRACTOR QUALIFICATIONS

- A. The AV contractor must be a professional audio-visual systems contracting company who regularly engages in the installation and service of commercial audio-visual communication systems.
- B. The AV contractor shall actively maintain the following business infrastructure and provide documentation upon request to substantiate:
 - 1. Adequate facilities and equipment to stage & complete the work.
 - 2. Adequate and diverse staff to perform the specific tasks of project management, engineering, drafting & documentation, programming, installation, commissioning, training & warranty service.
 - 3. Applicable industry and factory certifications.
 - 4. Technical expertise and experience to troubleshoot and creatively solve problems. Related experience to fully implement soft goods, equipment compatibility, firmware, testing, adjustments, equalization, network coordination, integration to lighting system(s) and commissioning.
 - 5. Appropriate financial resources to support the work sequence.
- C. Submit at the time of bidding, (3) three references to projects of similar size and scope where the contractor performed full turn-key installation and professional services. Include all client contact information; size of project in dollars and year the work was completed.
- D. Control system and digital signal processing may not be sub-contracted to third parties. The AV contractor must hold a Crestron Master Level Certification within the staff who are employed directly for the AV contractor.

1.5 SUBMITTALS

- A. Organize all product data, drawings and touch panel layouts by room and in the order of the equipment specification.
- B. Product Data: For each piece of equipment, provide the manufacturers data sheet and highlight the specific part number being provided. Equipment submittals should match the equipment specified in the project documents unless noted otherwise.
- C. Shop drawings: AV furniture, equipment racks, one-line diagrams, control system button panel layouts, power distribution, floor and ceiling plans, interior elevations for wall mounted devices

or suspended elevation details, professional structural engineer stamped drawings for all mounting hardware and equipment.

- D. Touch Panel Layouts: All touch panel and Crestron XPanel layouts. Organized by room.
- E. The AV contractor will submit a request for information (RFI) prior to submittals with a list of equipment needing color coordination. The selected colors shall then be documented on the project submittals for final verification by the architect.

1.6 SUBSTITUTIONS

- A. All equipment, cable, hardware & software shall be bid as specified.
- B. Substitutions will not be considered.
- C. Where a piece of equipment has been discontinued or replaced by the manufacturer, the AV contractor shall submit a request for information (RFI) to determine an appropriate model.

1.7 WARRANTY

- A. The AV contractor shall provide a full warranty of all equipment and workmanship for the period of one (1) year from the date of owner acceptance.
- B. In the case of factory required service & support, the AV contractor is responsible for providing a full one year warranty from the date of owner acceptance on all equipment. Extended factory warranties, service and support for all equipment shall be included by the AV contractor to meet this full (1) year warranty to the owner.

PART 2 PRODUCTS

2.1 Remote Asset Management

- A. SOFTWARE
 - 1. Qty. 1, Crestron SW-FUSION-RV
Fusion RV Remote Asset Management Software
 - i. Coordinate with owner IT for server requirements and installation location.
 - ii. Install software on owner provided server.
 - iii. Control and manage all rooms in Kearney Center from CCC central IT and Media Services

2.2 AV Cabling & Connectors

- A. AUDIO-VIDEO-CONTROL BULK CABLING
 - 1. West Penn 210454, Dual channel audio cable
 - 2. West Penn 25226B, Loudspeaker cable
 - 3. West Penn 25810, Antenna cable
 - 4. Crestron DM-CBL-ULTRA-P-SP1000, Digital Media cable
 - 5. Crestron CRESNET-P-TL-SP1000, Cresnet control cable
 - 6. West Penn 254246, Data cable
 - 7. Crestron CRESFIBER8G-SM-P-SP2KM, CresFiber 8G Single-Mode Optic cable
 - 8. AV contractor to supply all compatible connectors for bulk cabling. Use Crestron connectors with the specified Crestron cable.
- B. FIBER TERMINATIONS
 - 1. Qty. as required, Crestron CRESFIBER-SM-CONN-LC-12
 - 2. Qty. 1, Crestron CRESFIBER-TK, CresFiber Termination Kit (AFL Telecommunications)

2.3 Mechatronics Lab 107

A. PORTABLE CAMERA SYSTEM

1. Qty. 1, Sony EVI-H100V, Robotic Pan/Tilt/Zoom Camera - Tripod Mounted
2. Qty. 1, Magnus VT-4000-K2, Tripod System & Universal Tripod Dolly Kit with casters
3. Qty. 1, AV Contractor, Custom cable assembly as per drawings. Wrap in Whirlwind snake-skin.

B. WALL PLATE INTERFACES

1. Qty. 1, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate
2. Qty. 1, AV Contractor, Custom 3-gang wall plate as per drawings
3. Qty. 1, Sony MPA-AC1, Camera Power Supply
4. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable (Velcro wrap, store in drawer)
5. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable (Velcro wrap, store in drawer)

C. WIRELESS PRESENTATION SYSTEM

1. Qty. 1, Crestron AM-100, Wireless presentation system
2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf for AM-100
3. Qty. 1, Crestron CBL-HD-3, HDMI Cable
4. Qty. 1, AV Contractor Cables & Connectors

D. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

E. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied USB cables
6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier

F. DOCUMENT CAMERA

1. Qty. 1, Lumens PS751, Desktop style document camera
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

G. AV SWITCHER

1. Qty. 1, Crestron DMPS3-300-C, Presentation switcher and control system
2. Qty. 1, Crestron PW-4818DU, Power supply
3. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
4. Qty. 1 lot, AV contractor supplied control cables

H. HDMI TRANSMITTERS & RECEIVERS

1. Qty. 2, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 2, Crestron HD-EXT3-C-B_SYSTEM, HDMI and Control Extender
3. Qty. 6, Crestron CBL-HD-3, 3' HDMI Cable
4. Qty. 1 lot, AV contractor supplied control cables

I. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display

2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
 3. Qty. 2, Sharp LC-60UE30U, 60" LCD Flat Panel Display
 4. Qty. 2, Chief PCMU, Ceiling Pole Mount with Universal Plate
 5. Qty. 2, Chief CMA330, Structure Plate - 8" Offset Ceiling Plate – Black
 6. Qty. 2, AV Contractor, Custom cut 1-1/2" extension pipe - Black
- J. INTERACTIVE DISPLAY SYSTEM
1. Qty. 1, Smart Technologies, SBX885, 51" x 78-1/2" Interactive White Board
 2. Qty. 1, Smart Technologies, CAT5-XT-1100, USB Extender
- K. PROJECTORS & MOUNTS
1. Qty. 1, Eiki EIP-WSS3100, WXGA 3100 Lumen Short Throw LCD Projector
 2. Qty. 1, Chief CMA330, Structure Plate - 8" Offset Ceiling Plate – Black
 3. Qty. 1, Chief RSMAUW, Projector Mount – White
- L. CONTROL SYSTEM INTERFACES
1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing
- M. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- N. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- O. POWER AMPLIFIERS
1. Qty. 1, QSC CX302V, Power amplifier
- P. LOUDSPEAKERS
1. Qty. 15, JBL C65P/T, Ceiling suspended pendant loudspeaker
- Q. TEACHERS STATION FURNITURE
1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray
- R. THERMAL MANAGEMENT
1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- S. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 4. Qty. 1, Lowell RL-1, Rack service light
- T. CABLES, CONNECTORS & OTHER HARDWARE
1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification

2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.4 Skills Training Classroom 110

A. WALL PLATE INTERFACES

1. Qty. 2, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate
2. Qty. 2, AV Contractor, Custom 3-gang wall plate as per drawings
3. Qty. 2, Sony MPA-AC1, Camera Power Supply
4. Qty. 2, Crestron CBL-VGA-AUD-12, Laptop Input Cable (Velcro wrap, store in drawer)
5. Qty. 2, Crestron CBL-HD-12, Laptop Input Cable (Velcro wrap, store in drawer)

B. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

C. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied USB cables
6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier

D. DOCUMENT CAMERA

1. Qty. 1, Lumens PS751, Desktop style document camera
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

E. AV SWITCHER

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 1, Crestron CEN-C13-1, 3-Series Card Slot Interface
3. Qty. 1, Crestron C3COM-3, 3-Series Card (3) COM ports
4. Qty. 1, Crestron ST-RMK, Rack Kit
5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
6. Qty. 1 lot, AV contractor supplied control cables

F. HDMI RECEIVERS

1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

G. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display

2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- H. CONTROL SYSTEM INTERFACES
1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing
- I. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- J. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- K. POWER AMPLIFIERS
1. Qty. 1, QSC CX302V, Power amplifier
- L. LOUDSPEAKERS
1. Qty. 9, JBL CONTROL24CT, In-ceiling loudspeaker
- M. TEACHERS STATION FURNITURE
1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray
- N. THERMAL MANAGEMENT
1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- O. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 4. Qty. 1, Lowell RL-1, Rack service light
- P. CABLES, CONNECTORS & OTHER HARDWARE
1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
 5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
 6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
 7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.5 General Classroom 125

- A. LAPTOP TOP INTERFACES
 - 1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
 - 2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
 - 3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable
- B. LOCAL PC & MONITOR DISTRIBUTION
 - 1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
 - 2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
 - 3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
 - 4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 - 5. Qty. 1 lot, AV contractor supplied USB cables
 - 6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 - 7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
- C. DOCUMENT CAMERA
 - 1. Qty. 1, Lumens PS751, Desktop style document camera
 - 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 - 3. Qty. 1 lot, AV contractor supplied control cables
- D. AV SWITCHER
 - 1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
 - 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 - 3. Qty. 1 lot, AV contractor supplied control cables
- E. HDMI RECEIVERS
 - 1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 - 2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
 - 3. Qty. 1 lot, AV contractor supplied control cables
- F. VIDEO FLAT PANEL DISPLAYS & MOUNTS
 - 1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
 - 2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- G. CONTROL SYSTEM INTERFACES
 - 1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 - 2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing
- H. UNINTERRUBTABLE POWER SUPPLIES (UPS)
 - 1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- I. POWER DISTRIBUTION
 - 1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- J. POWER AMPLIFIERS
 - 1. Qty. 1, QSC CX302V, Power amplifier
- K. LOUDSPEAKERS
 - 1. Qty. 9, JBL CONTROL24CT, In-ceiling loudspeaker
- L. TEACHERS STATION FURNITURE
 - 1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)

- iii. Qty. 1, IMC Bottom Shelf
- iv. Qty. 1, Clear Acrylic Door
- v. Qty. 1, IMC Wire Management
- vi. Qty. 1, IMC Rear Rack Rails
- vii. Qty. 1, IMC Flip Up Shelf
- viii. Qty. 1, Econo keyboard tray

M. THERMAL MANAGEMENT

- 1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
- 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
- 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control

N. EQUIPMENT RACK ACCESSORIES

- 1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
- 2. Qty. 1, AV contractor custom logo 1RU panel
- 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
- 4. Qty. 1, Lowell RL-1, Rack service light

O. CABLES, CONNECTORS & OTHER HARDWARE

- 1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
- 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
- 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
- 4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
- 5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
- 6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
- 7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.6 Computer Lab 130

A. LAPTOP TOP INTERFACES

- 1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
- 2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
- 3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

B. LOCAL PC & MONITOR DISTRIBUTION

- 1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
- 2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
- 3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
- 4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
- 5. Qty. 1 lot, AV contractor supplied USB cables
- 6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
- 7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier

C. DOCUMENT CAMERA

- 1. Qty. 1, Lumens PS751, Desktop style document camera
- 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
- 3. Qty. 1 lot, AV contractor supplied control cables

D. AV SWITCHER

- 1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
- 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections

3. Qty. 1 lot, AV contractor supplied control cables
- E. HDMI RECEIVERS
1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
 3. Qty. 1 lot, AV contractor supplied control cables
- F. VIDEO FLAT PANEL DISPLAYS & MOUNTS
1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
 2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- G. CONTROL SYSTEM INTERFACES
1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing
- H. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- I. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- J. POWER AMPLIFIERS
1. Qty. 1, QSC CX302V, Power amplifier
- K. LOUDSPEAKERS
1. Qty. 9, JBL C65P/T, Ceiling suspended pendant loudspeakers
- L. TEACHERS STATION FURNITURE
1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray
- M. THERMAL MANAGEMENT
1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- N. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 4. Qty. 1, Lowell RL-1, Rack service light
- O. CABLES, CONNECTORS & OTHER HARDWARE
1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
 5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.

6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.7 Lecture Hall 131

- A. IP CAMERA – REMOTE MONITORING
 1. Qty. 1, Axis P1428-E, IP camera connected to network port for remote monitoring
- B. CAPTURE RECORDING SYSTEM
 1. Qty. 1, Sony EVI-H100V, Robotic Pan/Tilt/Zoom Camera
 2. Qty. 1, Vaddio 535-2000-236, Camera wall mount
 3. Qty. 1, Crestron Capture HD-PRO, Audio-Video Capture System
 - i. Establish network communication to allow automatic file saving of recordings on the owner's network
 4. Qty. 1 lot, AV contractor supplied cables & connectors
- C. WIRELESS MICROPHONE SYSTEMS – CHARGING – ANTENNA DISTRIBUTION
 1. Qty. 1, Shure QLXD24/B87A-G50, Handheld Condenser Wireless Microphone System
 2. Qty. 1, Shure QLXD14/85-G50, Lavalier with Bodypack Wireless Microphone System
 3. Qty. 2, Shure SB900, Battery
 4. Qty. 1, Shure SBC200-US, Battery Charger
 5. Qty. 1, Middle Atlantic SS4-23VTR, Sliding rack shelf
 6. Qty. 2, Shure UA864US, Wideband antenna
 7. Qty. 1, Shure US844SWB, Antenna and power distribution system
 8. Qty. 1 lot, AV contractor supplied cables & connectors
- D. DIGITAL SIGNAL PROCESSOR
 1. Qty. 1, QSC CORE110f, Digital Signal Processor
 2. Qty. 1, QSC Softphone (programming and SIP integration)
- E. POWER AMPLIFIERS
 1. Qty. 1, QSC CX302V, Power amplifier
- F. LOUDSPEAKERS
 1. Qty. 16, JBL C65P/T, Ceiling suspended pendant loudspeakers
- G. LAPTOP TOP INTERFACES
 1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
 2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
 3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable
 4. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
- H. LOCAL PC & MONITOR DISTRIBUTION
 1. Qty. 1, Owner provided, Local PC, Keyboard & Mouse
 2. Qty. 2, ViewSonic TD2340, 23" Touch Screen Monitor
 - i. Supply with current drivers
 3. Qty. 2, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
 4. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
 5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 6. Qty. 1 lot, AV contractor supplied USB cables
 7. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 8. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier

9. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
 10. Qty. 1, Crestron XPanel, Custom graphic user interface program
 - i. Executable file loaded on local PC with custom user interface for all room presentation functions.
- I. DOCUMENT CAMERA
1. Qty. 1, Lumens PS751, Desktop style document camera
 2. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
 3. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 4. Qty. 1 lot, AV contractor supplied control cables
- J. AV SWITCHER & NETWORK MANAGEMENT
1. Qty. 1, Crestron DM-MD8X8-RPS, Digital Media Switcher
 2. Qty. 4, Crestron DMC-4K-C, Input Card for 8G+ sources
 3. Qty. 4, Crestron DMC-4K-HD, Input Card for HDMI sources
 4. Qty. 2, Crestron DMC-4K-CO-HD, Output card for 8G+ devices
 5. Qty. 2, Crestron DMC-4K-HDO, Output card for HDMI devices
 6. Qty. 1, Crestron CEN-SWPOE-16, PoE and network switch
 7. Qty. 1, Crestron DM-PSU-8, 8-Port PoDM Power Supply
 8. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 9. Qty. 1 lot, AV contractor supplied control cables
- K. HDMI RECEIVERS
1. Qty. 4, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 2. Qty. 4, Crestron CBL-HD-3, 3' HDMI Cable
 3. Qty. 1 lot, AV contractor supplied control cables
- L. VIDEO PROJECTORS & MOUNTS
1. Qty. 2, Epson G6900WU, Video Projector
 2. Qty. 2, Epson V12H004L06, Long throw lens
 - i. AV contractor shall verify lens for throw and width compatibility with room and projection screen
 3. Qty. 2, Chief WMA210S, Wall mount arm with lateral shift
 4. Qty. 2, Chief CMS003, Fixed extension pipe
 5. Qty. 2, Chief RSMAU, projector mount
 6. Qty. 2, Chief CMA347, vibration isolation coupler
- M. VIDEO PROJECTION SCREENS
1. Qty. 2, Da-Lite 24853, 65" x 116" Electric Ceiling Recessed Screen with LVC
- N. VIDEO FLAT PANEL DISPLAYS & MOUNTS
1. Qty. 2, Sharp LC-80UE30U, 80" Flat Panel Display
 2. Qty. 2, Chief XTM1U-G, Extra-large flat panel wall mount
- O. CONTROL SYSTEM & INTERFACES
1. Qty. 1, Crestron TSW-1050-B-S, 10.5" Touch Screen - Power Over Ethernet
 2. Qty. 1, Crestron TSW-550/750/1050-SMK, Table Top Slant Housing
 3. Qty. 1, Crestron CP3N, Control Processor
- P. UNINTERRUPTIBLE POWER SUPPLIES (UPS)
1. Qty. 2, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- Q. POWER DISTRIBUTION
1. Qty. 2, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
 2. Qty. 1, Middle Atlantic PCR-2X320, Power distribution strip (AV rack 132)

R. TEACHERS STATION FURNITURE

1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 2, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray

S. THERMAL MANAGEMENT(Teachers Station)

1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control

T. EQUIPMENT RACK (AV Rack 132)

1. Qty. 1, Middle Atlantic WRK-44SA-27, 44RU 27" Deep Equipment Rack
2. Qty. 1, Middle Atlantic PVFD-44, Plexiglas Vented Front Door
3. Qty. 1, Middle Atlantic MW-4QFT-FC, Fan Top - (4) 4-1/2" Fans - Fan Controller
4. Qty. 1, Middle Atlantic CBS-WRK-27, Caster Base

U. THERMAL MANAGEMENT(AV Rack 132)

1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
- Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control

V. EQUIPMENT RACK ACCESSORIES

1. Qty. 2, Middle Atlantic D2, 2RU rack drawer
2. Qty. 2, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 2, Lowell RL-1, Rack service light

W. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.8 Classroom 210

A. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

B. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse

2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
 3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
 4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 5. Qty. 1 lot, AV contractor supplied USB cables
 6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
- C. DOCUMENT CAMERA
1. Qty. 1, Lumens PS751, Desktop style document camera
 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 3. Qty. 1 lot, AV contractor supplied control cables
- D. AV SWITCHER
1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 3. Qty. 1 lot, AV contractor supplied control cables
- E. HDMI RECEIVERS
1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
 3. Qty. 1 lot, AV contractor supplied control cables
- F. VIDEO FLAT PANEL DISPLAYS & MOUNTS
1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
 2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- G. CONTROL SYSTEM INTERFACES
1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 2. Qty. 1, Crestron TTK-MP/MPC/IPAC-B-T, Table Top Slant Housing
- H. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- I. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- J. POWER AMPLIFIERS
1. Qty. 1, QSC CX302V, Power amplifier
- K. LOUDSPEAKERS
1. Qty. 9, JBL CONTROL24CT, In-ceiling loudspeaker
- L. TEACHERS STATION FURNITURE
1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Link Lectern, Teachers Station (Type 3)
 - ii. Qty. 1, FPM Monitor Arm
 - iii. Qty. 1, Document Camera Shelf
- M. THERMAL MANAGEMENT
1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- N. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces

4. Qty. 1, Lowell RL-1, Rack service light

O. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.9 Seminar 223

A. TABLE TOP LAPTOP TOP & CONTROL INTERFACES

1. Qty. 1, Crestron C2N-FTB-D-B, Flip top and control interface
 - i. Mount in owner conference room table
2. Qty. 1, Crestron Custom, Set of buttons for C2N-FTB-D-B
3. Qty. 1, Crestron CBL-VGA-AUD-6, Laptop Input Cable
4. Qty. 1, Crestron CBL-HD-6, Laptop Input Cable
5. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface

B. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Keyboard & Mouse
2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
3. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
4. Qty. 1, Crestron USB-EXT, USB extender transmitter & receiver
5. Qty. 1 lot, AV contractor supplied USB cables
6. Qty. 1 lot, AV contractor supplied CAT6e patch cables

C. AV SWITCHER

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

D. HDMI TRANSMITTERS & RECEIVERS

1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

E. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-70UH30U, 70" Flat Panel Display
2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount

F. UNINTERRUPTIBLE POWER SUPPLIES (UPS)

1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection

G. POWER DISTRIBUTION

1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection

H. POWER AMPLIFIERS

1. Qty. 1, QSC CX302V, Power amplifier

- I. LOUDSPEAKERS
 - 1. Qty. 2, JBL CONTROL24CT, In-ceiling loudspeaker
- J. AV CREDENZA FURNITURE
 - 1. Qty. 1, Middle Atlantic C5F1 series, AV Credenza
 - i. Middle Atlantic, Master quote #893304 – contact manufacturer
 - ii. Qty. 1, Caster base, AV contractor specified
- K. EQUIPMENT RACK ACCESSORIES
 - 1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 - 2. Qty. 1, AV contractor custom logo 1RU panel
 - 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 - 4. Qty. 1, Middle Atlantic LT-GN-WL, Rack service light
- L. CABLES, CONNECTORS & OTHER HARDWARE
 - 1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 - 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 - 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 - 4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to AV credenza equipment rack.
 - 5. Qty. 1 lot, Whirlwind ½" or ¾" black snake skin for all exposed cable.
 - 6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
 - 7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

**2.10 Learning Commons A
 Learning Commons D
 Conference Room 226
 Conference Room 227
 Teaming Room 325
 Teaming Room 330 (equipment list applies to each room)**

- A. TABLE TOP LAPTOP TOP INTERFACES
 - 1. Qty. 1, Crestron FT-600-BALUM, Flip top
 - i. Mount in owner conference room table
 - 2. Qty. 1, Crestron FTA-CP-USB-102, Dual USB Connection for Flip Top
 - 3. Qty. 1, Crestron FTA-PWR-102, Dual Outlet Insert for Flip Top
 - 4. Qty. 1, Crestron CBL-VGA-AUD-3, VGA + Stereo Audio, 3'
 - 5. Qty. 1, Crestron CBL-HD-3, Laptop Input Cable
 - 6. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
 - 7. Qty. 1, Tripp Lite U222-007-R, USB Power Supply & Hub
 - 8. Qty. 1 lot, AV contractor specified USB cables
- B. HDMI RECEIVERS
 - 1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 - 2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
 - 3. Qty. 1 lot, AV contractor supplied control cables
- C. VIDEO FLAT PANEL DISPLAYS & MOUNTS
 - 1. Qty. 1, Sharp LC-70UH30U, 70" Flat Panel Display
 - 2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- D. CABLES, CONNECTORS & OTHER HARDWARE
 - 1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 - 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.

3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to floor box.
5. Qty. 1 lot, Whirlwind ½" or ¾" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.11 Lobby 202 & Digital Signage System

A. POWER AMPLIFIERS

1. Qty. 1, QSC CX502, Power amplifier

B. LOUDSPEAKERS

1. Qty. 2, RENKUS HEINZ, Quote #012616LT, Contact manufacturer for quote Custom height column line array loudspeakers and hinge brackets

C. AV ROOM MONITOR LOUDSPEAKER

1. Qty. 1, JBL CONTROL24CT, In-ceiling loudspeaker

D. WALL INPUT INTERFACE

1. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable (Velcro tie wrap)
2. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable (Velcro tie wrap)
3. Qty. 1, Crestron DM-TX-200-C-B-T, Digital Media Input Interface

E. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Keyboard & Mouse
2. Qty. 1, Middle Atlantic RM-KB-LCD17KVMHD, Rack mount monitor, KVM switch
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied USB cables
6. Qty. 1 lot, AV contractor supplied CAT6e patch cables

F. DIGITAL SIGNAGE PLAYERS

1. Qty. 2, Owner provided digital signage players
(model not selected at this time – plan for HDMI, Ethernet and USB connections)
2. Qty. 2, Middle Atlantic OCAP-2, Clamping rack shelf

G. CABLE TUNER

1. Qty. 1, Contemporary Research 232-ATSC 4, HDTV Tuner
2. Qty. 1, Contemporary Research RK1, Rack Kit

H. AV SWITCHER & NETWORK MANAGEMENT

1. Qty. 1, Crestron DM-MD16X16-RPS, Digital Media Switcher
2. Qty. 5, Crestron DMC-4K-HD, Input Card for HDMI sources
3. Qty. 2, Crestron DMC-4K-C, Input Card for 8G+ sources
4. Qty. 3, Crestron DMC-4K-HDO, Output card for HDMI devices
5. Qty. 2, Crestron DMC-4K-CO-HD, Output card for 8G+ devices
6. Qty. 2, Crestron DMC-S2O-HD, Output card for fiber
7. Qty. 1, Crestron DM-PSU-16, 16-Port PoDM Power Supply
8. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
9. Qty. 1 lot, AV contractor supplied control cables

- I. LOBBY VIDEO WALL
 - 1. Qty. 1, Planar Systems Quote# 00049520 Central CC Kearney NE contact manufacturer for quote
 - i. Displays, mounts, matrix processors, power supplies, cables
 - 2. Qty. 1 lot, AV contractor supplied cables, connectors & hardware for complete installation

- J. DIGITAL SIGNAGE DM RECEIVERS
 - 1. Qty. 3, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 - 2. Qty. 4, Crestron DM-RMC-SCALER-S2, Digital Media Receiver for Fiber
 - 3. Qty. 7, Crestron CBL-HD-3, 3' HDMI Cable
 - 4. Qty. 1 lot, AV contractor supplied control cables

- K. VIDEO FLAT PANEL DISPLAYS & MOUNTS
 - 1. Qty. 7, Planar SL551, 55" Flat Panel Display
 - 2. Qty. 7, Chief LTMU1-G, Large flat panel wall mount

- L. CONTROL SYSTEM & INTERFACES
 - 1. Qty. 1, Crestron TSW-1050-B-S, 10.5" Touch Screen - Power Over Ethernet
 - i. Shared Crestron processor in Learn Lab 234 for unique program
 - 2. Qty. 1, Crestron TSW-UMB-PMK, Pre-construction Mounting Kit for TSW-UMB
 - 3. Qty. 1, Crestron TSW-UMB, Universal Mounting Bracket for Touch Screen
 - 4. Qty. 1, Crestron IDOCI-PAD-LCA-DSC-B-S, iPad Table Dock for iPad Air
 - 5. Qty. 1, Apple iPad Air
 - 6. Qty. 1, Crestron Mobile App, Download from iTunes

- M. EQUIPMENT RACK (Learn Lab 234)
 - 1. Shared rack, power, processor, network switch etc. in Learn Lab 234

- N. CABLES, CONNECTORS & OTHER HARDWARE
 - 1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 - 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 - 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 - 4. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
 - 5. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
 - 6. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.12 Learn Lab 233

- A. DIGITAL SIGNAL PROCESSOR
 - 1. Qty. 1, QSC CORE110f, Digital Signal Processor

- B. POWER AMPLIFIERS
 - 1. Qty. 1, QSC CX168, Power amplifier

- C. LOUDSPEAKERS
 - 1. Qty. 5, INNOVOX FP-H2, Sound bar loudspeaker

- D. STUDENT TABLE LAPTOP TOP INTERFACES
 - 1. Qty. 4, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Student Table
 - 2. Qty. 4, Crestron CBL-VGA-AUD-6, Laptop Input Cable
 - 3. Qty. 4, Crestron CBL-HD-6, Laptop Input Cable
 - 4. Qty. 4, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate

5. Qty. 4, AV Contractor, Custom 3-gang wall plate as per drawings
- E. STUDENT TABLE POWER INTERFACES
1. Qty. 4, Mockett PCS73/USB, Power table top interface
 - i. Mount in Student Table
- F. WALL INPUT INTERFACE
1. Qty. 1, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate
- G. LOCAL PC & MONITOR DISTRIBUTION
1. Qty. 1, Owner provided, Local PC, Wireless Keyboard & Mouse
 2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
 3. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 4. Qty. 1 lot, AV contractor supplied USB cables
 5. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 6. Qty. 1, Crestron USB-EXT, USB Extender Transmitter & Receiver
- H. DOCUMENT CAMERA
1. Qty. 1, Lumens CL510, Ceiling style document camera
 2. Qty. 1, Lumens CL-A01, Bridge mounting for camera
 3. Qty. 1, Chief WM210S, Wall mount extension arm
 4. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
 5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 6. Qty. 1 lot, AV contractor supplied control cables
- I. WIRELESS PRESENTATION SYSTEM
1. Qty. 1, Crestron AM-100, Wireless presentation system
 2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf for AM-100
 3. Qty. 1, Crestron CBL-HD-3, HDMI Cable
 4. Qty. 1, AV Contractor Cables & Connectors
- J. AV SWITCHER & NETWORK MANAGEMENT
1. Qty. 1, Crestron DM-MD8X8-RPS, Digital Media Switcher
 2. Qty. 6, Crestron DMC-4K-C, Input Card for 8G+ sources
 3. Qty. 2, Crestron DMC-4K-HD, Input Card for HDMI sources
 4. Qty. 3, Crestron DMC-4K-CO-HD, Output card for 8G+ devices
 5. Qty. 1, Crestron DMC-4K-HDO, Output card for HDMI devices
 6. Qty. 1, Crestron CEN-SWPOE-16, PoE and network switch
 7. Qty. 1, Crestron DM-PSU-8, 8-Port PoDM Power Supply
 8. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 9. Qty. 1 lot, AV contractor supplied control cables
- K. HDMI RECEIVERS
1. Qty. 4, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 2. Qty. 4, Crestron CBL-HD-3, 3' HDMI Cable
 3. Qty. 1 lot, AV contractor supplied control cables
- L. VIDEO FLAT PANEL DISPLAYS & MOUNTS
1. Qty. 4, Sharp LC-60UE30U, 60" Flat Panel Display
 2. Qty. 4, Chief LTM1U-G, Large flat panel wall mount
- M. CONTROL SYSTEM & INTERFACES
1. Qty. 1, Crestron TSW-1050-W-S, 10.5" Touch Screen - Power Over Ethernet
 2. Qty. 1, Crestron TSW-UMB-PMK, Pre-construction Mounting Kit for TSW-UMB
 3. Qty. 1, Crestron TSW-UMB, Universal Mounting Bracket for Touch Screen
 4. Qty. 1, Crestron CP3N, Control Processor

5. Qty. 1, Crestron CNTBLOCK, Cresnet terminal block
- N. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- O. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
 2. Qty. 1, Middle Atlantic PCR-2X320, Power distribution strip
- P. EQUIPMENT RACK
1. Qty. 1, Middle Atlantic WRK-44SA-27, 44RU 27" Deep Equipment Rack
 2. Qty. 1, Middle Atlantic PVFD-44, Plexiglas Vented Front Door
 3. Qty. 1, Middle Atlantic MW-4QFT-FC, Fan Top - (4) 4-1/2" Fans - Fan Controller
 4. Qty. 1, Middle Atlantic CBS-WRK-27, Caster Base
- Q. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 4. Qty. 1, Lowell RL-1, Rack service light
- R. CABLES, CONNECTORS & OTHER HARDWARE
1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 4. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
 5. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
 6. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.13 Learn Lab 234

- A. DIGITAL SIGNAL PROCESSOR
1. Qty. 1, QSC CORE110f, Digital Signal Processor
- B. POWER AMPLIFIERS
1. Qty. 1, QSC CX168, Power amplifier
- C. LOUDSPEAKERS
1. Qty. 5, INNOVOX FP-H2, Sound bar loudspeaker
- D. STUDENT TABLE LAPTOP TOP INTERFACES
1. Qty. 4, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Student Tables
 2. Qty. 4, Crestron CBL-VGA-AUD-6, Laptop Input Cable
 3. Qty. 4, Crestron CBL-HD-6, Laptop Input Cable
 4. Qty. 4, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate
 5. Qty. 4, AV Contractor, Custom 3-gang wall plate as per drawings
- E. STUDENT TABLE POWER INTERFACES
1. Qty. 4, Mockett PCS73/USB, Power table top interface
 - i. Mount in Student Table

F. WALL INPUT INTERFACE

1. Qty. 1, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate

G. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Wireless Keyboard & Mouse
2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
3. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
4. Qty. 1 lot, AV contractor supplied USB cables
5. Qty. 1 lot, AV contractor supplied CAT6e patch cables
6. Qty. 1, Crestron USB-EXT, USB Extender Transmitter & Receiver

H. DOCUMENT CAMERA

1. Qty. 1, Lumens CL510, Ceiling style document camera
2. Qty. 1, Lumens CL-A01, Bridge mounting for camera
3. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
4. Qty. 1, Chief WM210S, Wall mount extension arm
5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
6. Qty. 1 lot, AV contractor supplied control cables

I. WIRELESS PRESENTATION SYSTEM

1. Qty. 1, Crestron AM-100, Wireless presentation system
2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf for AM-100
3. Qty. 1, Crestron CBL-HD-3, HDMI Cable
4. Qty. 1, AV Contractor Cables & Connectors

J. AV SWITCHER & NETWORK MANAGEMENT

1. Qty. 1, Crestron DM-MD8X8-RPS, Digital Media Switcher
2. Qty. 6, Crestron DMC-4K-C, Input Card for 8G+ sources
3. Qty. 2, Crestron DMC-4K-HD, Input Card for HDMI sources
4. Qty. 3, Crestron DMC-4K-CO-HD, Output card for 8G+ devices
5. Qty. 1, Crestron DMC-4K-HDO, Output card for HDMI devices
6. Qty. 1, Crestron CEN-SW-POE-16, PoE and network switch
7. Qty. 1, Crestron CEN-SW-POE-5, PoE and network switch
8. Qty. 1, Crestron DM-PSU-16, 16-Port PoDM Power Supply
9. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
10. Qty. 1 lot, AV contractor supplied control cables

K. HDMI RECEIVERS

1. Qty. 4, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 4, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

L. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 4, Sharp LC-60UE30U, 60" Flat Panel Display
2. Qty. 4, Chief LTM1U-G, Large flat panel wall mount

M. CONTROL SYSTEM & INTERFACES

1. Qty. 1, Crestron TSW-1050-W-S, 10.5" Touch Screen - Power Over Ethernet
2. Qty. 1, Crestron TSW-UMB-PMK, Pre-construction Mounting Kit for TSW-UMB
3. Qty. 1, Crestron TSW-UMB, Universal Mounting Bracket for Touch Screen
4. Qty. 1, Crestron CP3N, Control Processor
5. Qty. 1, Crestron CNTBLOCK, Cresnet terminal block
6. Qty. 1, Crestron CEN-C13-1, 3-Series Card Slot Interface
7. Qty. 1, Crestron C3COM-3, 3-Series Card (3) COM ports
8. Qty. 1, Crestron ST-RMK, Rack Kit

N. UNINTERRUPTABLE POWER SUPPLIES (UPS)

1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection

O. POWER DISTRIBUTION

1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
2. Qty. 1, Middle Atlantic PCR-2X320, Power distribution strip

P. EQUIPMENT RACK

1. Qty. 1, Middle Atlantic WRK-44SA-27, 44RU 27" Deep Equipment Rack
2. Qty. 1, Middle Atlantic PVFD-44, Plexiglas Vented Front Door
3. Qty. 1, Middle Atlantic MW-4QFT-FC, Fan Top - (4) 4-1/2" Fans - Fan Controller
4. Qty. 1, Middle Atlantic CBS-WRK-27, Caster Base

Q. EQUIPMENT RACK ACCESSORIES

1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
2. Qty. 1, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 1, Lowell RL-1, Rack service light

R. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
5. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
6. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.14 Classroom 236

A. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

B. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied USB cables
6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier

C. DOCUMENT CAMERA

1. Qty. 1, Lumens PS751, Desktop style document camera
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

D. AV SWITCHER

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

E. HDMI RECEIVERS

1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

F. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount

G. CONTROL SYSTEM INTERFACES

1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing

H. UNINTERRUPTABLE POWER SUPPLIES (UPS)

1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection

I. POWER DISTRIBUTION

1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection

J. POWER AMPLIFIERS

1. Qty. 1, QSC CX302V, Power amplifier

K. LOUDSPEAKERS

1. Qty. 9, JBL C65P/T, Ceiling suspended pendant loudspeaker

L. TEACHERS STATION FURNITURE

1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray

M. THERMAL MANAGEMENT

1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control

N. EQUIPMENT RACK ACCESSORIES

1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
2. Qty. 1, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 1, Lowell RL-1, Rack service light

O. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.

6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation

2.15 IP Classroom 239

A. IP CAMERA – REMOTE MONITORING

1. Qty. 1, Axis P1428-E, IP camera connected to network port for remote monitoring

B. MICROPHONES, BASES & CONNECTION INTERFACE

1. Qty. 8, Astatic 40-119, Microphone Base with 5-pin XLR connection
2. Qty. 8, Shure MX412/C, Gooseneck microphone
3. Qty. 8, Shure A412MWS, Windscreen
4. Qty. 7, AV Contractor custom 2-gang plate, as per drawings with consecutive numbered engraving. Contact closure and audio connections managed in the equipment rack to DSP and GPIO connections.
5. Qty. 1 lot, as needed, extend microphone cables to wall plate inputs

C. DIGITAL SIGNAL PROCESSOR

1. Qty. 1, QSC CORE 250i, Digital Signal Processor
2. Qty. 3, QSC CIML4, Input module
3. Qty. 1, QSC CODP4, Data port module
4. Qty. 1, QSC COL4, Output module
5. Qty. 1, QSC Softphone (programming and SIP integration)

D. POWER AMPLIFIERS

1. Qty. 1, QSC CX302V, Power amplifier

E. LOUDSPEAKERS

1. Qty. 4, JBL CONTROL24CT, In-ceiling loudspeaker

F. HEARING ASSISTANCE

1. Qty. 1, Williams Sound WIR TX75, Infrared Hearing Assistance Transmitter
2. Qty. 2, Williams Sound RX15-2, Headset Style IR Receiver, tunes 2.3 or 2.8 MHz
3. Qty. 1, Williams Sound EAR 055-100, Headphone covers package

G. VIDEO CONFERENCING SYSTEM & FACTORY SUPPORT

1. Qty. 1, Cisco CTS-SX80-IP60-K9, SX80 Codec with Precision 60 Camera and Touch 10
2. Qty. 1, Cisco CTS-CAM-P60, Precision 60 Camera
3. Qty. 2, Cisco CTS-CAM60-BRKT, Bracket for mounting of Precision 60 Camera
4. Qty. 2, Cisco CON-ECDN-CTSSX860, Extended Service & Support for SX80, Precision 60 Camera and Touch 10 – 12 months
 - i. Two years required to extended the support service during the AV contractors one year warranty
5. Qty. 2, Cisco CON-ECDN-CTSCAM60, Extended Service & Support for Precision 60 Camera – 12 months
 - i. Two years required to extended the support service during the AV contractors one year warranty
6. Qty. 1, Vyopta Codec & Vcontrol network software installation service
 Contact Information:
 Vyopta – Chris Gentsch
 4515 Seton Center Pkwy
 Austin, TX 78759
 (512)796-5741

7. Qty. 2, Crestron HD-EXT3-C-B_SYSTEM, HDMI to CAT6 Transmitter & Receiver - with RS232

H. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

I. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Keyboard & Mouse
2. Qty. 2, ViewSonic TD2340, 23" Touch Screen Monitor
 - i. Supply with current drivers
3. Qty. 2, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
4. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
6. Qty. 1 lot, AV contractor supplied USB cables
7. Qty. 1 lot, AV contractor supplied CAT6e patch cables
8. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
9. Qty. 1, Crestron XPanel, Custom graphic user interface program
 - i. Executable file loaded on local PC with custom user interface for all room presentation and video conferencing functions.

J. DOCUMENT CAMERA

1. Qty. 1, Lumens CL510, Ceiling style document camera
2. Qty. 1, Lumens CL-A01 Bridge mounting for camera
3. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied control cables

K. AV SWITCHER & CONTROL PANEL

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 2, Crestron CEN-C13-1, 3-Series Card Slot Interface
3. Qty. 2, Crestron C3COM-3, 3-Series Card (3) COM ports
4. Qty. 1, Crestron ST-RMK, Rack Kit
5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
6. Qty. 1 lot, AV contractor supplied control cables
7. Qty. 2, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
8. Qty. 2, Crestron HD-EXT3-C-B_SYSTEM, HDMI to CAT6 Transmitter & Receiver - with RS232
9. Qty. 1, Crestron CEN-SW-POE-5, 5 Port network switch for local control system devices

L. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 2, Sharp LC-80UE30U, 80" Flat Panel Display
2. Qty. 2, Chief XTM1U-G, Extra-large flat panel wall mount
3. Qty. 2, Sharp LC-60UE30U, 60" Flat Panel Display
4. Qty. 2, Chief LTM1U-G, Large flat panel wall mount

M. UNINTERRUPTIBLE POWER SUPPLIES (UPS)

1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection

N. POWER DISTRIBUTION

1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection

O. TEACHERS STATION FURNITURE

1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #2, Teachers Station (Type 2)
 - ii. Qty. 2, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 2, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray

P. THERMAL MANAGEMENT(Teachers Station)

1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control

Q. EQUIPMENT RACK ACCESSORIES

1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
2. Qty. 1, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 1, Lowell RL-1, Rack service light

R. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.16 Veterans Office 230

A. WALL PLATE INPUT

1. Qty. 1, Crestron CBL-VGA-AUD-12, VGA + Stereo Audio, 12' (wrap with Velcro tie)
2. Qty. 1, Crestron CBL-HD-12, 12' HDMI Cable (wrap with Velcro tie)
3. Qty. 1, Crestron DM-TX-200-C-2G-B-T, HDMI - VGA Input Interface - 2 Gang Wall Plate

B. WALL BUTTON PANEL CONTROLLER

1. Qty. 1, Crestron MPC-M20-B-T, 15-Button wall station control system

C. HDMI RECEIVERS

1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable

D. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-70UH30U, 70" Flat Panel Display
2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount

E. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to floor box.
5. Qty. 1 lot, Whirlwind ½" or ¾" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.17 Sound Masking – Faculty Suite and Veterans Area

A. SOUND MASKING EQUIPMENT

1. Qty. 1, Cambridge Quote # 509175, Central Community College – Kearney Center

B. COMMISSIONING: By factory personnel. Coordinate with minimum 30 day advance notice.

2.18 Break Room 241

A. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-60UE30U, 60" Flat Panel Display
2. Qty. 1, Chief LTM1U-G, Large flat panel wall mount

B. HDMI RECEIVERS

1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable

C. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.19 IP Classroom 229

A. IP CAMERA – REMOTE MONITORING

1. Qty. 1, Axis P1428-E, IP camera connected to network port for remote monitoring

B. MICROPHONES, BASES & CONNECTION INTERFACE

1. Qty. 7, Astatic 40-119, Microphone Base with 5-pin XLR connection
2. Qty. 7, Shure MX412/C, Gooseneck microphone
3. Qty. 7, Shure A412MWS, Windscreen
4. Qty. 6, AV Contractor custom 2-gang plate, as per drawings with consecutive numbered engraving. Contact closure and audio connections managed in the equipment rack to DSP and GPIO connections.
5. Qty. 1 lot, as needed, extend microphone cables to wall plate inputs

C. DIGITAL SIGNAL PROCESSOR

1. Qty. 1, QSC CORE 250i, Digital Signal Processor
2. Qty. 3, QSC CIML4, Input module
3. Qty. 1, QSC CODP4, Data port module

4. Qty. 1, QSC COL4, Output module
 5. Qty. 1, QSC Softphone (programming and SIP integration)
- D. POWER AMPLIFIERS
1. Qty. 1, QSC CX302V, Power amplifier
- E. LOUDSPEAKERS
1. Qty. 4, JBL CONTROL24CT, In-ceiling loudspeaker
- F. HEARING ASSISTANCE
1. Qty. 1, Williams Sound WIR TX75, Infrared Hearing Assistance Transmitter
 2. Qty. 2, Williams Sound RX15-2, Headset Style IR Receiver, tunes 2.3 or 2.8 MHz
 3. Qty. 1, Williams Sound EAR 055-100, Headphone covers package
- G. VIDEO CONFERENCING SYSTEM & FACTORY SUPPORT
1. Qty. 1, Cisco CTS-SX80-IP60-K9, SX80 Codec with Precision 60 Camera and Touch 10
 2. Qty. 1, Cisco CTS-CAM-P60, Precision 60 Camera
 3. Qty. 2, Cisco CTS-CAM60-BRKT, Bracket for mounting of Precision 60 Camera
 4. Qty. 2, Cisco CON-ECDN-CTSSX860, Extended Service & Support for SX80, Precision 60 Camera and Touch 10 – 12 months
 - i. Two years required to extended the support service during the AV contractors one year warranty
 5. Qty. 2, Cisco CON-ECDN-CTSCAM60, Extended Service & Support for Precision 60 Camera – 12 months
 - i. Two years required to extended the support service during the AV contractors one year warranty
 6. Qty. 1, Vyopta Codec & Vcontrol network software installation service
 Contact Information:
 Vyopta – Chris Gentsch
 4515 Seton Center Pkwy
 Austin, TX 78759
 (512)796-5741
 7. Qty. 2, Crestron HD-EXT3-C-B_SYSTEM, HDMI to CAT6 Transmitter & Receiver - with RS232
- H. LAPTOP TOP INTERFACES
1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
 2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
 3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable
- I. LOCAL PC & MONITOR DISTRIBUTION
1. Qty. 1, Owner provided, Local PC, Keyboard & Mouse
 2. Qty. 2, ViewSonic TD2340, 23" Touch Screen Monitor
 - i. Supply with current drivers
 3. Qty. 2, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
 4. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
 5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 6. Qty. 1 lot, AV contractor supplied USB cables
 7. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 8. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
 9. Qty. 1, Crestron XPanel, Custom graphic user interface program
 - i. Executable file loaded on local PC with custom user interface for all room presentation and video conferencing functions.

J. DOCUMENT CAMERA

1. Qty. 1, Lumens CL510, Ceiling style document camera
2. Qty. 1, Lumens CL-A01 Bridge mounting for camera
3. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied control cables

K. AV SWITCHER & CONTROL PANEL

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 2, Crestron CEN-C13-1, 3-Series Card Slot Interface
3. Qty. 2, Crestron C3COM-3, 3-Series Card (3) COM ports
4. Qty. 1, Crestron ST-RMK, Rack Kit
5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
6. Qty. 1 lot, AV contractor supplied control cables
7. Qty. 2, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
8. Qty. 2, Crestron HD-EXT3-C-B_SYSTEM, HDMI to CAT6 Transmitter & Receiver - with RS232
9. Qty. 1, Crestron CEN-SW-POE-5, 5 Port network switch for local control system devices

L. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 2, Sharp LC-80UE30U, 80" Flat Panel Display
2. Qty. 2, Chief XTM1U-G, Extra-large flat panel wall mount
3. Qty. 2, Sharp LC-60UE30U, 60" Flat Panel Display
4. Qty. 2, Chief LTM1U-G, Large flat panel wall mount

M. UNINTERRUPTABLE POWER SUPPLIES (UPS)

1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection

N. POWER DISTRIBUTION

1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection

O. TEACHERS STATION FURNITURE

1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #2, Teachers Station (Type 2)
 - ii. Qty. 2, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 2, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray

P. THERMAL MANAGEMENT(Teachers Station)

1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control

Q. EQUIPMENT RACK ACCESSORIES

1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
2. Qty. 1, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 1, Lowell RL-1, Rack service light

R. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification

2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.20 IP Classroom 310

A. IP CAMERA – REMOTE MONITORING

1. Qty. 1, Axis P1428-E, IP camera connected to network port for remote monitoring

B. MICROPHONES

1. Qty. 2, Audix M40W12HC, Ceiling microphone
2. Qty. 2, Audix JBM40, Junction box

C. DIGITAL SIGNAL PROCESSOR

1. Qty. 1, QSC CORE 250i, Digital Signal Processor
2. Qty. 2, QSC CIML4, Input module
3. Qty. 1, QSC CODP4, Data port module
4. Qty. 1, QSC COL4, Output module
5. Qty. 1, QSC Softphone (programming and SIP integration)

D. POWER AMPLIFIERS

1. Qty. 1, QSC CX302V, Power amplifier

E. LOUDSPEAKERS

1. Qty. 2, JBL CONTROL24CT, In-ceiling loudspeaker

F. HEARING ASSISTANCE

1. Qty. 1, Williams Sound WIR TX75, Infrared Hearing Assistance Transmitter
2. Qty. 2, Williams Sound RX15-2, Headset Style IR Receiver, tunes 2.3 or 2.8 MHz
3. Qty. 1, Williams Sound EAR 055-100, Headphone covers package

G. VIDEO CONFERENCING SYSTEM & FACTORY SUPPORT

1. Qty. 1, Cisco CTS-SX80-IPST60-K9, SX80 Codec with Speaker Track 60 Camera and Touch 10
2. Qty. 2, Cisco CON-ECDN-SX80IP60, Extended Service & Support for SX80, Speaker Track 60 Camera and Touch 10 – 12 months
 - i. Two years required to extended the support service during the AV contractors one year warranty
3. Qty. 1, Vyopta Codec & Vcontrol network software installation service
 Contact Information:
 Vyopta – Chris Gentsch
 4515 Seton Center Pkwy
 Austin, TX 78759
 (512)796-5741
4. Qty. 2, Crestron HD-EXT3-C-B_SYSTEM, HDMI to CAT6 Transmitter & Receiver - with RS232

- H. TABLE TOP LAPTOP TOP & CONTROL INTERFACES
 - 1. Qty. 1, Crestron C2N-FTB-D-B, Flip top and control interface
 - i. Mount in owner conference room table
 - 2. Qty. 1, Crestron Custom, Set of buttons for C2N-FTB-D-B
 - 3. Qty. 1, Crestron CBL-VGA-AUD-6, Laptop Input Cable
 - 4. Qty. 1, Crestron CBL-HD-6, Laptop Input Cable
 - 5. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface

- I. LOCAL PC & MONITOR DISTRIBUTION
 - 1. Qty. 1, Owner provided, Local PC, Keyboard & Mouse
 - 2. Qty. 2, ViewSonic TD2340, 23" Touch Screen Monitor
 - i. Supply with current drivers
 - 3. Qty. 2, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
 - 4. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
 - 5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 - 6. Qty. 1 lot, AV contractor supplied USB cables
 - 7. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 - 8. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
 - 9. Qty. 1, Crestron XPanel, Custom graphic user interface program
 - i. Executable file loaded on local PC with custom user interface for all room presentation and video conferencing functions.

- J. DOCUMENT CAMERA
 - 1. Qty. 1, Lumens CL510, Ceiling style document camera
 - 2. Qty. 1, Lumens CL-A01 Bridge mounting for camera
 - 3. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
 - 4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 - 5. Qty. 1 lot, AV contractor supplied control cables

- K. AV SWITCHER & CONTROL PANEL
 - 1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
 - 2. Qty. 2, Crestron CEN-C13-1, 3-Series Card Slot Interface
 - 3. Qty. 2, Crestron C3COM-3, 3-Series Card (3) COM ports
 - 4. Qty. 1, Crestron ST-RMK, Rack Kit
 - 5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 - 6. Qty. 1 lot, AV contractor supplied control cables
 - 7. Qty. 2, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
 - 8. Qty. 2, Crestron HD-EXT3-C-B_SYSTEM, HDMI to CAT6 Transmitter & Receiver - with RS232
 - 9. Qty. 1, Crestron CEN-SW-POE-5, 5 Port network switch for local control system devices

- L. VIDEO FLAT PANEL DISPLAYS & MOUNTS
 - 1. Qty. 2, Sharp LC-70UH30U, 70" Flat Panel Display
 - 2. Qty. 2, Chief XTM1U-G, Extra-large flat panel wall mount

- M. UNINTERRUBTABLE POWER SUPPLIES (UPS)
 - 1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection

- N. POWER DISTRIBUTION
 - 1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection

- O. AV CREDENZA FURNITURE
 - 1. Qty. 1, Middle Atlantic C5F1 series, AV Credenza
 - i. Middle Atlantic, Master quote #893304 – contact manufacturer
 - ii. Qty. 1, Caster base, AV contractor specified

P. EQUIPMENT RACK ACCESSORIES

1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
2. Qty. 1, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 1, Lowell RL-1, Rack service light

Q. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing AV credenza equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

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A. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

B. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied USB cables
6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier

C. DOCUMENT CAMERA

1. Qty. 1, Lumens CL510, Ceiling style document camera
2. Qty. 1, Lumens CL-A01 Bridge mounting for camera
3. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied control cables

D. AV SWITCHER

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

E. HDMI RECEIVERS

1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

F. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display

- 2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- G. CONTROL SYSTEM INTERFACES
 - 1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 - 2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing
- H. UNINTERRUPTABLE POWER SUPPLIES (UPS)
 - 1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- I. POWER DISTRIBUTION
 - 1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- J. POWER AMPLIFIERS
 - 1. Qty. 1, QSC CX302V, Power amplifier
- K. LOUDSPEAKERS
 - 1. Qty. 9, JBL C65P/T, Ceiling suspended pendant loudspeakers
- L. EQUIPMENT RACK
 - 1. Qty. 1, Middle Atlantic SRSR-2-15, Slide Out Equipment Rack
- M. THERMAL MANAGEMENT
 - 1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 - 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 - 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- N. EQUIPMENT RACK ACCESSORIES
 - 1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 - 2. Qty. 1, AV contractor custom logo 1RU panel
 - 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 - 4. Qty. 1, Lowell RL-1, Rack service light
- O. CABLES, CONNECTORS & OTHER HARDWARE
 - 1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 - 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 - 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 - 4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
 - 5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
 - 6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
 - 7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

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- A. DIGITAL SIGNAL PROCESSOR
 - 1. Qty. 1, QSC CORE110f, Digital Signal Processor
- B. POWER AMPLIFIERS
 - 1. Qty. 1, QSC CX108V, Power amplifier
- C. LOUDSPEAKERS
 - 1. Qty. 9, JBL C65P/T, Ceiling suspended pendant loudspeakers

D. STUDENT TABLE & TEACHERS STATION TABLE LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Student Tables and Instructors Station
2. Qty. 1, Crestron CBL-VGA-AUD-6, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-6, Laptop Input Cable
4. Qty. 3, Crestron CBL-VGA-AUD-3, Laptop Input Cable
5. Qty. 3, Crestron CBL-HD-3, Laptop Input Cable
6. Qty. 6, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate
7. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface

E. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Wireless Keyboard & Mouse
2. Qty. 2, ViewSonic TD2340, 23" Touch Screen Monitor
 - i. Supply with current drivers
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
6. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
7. Qty. 1 lot, AV contractor supplied USB cables
8. Qty. 1 lot, AV contractor supplied CAT6e patch cables
9. Qty. 1, Crestron XPanel, Custom graphic user interface program
 - i. Executable file loaded on local PC with custom user interface for all room presentation functions.

F. DOCUMENT CAMERA

1. Qty. 1, Lumens CL510, Ceiling style document camera
2. Qty. 1, Lumens CL-A01 Bridge mounting for camera
3. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied control cables

G. WIRELESS PRESENTATION SYSTEM

1. Qty. 1, Crestron AM-100, Wireless presentation system
2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf for AM-100
3. Qty. 1, Crestron CBL-HD-3, HDMI Cable
4. Qty. 1, AV Contractor Cables & Connectors

H. AV SWITCHER & NETWORK MANAGEMENT

1. Qty. 1, Crestron DM-MD16X16-RPS, Digital Media Switcher
2. Qty. 9, Crestron DMC-4K-C, Input Card for 8G+ sources
3. Qty. 2, Crestron DMC-4K-HD, Input Card for HDMI sources
4. Qty. 5, Crestron DMC-4K-CO-HD, Output card for 8G+ devices
5. Qty. 1, Crestron DMC-4K-HDO, Output card for HDMI devices
6. Qty. 1, Crestron CEN-SWPOE-16, PoE and network switch
7. Qty. 1, Crestron DM-PSU-16, 16-Port PoDM Power Supply
8. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
9. Qty. 1 lot, AV contractor supplied control cables

I. HDMI RECEIVERS

1. Qty. 7, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 7, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

J. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount

3. Qty. 6, Planar SL4851, 48" Flat Panel Display
 4. Qty. 6, Chief LTM1U-G, Large flat panel wall mount
- K. CONTROL SYSTEM & INTERFACES
1. Qty. 1, Crestron CP3N, Control Processor
- L. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- M. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- N. EQUIPMENT RACK
1. Qty. 1, Middle Atlantic SRSR-2-15, Slide Out Equipment Rack
- O. THERMAL MANAGEMENT
1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- P. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 4. Qty. 1, Lowell RL-1, Rack service light
- Q. CABLES, CONNECTORS & OTHER HARDWARE
1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
 5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
 6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
 7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.23 P.N. / A.D.N. NURSING LAB 318

- A. DIGITAL SIGNAL PROCESSOR
1. Qty. 1, QSC CORE110f, Digital Signal Processor
- B. POWER AMPLIFIERS
1. Qty. 1, QSC CX168, Power amplifier
- C. LOUDSPEAKERS
1. Qty. 5, INNOVOX FP-H2, Sound bar loudspeaker
- D. STUDENT TABLE LAPTOP TOP INTERFACES
1. Qty. 4, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Student Table
 2. Qty. 4, Crestron CBL-VGA-AUD-6, Laptop Input Cable
 3. Qty. 4, Crestron CBL-HD-6, Laptop Input Cable
 4. Qty. 4, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate
 5. Qty. 4, AV Contractor, Custom 3-gang wall plate as per drawings

E. STUDENT TABLE POWER INTERFACES

1. Qty. 4, Mockett PCS73/USB, Power table top interface
 - i. Mount in Student Table

F. WALL INPUT INTERFACE

1. Qty. 1, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate

G. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Wireless Keyboard & Mouse
2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
3. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
4. Qty. 1 lot, AV contractor supplied USB cables
5. Qty. 1 lot, AV contractor supplied CAT6e patch cables
6. Qty. 1, Crestron USB-EXT, USB Extender Transmitter & Receiver

H. DOCUMENT CAMERA & MOUNT

1. Qty. 1, Lumens CL510, Ceiling style document camera
2. Qty. 1, Lumens CL-A01 Bridge mounting for camera
3. Qty. 1, Crestron DM-TX-201-C, Digital Media Input Interface
4. Qty. 1, Chief WM210S, Wall mount extension arm
5. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
6. Qty. 1 lot, AV contractor supplied control cables

I. WIRELESS PRESENTATION SYSTEM

1. Qty. 1, Crestron AM-100, Wireless presentation system
2. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf for AM-100
3. Qty. 1, Crestron CBL-HD-3, HDMI Cable
4. Qty. 1, AV Contractor Cables & Connectors

J. AV SWITCHER & NETWORK MANAGEMENT

1. Qty. 1, Crestron DM-MD8X8-RPS, Digital Media Switcher
2. Qty. 6, Crestron DMC-4K-C, Input Card for 8G+ sources
3. Qty. 2, Crestron DMC-4K-HD, Input Card for HDMI sources
4. Qty. 3, Crestron DMC-4K-CO-HD, Output card for 8G+ devices
5. Qty. 1, Crestron DMC-4K-HDO, Output card for HDMI devices
6. Qty. 1, Crestron CEN-SWPOE-16, PoE and network switch
7. Qty. 1, Crestron DM-PSU-16, 16-Port PoDM Power Supply
8. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
9. Qty. 1 lot, AV contractor supplied control cables

K. HDMI RECEIVERS

1. Qty. 4, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 4, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

L. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 4, Sharp LC-60UE30U, 60" Flat Panel Display
2. Qty. 4, Chief LTM1U-G, Large flat panel wall mount

M. CONTROL SYSTEM & INTERFACES

1. Qty. 1, Crestron TSW-1050-W-S, 10.5" Touch Screen - Power Over Ethernet
2. Qty. 1, Crestron TSW-UMB-PMK, Pre-construction Mounting Kit for TSW-UMB
3. Qty. 1, Crestron TSW-UMB, Universal Mounting Bracket for Touch Screen
4. Qty. 1, Crestron CP3N, Control Processor

5. Qty. 1, Crestron CNTBLOCK, Cresnet terminal block
- N. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- O. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
 2. Qty. 1, Middle Atlantic PCR-2X320, Power distribution strip
- P. EQUIPMENT RACK
1. Qty. 1, Middle Atlantic WRK-44SA-27, 44RU 27" Deep Equipment Rack
 2. Qty. 1, Middle Atlantic PVFD-44, Plexiglas Vented Front Door
 3. Qty. 1, Middle Atlantic MW-4QFT-FC, Fan Top - (4) 4-1/2" Fans - Fan Controller
 4. Qty. 1, Middle Atlantic CBS-WRK-27, Caster Base
- Q. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 4. Qty. 1, Lowell RL-1, Rack service light
- R. CABLES, CONNECTORS & OTHER HARDWARE
1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
 4. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
 5. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
 6. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.24 Nursing Classroom 320

- A. LAPTOP TOP INTERFACES
1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
 2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
 3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable
- B. LOCAL PC & MONITOR DISTRIBUTION
1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
 2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
 3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
 4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 5. Qty. 1 lot, AV contractor supplied USB cables
 6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
- C. DOCUMENT CAMERA
1. Qty. 1, Lumens PS751, Desktop style document camera
 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 3. Qty. 1 lot, AV contractor supplied control cables
- D. AV SWITCHER
1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system

2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 3. Qty. 1 lot, AV contractor supplied control cables
- E. HDMI RECEIVERS
1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
 3. Qty. 1 lot, AV contractor supplied control cables
- F. VIDEO FLAT PANEL DISPLAYS & MOUNTS
1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
 2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- G. CONTROL SYSTEM INTERFACES
1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing
- H. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- I. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- J. POWER AMPLIFIERS
1. Qty. 1, QSC CX302V, Power amplifier
- K. LOUDSPEAKERS
1. Qty. 9, JBL CONTROL24CT, In-ceiling loudspeaker
- L. TEACHERS STATION FURNITURE
1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray
- M. THERMAL MANAGEMENT
1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- N. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
 2. Qty. 1, AV contractor custom logo 1RU panel
 3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
 4. Qty. 1, Lowell RL-1, Rack service light
- O. CABLES, CONNECTORS & OTHER HARDWARE
1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
 2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
 3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling

4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind ½" or ¾" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.25 Classroom 328

A. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

B. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied USB cables
6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier

C. DOCUMENT CAMERA

1. Qty. 1, Lumens PS751, Desktop style document camera
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

D. AV SWITCHER

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
3. Qty. 1 lot, AV contractor supplied control cables

E. HDMI RECEIVERS

1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
3. Qty. 1 lot, AV contractor supplied control cables

F. VIDEO FLAT PANEL DISPLAYS & MOUNTS

1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount

G. CONTROL SYSTEM INTERFACES

1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing

H. UNINTERRUPTIBLE POWER SUPPLIES (UPS)

1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection

I. POWER DISTRIBUTION

1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection

J. POWER AMPLIFIERS

1. Qty. 1, QSC CX302V, Power amplifier

K. LOUDSPEAKERS

1. Qty. 9, JBL CONTROL24CT, In-ceiling loudspeaker

L. TEACHERS STATION FURNITURE

1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray

M. THERMAL MANAGEMENT

1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control

N. EQUIPMENT RACK ACCESSORIES

1. Qty. 1, Middle Atlantic D2, 2RU rack drawer
2. Qty. 1, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 1, Lowell RL-1, Rack service light

O. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.26 Nurses Aid Lab 321

A. LAPTOP TOP INTERFACES

1. Qty. 1, Crestron TT-100, Cable grommet with integrated control
 - i. Mount in Teachers Station countertop
2. Qty. 1, Crestron CBL-VGA-AUD-12, Laptop Input Cable
3. Qty. 1, Crestron CBL-HD-12, Laptop Input Cable

B. LOCAL PC & MONITOR DISTRIBUTION

1. Qty. 1, Owner provided, Local PC, Monitor, Keyboard & Mouse
2. Qty. 1, Spectrum Industries FPM Monitor Arm Mount (see Teachers Station Spec)
3. Qty. 1, Middle Atlantic RSH4A2S, Rack shelf
4. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
5. Qty. 1 lot, AV contractor supplied USB cables

6. Qty. 1 lot, AV contractor supplied CAT6e patch cables
 7. Qty. 1, Crestron HD-DA-2, 1:2 HDMI distribution amplifier
- C. DOCUMENT CAMERA
1. Qty. 1, Lumens PS751, Desktop style document camera
 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 3. Qty. 1 lot, AV contractor supplied control cables
- D. AV SWITCHER
1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
 2. Qty. 1 lot, Crestron CBL series cables, HDMI or DVI connections
 3. Qty. 1 lot, AV contractor supplied control cables
- E. HDMI RECEIVERS
1. Qty. 1, Crestron DM-RMC-4K-SCALER-C, Digital Media Receiver
 2. Qty. 1, Crestron CBL-HD-3, 3' HDMI Cable
 3. Qty. 1 lot, AV contractor supplied control cables
- F. VIDEO FLAT PANEL DISPLAYS & MOUNTS
1. Qty. 1, Sharp LC-90LE657U, 90" Flat Panel Display
 2. Qty. 1, Chief XTM1U-G, Extra-large flat panel wall mount
- G. CONTROL SYSTEM INTERFACES
1. Qty. 1, Crestron MP-B20-B-T, 15 Button Panel - Navigation Buttons & Volume Control
 2. Qty. 1, Crestron SMK-MP/MPC/IPAC, Table Top Slant Housing
- H. UNINTERRUPTABLE POWER SUPPLIES (UPS)
1. Qty. 1, APC SMT 1500VA LCD RM 2U, 1500VA UPS - Power Protection
- I. POWER DISTRIBUTION
1. Qty. 1, Middle Atlantic PD-920R, Rack mount power strip, 20amp, with surge protection
- J. POWER AMPLIFIERS
1. Qty. 1, QSC CX302V, Power amplifier
- K. LOUDSPEAKERS
1. Qty. 9, JBL CONTROL24CT, In-ceiling loudspeaker
- L. TEACHERS STATION FURNITURE
1. Qty. 1, Spectrum Industries Quote Q000161012
 - i. Qty. 1, Console #1, Teachers Station (Type 1)
 - ii. Qty. 1, FPM Monitor Arm (Local PC monitor mount)
 - iii. Qty. 1, IMC Bottom Shelf
 - iv. Qty. 1, Clear Acrylic Door
 - v. Qty. 1, IMC Wire Management
 - vi. Qty. 1, IMC Rear Rack Rails
 - vii. Qty. 1, IMC Flip Up Shelf
 - viii. Qty. 1, Econo keyboard tray
- M. THERMAL MANAGEMENT
1. Qty. 2, Middle Atlantic GUARD, 4-1/2" Fan Guard
 2. Qty. 2, Middle Atlantic FAN, 4-1/2" Fan
 3. Qty. 1, Middle Atlantic FC-4-1CA, Thermostat Control
- N. EQUIPMENT RACK ACCESSORIES
1. Qty. 1, Middle Atlantic D2, 2RU rack drawer

2. Qty. 1, AV contractor custom logo 1RU panel
3. Qty. 1 lot, Blank rack panels to fill unused rack spaces
4. Qty. 1, Lowell RL-1, Rack service light

O. CABLES, CONNECTORS & OTHER HARDWARE

1. Qty. 1 lot, Bulk AV cabling, see cabling portion of the specification
2. Qty. 1 lot, Pre-made cables for HDMI, DVI-D, USB, CAT6 etc.
3. Qty. 1 lot, Bulk AV connectors, compatible with the specified cabling
4. Qty. 1, AV contractor custom, 2-gang stainless steel plate with 1" grommet for cabling routing to teachers station equipment rack.
5. Qty. 1 lot, Whirlwind 1/2" or 3/4" black snake skin for all exposed cable.
6. Qty. 1 lot, AV contractor provided structural attachment hardware for wall and ceiling mount equipment
7. Qty. 1 lot, AV contractor provided backing for flat panel display mounting, ceiling supports for all suspended equipment and other hardware required for secure installation.

2.27 Warranty Service Equipment

A. SPARE EQUIPMENT FOR WARRANTY SERVICE

1. Qty. 1, Crestron DMPS3-4K-150-C, Presentation switcher and control system
2. Qty. 1, QSC CORE110f, Digital Signal Processor
3. Qty. 1, Crestron TSW-1050-W-S, 10.5" Touch Screen - Power Over Ethernet
4. Qty. 1, Crestron CEN-SWPOE-16, PoE and network switch
5. Qty. 2, Crestron DM-TX-200-C-2G-W-T, HDMI - VGA Input Interface - 2 Gang Wall Plate

END OF SECTION

GENERAL UTILITY NOTES:

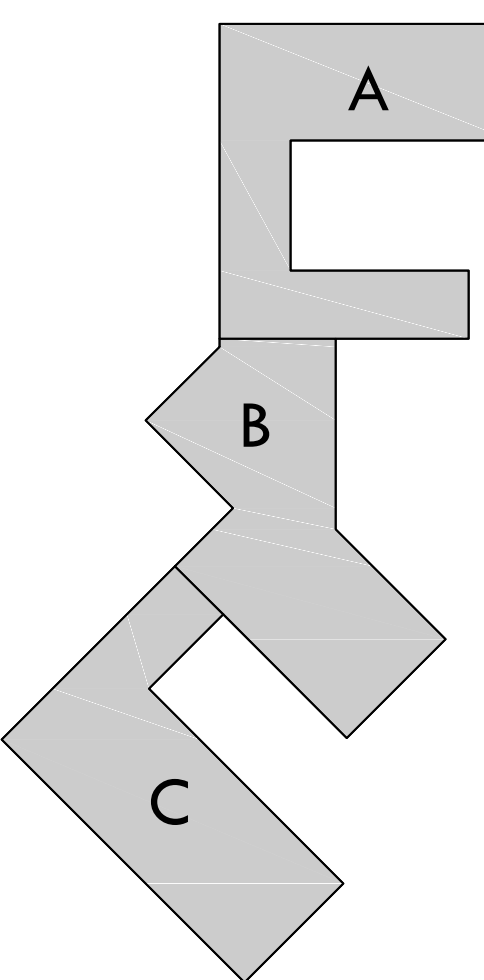
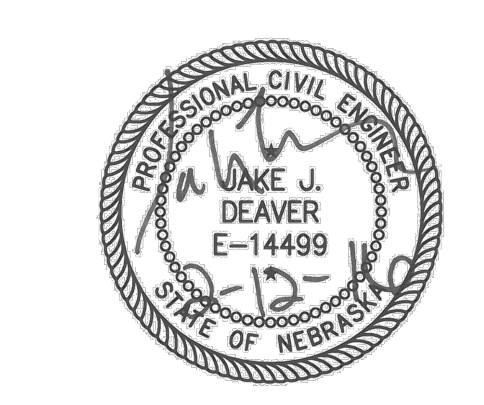
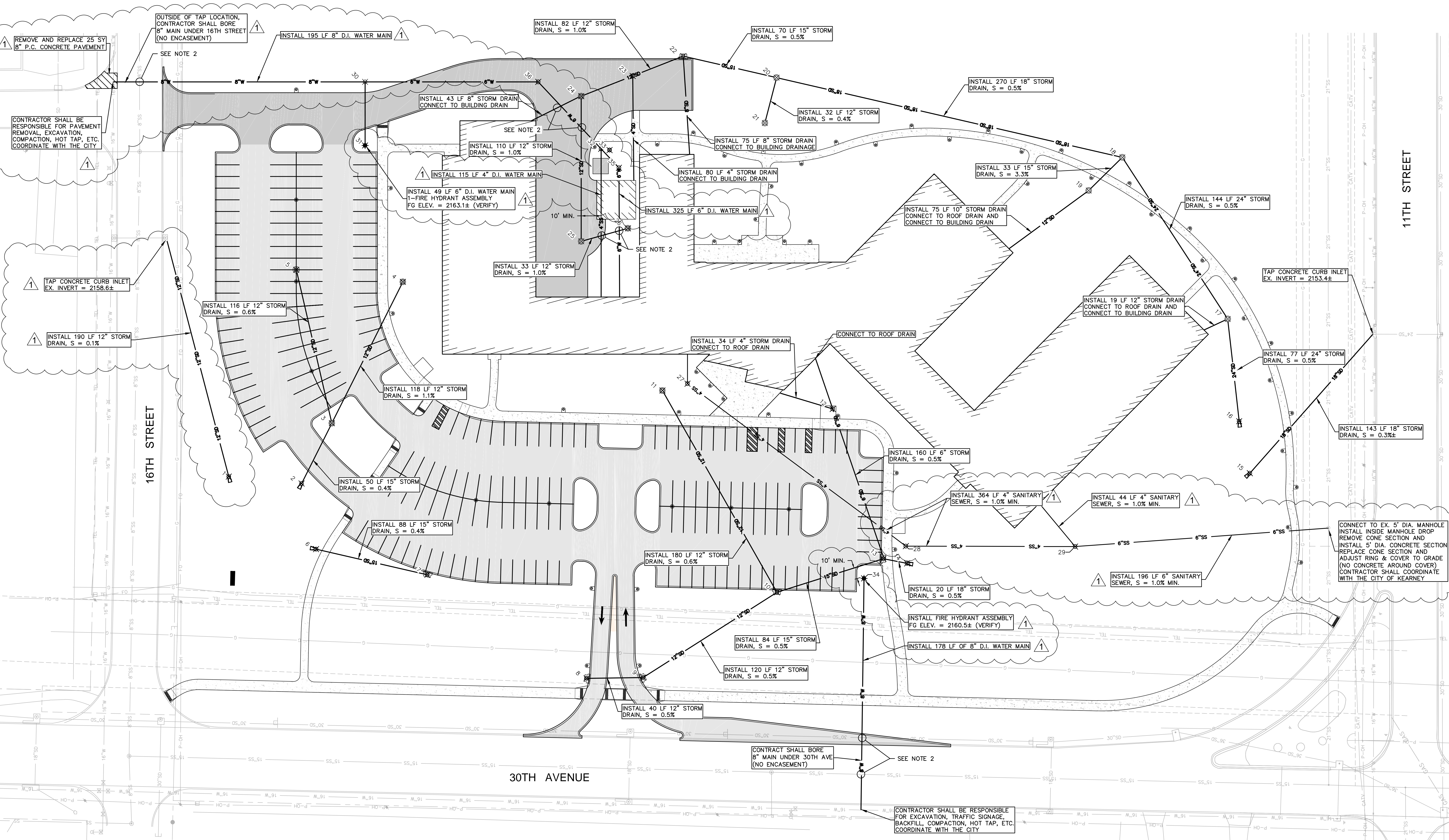
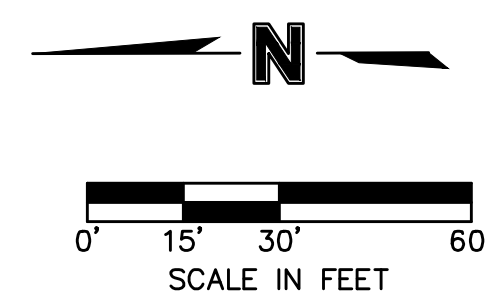
1. THE LOCATION OF ALL AERIAL AND UNDERGROUND UTILITY FACILITIES MAY NOT BE INDICATED ON THESE PLANS. UNDERGROUND UTILITIES, WHETHER INDICATED OR NOT WILL BE LOCATED AND FLAGGED BY THE UTILITIES AT THE REQUEST OF THE CONTRACTOR. NO EXCAVATION WILL BE PERMITTED IN THE AREA OF UNDERGROUND UTILITY FACILITIES UNTIL ALL SUCH FACILITIES HAVE BEEN LOCATED AND IDENTIFIED TO THE SATISFACTION OF ALL PARTIES. THE EXCAVATION MUST BE ACCOMPLISHED WITH EXTREME CARE IN ORDER TO AVOID ANY POSSIBILITY OF DAMAGE TO THE UTILITY FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES.
2. CONTRACTOR SHALL PRESERVE ALL PROPERTY CORNER MONUMENTS.
3. THE CONTRACTOR SHALL OBTAIN AND PAY THE COST OF ALL REQUIRED PERMITS AND FEES.
4. CONTRACTOR TO PROVIDE ALL INCIDENTAL FITTINGS NECESSARY TO COMPLETE WORK.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF TESTS AS REQUIRED INCLUDING TV INSPECTION, DEFLECTION TESTS, AIR PRESSURE TESTS, EXFILTRATION/INFILTRATION TESTS, AND COMPACTION TESTING.
6. TRENCH EXCAVATION & BACKFILL SHALL BE MECHANICALLY TAMPED BY THE CONTRACTOR & TESTED. COMPACTION TESTING SHALL BE IN ACCORDANCE WITH ANSI/ASTM D698 AND D2922. COMPACTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CITY OF KEARNEY SPECIFICATIONS.
7. ANY DEWATERING ASSOCIATED WITH THE INSTALLATION OF UTILITIES SHALL BE SUBSIDIARY TO CONSTRUCTION.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXCAVATION REQUIRED TO CONNECT TO AN EXISTING UTILITY. EXCAVATIONS SHALL BE IN ACCORDANCE WITH ALL SAFETY CODES.
9. ALL SEWER AND WATER CROSSINGS SHALL HAVE A MINIMUM OF 18" VERTICAL CLEARANCE AND 10' HORIZONTAL CLEARANCE.
10. DUCTILE IRON (D.I.) WATER MAIN CONSTRUCTION AND FIRE HYDRANT INSTALLATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF KEARNEY STANDARD SPECIFICATIONS AND DETAILS.
11. SANITARY SERVICE SHALL CONSTRUCTED IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE, MOST RECENT EDITION. PIPE SHALL BE SCHEDULE 40 PVC WITH A MINIMUM SLOPE OF 2.0% (1/4" PER FOOT).
12. STORM DRAIN SHALL BE ADS HDPE N-12WT AND SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
13. SEE SHEET C1.10 FOR IRRIGATION WELLS DETAILS AND SPECIFICATIONS.

STORM POINT TABLE					
POINT #	NORTHING	EASTING	DESCRIPTION	RIM	INVERT
1	31,2463.27	188,3637.71	FLARED END	N/A	2158.80
2	31,2407.13	188,3632.39	FLARED END	N/A	2158.00
3	31,2383.78	188,3678.94	AREA INLET	2160.75	2158.25
4	31,2328.99	188,3787.98	AREA INLET	2162.90	2159.60
5	31,2411.21	188,3797.29	AREA INLET	2161.46	2158.96
6	31,2395.95	188,3581.76	FLARED END	N/A	2157.70
7	31,2310.12	188,3561.96	CURB INLET	2160.06	2158.06
8	31,2187.31	188,3482.05	CURB INLET	2160.50	2158.32
9	31,2143.76	188,3482.68	CURB INLET	2160.50	2158.13
10	31,2040.55	188,3548.47	CURB INLET	2160.00	2157.50
11	31,2128.85	188,3704.17	AREA INLET	2162.17	2158.60
12	31,1997.53	188,3689.94	6"x4" WYE	N/A	2157.65
13	31,1958.40	188,3574.38	CURB INLET	2159.55	2157.05

STORM POINT TABLE					
POINT #	NORTHING	EASTING	DESCRIPTION	RIM	INVERT
14	31,1940.14	188,3570.75	FLARED END	N/A	2156.90
15	31,1675.85	188,3640.33	FLARED END	N/A	2153.90
16	31,1684.08	188,3680.43	FLARED END	N/A	2154.50
17	31,1692.88	188,3759.35	JUNCTION BOX	2162.60	2154.90
18	31,1774.20	188,3884.03	JUNCTION BOX	2160.00	2155.70
19	31,1800.09	188,3858.46	AREA INLET	2160.10	2156.90
20	31,2040.80	188,3945.56	JUNCTION BOX	2160.50	2157.25
21	31,2049.85	188,3910.54	AREA INLET	2159.90	2157.39
22	31,2112.80	188,3962.17	CURB INLET	2160.20	2157.70
23	31,2151.78	188,3946.85	12"x4" WYE	N/A	2158.10
24	31,2191.46	188,3931.26	JUNCTION BOX	2161.87	2158.55
25	31,2191.46	188,3819.29	AREA INLET	2162.44	2159.65
26	31,2155.46	188,3829.29	AREA INLET	2162.30	2160.03

SANITARY POINT TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
27	31,2109.51	188,3709.44	4" CLEANOUT
28	31,1941.12	188,3584.09	4" CLEANOUT
29	31,1810.62	188,3583.72	6"x4" WYE 6" CLEANOUT

WATER POINT TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
30	31,2358.15	188,3942.29	8"x6" TEE 6"x8" REDUCER
31	31,2358.15	188,3893.23	FIRE HYDRANT
32	31,2176.11	188,3890.61	6"x4" TEE 4" 45° BEND
33	31,2169.63	188,3889.66	WELL
34	31,1973.37	188,3559.18	FIRE HYDRANT
35	31,2162.39	188,3875.99	6" 45° BEND
36	31,2224.60	188,3942.29	6" 45° BEND



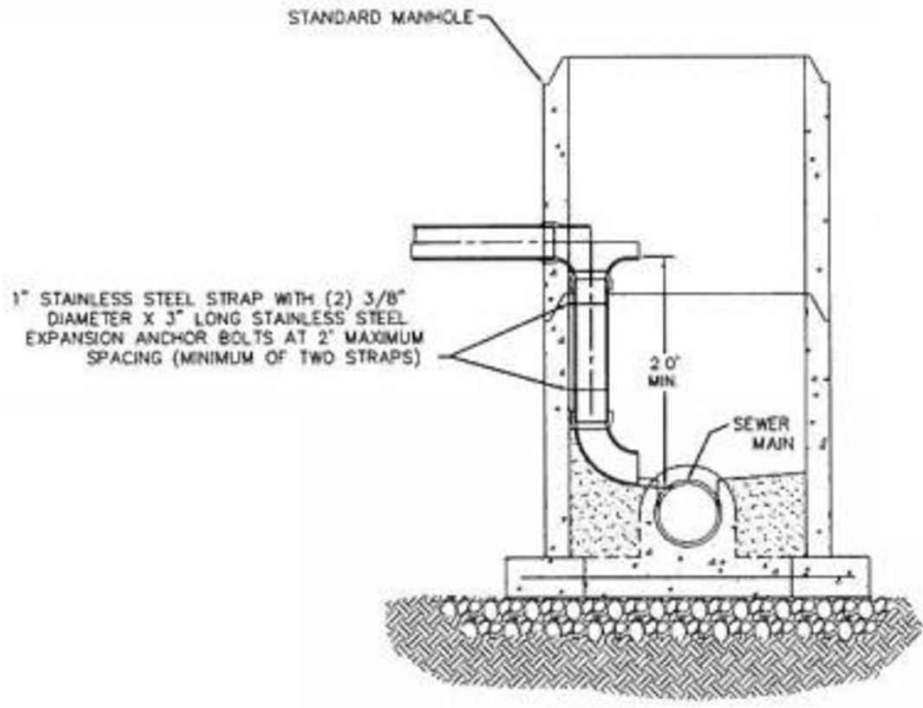
**CENTRAL COMMUNITY COLLEGE
KEARNEY CENTER**
Kearney, Nebraska

Revision/Issue	Date
Addendum #1	2.12.2016

SITE UTILITY PLAN

Project Number: 1501
Date: January 28, 2016
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WILKINS Architecture | Design | Planning LLC
Sheet Number:

C1.6



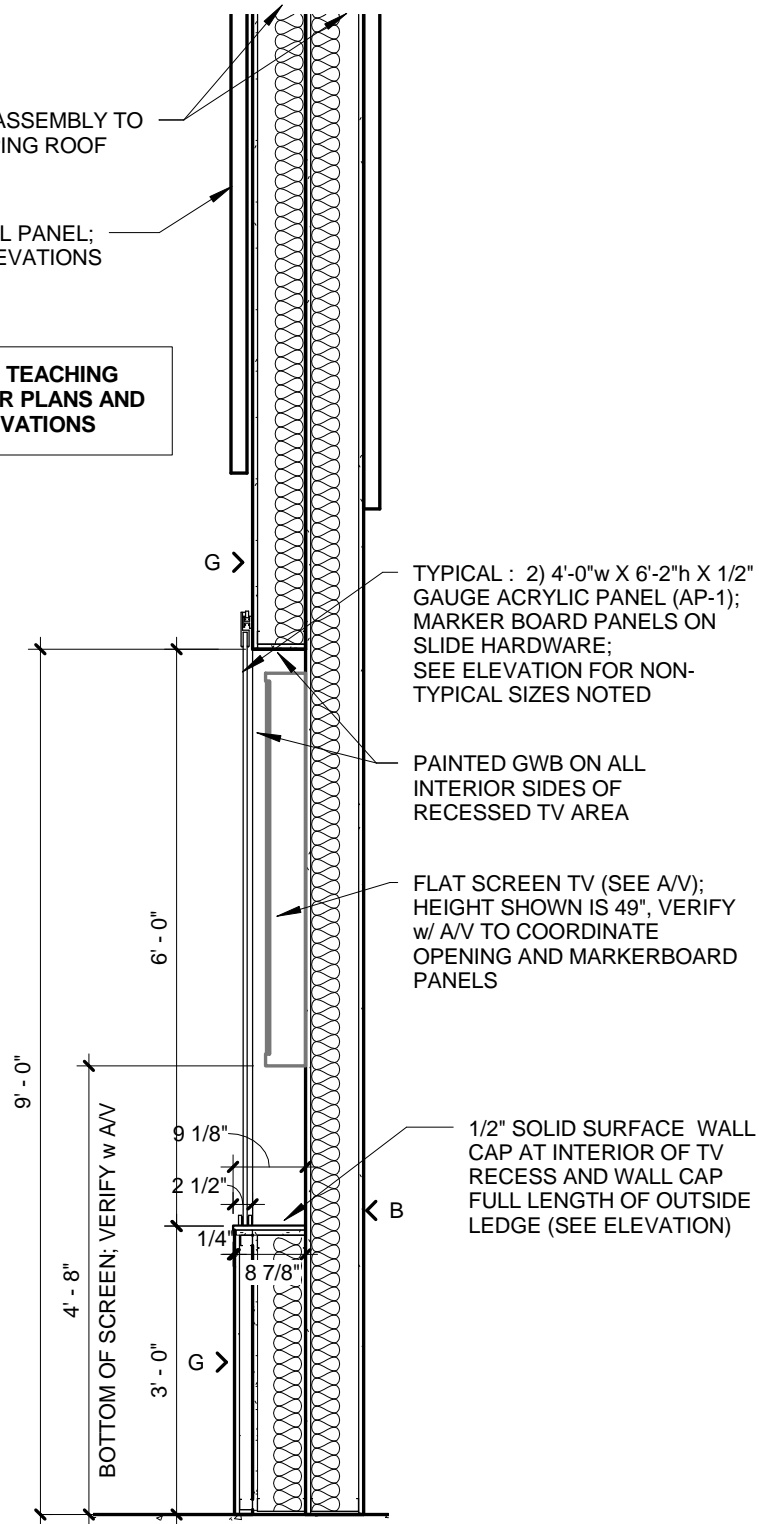
Typical Inside Drop
Manhole

No Scale

CONTINUE WALL ASSEMBLY TO
BOTTOM OF SLOPING ROOF
DECK ABOVE

ACOUSTICAL WALL PANEL;
SEE INTERIOR ELEVATIONS

TYPICAL AT ALL TEACHING
WALLS; SEE FLOOR PLANS AND
INTERIOR ELEVATIONS



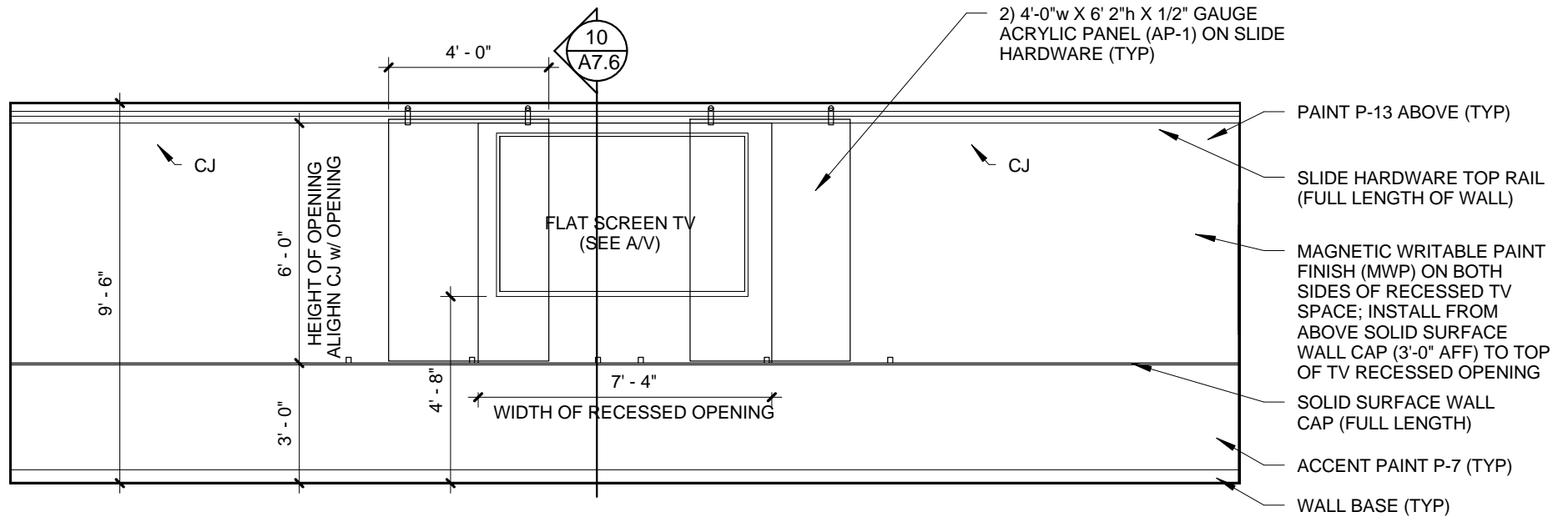
TYPICAL : 2) 4'-0" w X 6'-2" h X 1/2"
GAUGE ACRYLIC PANEL (AP-1);
MARKER BOARD PANELS ON
SLIDE HARDWARE;
SEE ELEVATION FOR NON-
TYPICAL SIZES NOTED

PAINTED GWB ON ALL
INTERIOR SIDES OF
RECESSED TV AREA

FLAT SCREEN TV (SEE A/V);
HEIGHT SHOWN IS 49", VERIFY
w/ A/V TO COORDINATE
OPENING AND MARKERBOARD
PANELS

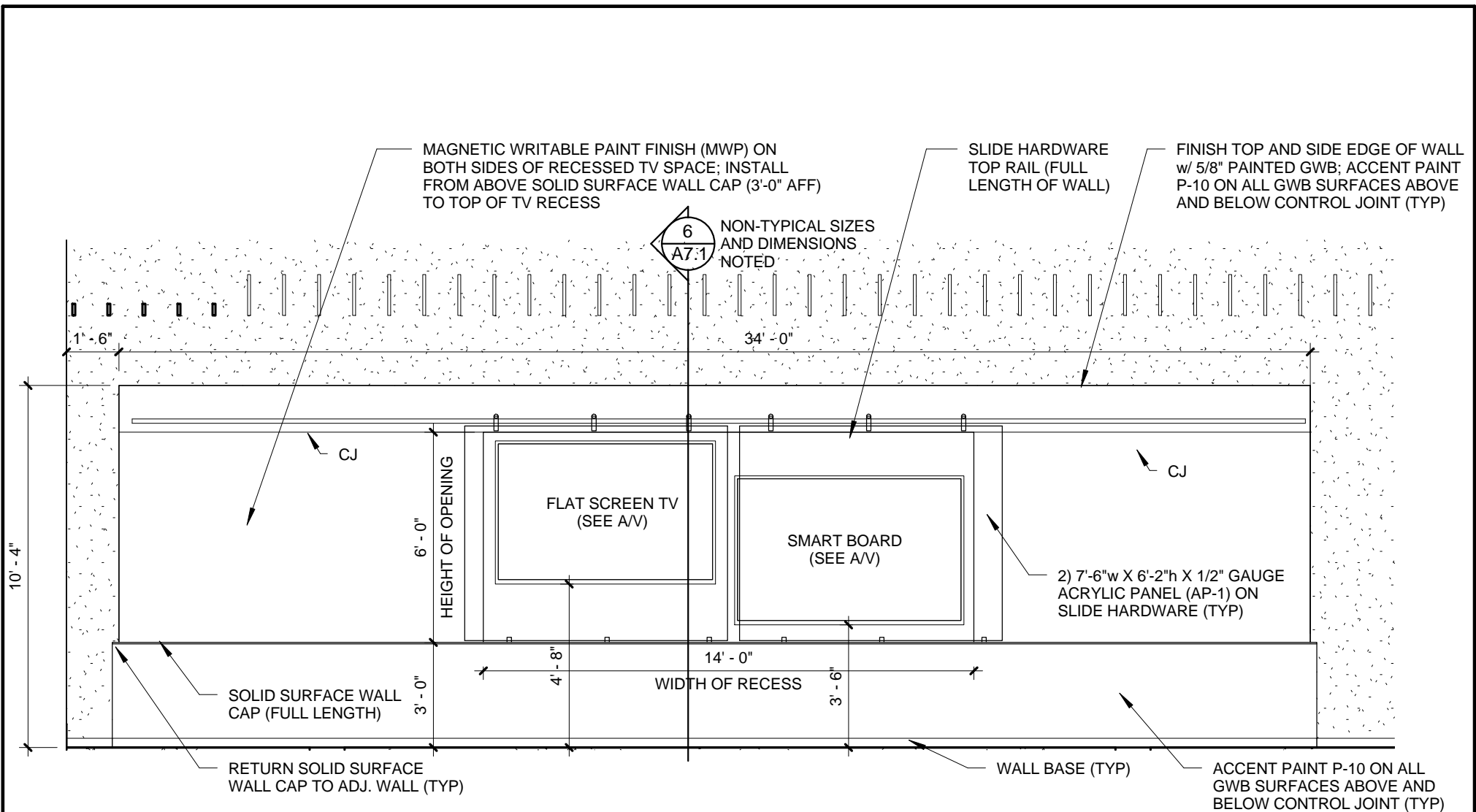
1/2" SOLID SURFACE WALL
CAP AT INTERIOR OF TV
RECESS AND WALL CAP
FULL LENGTH OF OUTSIDE
LEDGE (SEE ELEVATION)

1 **WALL DETAIL**
ASK-01 SCALE: 1/2" = 1'-0"



1 INTERIOR ELEVATION - SKILLS TRAINING CLASSROOM 110

ASK-02 SCALE: 1/4" = 1'-0"



1 INTERIOR ELEVATION - MECHATRONICS LAB 107

ASK-03 SCALE: 1/4" = 1'-0"



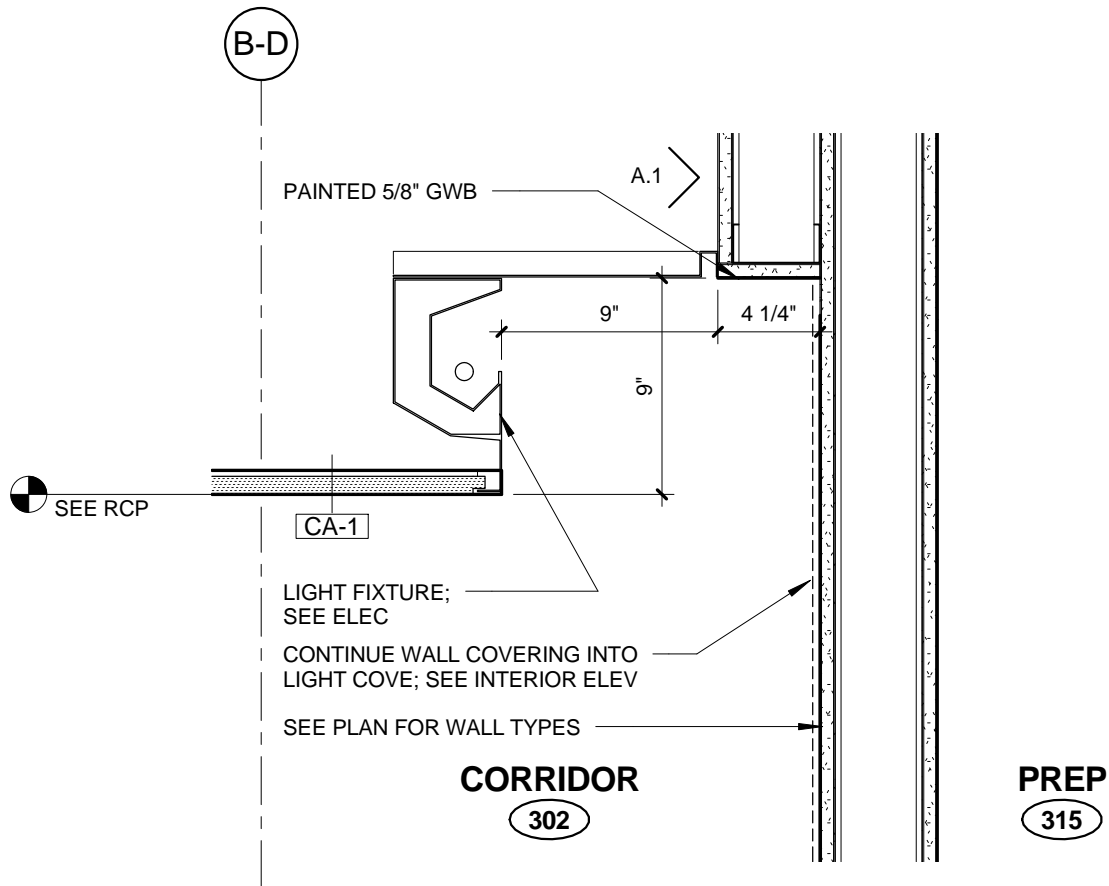
WILKINS
ARCHITECTURE | DESIGN | PLANNING
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CENTRAL COMMUNITY COLLEGE
KEARNEY CENTER
Kearney, Nebraska
Project Number: 1501

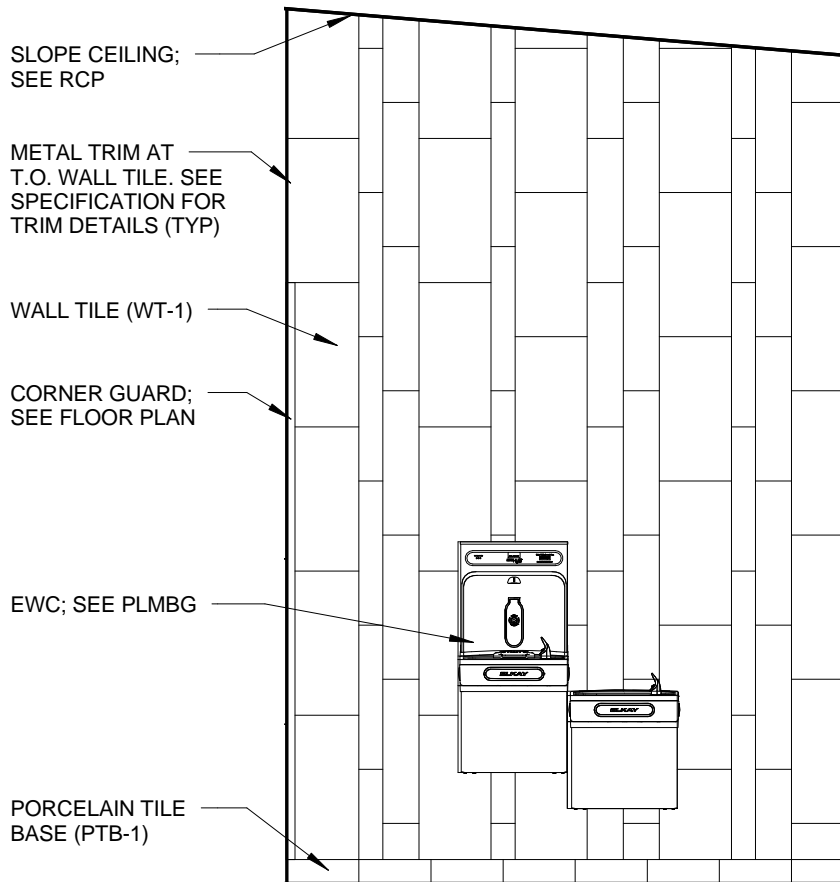
Addendum No. 1
Mechatronics Lab Elevation
Sheet Ref: 11/A9.4
Sketch Date: 02/12/2016

Sketch Number:

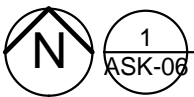
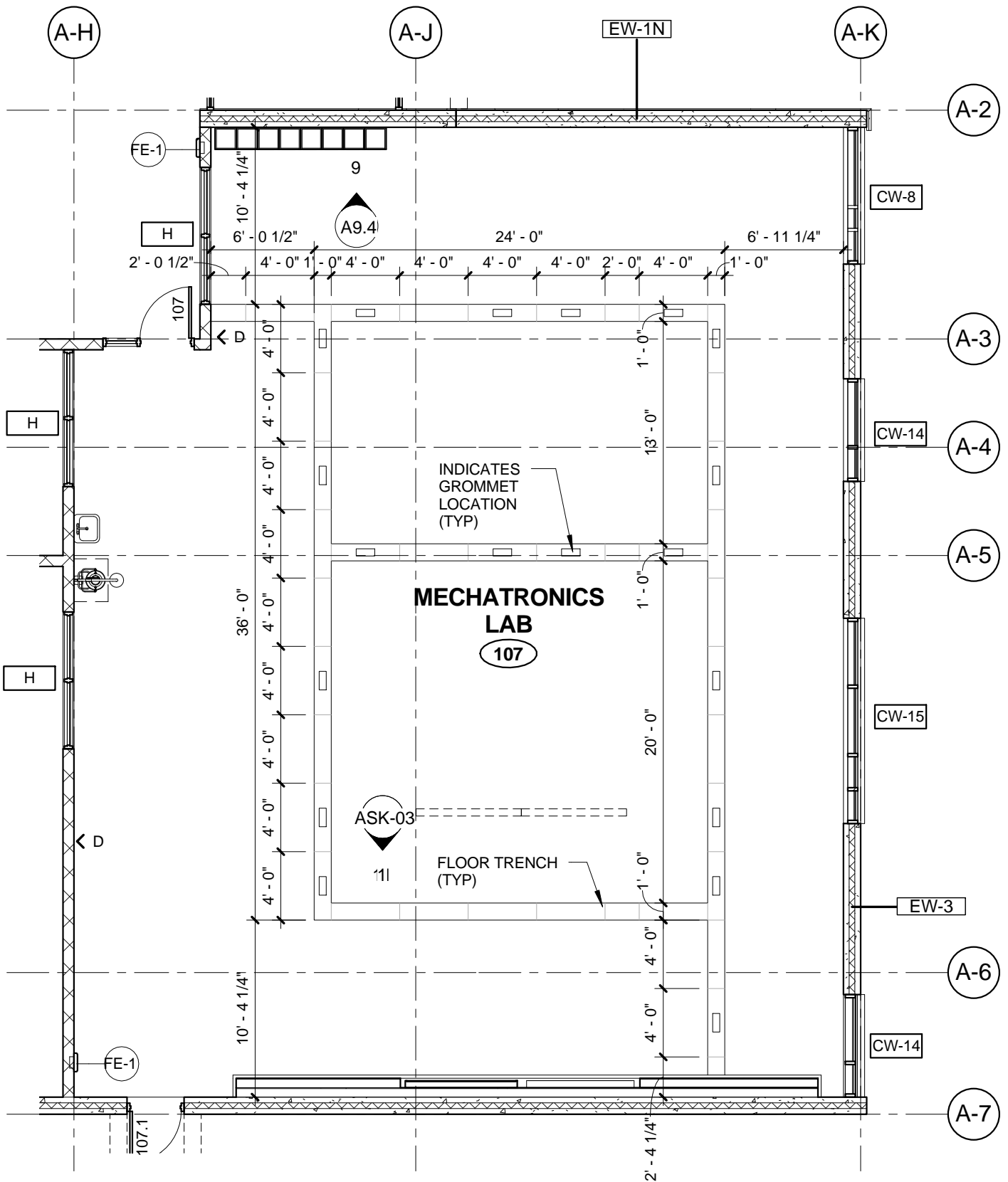
ASK-03



1 **CEILING DETAIL - CORRIDOR 302 LIGHT COVE**
ASK-04 SCALE: 1 1/2" = 1'-0"



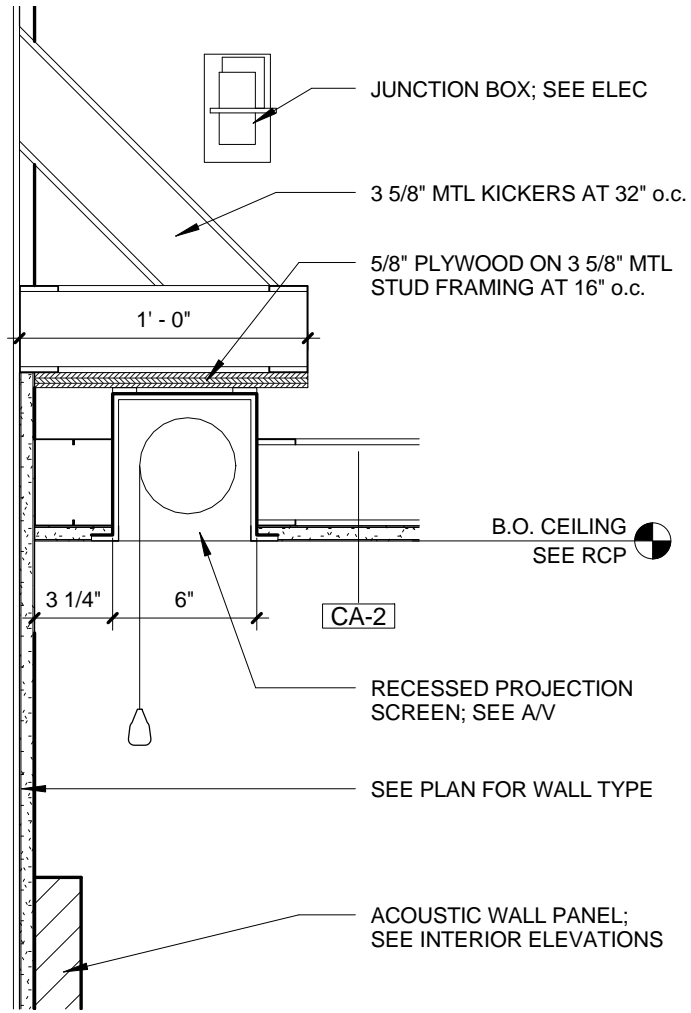
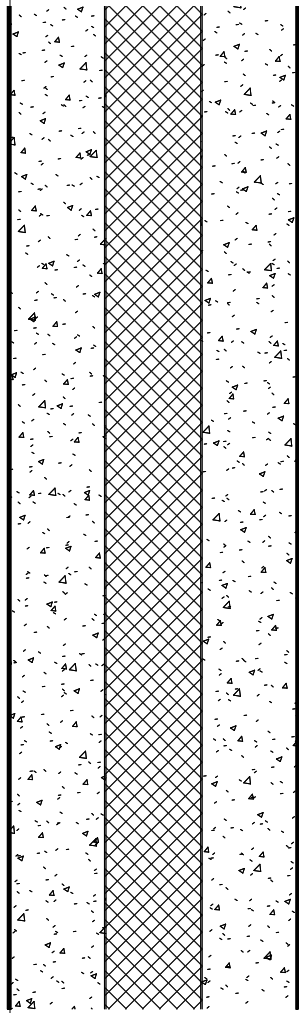
1 **INTERIOR ELEVATION - LOUNGE 304**
 ASK-05 SCALE: 3/8" = 1'-0"



MECHATRONICS LAB 107 TRENCHES

SCALE: 1/8" = 1'-0"

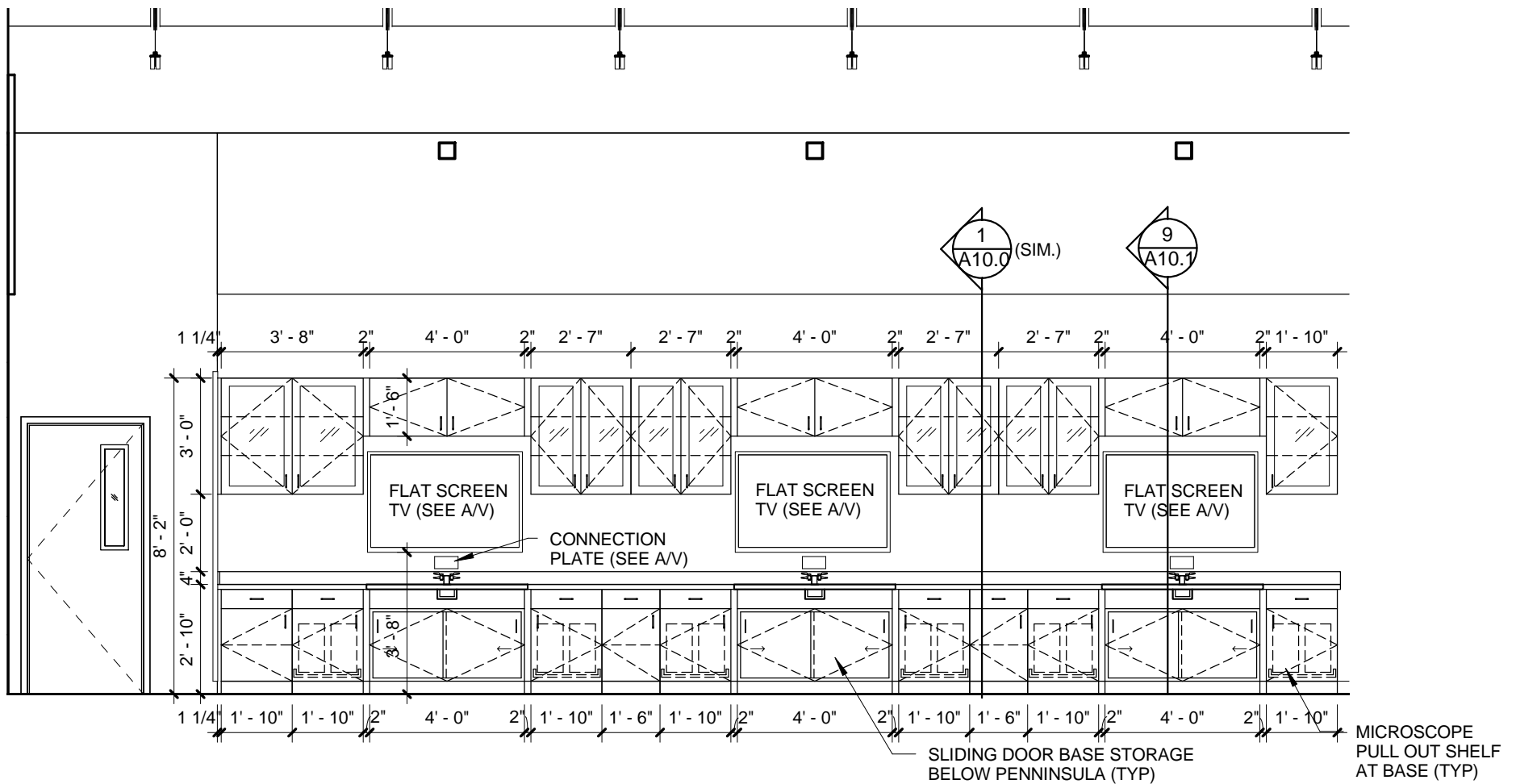
A-J



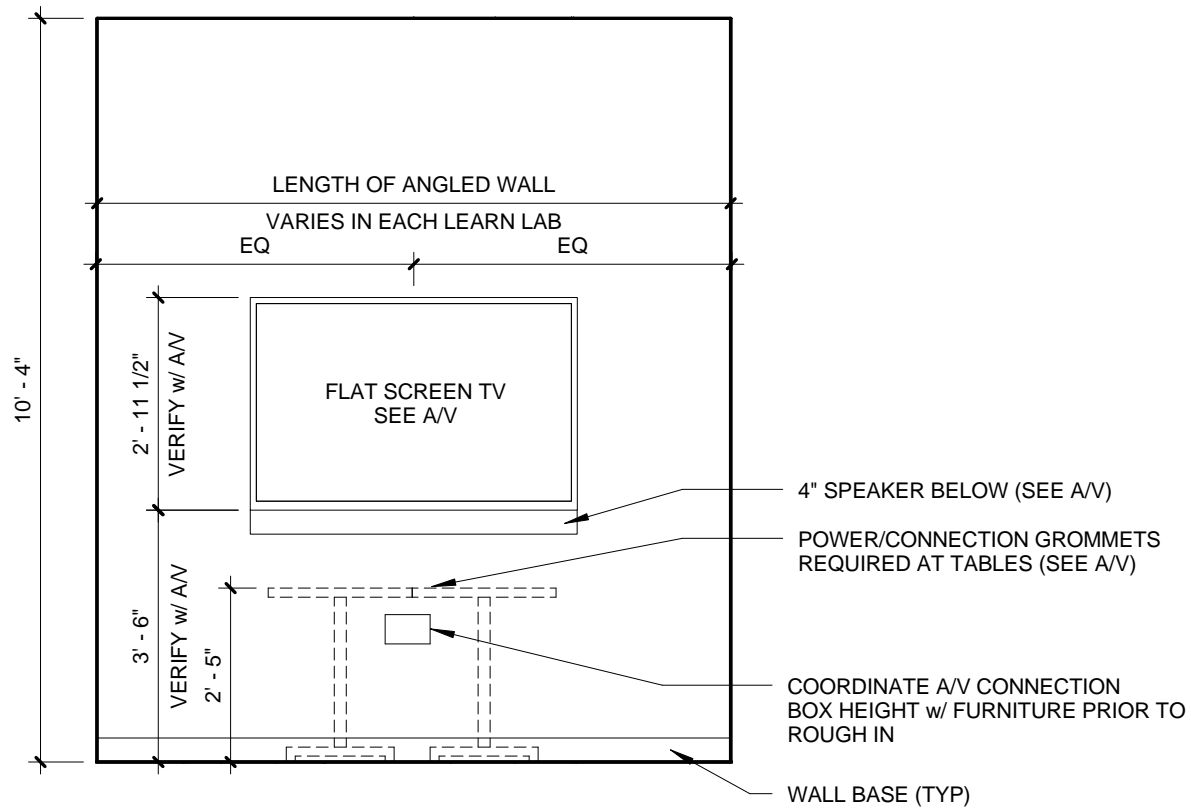
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ASK-07

CEILING DETAIL - LECTURE HALL PROJECTION SCREEN

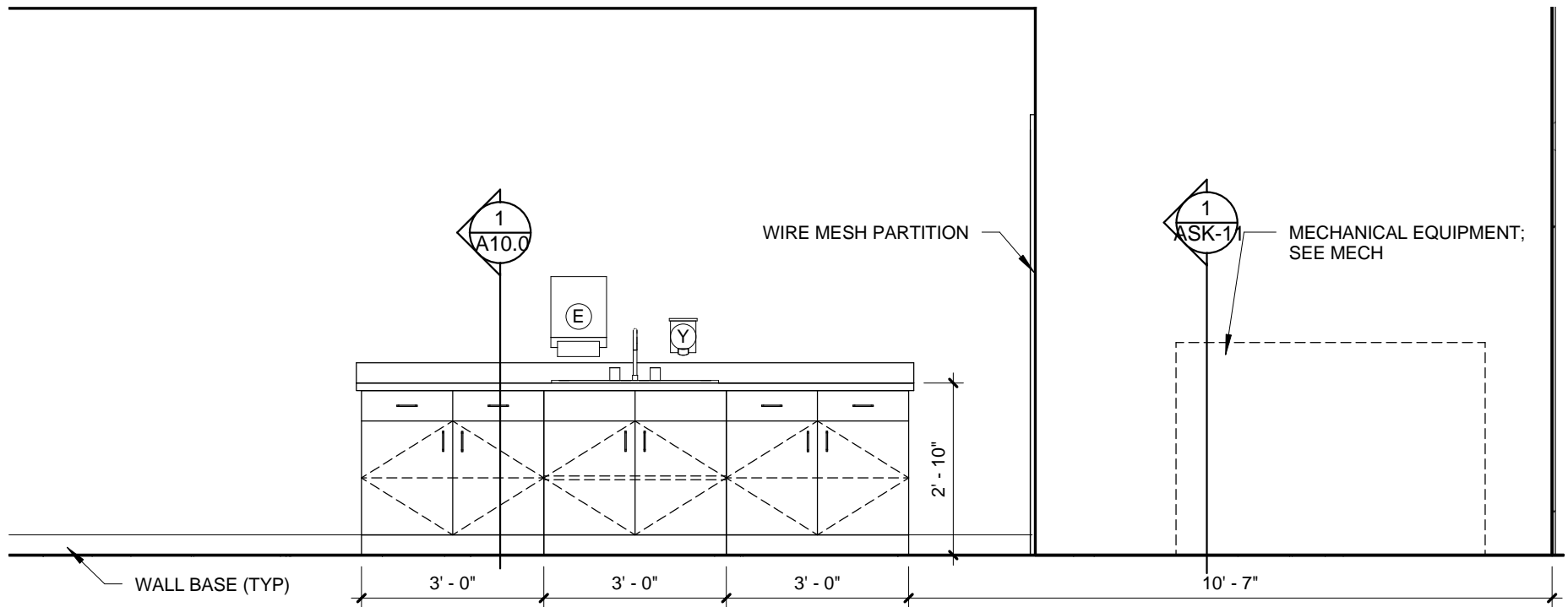
SCALE: 1 1/2" = 1'-0"



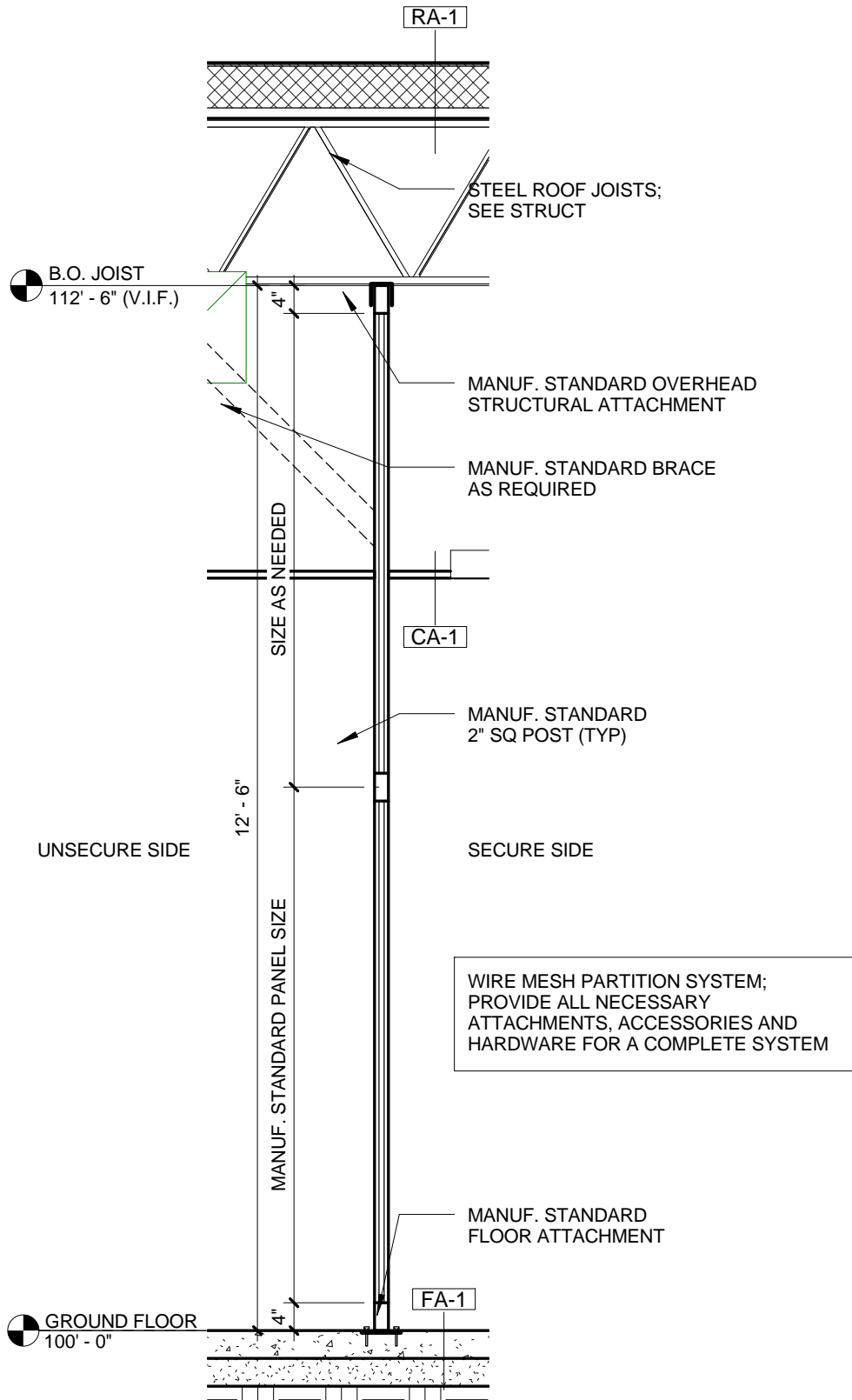
1 **INTERIOR ELEVATION - BIOLOGY / A/P LAB 314**
 ASK-08 SCALE: 1/4" = 1'-0"



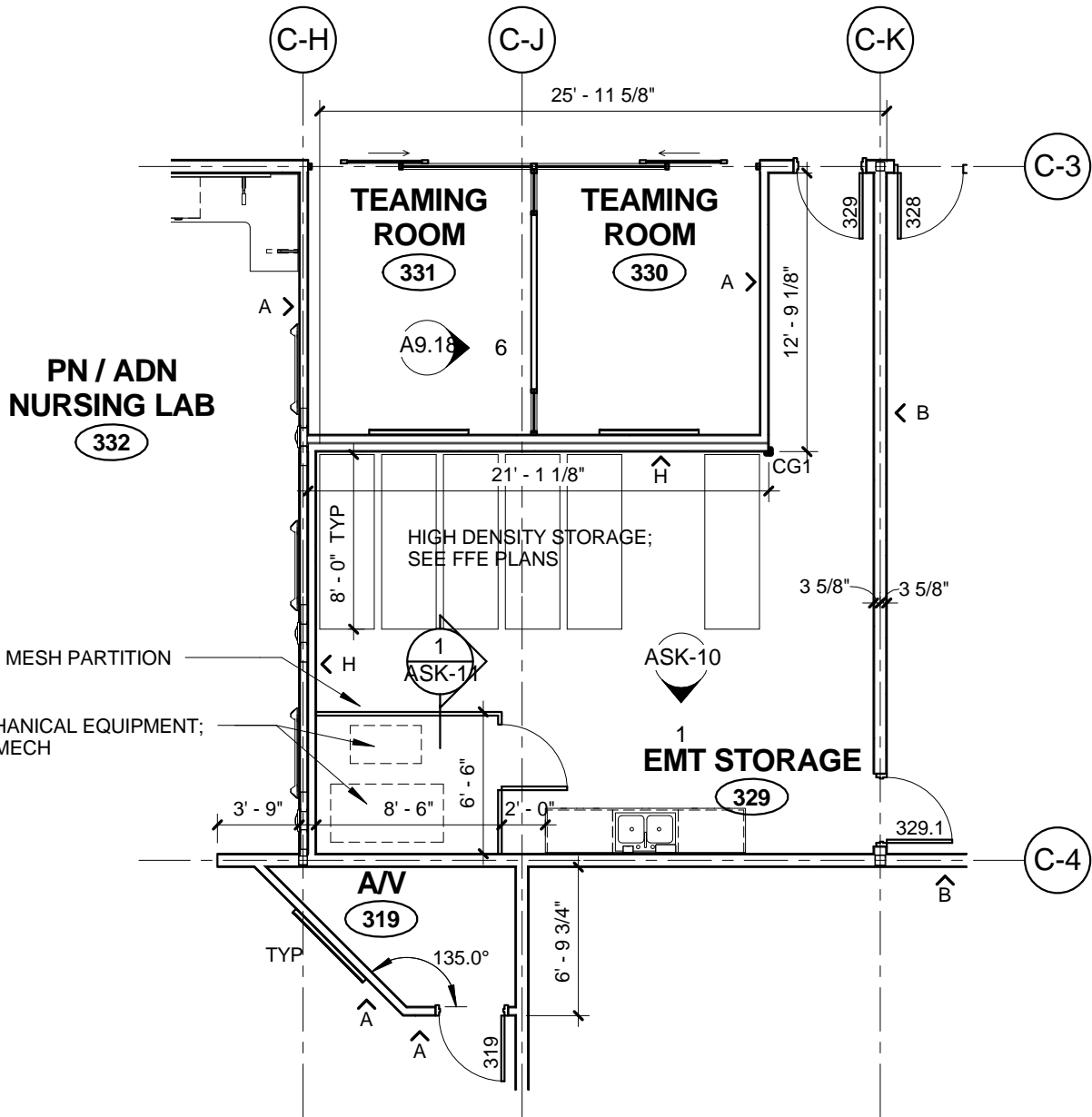
1 **INTERIOR ELEVATION - LEARN LAB TYP. WALL**
ASK-09 SCALE: 3/8" = 1'-0"



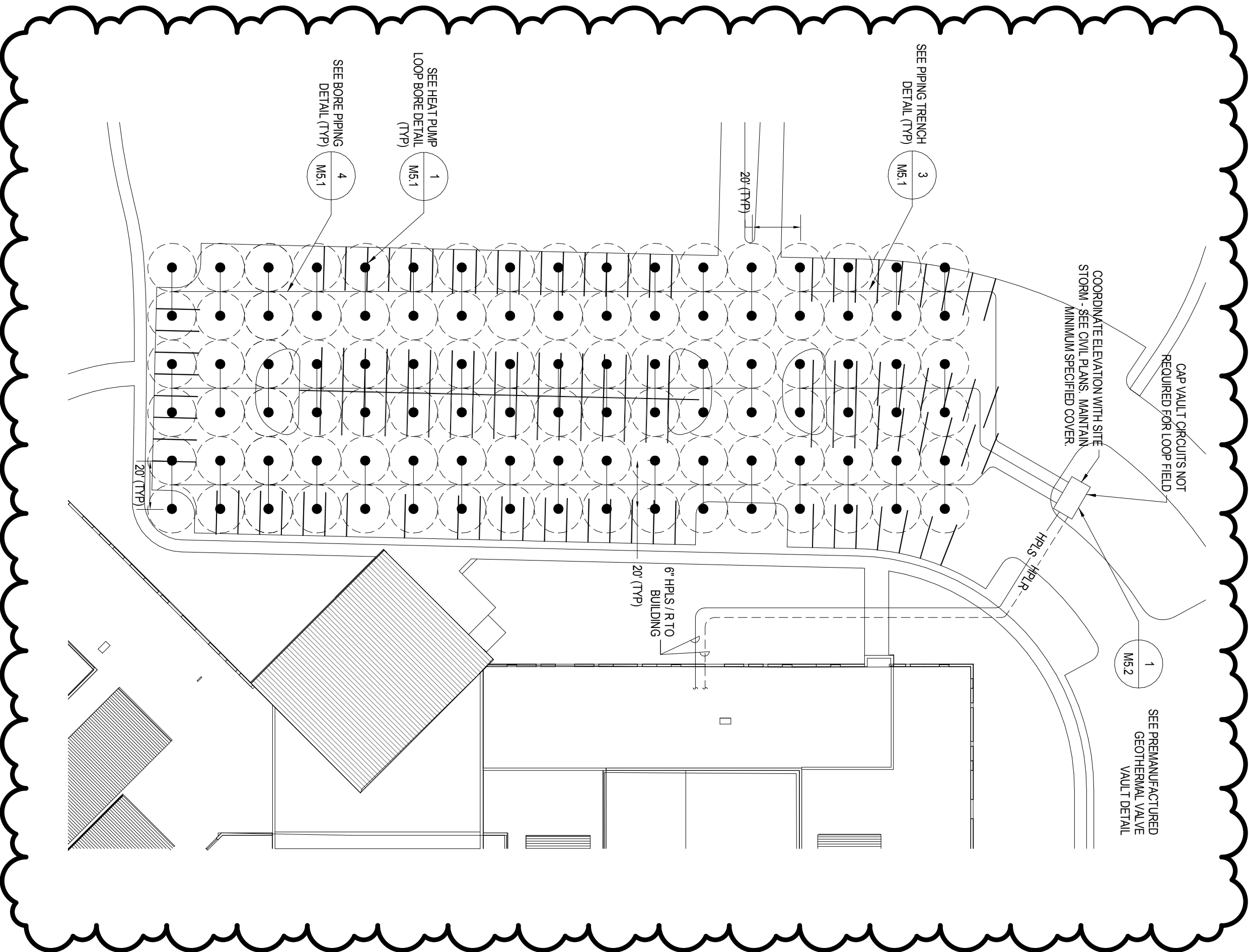
1
ASK-10 **INTERIOR ELEVATION - EMT STORAGE 329**
SCALE: 3/8" = 1'-0"



1 WIRE MESH PARTITION
 ASK-11 SCALE: 1/2" = 1'-0"



1 **EMT STORAGE 329**
 ASK-12 SCALE: 1/8" = 1'-0"



CAP VAULT CIRCUITS NOT
REQUIRED FOR LOOP FIELD

COORDINATE ELEVATION WITH SITE
STORM - SEE CIVIL PLANS, MAINTAIN
MINIMUM SPECIFIED COVER

1
M5.2
SEE PREMANUFACTURED
GEOTHERMAL VALVE
VAULT DETAIL

3
M5.1
SEE PIPING TRENCH
DETAIL (TYP)

1
M5.1
SEE HEAT PUMP
LOOP BORE DETAIL
(TYP)

4
M5.1
SEE BORE PIPING
DETAIL (TYP)

6" HPLS / R TO
BUILDING
20' (TYP)

20' (TYP)

20' (TYP)

VARIABLE FREQUENCY DRIVE SCHEDULE

GENERAL	MARK	VFD-HPLP-1A	VFD-HPLP-1B	VFD-HHWP-1A	VFD-HHWP-1B	VFD-IP-1	-
	SERVES	HPLP-1A	HPLP-1B	HHWP-1A	HHWP-1B	IP-1 (3)	-
	LOCATION	MECH 121	MECH 121	MECH 121	MECH 121	MECH 121	-
ELECTRICAL	MAX. DRIVE OUTPUT CURRENT (AMPS)	-	-	-	-	-	-
	VOLTAGE	460	460	460	460	460	-
	PHASE	3	3	3	3	3	-
	CONNECTED MOTOR HP	25	25	2	2	20	-
	MOTOR TYPE	ODP	ODP	ODP	ODP	ODP	-
	REMARKS	(1) (2)	(1) (2)	(1) (2)	(1) (2)	(1) (2) (3)	-
REMARKS	<ol style="list-style-type: none"> FURNISHED BY TEMPERATURE CONTROL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR. VARIABLE FREQUENCY DRIVES SHALL BE SUITABLE FOR HVAC APPLICATIONS. DRIVE SHALL HAVE STANDARD FEATURES PLUS FOLLOWING FEATURES: DISCONNECT, EMI, RFI FILTERS, INPUT AC LINE REACTORS AND AUTOMATIC RESET UPON LOSS OF POWER. SEE MECHANICAL SPECIFICATIONS. COORDINATE ALL REQUIREMENTS WITH THE IRRIGATION CONSULTANT. HORSEPOWER IS FOR BIDDING PURPOSES ONLY, ACTUAL HORSEPOWER REQUIREMENTS WILL BE DETERMINED AFTER THE IRRIGATION WELL HAS BEEN DUG. 						



WATER SOFTENER SCHEDULE		
PLAN TAG	WS-1	
MANUFACTURER	CULLIGAN	
MODEL NUMBER	(1)	
SERVES	SEE PLANS	
CONFIGURATION	(2)	
RESIN QUANTITY EACH UNIT (CUBIC FEET)	2.0	
SIZE (DIAMETER x HEIGHT) (IN.) - SOFTENER AND BRINE TANK	16x65 & 24x50	
CONTINUOUS FLOW RATE EACH UNIT (GPM)	45	
PEAK FLOW RATE EACH UNIT (GPM)	60	
CONTINUOUS FLOW PRESSURE DROP (PSI)	15.0 PSI	
PEAK FLOW PRESSURE DROP (PSI)	25.0 PSI	
POWER	24 VOLT	
REMARKS	(3) (4)	
REMARKS	<p>(1) CULLIGAN HCE-120-2</p> <p>(2) SIMPLEX / WATER METER / DELAY CONFIGURATION</p> <p>(3) PROVIDE WITH 2" INLET & OUTLET PIPE CONNECTION, FULLY INTEGRATED PROGRAMMABLE ELECTRONIC CONTROLLER, UL LISTED 120V/24V TRANSFORMER, CORROSION RESISTANT TANKS CONSTRUCTED OF FIBERGLASS REINFORCED POLYESTER. PROVIDE WITH CORROSION RESISTANT POSITIVE MOTOR-DRIVEN REGENERATION VALVE.</p> <p>(4) WATER SOFTENER SELECTION SHALL BE BASED ON INCOMING WATER PARAMETERS OF: 19.0 GPG HARDNESS. SOFTENER SHALL BE SELECTED BASED ON 8 HOUR NORMAL BUILDING OPERATION, 1,000 GALLONS OF HOT WATER USAGE PER DAY, 60 GPM PEAK WATER FLOW RATE, 45 GPM CONTINUOUS FLOW RATE (15.0 PSI PD).</p>	

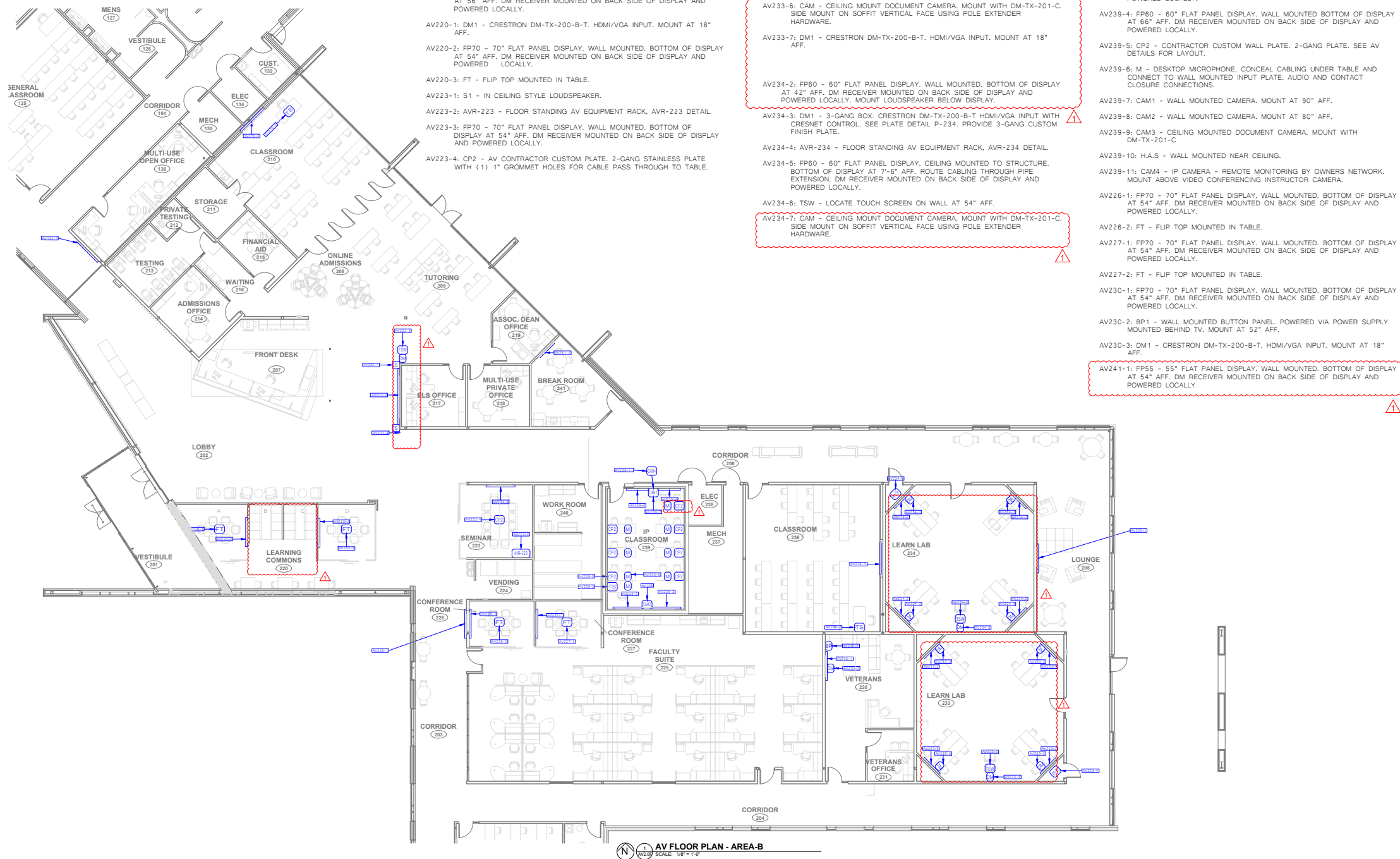
REVERSE OSMOSIS SYSTEM		
PLAN TAG	RO-1	
MANUFACTURER	CULLIGAN	
MODEL NUMBER	(1)	
SERVES	SEE PLANS	
CONFIGURATION	(2)	
SIZE (LxWxH) (IN.)	18.4x8.1x17.9	
NOMINAL FLOW RATE (RO WATER PRODUCTION) - GPM	0.35	
NOMINAL CAPACITY (GALLONS PER DAY)	100	
NOMINAL SYSTEM RECOVERY (%)	30	
MINIMUM INLET PRESSURE (PSI)	20.0 PSI	
VOLTAGE	115/1	
FLA	5.6	
REMARKS	(3) (4)	
REMARKS	<p>(1) CULLIGAN LCRO-100AC</p> <p>(2) SINGLE WALL MOUNTED REVERSE OSMOSIS SYSTEM WITH PRE-FILTER, R.O. MODULES, AND PIPE SPECIALTIES (PRESSURE GAUGES, FLOW INDICATORS, WASTE RESTRICTOR, PRESSURE CONTROL VALVE, PIPE CONNECTIONS), AND PRESSURE BOOSTER PUMP. PROVIDE WITH AMTROL 14.0 GALLON ACCUMULATOR TANK FOR RO STORAGE.</p> <p>(3) FEED WATER TO THE RO SYSTEM MUST NOT EXCEED: 1.0 mg/L SOLUBLE IRON, 3.0 PPM FREE CHLORIDE, 1 NTU TURBIDITY, 5 PPM HYDROGEN SULFIDE, 3-11 pH. THE SILT INDEX MUST BE BELOW 3.0. CONTRACTOR SHALL PROVIDE FULL WATER ANALYSIS OF WATER QUALITY ON SITE PRIOR TO ORDERING EQUIPMENT (IN CONJUNCTION WITH WATER SOFTENER SELECTION). PROVIDE ADDITIONAL FILTRATION / MEMBRANES AS REQUIRED FOR THE SITE SPECIFIC CONDITIONS OF THE WATER. VERIFY RO SYSTEM SIZING REQUIREMENTS WITH CONNECTED FIXTURES ON RO SYSTEM.</p> <p>(4) PROVIDE WITH WALL MOUNTED ARIES ARS-102 SYSTEM, DISPENSING GUN AND TUBING KIT, WALL MOUNT BRACKET, AND RO FEED CARTRIDGE KIT. CONNECT TO OUTLET OF RO SYSTEM.</p>	

KEY NOTES:

- AV102-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV202-1: S3 - COLUMN LINE ARRAY.
- AV202-2: VW - VIDEO FEATURE WALL. 3X3 DISPLAY. INTEGRATE WITH LINE ARRAY LOUDSPEAKERS
- AV202-3: TSW - MOUNT TOUCH SCREEN ON WALL 54" AFF.
- AV202-4: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
- AV205-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV210-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV210-2: TS3 - TEACHERS STATION, TYPE 3. AV EQUIPMENT RACK. AVR-210 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV210-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV220-1: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
- AV220-2: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV220-3: FT - FLIP TOP MOUNTED IN TABLE.
- AV223-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV223-2: AVR-233 - FLOOR STANDING AV EQUIPMENT RACK, AVR-233 DETAIL.
- AV223-3: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV223-4: CP2 - AV CONTRACTOR CUSTOM PLATE. 2-GANG STAINLESS PLATE WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.

- AV225-1: E-A-W-30-4 EMITTER. FLUSH MOUNT IN CEILING.
- AV225-2: E-A-W-30-4 EMITTER. FURNISHED WITH UB-W UNIVERSAL BRACKET.
- AV226-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV230-4: E-A-W-30-4 EMITTER. FURNISHED WITH UB-W UNIVERSAL BRACKET.
- AV231-1: E-A-W-30-4 EMITTER. FLUSH MOUNT IN CEILING.
- AV233-2: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY. MOUNT LOUDSPEAKER BELOW DISPLAY.
- AV233-3: DM1 - 3-GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CRESNET CONTROL. SEE PLATE DETAIL P-233. PROVIDE 3-GANG CUSTOM FINISH PLATE.
- AV233-4: AVR-233 - FLOOR STANDING AV EQUIPMENT RACK, AVR-233 DETAIL.
- AV233-5: TSW - LOCATE TOUCH SCREEN ON WALL AT 54" AFF.
- AV233-6: CAM - CEILING MOUNT DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C. SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.
- AV233-7: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
- AV234-2: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY. MOUNT LOUDSPEAKER BELOW DISPLAY.
- AV234-3: DM1 - 3-GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CRESNET CONTROL. SEE PLATE DETAIL P-234. PROVIDE 3-GANG CUSTOM FINISH PLATE.
- AV234-4: AVR-234 - FLOOR STANDING AV EQUIPMENT RACK, AVR-234 DETAIL.
- AV234-5: FP60 - 60" FLAT PANEL DISPLAY, CEILING MOUNTED TO STRUCTURE. BOTTOM OF DISPLAY AT 7" AFF. ROUTE CABLES THROUGH PIPE EXTENSION. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV234-6: TSW - LOCATE TOUCH SCREEN ON WALL AT 54" AFF.
- AV234-7: CAM - CEILING MOUNT DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C. SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.

- AV234-8: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV234-7: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
- AV236-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV236-2: TS1L - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-10 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV236-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV239-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV239-2: TS1L - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-9 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV239-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 60" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV239-4: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED BOTTOM OF DISPLAY AT 66" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV239-5: CP2 - CONTRACTOR CUSTOM WALL PLATE. 2-GANG PLATE. SEE AV DETAILS FOR LAYOUT.
- AV239-6: M - DESKTOP MICROPHONE. CONCEAL CABLING UNDER TABLE AND CONNECT TO WALL MOUNTED INPUT PLATE. AUDIO AND CONTACT CLOSURE CONNECTIONS.
- AV239-7: CAM1 - WALL MOUNTED CAMERA. MOUNT AT 90° AFF.
- AV239-8: CAM2 - WALL MOUNTED CAMERA. MOUNT AT 80° AFF.
- AV239-9: CAM3 - CEILING MOUNTED DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C.
- AV239-10: H.A.S - WALL MOUNTED NEAR CEILING.
- AV239-11: CAM4 - IP CAMERA - REMOTE MONITORING BY OWNERS NETWORK. MOUNT ABOVE VIDEO CONFERENCING INSTRUCTOR CAMERA.
- AV226-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV226-2: FT - FLIP TOP MOUNTED IN TABLE.
- AV227-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV227-2: FT - FLIP TOP MOUNTED IN TABLE.
- AV230-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV230-2: BP1 - WALL MOUNTED BUTTON PANEL. POWERED VIA POWER SUPPLY MOUNTED BEHIND TV. MOUNT AT 52" AFF.
- AV230-3: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
- AV241-1: FP55 - 55" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.



AV FLOOR PLAN - AREA B
SCALE: 1/8" = 1'-0"



CENTRAL COMMUNITY COLLEGE
KEARNEY CENTER
Kearney, Nebraska

Addendum No. 1
AV Floor Plan - Area B
Sheet Ref: AV2.0F

Project Number: **1501**
Sketch Date: **02/12/2016**
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WILKINS Architecture | Design | Planning L.L.C.

Sketch Number:
AVSK-2F

KEY NOTES:

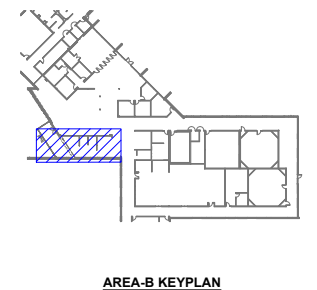
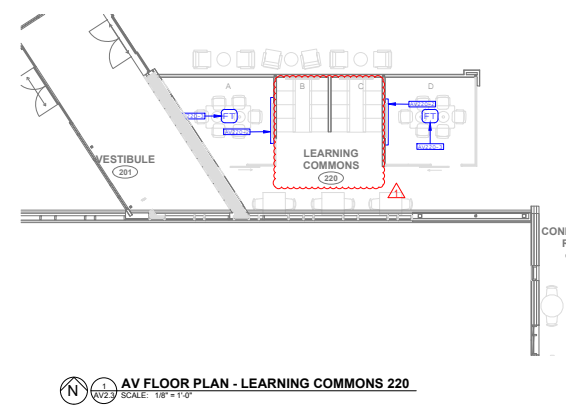
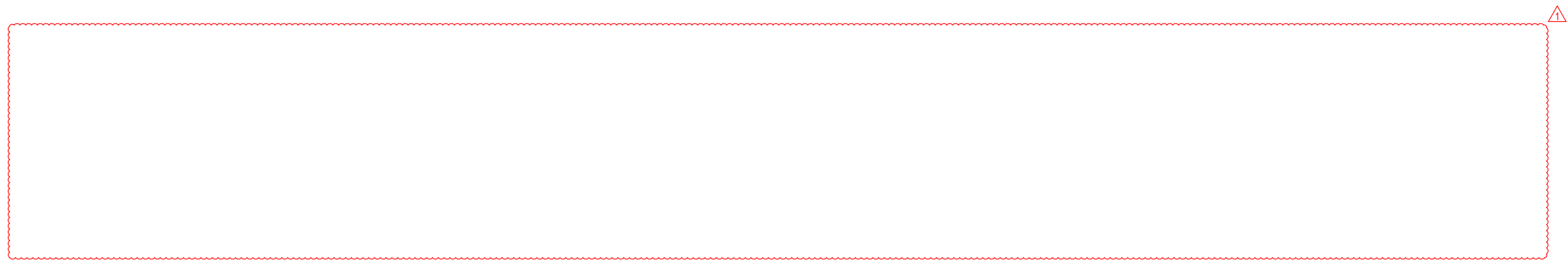
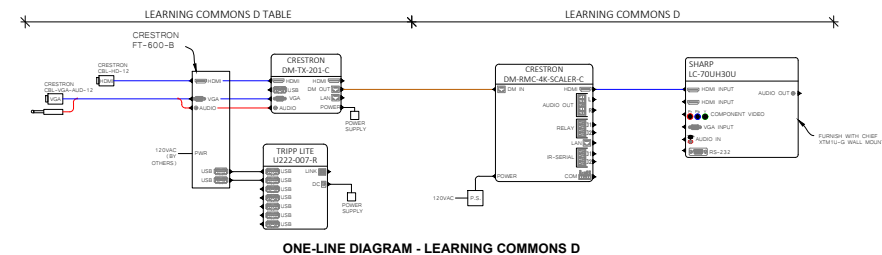
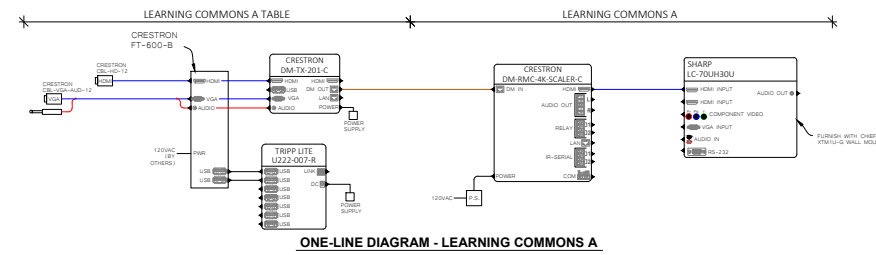
- AV202-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF, DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV202-1: S3 - COLUMN LINE ARRAY.
- AV202-2: VW - VIDEO FEATURE WALL, 3X3 DISPLAY, INTEGRATE WITH LINE ARRAY LOUDSPEAKERS
- AV202-3: TSW - MOUNT TOUCH SCREEN ON WALL 54" AFF.
- AV202-4: DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.
- AV205-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF, DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV210-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV210-2: TS3 - TEACHERS STATION, TYPE 3, AV EQUIPMENT RACK, AVR-210 DETAIL, PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV210-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV220-1: DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.
- AV220-2: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV220-3: FT - FLIP TOP MOUNTED IN TABLE.
- AV223-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV223-2: AVR-223 - FLOOR STANDING AV EQUIPMENT RACK, AVR-223 DETAIL.
- AV223-3: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV223-4: CP2 - AV CONTRACTOR CUSTOM PLATE, 2-GANG STAINLESS PLATE WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.

- AV225-1: E-A-W-30-4 EMITTER, FLUSH MOUNT IN CEILING.
- AV225-2: E-A-W-30-4 EMITTER, FURNISHED WITH UB-W UNIVERSAL BRACKET.
- AV226-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF, DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV230-4: E-A-W-30-4 EMITTER, FURNISHED WITH UB-W UNIVERSAL BRACKET.
- AV231-1: E-A-W-30-4 EMITTER, FLUSH MOUNT IN CEILING.
- AV233-2: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 42" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY, MOUNT LOUDSPEAKER BELOW DISPLAY.
- AV233-3: DM1 - 3-GANG BOX, CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT WITH CRESNET CONTROL, SEE PLATE DETAIL P-233, PROVIDE 3-GANG CUSTOM FINISH PLATE.
- AV233-4: AVR-233 - FLOOR STANDING AV EQUIPMENT RACK, AVR-233 DETAIL.
- AV233-5: TSW - LOCATE TOUCH SCREEN ON WALL AT 54" AFF.
- AV233-6: CAM - CEILING MOUNT DOCUMENT CAMERA, MOUNT WITH DM-TX-201-C, SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.
- AV233-7: DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.
- AV234-2: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 42" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY, MOUNT LOUDSPEAKER BELOW DISPLAY.
- AV234-3: DM1 - 3-GANG BOX, CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT WITH CRESNET CONTROL, SEE PLATE DETAIL P-234, PROVIDE 3-GANG CUSTOM FINISH PLATE.
- AV234-4: AVR-234 - FLOOR STANDING AV EQUIPMENT RACK, AVR-234 DETAIL.
- AV234-5: FP60 - 60" FLAT PANEL DISPLAY, CEILING MOUNTED TO STRUCTURE, BOTTOM OF DISPLAY AT 7'-6" AFF, ROUTE CABLING THROUGH PIPE EXTENSION, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV234-6: TSW - LOCATE TOUCH SCREEN ON WALL AT 54" AFF.
- AV234-7: CAM - CEILING MOUNT DOCUMENT CAMERA, MOUNT WITH DM-TX-201-C, SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.

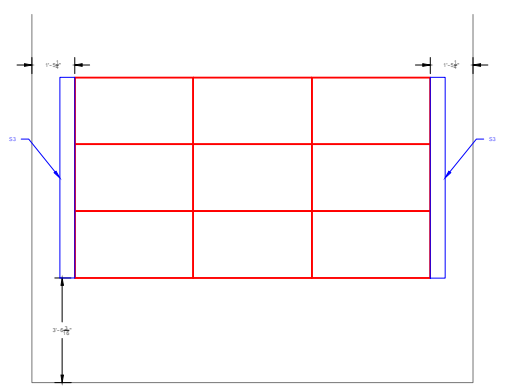
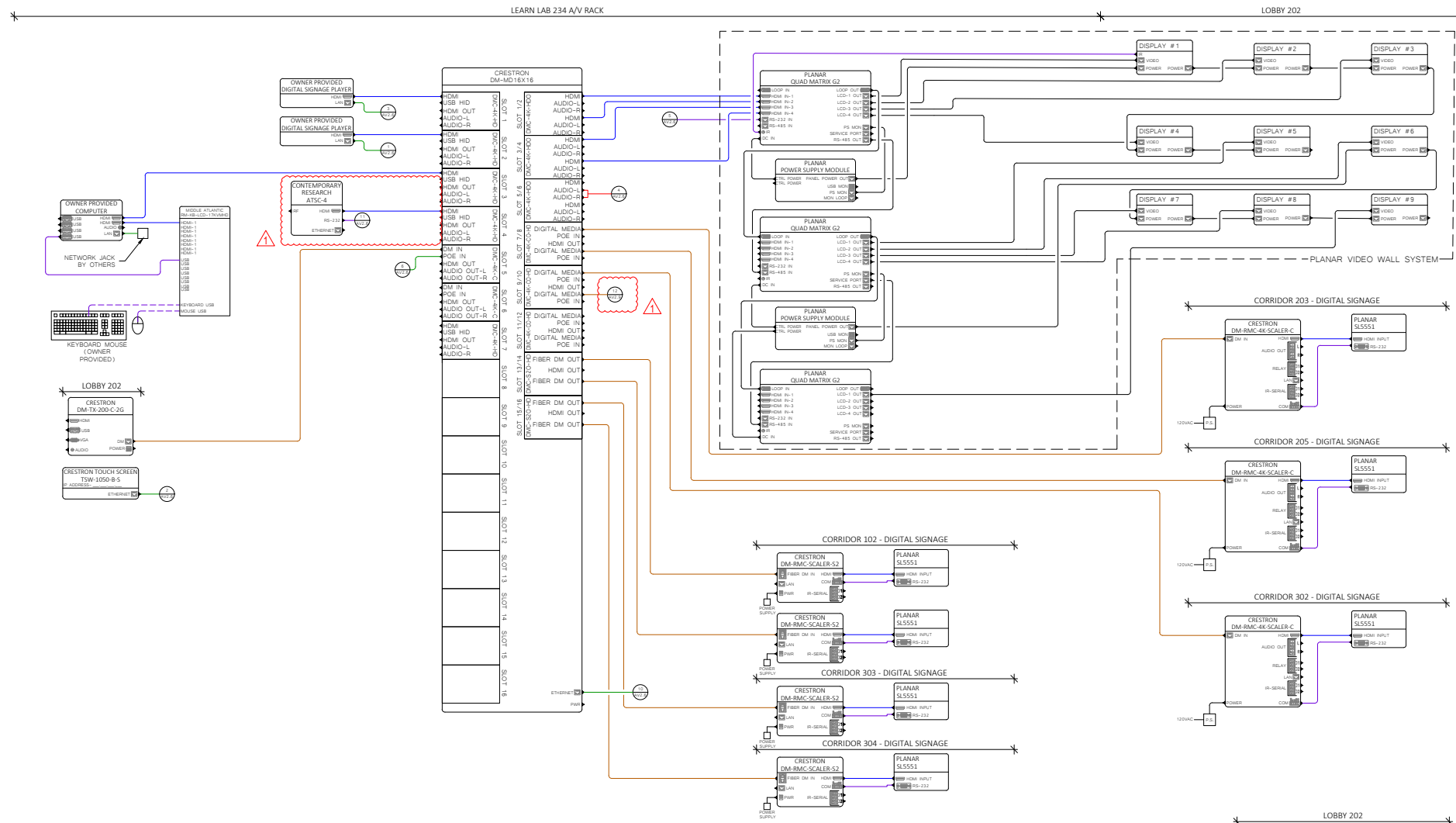
- AV234-8: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV234-7: DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.
- AV236-1: S2 - PENDENT STYLE LOUDSPEAKER, ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT, MATCH CEILING ELEVATION.
- AV236-2: TS1L - TEACHERS STATION, TYPE 1, AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE, AVR-10 DETAIL, PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV236-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV239-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV239-2: TS1L - TEACHERS STATION, TYPE 1, AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE, AVR-9 DETAIL, PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV239-3: FP80 - 80" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 60" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV239-4: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED BOTTOM OF DISPLAY AT 66" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV239-5: CP2 - CONTRACTOR CUSTOM WALL PLATE, 2-GANG PLATE, SEE AV DETAILS FOR LAYOUT.
- AV239-6: M - DESKTOP MICROPHONE, CONCEAL CABLING UNDER TABLE AND CONNECT TO WALL MOUNTED INPUT PLATE, AUDIO AND CONTACT CLOSURE CONNECTIONS.
- AV239-7: CAM1 - WALL MOUNTED CAMERA, MOUNT AT 90" AFF.
- AV239-8: CAM2 - WALL MOUNTED CAMERA, MOUNT AT 80" AFF.
- AV239-9: CAM3 - CEILING MOUNTED DOCUMENT CAMERA, MOUNT WITH DM-TX-201-C
- AV239-10: H.A.S - WALL MOUNTED NEAR CEILING.
- AV239-11: CAM4 - IP CAMERA - REMOTE MONITORING BY OWNERS NETWORK, MOUNT ABOVE VIDEO CONFERENCING INSTRUCTOR CAMERA.
- AV226-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV226-2: FT - FLIP TOP MOUNTED IN TABLE.
- AV227-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV227-2: FT - FLIP TOP MOUNTED IN TABLE.
- AV230-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV230-2: BP1 - WALL MOUNTED BUTTON PANEL, POWERED VIA POWER SUPPLY MOUNTED BEHIND TV, MOUNT AT 52" AFF.
- AV230-3: DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.
- AV241-1: FP55 - 55" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.



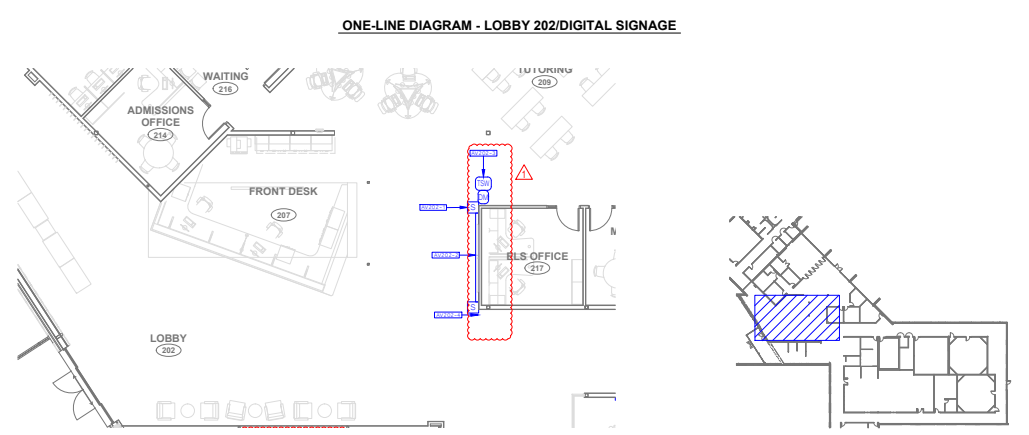
AV CEILING PLAN - AREA-B
SCALE: 1/8" = 1'-0"



KEY NOTES:
 AV220-1: DMT - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
 AV220-2: FP70 - 70" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 AV220-3: FT - FLIP TOP MOUNTED IN TABLE.

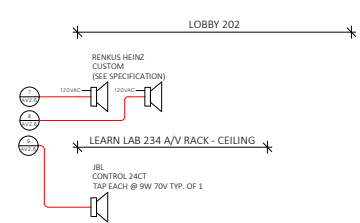


VIDEO WALL DETAIL - LOBBY 202

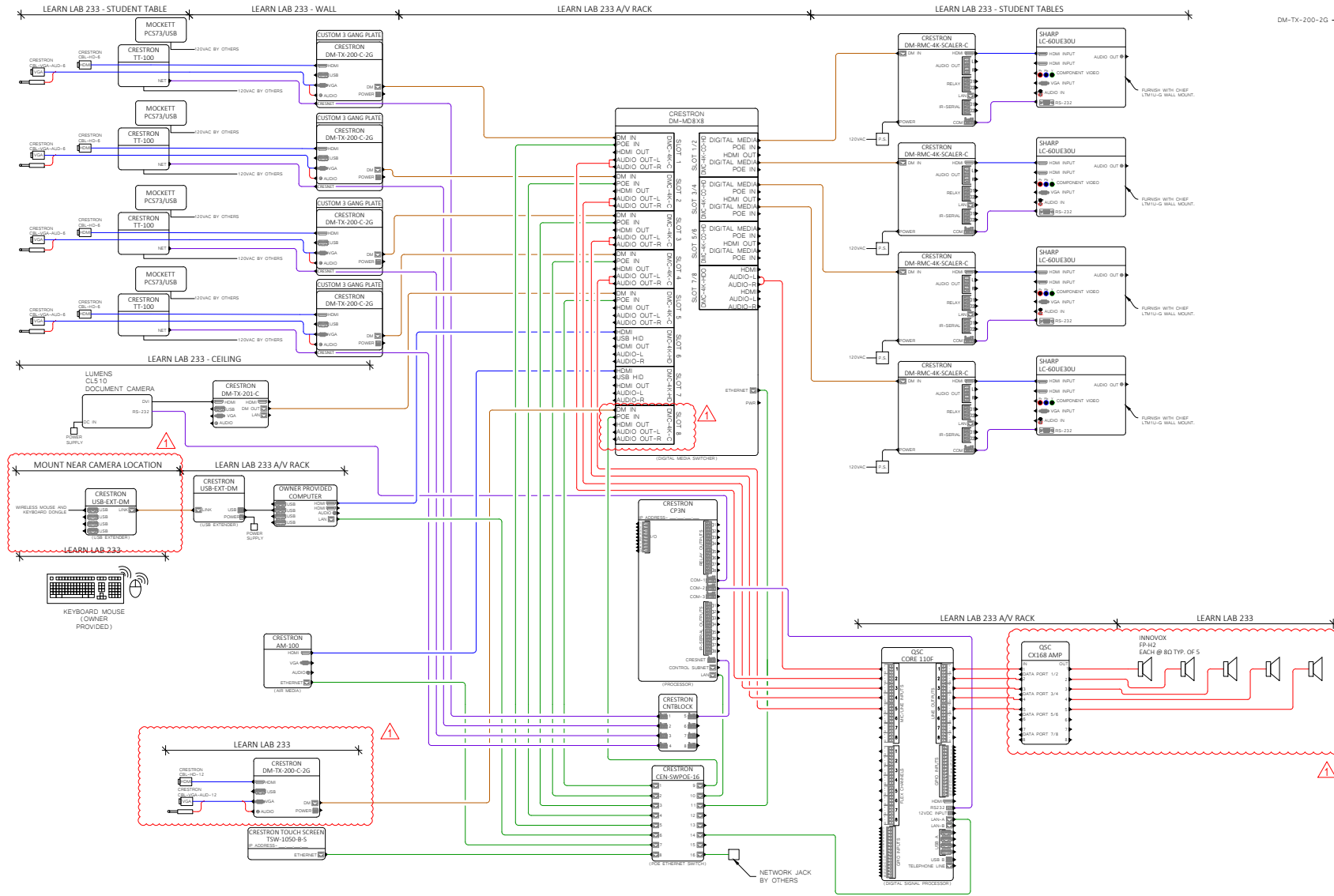


AV FLOOR PLAN - LOBBY 202

AREA-B KEYPLAN



- KEY NOTES:**
- AV202-1: SS - COLUMN LINE ARRAY.
 - AV202-2: VW - VIDEO FEATURE WALL. 3X3 DISPLAY. INTEGRATE WITH LINE ARRAY LOUDSPEAKERS.
 - AV202-3: TSW - MOUNT TOUCH SCREEN ON WALL 54" AFF.
 - AV202-4: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.



ONE-LINE DIAGRAM - LEARN LAB 233

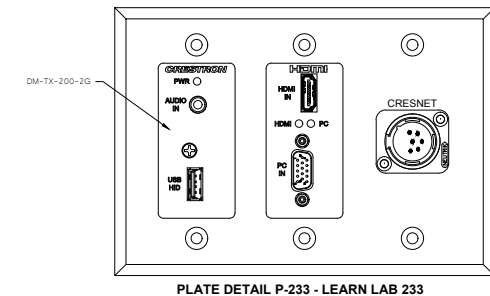
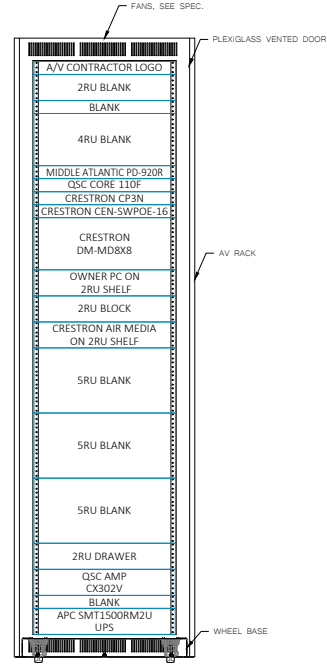
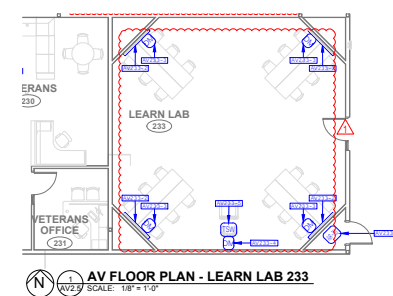


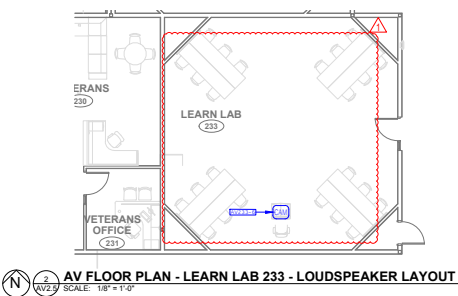
PLATE DETAIL P-233 - LEARN LAB 233



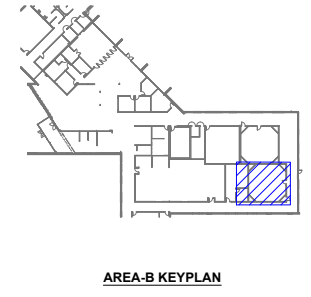
AVR-233 RACK ELEVATION - LEARN LAB 233



AV FLOOR PLAN - LEARN LAB 233

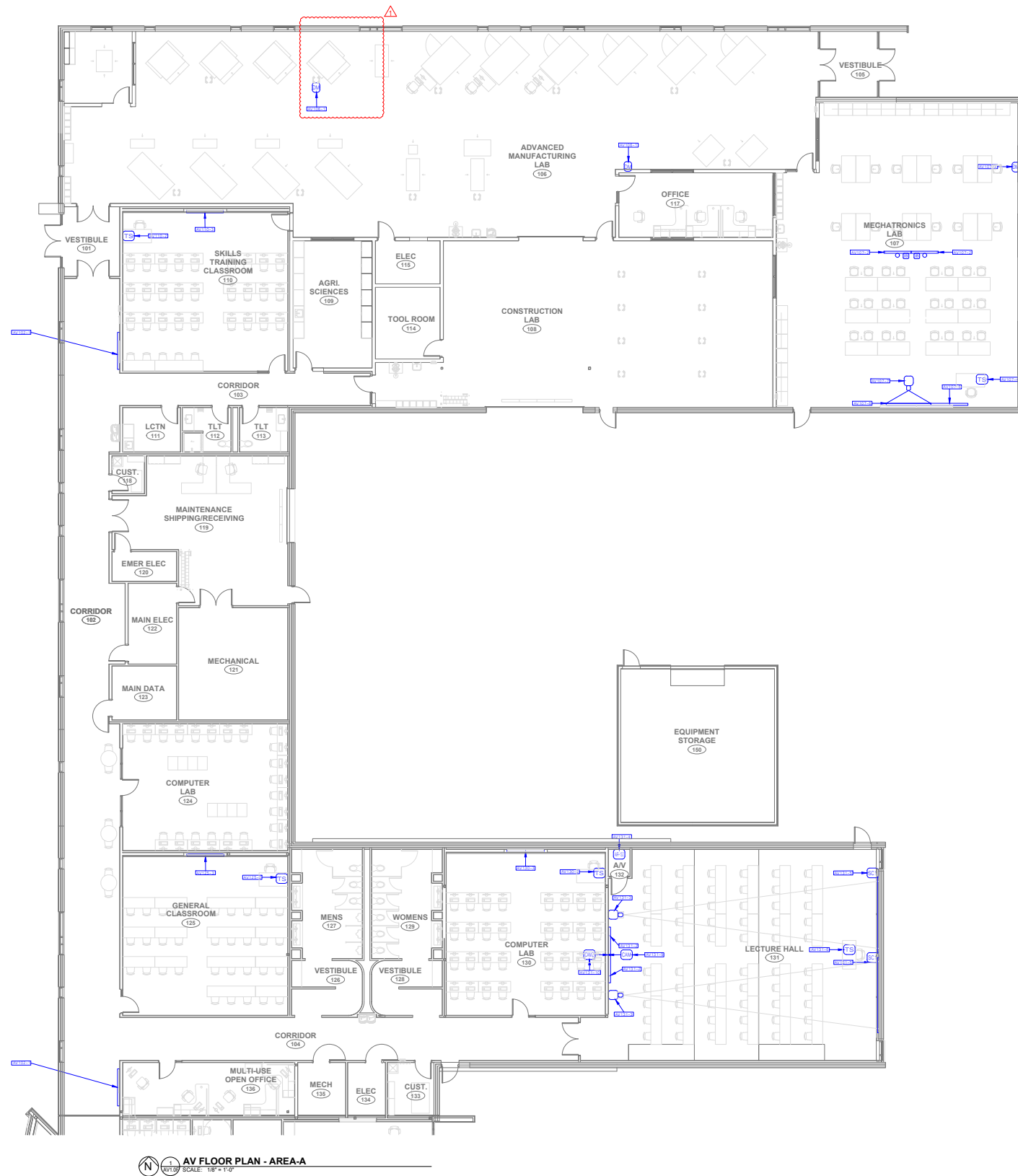


AV FLOOR PLAN - LEARN LAB 233 - LOUDSPEAKER LAYOUT



AREA-B KEYPLAN

- KEY NOTES:**
- AV233-2; FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 42" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY, MOUNT LOUDSPEAKER BELOW DISPLAY.
 - AV233-3; DM1 - 3-GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CRESNET CONTROL, SEE PLATE DETAIL P-233, PROVIDE 3-GANG CUSTOM FINISH PLATE.
 - AV233-4; AVR-233 - FLOOR STANDING AV EQUIPMENT RACK, AVR-233 DETAIL.
 - AV233-5; TSW - LOCATE TOUCH SCREEN ON WALL AT 54" AFF.
 - AV233-6; CAM - CEILING MOUNT DOCUMENT CAMERA, MOUNT WITH DM-TX-201-C, SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.
 - AV233-7; DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.



KEY NOTES:

AV102-1: DSS5 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF, DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.

AV106-1: DM1 - 3- GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CAMERA CONTROL AND POWER, SEE PLATE DETAIL P-106. PROVIDE 3-GANG CUSTOM FINISH PLATE, AV CONTRACTOR TO SUPPLY AND MOUNT ATTACHMENT HARDWARE TO COLUMN, SUBMIT MOUNTING CONCEPT WITH SHOP DRAWINGS FOR APPROVAL.

AV107-1: S2 - PENDENT STYLE LOUDSPEAKER, ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT, MATCH CEILING ELEVATION.

AV107-2: FP80 - 60" FLAT PANEL DISPLAY, CEILING MOUNTED TO STRUCTURE, BOTTOM OF DISPLAY AT 7'-0" AFF, ROUTE CABLING THROUGH PIPE EXTENSION, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.

AV107-3: DM1 - 3- GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CAMERA CONTROL AND POWER, SEE PLATE DETAIL P-107, PROVIDE 3-GANG CUSTOM FINISH PLATE.

AV107-4: TS1R - TEACHERS STATION, TYPE 1, AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE, AVR-107 DETAIL, PROVIDE 4-GANG PLATE FOR JUNCTION BOX WITH (4) 1.5" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.

AV107-5: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.

AV107-6: SB - 51"x78-1/2" SMART BOARD, BOTTOM OF DISPLAY AT 42" AFF, USB EXTENDER MOUNTED ABOVE DISPLAY.

AV107-7: PJ - CEILING MOUNTED PROJECTOR, DM RECEIVER MOUNTED ON POLE BASE NEAR PROJECTOR.

AV110-1: S1 - IN CEILING STYLE LOUDSPEAKER.

AV110-2: TS1R - TEACHERS STATION, TYPE 1, AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE, AVR-110 DETAIL, PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.

AV110-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.

AV125-1: S1 - IN CEILING STYLE LOUDSPEAKER.

AV125-2: TS1L - TEACHERS STATION, TYPE 1, AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE, AVR-125 DETAIL, PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.

AV125-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.

AV130-1: S2 - PENDENT STYLE LOUDSPEAKER, ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT, MATCH CEILING ELEVATION.

AV130-2: TS1L - TEACHERS STATION, TYPE 1, AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE, AVR-130 DETAIL, PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.

AV130-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.

AV131-1: S2 - PENDENT STYLE LOUDSPEAKER, ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT, MATCH CEILING ELEVATION.

AV131-2: FP80 - 80" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 7'-0" AFF, DM RECEIVER MOUNTED BEHIND DISPLAY AND POWERED LOCALLY.

AV131-3: CP1 - WALL MOUNTED PROJECTOR WITH LONG THROW LENS, DM RECEIVER MOUNTED AT PROJECTOR.

AV131-4: AVR-132 - FLOOR STANDING RACK AV EQUIPMENT RACK, AVR-132 DETAIL.

AV131-5: SC1 - CEILING MOUNTED ELECTRIC SCREEN, TYPE 1, 65" X 116", ADD BLACK DROP AS REQUIRED, BOTTOM OF SCREEN AT 56" AFF.

AV131-6: TS2 - TEACHERS STATION, TYPE 1, AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE, AVR-131 DETAIL, PROVIDE 4-GANG PLATE FOR JUNCTION BOX WITH (4) 1.5" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.

AV131-7: WA - WIRELESS MICROPHONE ANTENNA SURFACE MOUNT TO CEILING STRUCTURE.

AV131-8: WALL MOUNTED CAMERA MOUNTED BELOW CONFIDENCE MONITORS AT 6'-9" AFF, POWERED LOCALLY.

AV131-9: CAM - SONY EVI-H100S CAMERA MOUNTED BELOW FLAT PANELS, CENTERED.

AV131-10: CAM3 - IP CAMERA - REMOTE MONITORING BY OWNER OVER OWNERS NETWORK, MOUNT ABOVE VIDEO CONFERENCE INSTRUCTOR CAMERA.

AV FLOOR PLAN - AREA-A
SCALE: 1/8" = 1'-0"



- KEY NOTES:**
- AV102-1: DSS5 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV106-1: DM1 - 3- GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CAMERA CONTROL AND POWER. SEE PLATE DETAIL P-106. PROVIDE 3-GANG CUSTOM FINISH PLATE. AV CONTRACTOR TO SUPPLY AND MOUNT ATTACHMENT HARDWARE TO COLUMN. SUBMIT MOUNTING CONCEPT WITH SHOP DRAWINGS FOR APPROVAL.
 - AV107-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
 - AV107-2: FP80 - 60" FLAT PANEL DISPLAY, CEILING MOUNTED TO STRUCTURE, BOTTOM OF DISPLAY AT 7'-0" AFF. ROUTE CABLING THROUGH PIPE EXTENSION. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV107-3: DM1 - 3- GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CAMERA CONTROL AND POWER. SEE PLATE DETAIL P-107. PROVIDE 3-GANG CUSTOM FINISH PLATE.
 - AV107-4: TS1R - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE. AVR-107 DETAIL. PROVIDE 4-GANG PLATE FOR JUNCTION BOX WITH (4) 1.5" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV107-5: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV107-6: SB - 51"x78-1/2" SMART BOARD, BOTTOM OF DISPLAY AT 42" AFF. USB EXTENDER MOUNTED ABOVE DISPLAY.
 - AV107-7: PJ - CEILING MOUNTED PROJECTOR. DM RECEIVER MOUNTED ON POLE BASE NEAR PROJECTOR.
 - AV110-1: S1 - IN CEILING STYLE LOUDSPEAKER.
 - AV110-2: TS1R - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE. AVR-110 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV110-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV125-1: S1 - IN CEILING STYLE LOUDSPEAKER.
 - AV125-2: TS1L - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-125 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV125-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV130-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
 - AV130-2: TS1L - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-130 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV130-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV131-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
 - AV131-2: FP80 - 80" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 7'-0" AFF. DM RECEIVER MOUNTED BEHIND DISPLAY AND POWERED LOCALLY.
 - AV131-3: CP1 - WALL MOUNTED PROJECTOR WITH LONG THROW LENS. DM RECEIVER MOUNTED AT PROJECTOR.
 - AV131-4: AVR-132 - FLOOR STANDING RACK AV EQUIPMENT RACK, AVR-132 DETAIL.
 - AV131-5: SC1 - CEILING MOUNTED ELECTRIC SCREEN, TYPE 1, 65" X 116". ADD BLACK DROP AS REQUIRED. BOTTOM OF SCREEN AT 56" AFF.
 - AV131-6: TS2 - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE. AVR-131 DETAIL. PROVIDE 4-GANG PLATE FOR JUNCTION BOX WITH (4) 1.5" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV131-7: WA - WIRELESS MICROPHONE ANTENNA SURFACE MOUNT TO CEILING STRUCTURE.
 - AV131-8: WALL MOUNTED CAMERA MOUNTED BELOW CONFERENCE MONITORS AT 6'-9" AFF. POWERED LOCALLY.
 - AV131-9: CAM - SONY EVI-H100S CAMERA MOUNTED BELOW FLAT PANELS, CENTERED.
 - AV131-10: CAM3 - IP CAMERA - REMOTE MONITORING BY OWNER OVER OWNER'S NETWORK. MOUNT ABOVE VIDEO CONFERENCING INSTRUCTOR CAMERA.

AV CEILING PLAN - AREA A
SCALE: 1/8" = 1'-0"

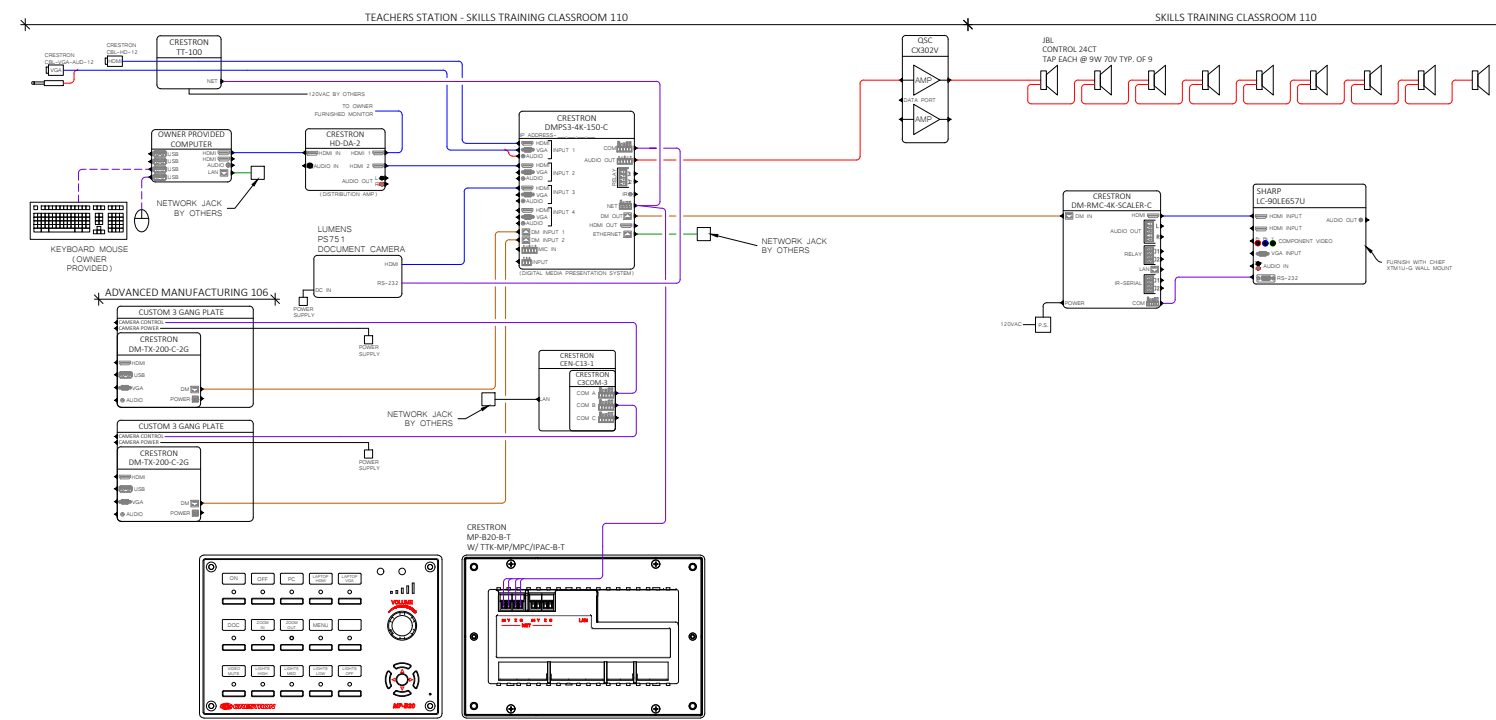


CENTRAL COMMUNITY COLLEGE
KEARNEY CENTER
 Kearney, Nebraska

Addendum No. 1
 AV Floor Plan - Area A
 Sheet Ref: AV1.0C

Project Number: **1501**
 Sketch Date: **02/12/2016**
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Sketch Number:
AVSK-1C



ONE-LINE DIAGRAM - SKILLS TRAINING CLASSROOM 110

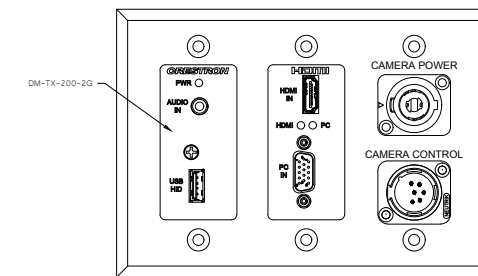
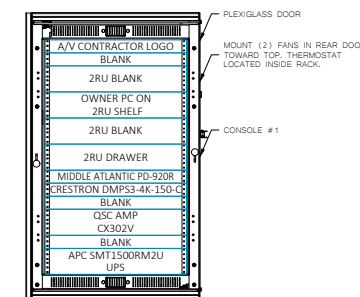
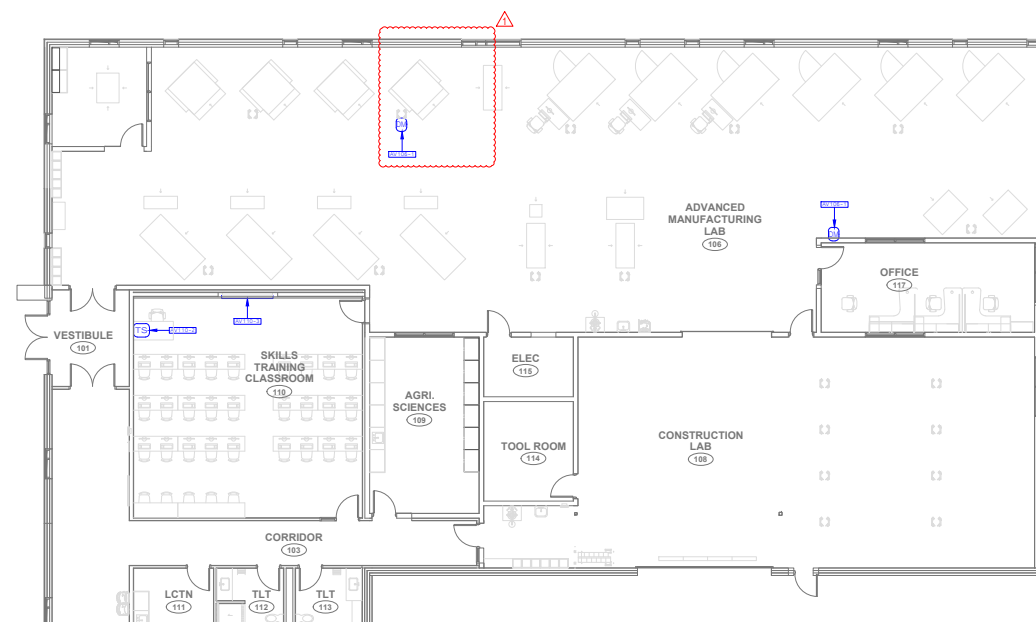


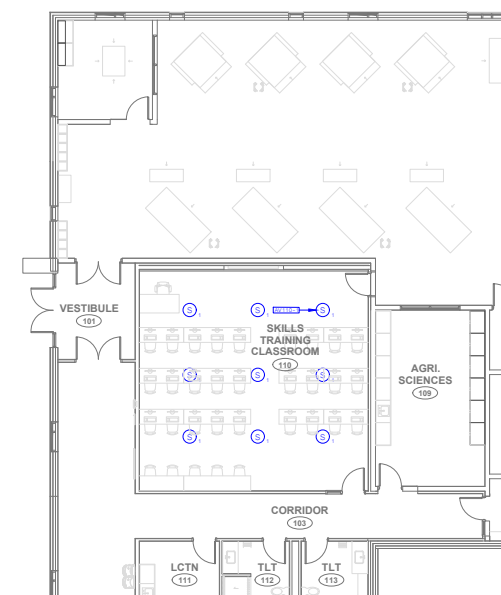
PLATE DETAIL P-106 - ADVANCED MANUFACTURING 106



TEACHER STATION AVR-110 RACK ELEVATION - SKILLS TRAINING CLASSROOM 110

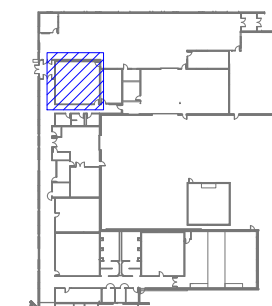


AV FLOOR PLAN - SKILLS TRAINING CLASSROOM 110

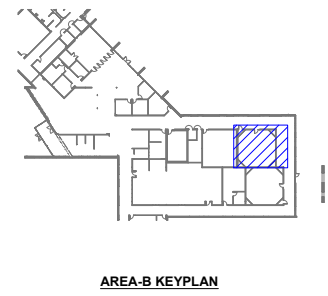
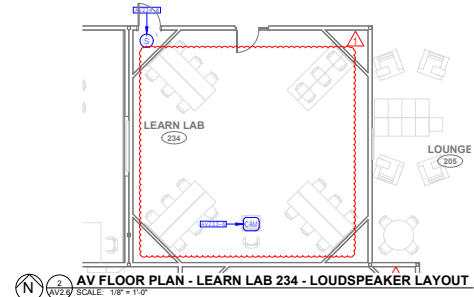
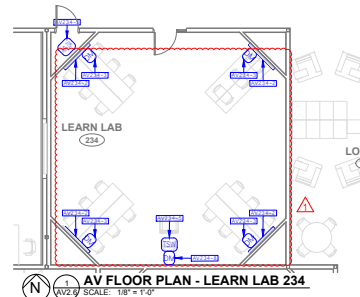
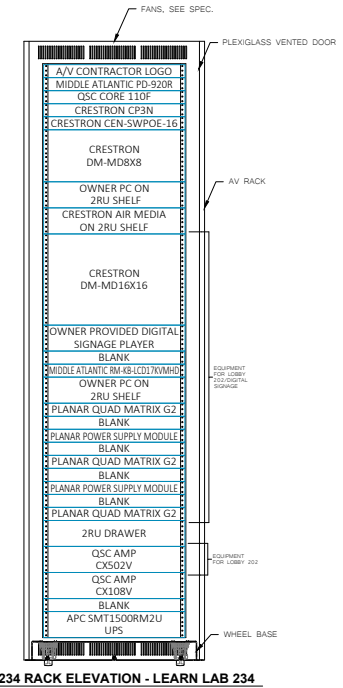
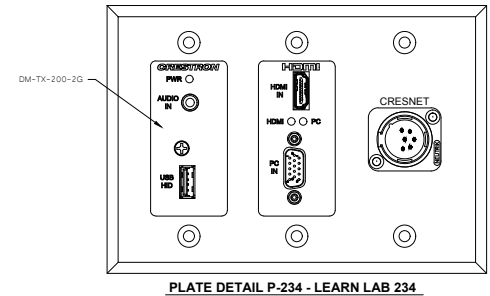
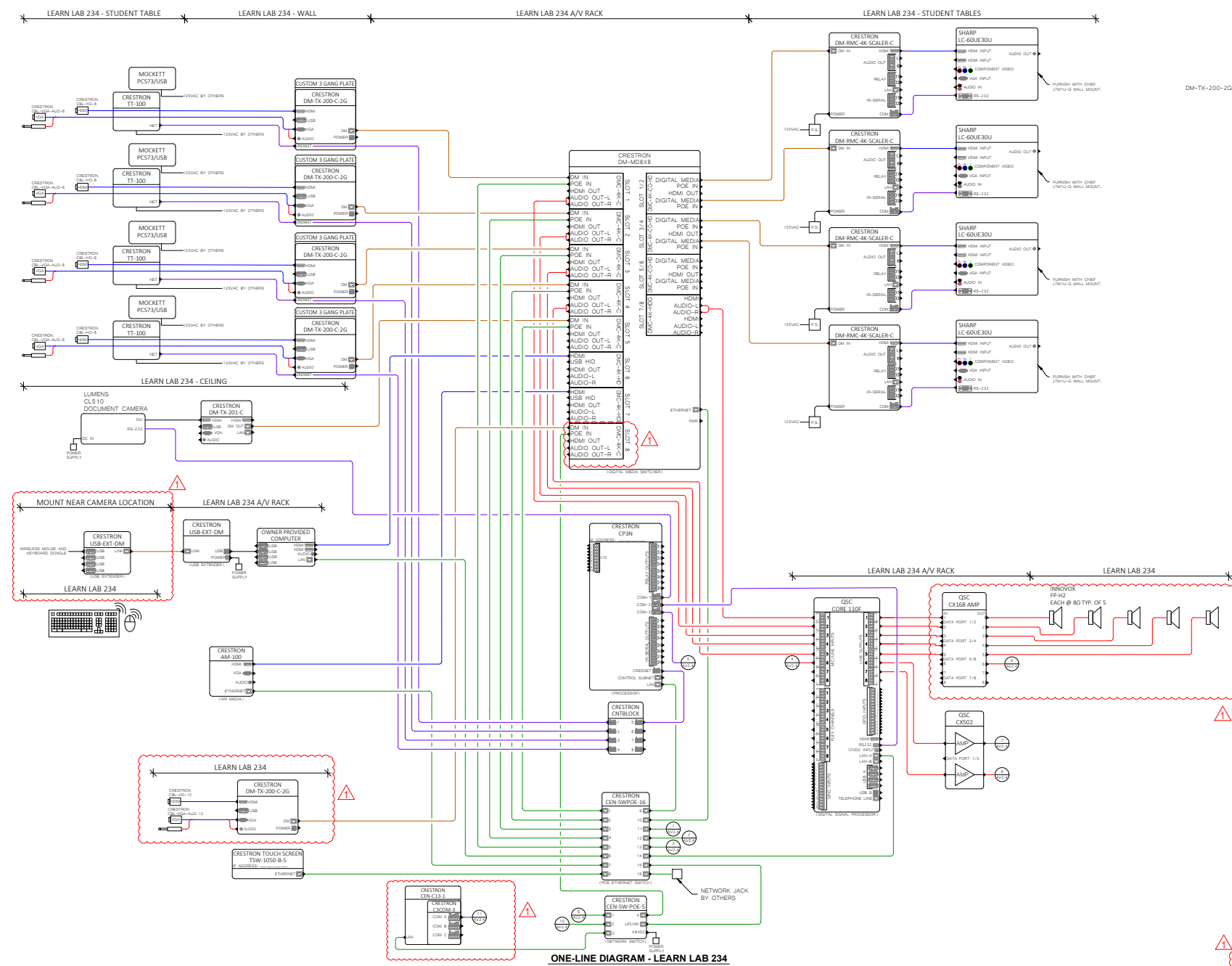


AV FLOOR PLAN - SKILLS TRAINING CLASSROOM 110 - LOUDSPEAKER LAYOUT

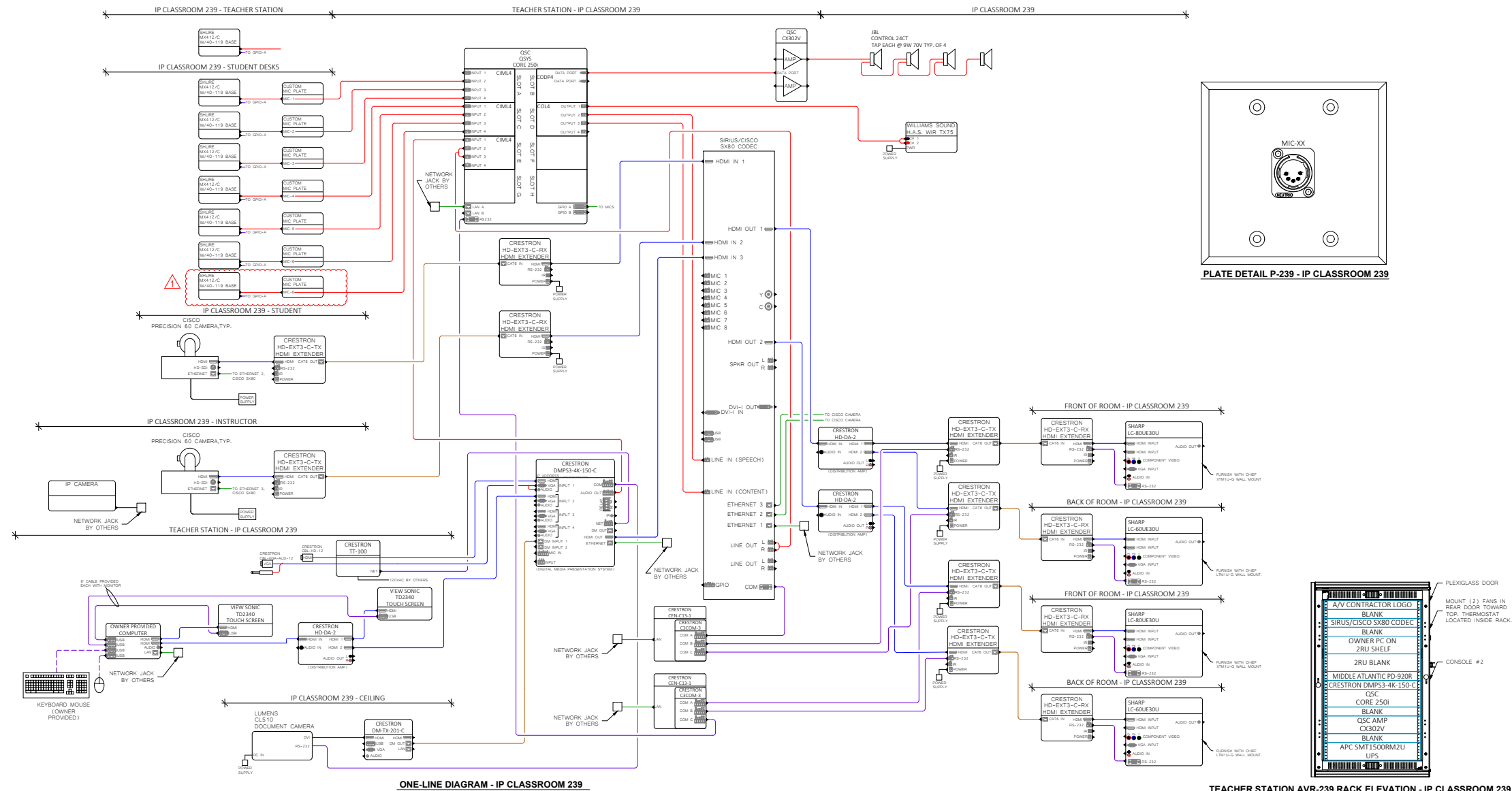
- KEY NOTES:
- AV106-1: DMT - 3-GANG BOX, CRESTRON DM-TX-200-B-1 HDMI/VGA INPUT WITH CAMERA CONTROL AND POWER. SEE PLATE DETAIL P-106. PROVIDE 3-GANG CUSTOM FINISH PLATE. AV CONTRACTOR TO SUPPLY AND MOUNT ATTACHMENT HARDWARE TO COLUMN. SUBMIT MOUNTING CONCEPT WITH SHOP DRAWINGS FOR APPROVAL.
 - AV110-1: S1 - IN CEILING STYLE LOUDSPEAKER.
 - AV110-2: TS1R - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE. AVR-110 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLE FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV110-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.



AREA-A KEYPLAN

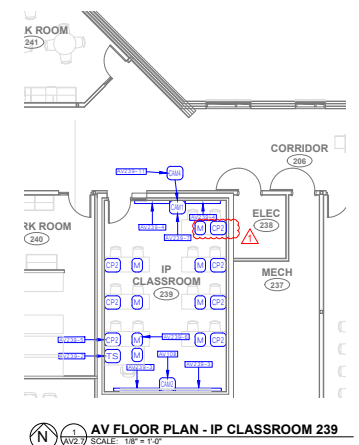


- KEY NOTES:**
- AV234-2: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY. MOUNT LOUDSPEAKER BELOW DISPLAY.
 - AV234-3: DM1 - 3-GANG BOX, CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CRESNET CONTROL. SEE PLATE DETAIL P-234, PROVIDE 3-GANG CUSTOM FINISH PLATE.
 - AV234-4: AVR-234 - FLOOR STANDING AV EQUIPMENT RACK, AVR-234 DETAIL.
 - AV234-5: TSW - LOCATE TOUCH SCREEN ON WALL AT 54" AFF.
 - AV234-6: CAM - CEILING MOUNT DOCUMENT CAMERA, MOUNT WITH DM-TX-201-C SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.
 - AV234-7: S1 - IN CEILING STYLE LOUDSPEAKER.
 - AV234-8: DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.

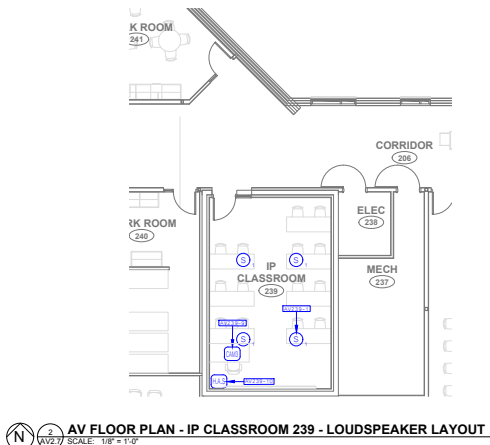


ONE-LINE DIAGRAM - IP CLASSROOM 239

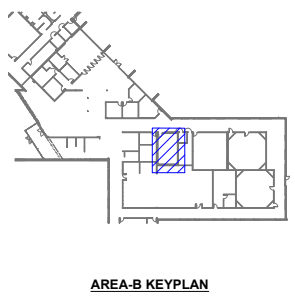
TEACHER STATION AVR-239 RACK ELEVATION - IP CLASSROOM 239



AV FLOOR PLAN - IP CLASSROOM 239
SCALE: 1/8" = 1'-0"

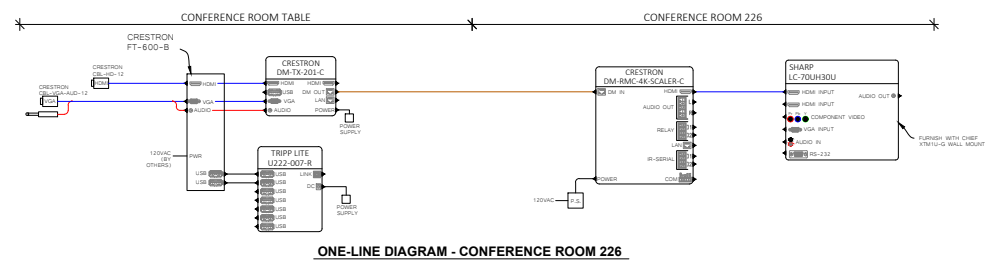


AV FLOOR PLAN - IP CLASSROOM 239 - LOUDSPEAKER LAYOUT
SCALE: 1/8" = 1'-0"

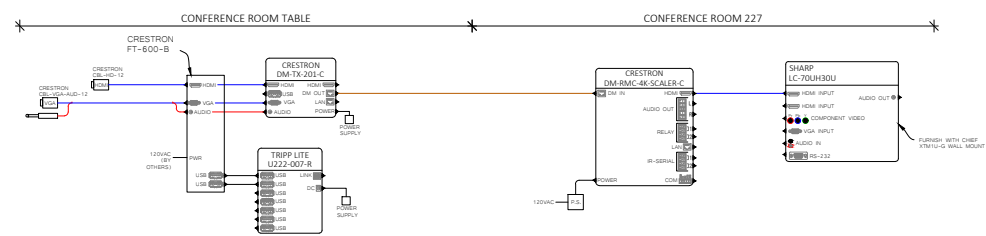


AREA-B KEYPLAN

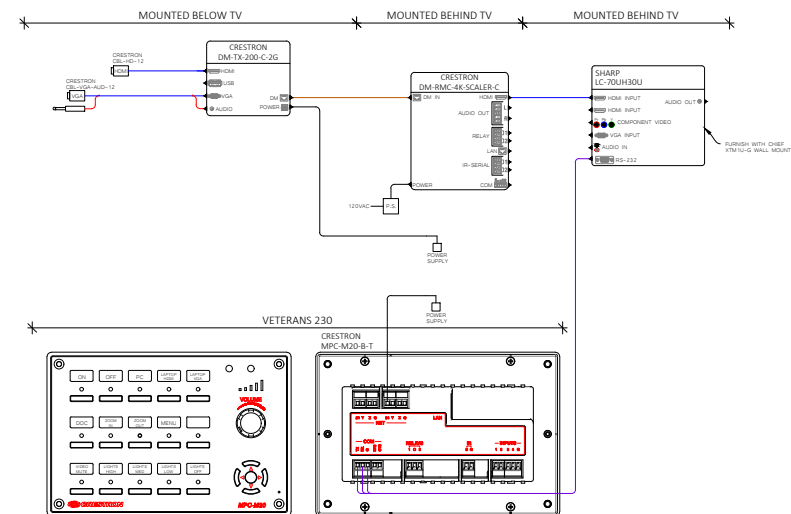
- KEY NOTES:**
- AV239-T: ST - IN CEILING STYLE LOUDSPEAKER.
 - AV239-2: TS1L - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-239 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV239-3: FP80 - 80" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 60" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV239-4: FP60 - 60" FLAT PANEL DISPLAY. WALL MOUNTED BOTTOM OF DISPLAY AT 65" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV239-5: CP2 - CONTRACTOR CUSTOM WALL PLATE. 2-GANG PLATE. SEE AV DETAILS FOR LAYOUT.
 - AV239-6: M - DESKTOP MICROPHONE. CONCEAL CABLING UNDER TABLE AND CONNECT TO WALL MOUNTED INPUT PLATE. AUDIO AND CONTACT CLOSURE CONNECTIONS.
 - AV239-7: CAM1 - WALL MOUNTED CAMERA. MOUNT AT 90° AFF.
 - AV239-8: CAM2 - WALL MOUNTED CAMERA. MOUNT AT 60° AFF.
 - AV239-9: CAM3 - CEILING MOUNTED DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C
 - AV239-10: H.A.S - WALL MOUNTED NEAR CEILING.
 - AV239-11: CAM4 - IP CAMERA - REMOTE MONITORING BY OWNERS NETWORK. MOUNT ABOVE VIDEO CONFERENCEING INSTRUCTOR CAMERA.



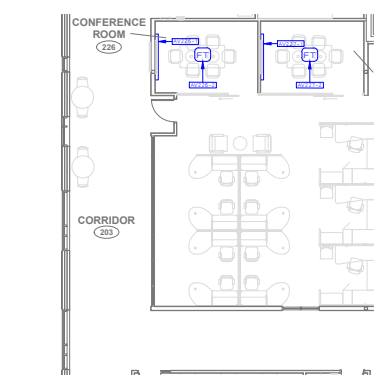
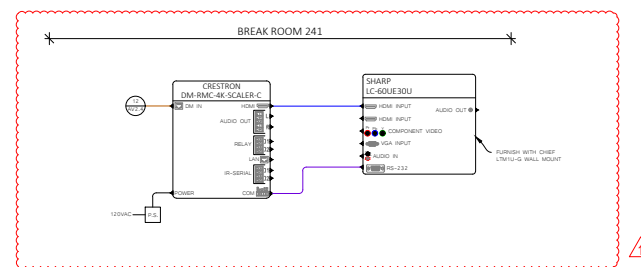
ONE-LINE DIAGRAM - CONFERENCE ROOM 226



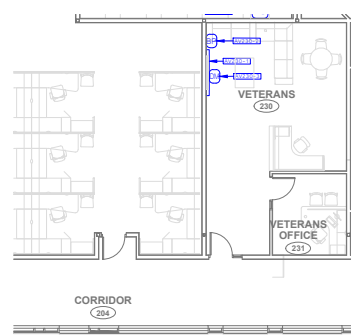
ONE-LINE DIAGRAM - CONFERENCE ROOM 227



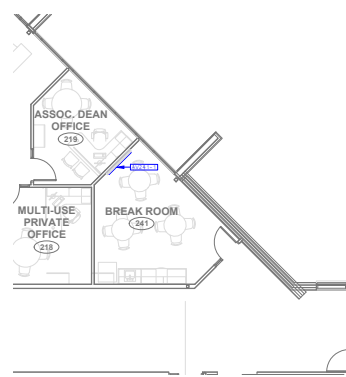
ONE-LINE DIAGRAM - VETERANS 230



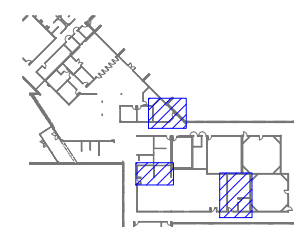
AV FLOOR PLAN - CONFERENCE ROOM 226/227



AV FLOOR PLAN - VETERANS 230



AV FLOOR PLAN - VETERANS 230



AREA-B KEYPLAN

KEY NOTES:

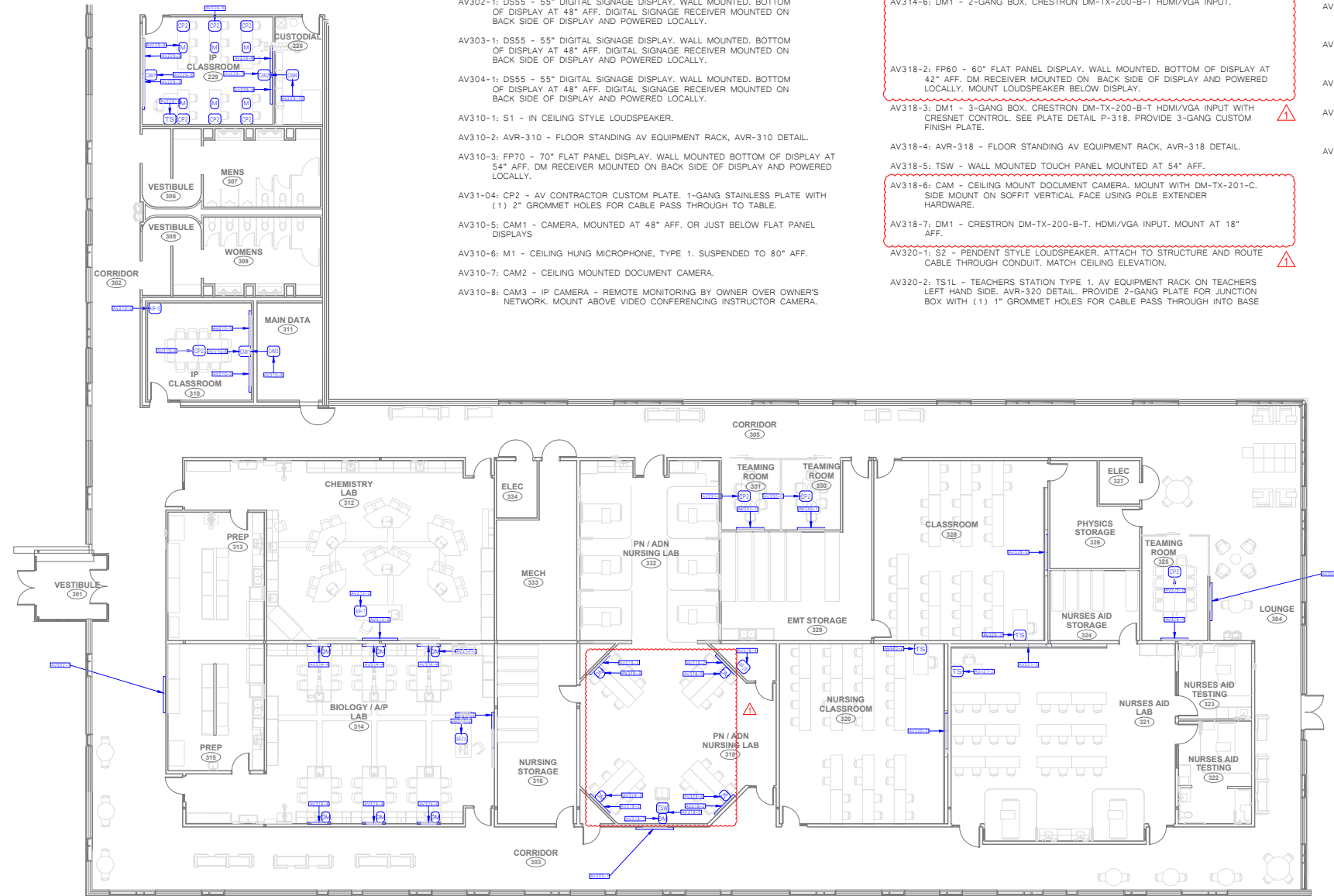
- AV226-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV226-2: FT - FLIP TOP MOUNTED IN TABLE.
- AV227-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV227-2: FT - FLIP TOP MOUNTED IN TABLE.
- AV230-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV230-2: BP1 - WALL MOUNTED BUTTON PANEL, POWERED VIA POWER SUPPLY MOUNTED BEHIND TV, MOUNT AT 52" AFF.
- AV230-3: DM1 - CRESTRON DM-TX-200-B-T, HDMI/VGA INPUT, MOUNT AT 18" AFF.
- AV241-1: FP55 - 55" FLAT PANEL DISPLAY, WALL MOUNTED, BOTTOM OF DISPLAY AT 54" AFF, DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.

KEY NOTES:

- AV229-TT: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV229-2: TS1R - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE. AVR-229 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV229-3: FP80 - 80" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 60" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV229-4: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 66" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV229-5: CP2 - CONTRACTOR CUSTOM WALL PLATE. 2-GANG PLATE. SEE AV DETAILS FOR LAYOUT.
- AV229-6: CAM1 - STUDENT CAMERA. MOUNT AT 78" AFF.
- AV229-7: CAM2 - TEACHER CAMERA. MOUNT AT 84" AFF. OR JUST ABOVE FLAT PANEL HEIGHT.
- AV229-8: M2 - DESKTOP MICROPHONE. CONCEAL CABLING UNDER TABLE AND CONNECT TO WALL MOUNTED INPUT PLATE. AUDIO AND CONTACT CLOSURE CONNECTIONS.
- AV229-9: CAM3 CEILING MOUNTED DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C.
- AV229-10: CAM4 - IP CAMERA - REMOTE MONITORING BY OWNER OVER OWNER'S NETWORK. MOUNT ABOVE VIDEO CONFERENCING INSTRUCTOR CAMERA.
- AV302-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV303-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV304-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV310-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV310-2: AVR-310 - FLOOR STANDING AV EQUIPMENT RACK, AVR-310 DETAIL.
- AV310-3: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV31-04: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.
- AV310-5: CAM1 - CAMERA. MOUNTED AT 48" AFF. OR JUST BELOW FLAT PANEL DISPLAYS.
- AV310-6: M1 - CEILING HUNG MICROPHONE, TYPE 1. SUSPENDED TO 80" AFF.
- AV310-7: CAM2 - CEILING MOUNTED DOCUMENT CAMERA.
- AV310-8: CAM3 - IP CAMERA - REMOTE MONITORING BY OWNER OVER OWNER'S NETWORK. MOUNT ABOVE VIDEO CONFERENCING INSTRUCTOR CAMERA.

- AV312-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV312-2: AVR-312 - AV EQUIPMENT RACK. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV312-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV312-4: CAM1 - CEILING MOUNTED DOCUMENT CAMERA. MOUNT DM TRANSMITTER AT CAMERA AND EXTERNAL POWER SUPPLY.
- AV314-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV314-2: AVR-314 - AV EQUIPMENT RACK. AVR-314 DETAIL PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV314-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV314-4: FP48 - 48" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV314-5: DC - CEILING MOUNTED DOCUMENT CAMERA. MOUNT DM TRANSMITTER AT CAMERA AND POWER LOCALLY.
- AV314-6: DM1 - 2-GANG BOX. CRESTRON DM-TX-200-B-T HDMI/VGA INPUT.
- AV318-2: FP60 - 60" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY. MOUNT LOUDSPEAKER BELOW DISPLAY.
- AV318-3: DM1 - 3-GANG BOX. CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CRESNET CONTROL. SEE PLATE DETAIL P-318. PROVIDE 3-GANG CUSTOM FINISH PLATE.
- AV318-4: AVR-318 - FLOOR STANDING AV EQUIPMENT RACK, AVR-318 DETAIL.
- AV318-5: TSW - WALL MOUNTED TOUCH PANEL MOUNTED AT 54" AFF.
- AV318-6: CAM - CEILING MOUNT DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C. SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.
- AV318-7: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
- AV320-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV320-2: TS1L - TEACHERS STATION TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-320 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.

- OF STATION.
- AV320-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV321-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV321-2: TS1L - TEACHERS STATION TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-321 DETAIL. PROVIDE 1-GANG PLATE FOR JUNCTION BOX WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV321-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV325-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV325-2: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.
- AV328-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV328-2: TS1L - TEACHERS STATION TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-328 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV328-3: FP90 - 90" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV330-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV330-2: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.
- AV331-1: FP70 - 70" FLAT PANEL DISPLAY, WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV331-2: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.



AV FLOOR PLAN AREA-C
SCALE: 1/8\"/>

KEY NOTES:

- AV229-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV229-2: TS1R - TEACHERS STATION, TYPE 1. AV EQUIPMENT RACK ON TEACHERS RIGHT HAND SIDE. AVR-229 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV229-3: FP90 - 90" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 60" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV229-4: FP60 - 60" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 66" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV229-5: CP2 - CONTRACTOR CUSTOM WALL PLATE. 2-GANG PLATE. SEE AV DETAILS FOR LAYOUT.
- AV229-6: CAM1 - STUDENT CAMERA. MOUNT AT 78" AFF.
- AV229-7: CAM2 - TEACHER CAMERA. MOUNT AT 84" AFF. OR JUST ABOVE FLAT PANEL HEIGHT.
- AV229-8: M2 - DESKTOP MICROPHONE. CONCEAL CABLING UNDER TABLE AND CONNECT TO WALL MOUNTED INPUT PLATE. AUDIO AND CONTACT CLOSURE CONNECTIONS.
- AV229-9: CAM3 CEILING MOUNTED DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C.
- AV229-10: CAM4 - IP CAMERA - REMOTE MONITORING BY OWNER OVER OWNER'S NETWORK. MOUNT ABOVE VIDEO CONFERENCING INSTRUCTOR CAMERA.
- AV302-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV303-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV304-1: DS55 - 55" DIGITAL SIGNAGE DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DIGITAL SIGNAGE RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV310-1: S1 - IN CEILING STYLE LOUDSPEAKER.
- AV310-2: AVR-310 - FLOOR STANDING AV EQUIPMENT RACK. AVR-310 DETAIL.
- AV310-3: FP70 - 70" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 54" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV31-04: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.
- AV310-5: CAM1 - CAMERA. MOUNTED AT 48" AFF. OR JUST BELOW FLAT PANEL DISPLAYS
- AV310-6: M1 - CEILING HUNG MICROPHONE. TYPE 1. SUSPENDED TO 80" AFF.
- AV310-7: CAM2 - CEILING MOUNTED DOCUMENT CAMERA.
- AV310-8: CAM3 - IP CAMERA - REMOTE MONITORING BY OWNER OVER OWNER'S NETWORK. MOUNT ABOVE VIDEO CONFERENCING INSTRUCTOR CAMERA.

- AV312-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV312-2: AVR-312 - AV EQUIPMENT RACK. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV312-3: FP90 - 90" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV312-4: CAM1 - CEILING MOUNTED DOCUMENT CAMERA. MOUNT DM TRANSMITTER AT CAMERA AND EXTERNAL POWER SUPPLY.
- AV314-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV314-2: AVR-314 - AV EQUIPMENT RACK. AVR-314 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV314-3: FP90 - 90" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV314-4: FP48 - 48" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV314-5: DC - CEILING MOUNTED DOCUMENT CAMERA. MOUNT DM TRANSMITTER AT CAMERA AND POWER LOCALLY.
- AV314-6: DM1 - 2-GANG BOX. CRESTRON DM-TX-200-B-T HDMI/VGA INPUT.
- AV318-2: FP60 - 60" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY. MOUNT LOUDSPEAKER BELOW DISPLAY.
- AV318-3: DM1 - 3-GANG BOX. CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CRESNET CONTROL. SEE PLATE DETAIL P-318. PROVIDE 3-GANG CUSTOM FINISH PLATE.
- AV318-4: AVR-318 - FLOOR STANDING AV EQUIPMENT RACK. AVR-318 DETAIL.
- AV318-5: TSW - WALL MOUNTED TOUCH PANEL MOUNTED AT 54" AFF.
- AV318-6: CAM - CEILING MOUNT DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C. SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.
- AV318-7: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.
- AV320-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV320-2: TS1L - TEACHERS STATION TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-320 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.

- AV320-3: FP90 - 90" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV321-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV321-2: TS1L - TEACHERS STATION TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-321 DETAIL. PROVIDE 1-GANG PLATE FOR JUNCTION BOX WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV321-3: FP90 - 90" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV325-1: FP70 - 70" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV325-2: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.
- AV328-1: S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
- AV328-2: TS1L - TEACHERS STATION TYPE 1. AV EQUIPMENT RACK ON TEACHERS LEFT HAND SIDE. AVR-328 DETAIL. PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
- AV328-3: FP90 - 90" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV330-1: FP70 - 70" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV330-2: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.
- AV331-1: FP70 - 70" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 48" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
- AV331-2: CP2 - AV CONTRACTOR CUSTOM PLATE. 1-GANG STAINLESS PLATE WITH (1) 2" GROMMET HOLES FOR CABLE PASS THROUGH TO TABLE.



AV CEILING PLAN - AREA-C
SCALE: 1/8"=1'-0"

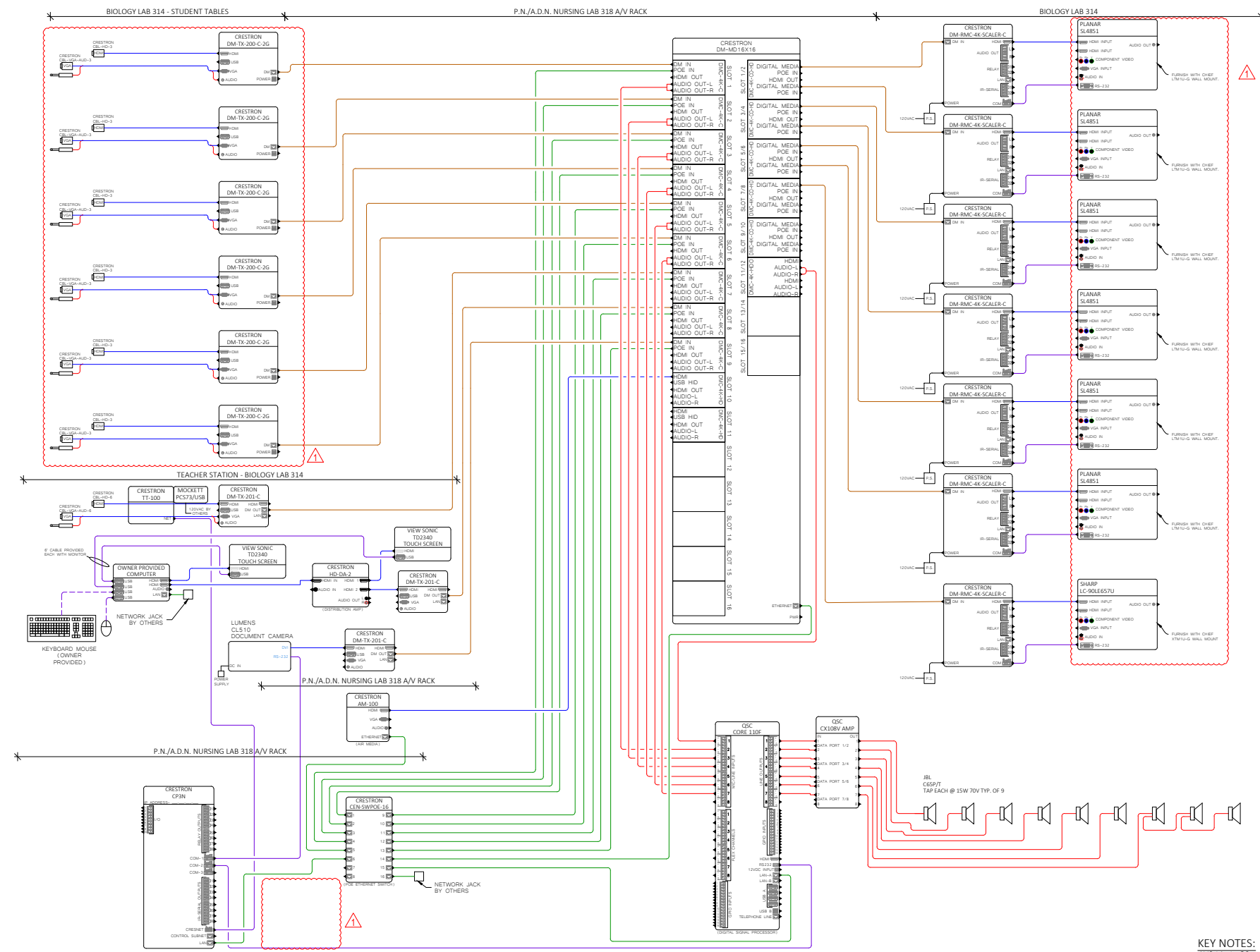


CENTRAL COMMUNITY COLLEGE
KEARNEY CENTER
Kearney, Nebraska

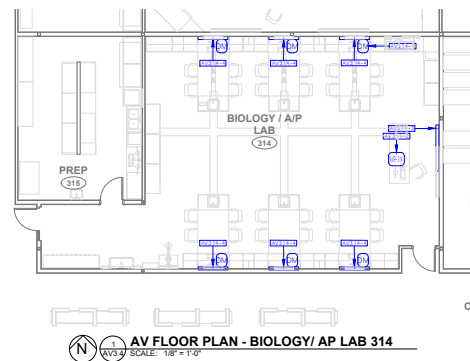
Addendum No. 1
AV Floor Plan - Area C
Sheet Ref: AV3.0C

Project Number: **1501**
Sketch Date: **02/12/2016**
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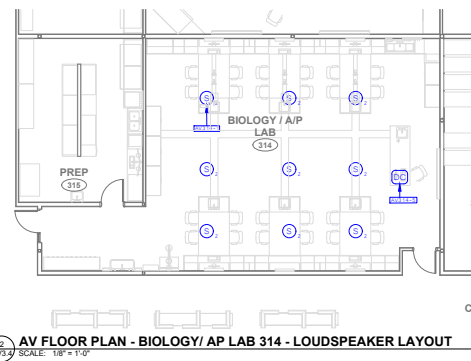
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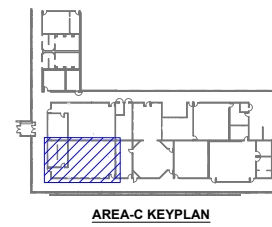
ONE-LINE DIAGRAM - BIOLOGY/ AP LAB 314



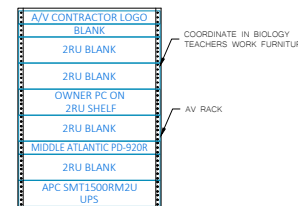
AV FLOOR PLAN - BIOLOGY/ AP LAB 314



AV FLOOR PLAN - BIOLOGY/ AP LAB 314 - LOUDSPEAKER LAYOUT

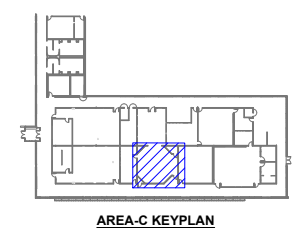
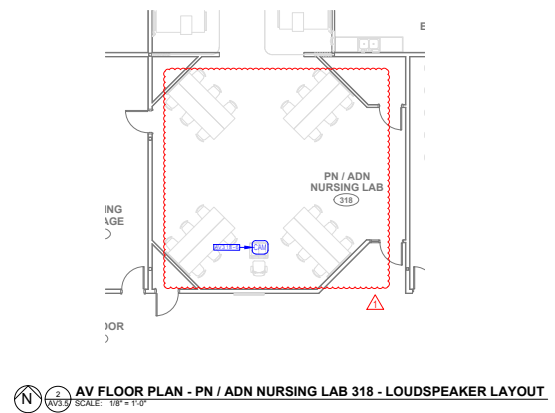
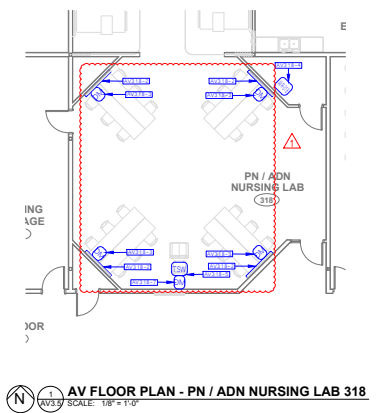
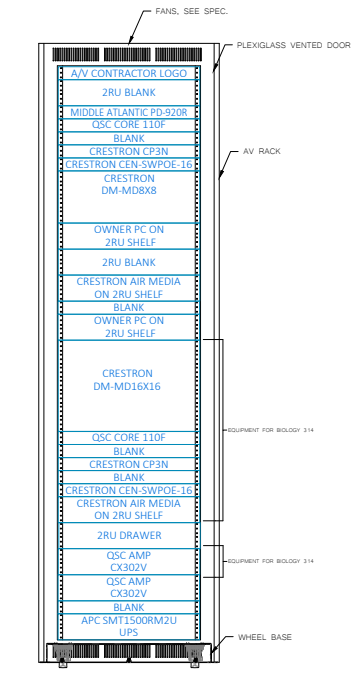
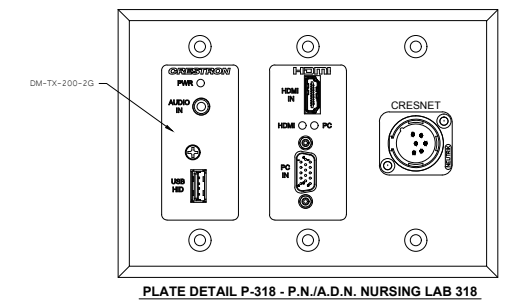
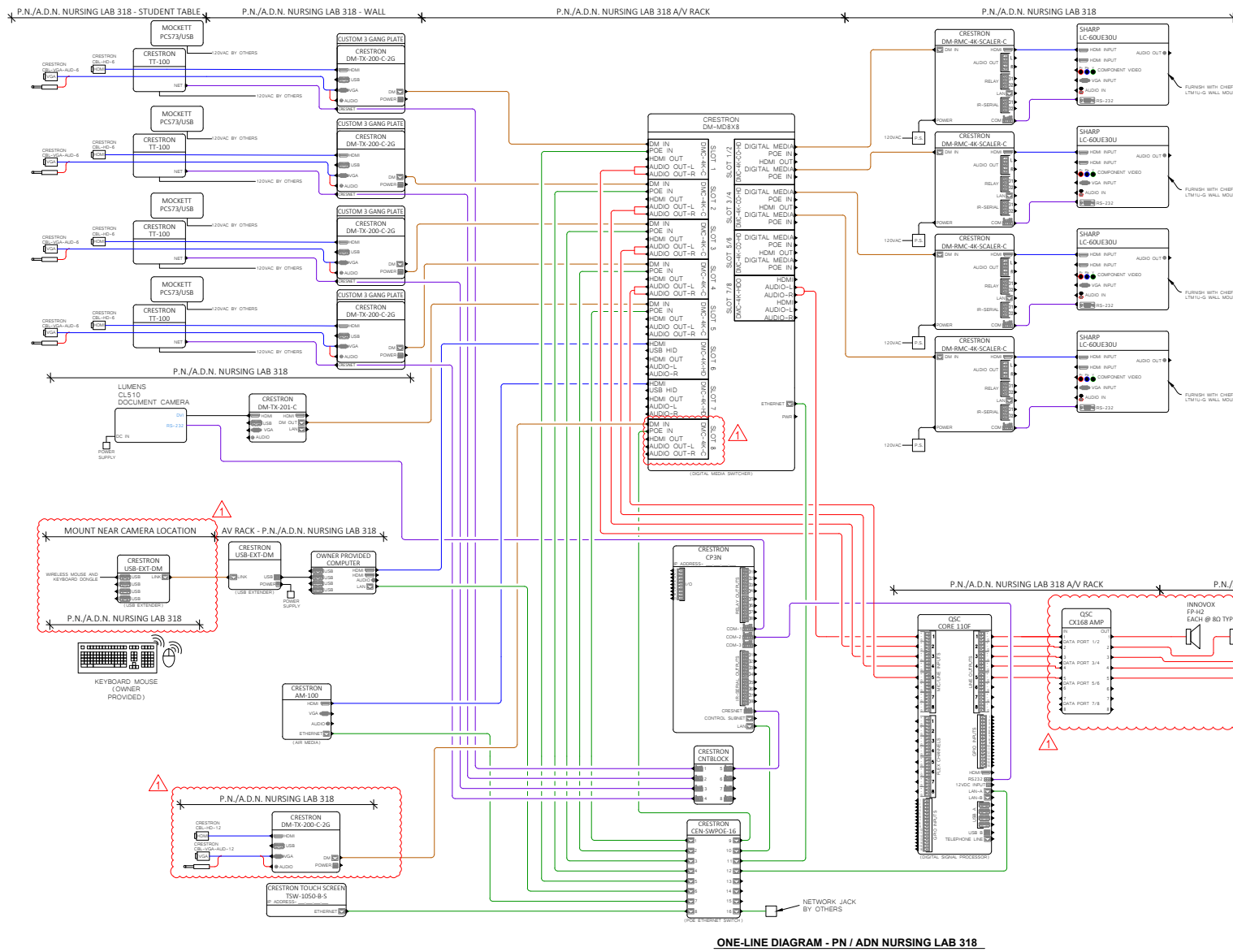


AREA-C KEYPLAN



AVR-314 RACK ELEVATION - BIOLOGY/ AP LAB 314

- KEY NOTES:**
- AV314-1; S2 - PENDENT STYLE LOUDSPEAKER. ATTACH TO STRUCTURE AND ROUTE CABLE THROUGH CONDUIT. MATCH CEILING ELEVATION.
 - AV314-2; AVR-314 - AV EQUIPMENT RACK, AVR-314 DETAIL PROVIDE 2-GANG PLATE FOR JUNCTION BOX WITH (1) 1" GROMMET HOLES FOR CABLE PASS THROUGH INTO BASE OF STATION.
 - AV314-3; FP90 - 90" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 56" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV314-4; FP48 - 48" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY.
 - AV314-5; DC - CEILING MOUNTED DOCUMENT CAMERA. MOUNT DM TRANSMITTER AT CAMERA AND POWER LOCALLY.
 - AV314-6; DM1 - 2-GANG BOX. CRESTRON DM-TX-200-B-T HDMI/VGA INPUT.



- KEY NOTES:**
- AV318-2: FP60 - 60" FLAT PANEL DISPLAY. WALL MOUNTED. BOTTOM OF DISPLAY AT 42" AFF. DM RECEIVER MOUNTED ON BACK SIDE OF DISPLAY AND POWERED LOCALLY. MOUNT LOUDSPEAKER BELOW DISPLAY.
 - AV318-3: DM1 - 3-GANG BOX. CRESTRON DM-TX-200-B-T HDMI/VGA INPUT WITH CRESNET CONTROL. SEE PLATE DETAIL P-318. PROVIDE 3-GANG CUSTOM FINISH PLATE.
 - AV318-4: AVR-318 - FLOOR STANDING AV EQUIPMENT RACK, AVR-318 DETAIL.
 - AV318-5: TSW - WALL MOUNTED TOUCH PANEL MOUNTED AT 54" AFF.
 - AV318-6: CAM - CEILING MOUNT DOCUMENT CAMERA. MOUNT WITH DM-TX-201-C. SIDE MOUNT ON SOFFIT VERTICAL FACE USING POLE EXTENDER HARDWARE.
 - AV318-7: DM1 - CRESTRON DM-TX-200-B-T. HDMI/VGA INPUT. MOUNT AT 18" AFF.