

ADDENDUM NO. 2
Western Nebraska Veterans' Home – Kitchen HVAC Renovation
1102 W 42nd Street
Scottsbluff, Nebraska - 2013
February 2013 / OA Project No. 012-1721

Design Professionals:

Olsson Associates – Mechanical and Electrical Engineers

DATE OF ISSUANCE: March 12, 2013

Bid Opening Date, Time & Location: March 28, 2013, 2:00 PM CT, State of Nebraska, AS/State Building Division, Executive Building, 521 South 14th Street, 5th Floor, Lincoln, Nebraska

The Project Manual and Project Drawings dated February 2013, for the above referenced project, are amended by this addendum.

NOTICE: This Addendum is issued to all interested prospective bidders as an amendment to the project manual or other parts of the bidding (contract) documents for the above named project. Reference to this Addendum must be included in the Bid proposal. The information contained herein shall be fully incorporated into the contract documents as though originally included therein.

PROJECT CHANGES

1) General Conditions Section, Pages 1-13

Delete the General Conditions in its entirety and replace with the attached General Conditions (pages GC 1-14).

2) Refer to Specification 230713 – Duct Insulation

Delete this Section in its entirety and replace with the attached Section 230713 – Duct Insulation.

3) Prior Approvals

The following manufacturers are approved for bidding purposes, subject to the provisions of the specifications and drawings.

Specification Section 233713 – Grilles, Registered, Diffusers: add Krueger

4) Refer to Sheet G2 – Phasing Plans

Amend General Note A to read: “Contractor shall remove, store protected from elements, ...”

5) Refer to Sheet FS1 – Kitchen Equipment Plans, Elevations & Schedule

Add Sheet FS1 Rev 1 to the set.

6) Refer to Sheet M1 – First Floor HVAC Plans

Amend General Note A to read: “In kitchen (including side room of kitchen to west, and south of Food Storage),...”

Replace General Note E with: “Before excavating for this project, the contractor shall perform locates of all necessary utilities. One Call will not necessarily locate on private property.

Replace General Note I with: “All duct seams shall be sealed, see specifications.”

Amend Sheet Note 8 to read: "Relocate condensing units, demo old pads, add new poured housekeeping pads."

Amend Sheet Note 9 to read: "Provide new poured concrete pad, slope as indicated at minimum 1/8" per ft.

Add to end of Sheet Note 15: "Extension shall have rain cap."

7) Refer to Sheet M2 – Roof HVAC Plans and Plumbing Plans

Add General Note S: Roof work shall be done to maintain existing roof warranty of kitchen and admin roofs.

See attached M2. Add locations of roof duct supports.

8) Refer to Sheet M3 – First Floor Plumbing Plans

Plumbing Site Plan, add cleanout (below grade) halfway down length of run.

See attached M3. See rerouting of domestic water to MAU-1, and addition of bleeder valve.

9) Refer to Sheet M5 – Mechanical Details & Legend

Detail 1 (Rectangular Duct on Roof), amend Note 1 to read: "Space supports a maximum of 6 ft. apart & at every change of direction"

Details 3 and 7, minimum curb height shall be 14".

10) Refer to Sheet M7 – Mechanical Schedules

Add in Air Handling Unit Schedule, AHU-1:

Unit Voltage:	208/60/3
MCA:	60.3 A
MROPD:	70 A

Add in Air Handling Unit Schedule, MAU-1

Unit Voltage:	208/60/3
Supply Fan Motor	5 HP
FLA	14.1 FLA

Provide AHU-1 with smoke detector in supply ductwork.

11) Refer to Sheet E1 – First Floor Electrical Plans

Amend General Note L to read: "...shall be mounted 46" (to top of device) A.F.F. unless..."

END OF ADDENDUM NO. 2

Each Bidder must acknowledge receipt of all addenda in the space provided on the Bid Form.

SECTION 230713 - DUCT INSULATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes insulating the following duct services:
 1. Indoor, concealed supply air.
 2. Indoor, concealed return located in unconditioned space.
 3. Indoor, concealed, Type I, commercial, kitchen hood exhaust.
 4. Indoor, concealed warewash exhaust.
 5. Indoor, concealed exhaust between isolation damper and penetration of building exterior.
 6. Outdoor, exposed supply and return.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include thermal conductivity, water-vapor permeance thickness, and jackets (both factory- and field-applied if any).

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Skilled mechanics who have successfully completed an apprenticeship program or another craft training program certified by the Department of Labor, Bureau of Apprenticeship and Training.
- B. Surface-Burning Characteristics: For insulation and related materials, as determined by testing identical products according to ASTM E 84, by a testing agency acceptable to authorities having jurisdiction. Factory label insulation and jacket materials and adhesive, mastic, tapes, and cement material containers, with appropriate markings of applicable testing agency.
 1. Insulation Installed Indoors: Flame-spread index of 25 or less, and smoke-developed index of 50 or less.
 2. Insulation Installed Outdoors: Flame-spread index of 75 or less, and smoke-developed index of 150 or less.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Packaging: Insulation material containers shall be marked by manufacturer with appropriate ASTM standard designation, type and grade, and maximum use temperature.

1.6 COORDINATION

- A. Coordinate clearance requirements with duct Installer for duct insulation application. Before preparing ductwork Shop Drawings, establish and maintain clearance requirements for installation of insulation and field-applied jackets and finishes and for space required for maintenance.

1.7 SCHEDULING

- A. Schedule insulation application after pressure testing systems and, where required, after installing and testing heat tracing. Insulation application may begin on segments that have satisfactory test results.

PART 2 - PRODUCTS

2.1 INSULATION MATERIALS

- A. Comply with requirements in "Duct Insulation Schedule, General," "Indoor Duct and Plenum Insulation Schedule," and "Aboveground, Outdoor Duct and Plenum Insulation Schedule" articles for where insulating materials shall be applied.
- B. Products shall not contain asbestos, lead, mercury, or mercury compounds.
- C. Products that come in contact with stainless steel shall have a leachable chloride content of less than 50 ppm when tested according to ASTM C 871.
- D. Insulation materials for use on austenitic stainless steel shall be qualified as acceptable according to ASTM C 795.
- E. Foam insulation materials shall not use CFC or HCFC blowing agents in the manufacturing process.
- F. Mineral-Fiber Blanket Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 553, Type II and ASTM C 1290, Type III with factory-applied FSK jacket. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. CertainTeed Corp.; SoftTouch Duct Wrap.
 - b. Johns Manville; Microlite.

- c. Knauf Insulation; Friendly Feel Duct Wrap.
 - d. Owens Corning; SOFTR All-Service Duct Wrap.
- G. Mineral-Fiber Board Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 612, Type IA or Type IB. For duct and plenum applications, provide insulation with factory-applied FSK jacket. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
- 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. CertainTeed Corp.; Commercial Board.
 - b. Johns Manville; 800 Series Spin-Glas.
 - c. Knauf Insulation; Insulation Board.
 - d. Owens Corning; Fiberglas 700 Series.

2.2 FIRE-RATED INSULATION SYSTEMS

- A. Fire-Rated Board: Structural-grade, press-molded, xonolite calcium silicate, fireproofing board suitable for operating temperatures up to 1700 deg F (927 deg C). Comply with ASTM C 656, Type II, Grade 6. Tested and certified to provide a 2-hour fire rating by an NRTL acceptable to authorities having jurisdiction.
- 1. Products: Subject to compliance with requirements, provide the following:
 - a. Johns Manville; Super Firetemp M.
- B. Fire-Rated Blanket: High-temperature, flexible, blanket insulation with FSK jacket that is tested and certified to provide a 2-hour fire rating by an NRTL acceptable to authorities having jurisdiction.
- 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. CertainTeed Corp.; FlameChek.
 - b. Johns Manville; Firetemp Wrap.
 - c. Nelson Fire Stop Products; Nelson FSB Flameshield Blanket.
 - d. Thermal Ceramics; FireMaster Duct Wrap.
 - e. 3M; Fire Barrier Wrap Products.
 - f. Unifrax Corporation; FyreWrap.

2.3 ADHESIVES

- A. Materials shall be compatible with insulation materials, jackets, and substrates and for bonding insulation to itself and to surfaces to be insulated unless otherwise indicated.
- B. Mineral-Fiber Adhesive: Comply with MIL-A-3316C, Class 2, Grade A.
- C. FSK Jacket Adhesive: Comply with MIL-A-3316C, Class 2, Grade A for bonding insulation jacket lap seams and joints.

2.4 MASTICS

- A. Materials shall be compatible with insulation materials, jackets, and substrates; comply with MIL-PRF-19565C, Type II.
- B. Vapor-Barrier Mastic: Water based; suitable for indoor use on below ambient services.
 - 1. Water-Vapor Permeance: ASTM E 96/E 96M, Procedure B, 0.013 perm (0.009 metric perm) at 43-mil (1.09-mm) dry film thickness.
 - 2. Service Temperature Range: Minus 20 to plus 180 deg F (Minus 29 to plus 82 deg C).
 - 3. Solids Content: ASTM D 1644, 58 percent by volume and 70 percent by weight.
 - 4. Color: White.
- C. Breather Mastic: Water based; suitable for indoor and outdoor use on above ambient services.
 - 1. Water-Vapor Permeance: ASTM F 1249, 1.8 perms (1.2 metric perms) at 0.0625-inch (1.6-mm) dry film thickness.
 - 2. Service Temperature Range: Minus 20 to plus 180 deg F (Minus 29 to plus 82 deg C).
 - 3. Solids Content: 60 percent by volume and 66 percent by weight.
 - 4. Color: White.

2.5 LAGGING ADHESIVES

- A. Description: Comply with MIL-A-3316C, Class I, Grade A and shall be compatible with insulation materials, jackets, and substrates.
 - 1. Fire-resistant, water-based lagging adhesive and coating for use indoors to adhere fire-resistant lagging cloths over duct insulation.
 - 2. Service Temperature Range: 0 to plus 180 deg F (Minus 18 to plus 82 deg C).
 - 3. Color: White.

2.6 SEALANTS

- A. FSK and Metal Jacket Flashing Sealants:
 - 1. Materials shall be compatible with insulation materials, jackets, and substrates.
 - 2. Fire- and water-resistant, flexible, elastomeric sealant.
 - 3. Service Temperature Range: Minus 40 to plus 250 deg F (Minus 40 to plus 121 deg C).
 - 4. Color: Aluminum.
 - 5. For indoor applications, sealants shall have a VOC content of 420 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 - 6. Sealants shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

2.7 FACTORY-APPLIED JACKETS

- A. Insulation system schedules indicate factory-applied jackets on various applications. When factory-applied jackets are indicated, comply with the following:
 - 1. FSK Jacket: Aluminum-foil, fiberglass-reinforced scrim with kraft-paper backing; complying with ASTM C 1136, Type II.

2.8 FIELD-APPLIED JACKETS

- A. Field-applied jackets shall comply with ASTM C 921, Type I, unless otherwise indicated.
- B. Self-Adhesive Outdoor Jacket: 60-mil- (1.5-mm-) thick, laminated vapor barrier and waterproofing membrane for installation over insulation located aboveground outdoors; consisting of a rubberized bituminous resin on a crosslaminated polyethylene film covered with white aluminum-foil facing.
 - 1. Products: Subject to compliance with requirements, provide the following:
 - a. Polyguard Products, Inc.; Alumaguard 60.

2.9 TAPES

- A. FSK Tape: Foil-face, vapor-retarder tape matching factory-applied jacket with acrylic adhesive; complying with ASTM C 1136.
 - 1. Width: 3 inches (75 mm).
 - 2. Thickness: 6.5 mils (0.16 mm).
 - 3. Adhesion: 90 ounces force/inch (1.0 N/mm) in width.
 - 4. Elongation: 2 percent.
 - 5. Tensile Strength: 40 lbf/inch (7.2 N/mm) in width.
 - 6. FSK Tape Disks and Squares: Precut disks or squares of FSK tape.

2.10 SECUREMENTS

- A. Bands:
 - 1. Stainless Steel: ASTM A 167 or ASTM A 240/A 240M, Type 304 or Type 316; 0.015 inch (0.38 mm) thick, 3/4 inch (19 mm) wide with wing seal.
 - 2. Aluminum: ASTM B 209 (ASTM B 209M), Alloy 3003, 3005, 3105, or 5005; Temper H-14, 0.020 inch (0.51 mm) thick, 3/4 inch (19 mm) wide with wing seal.
 - 3. Springs: Twin spring set constructed of stainless steel with ends flat and slotted to accept metal bands. Spring size determined by manufacturer for application.
- B. Insulation Pins and Hangers:

1. Capacitor-Discharge-Weld Pins: Copper- or zinc-coated steel pin, fully annealed for capacitor-discharge welding, 0.135-inch- (3.5-mm-) diameter shank, length to suit depth of insulation indicated.
 2. Cupped-Head, Capacitor-Discharge-Weld Pins: Copper- or zinc-coated steel pin, fully annealed for capacitor-discharge welding, 0.135-inch- (3.5-mm-) diameter shank, length to suit depth of insulation indicated with integral 1-1/2-inch (38-mm) galvanized carbon-steel washer.
 3. Insulation-Retaining Washers: Self-locking washers formed from 0.016-inch- (0.41-mm-) thick, stainless-steel sheet, with beveled edge sized as required to hold insulation securely in place but not less than 1-1/2 inches (38 mm) in diameter.
 - a. Protect ends with capped self-locking washers incorporating a spring steel insert to ensure permanent retention of cap in exposed locations.
- C. Staples: Outward-clinching insulation staples, nominal 3/4-inch- (19-mm-) wide, stainless steel or Monel.
- D. Wire: 0.062-inch (1.6-mm) soft-annealed, stainless steel.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of insulation application.
1. Verify that systems to be insulated have been tested and are free of defects.
 2. Verify that surfaces to be insulated are clean and dry.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Preparation: Clean and dry surfaces to receive insulation. Remove materials that will adversely affect insulation application.

3.3 GENERAL INSTALLATION REQUIREMENTS

- A. Install insulation materials, accessories, and finishes with smooth, straight, and even surfaces; free of voids throughout the length of ducts and fittings.
- B. Install insulation materials, vapor barriers or retarders, jackets, and thicknesses required for each item of duct system as specified in insulation system schedules.

- C. Install accessories compatible with insulation materials and suitable for the service. Install accessories that do not corrode, soften, or otherwise attack insulation or jacket in either wet or dry state.
- D. Install insulation with longitudinal seams at top and bottom of horizontal runs.
- E. Install multiple layers of insulation with longitudinal and end seams staggered.
- F. Keep insulation materials dry during application and finishing.
- G. Install insulation with tight longitudinal seams and end joints. Bond seams and joints with adhesive recommended by insulation material manufacturer.
- H. Install insulation with least number of joints practical.
- I. Where vapor barrier is indicated, seal joints, seams, and penetrations in insulation at hangers, supports, anchors, and other projections with vapor-barrier mastic.
 - 1. Install insulation continuously through hangers and around anchor attachments.
 - 2. For insulation application where vapor barriers are indicated, extend insulation on anchor legs from point of attachment to supported item to point of attachment to structure. Taper and seal ends at attachment to structure with vapor-barrier mastic.
 - 3. Install insert materials and install insulation to tightly join the insert. Seal insulation to insulation inserts with adhesive or sealing compound recommended by insulation material manufacturer.
- J. Apply adhesives, mastics, and sealants at manufacturer's recommended coverage rate and wet and dry film thicknesses.
- K. Install insulation with factory-applied jackets as follows:
 - 1. Draw jacket tight and smooth.
 - 2. Cover circumferential joints with 3-inch- (75-mm-) wide strips, of same material as insulation jacket. Secure strips with adhesive and outward clinching staples along both edges of strip, spaced 4 inches (100 mm) o.c.
 - 3. Overlap jacket longitudinal seams at least 1-1/2 inches (38 mm). Clean and dry surface to receive self-sealing lap. Staple laps with outward clinching staples along edge at 2 inches (50 mm) o.c.
 - a. For below ambient services, apply vapor-barrier mastic over staples.
 - 4. Cover joints and seams with tape, according to insulation material manufacturer's written instructions, to maintain vapor seal.
 - 5. Where vapor barriers are indicated, apply vapor-barrier mastic on seams and joints and at ends adjacent to duct flanges and fittings.
- L. Cut insulation in a manner to avoid compressing insulation more than 75 percent of its nominal thickness.

- M. Finish installation with systems at operating conditions. Repair joint separations and cracking due to thermal movement.
- N. Repair damaged insulation facings by applying same facing material over damaged areas. Extend patches at least 4 inches (100 mm) beyond damaged areas. Adhere, staple, and seal patches similar to butt joints.

3.4 PENETRATIONS

- A. Insulation Installation at Roof Penetrations: Install insulation continuously through roof penetrations.
 - 1. Seal penetrations with flashing sealant.
 - 2. For applications requiring only indoor insulation, terminate insulation above roof surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
 - 3. Extend jacket of outdoor insulation outside roof flashing at least 2 inches (50 mm) below top of roof flashing.
 - 4. Seal jacket to roof flashing with flashing sealant.
- B. Insulation Installation at Aboveground Exterior Wall Penetrations: Install insulation continuously through wall penetrations.
 - 1. Seal penetrations with flashing sealant.
 - 2. For applications requiring only indoor insulation, terminate insulation inside wall surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
 - 3. Extend jacket of outdoor insulation outside wall flashing and overlap wall flashing at least 2 inches (50 mm).
 - 4. Seal jacket to wall flashing with flashing sealant.
- C. Insulation Installation at Interior Wall and Partition Penetrations (That Are Not Fire Rated): Install insulation continuously through walls and partitions.
- D. Insulation Installation at Fire-Rated Wall and Partition Penetrations: Terminate insulation at fire damper sleeves for fire-rated wall and partition penetrations. Externally insulate damper sleeves to match adjacent insulation and overlap duct insulation at least 2 inches (50 mm).
 - 1. Comply with requirements in Section 078413 "Penetration Firestopping" firestopping and fire-resistive joint sealers.
- E. Insulation Installation at Floor Penetrations:
 - 1. Duct: For penetrations through fire-rated assemblies, terminate insulation at fire damper sleeves and externally insulate damper sleeve beyond floor to match adjacent duct insulation. Overlap damper sleeve and duct insulation at least 2 inches (50 mm).

2. Seal penetrations through fire-rated assemblies. Comply with requirements in Section 078413 "Penetration Firestopping."

3.5 INSTALLATION OF MINERAL-FIBER INSULATION

- A. Blanket Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins.
 1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 50 percent coverage of duct and plenum surfaces.
 2. Apply adhesive to entire circumference of ducts and to all surfaces of fittings and transitions.
 3. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows:
 - a. On duct sides with dimensions 18 inches (450 mm) and smaller, place pins along longitudinal centerline of duct. Space 3 inches (75 mm) maximum from insulation end joints, and 16 inches (400 mm) o.c.
 - b. On duct sides with dimensions larger than 18 inches (450 mm), place pins 16 inches (400 mm) o.c. each way, and 3 inches (75 mm) maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing.
 - c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums.
 - d. Do not overcompress insulation during installation.
 - e. Impale insulation over pins and attach speed washers.
 - f. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing.
 4. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches (50 mm) from one edge and one end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch (13-mm) outward-clinching staples, 1 inch (25 mm) o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions.
 - a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal.
 - b. Install vapor stops for ductwork and plenums operating below 50 deg F (10 deg C) at 18-foot (5.5-m) intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along butt end of insulation, and over the surface. Cover insulation face and surface to be insulated a width equal to two times the insulation thickness, but not less than 3 inches (75 mm).

5. Overlap unfaced blankets a minimum of 2 inches (50 mm) on longitudinal seams and end joints. At end joints, secure with steel bands spaced a maximum of 18 inches (450 mm) o.c.
 6. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Install insulation on round and flat-oval duct elbows with individually mitered gores cut to fit the elbow.
 7. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch- (150-mm-) wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches (150 mm) o.c.
- B. Board Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins.
1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 50 percent coverage of duct and plenum surfaces.
 2. Apply adhesive to entire circumference of ducts and to all surfaces of fittings and transitions.
 3. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows:
 - a. On duct sides with dimensions 18 inches (450 mm) and smaller, place pins along longitudinal centerline of duct. Space 3 inches (75 mm) maximum from insulation end joints, and 16 inches (400 mm) o.c.
 - b. On duct sides with dimensions larger than 18 inches (450 mm), space pins 16 inches (400 mm) o.c. each way, and 3 inches (75 mm) maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing.
 - c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums.
 - d. Do not overcompress insulation during installation.
 - e. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing.
 4. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches (50 mm) from one edge and one end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch (13-mm) outward-clinching staples, 1 inch (25 mm) o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions.
 - a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal.
 - b. Install vapor stops for ductwork and plenums operating below 50 deg F (10 deg C) at 18-foot (5.5-m) intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along butt end of insulation, and over the surface. Cover insulation face and surface

to be insulated a width equal to two times the insulation thickness, but not less than 3 inches (75 mm).

5. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Groove and score insulation to fit as closely as possible to outside and inside radius of elbows. Install insulation on round and flat-oval duct elbows with individually mitered gores cut to fit the elbow.
6. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch- (150-mm-) wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches (150 mm) o.c.

3.6 FIRE-RATED INSULATION SYSTEM INSTALLATION

- A. Where fire-rated insulation system is indicated, secure system to ducts and duct hangers and supports to maintain a continuous fire rating.
- B. Insulate duct access panels and doors to achieve same fire rating as duct.
- C. Install firestopping at penetrations through fire-rated assemblies.

3.7 FINISHES

- A. Do not field paint aluminum or stainless-steel jackets.

3.8 DUCT INSULATION SCHEDULE, GENERAL

- A. Ducts Requiring Insulation:
 1. Indoor, concealed supply and outdoor air.
 2. Indoor, concealed return located in unconditioned space.
 3. Indoor, concealed, Type I, commercial, kitchen hood exhaust.
 4. Indoor, concealed warewash exhaust.
 5. Indoor, exhaust between isolation damper and penetration of building exterior.
 6. Outdoor, exposed supply and return.
- B. Items Not Insulated:
 1. Fibrous-glass ducts.
 2. Metal ducts with duct liner of sufficient thickness to comply with energy code and ASHRAE/IESNA 90.1.
 3. Factory-insulated flexible ducts.
 4. Factory-insulated plenums and casings.
 5. Flexible connectors.
 6. Vibration-control devices.
 7. Factory-insulated access panels and doors.

3.9 INDOOR DUCT AND PLENUM INSULATION SCHEDULE

- A. Concealed, supply-air duct insulation shall be the following:
 - 1. Mineral-Fiber Blanket: 2 inches (50 mm) thick and 0.75-lb/cu. ft. (12-kg/cu. m) nominal density.
- B. Concealed, return-air duct insulation shall be the following:
 - 1. Mineral-Fiber Blanket: 1-1/2 inches (38 mm) thick and 0.75-lb/cu. ft. (12-kg/cu. m) nominal density.
- C. Exhaust-air duct insulation between isolation damper and penetration of building exterior shall be the following:
 - 1. Mineral-Fiber Blanket: 2 inches (50 mm) thick and 0.75-lb/cu. ft. (12-kg/cu. m) nominal density.
- D. Concealed, Type I, Commercial, Kitchen Hood Exhaust Duct and Plenum Insulation: Fire-rated blanket or board; thickness as required to achieve 2-hour fire rating.

3.10 ABOVEGROUND, OUTDOOR DUCT AND PLENUM INSULATION SCHEDULE

- A. Insulation materials and thicknesses are identified below. If more than one material is listed for a duct system, selection from materials listed is Contractor's option.
- B. Exposed, rectangular, supply-air duct insulation shall be the following:
 - 1. Mineral-Fiber Board: 3-1/2 inches (90 mm) thick and 3-lb/cu. ft. (48-kg/cu. m) nominal density.
- C. Exposed, rectangular, return-air duct insulation shall be the following:
 - 1. Mineral-Fiber Board: 3-1/2 inches (90 mm) thick and 3-lb/cu. ft. (48-kg/cu. m) nominal density.

3.11 OUTDOOR, FIELD-APPLIED JACKET SCHEDULE

- A. Install jacket over insulation material. For insulation with factory-applied jacket, install the field-applied jacket over the factory-applied jacket.
- B. Ducts, Exposed:
 - 1. Self-Adhesive Outdoor Jacket, hail-resistant.

END OF SECTION 230713

GENERAL CONDITIONS

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Rev. Date 9/29/09

File: SBD General Conditions 20080314.doc

GENERAL CONDITIONS

1. DEFINITIONS

The "AS/State Building Division," sometimes referred to as the Owner or Department, and the "Contractor" is named as such in the Contract.

The "AS/State Building Division" is the Department of Administrative Services, State Building Division of the State of Nebraska.

The "Architect/Engineer" is the Architect/Engineer of the AS/State Building Division. He may act personally or by and through such assistants as may be duly authorized to act for him; but whenever in these conditions the word "Architect/Engineer" is used, it shall be understood as referring to the Architect/Engineer appointed by the AS/State Building Division and not to any assistant.

The "Consultant" is the consulting architect or engineer that the Department may have employed to perform professional services required for the planning and construction of this project.

The term "the work" or "Work of the Contractor" includes labor or materials or both, equipment, transportation, and other facilities necessary to complete the Contract.

The term "Subcontractor" as employed herein, includes any person, firm or corporation having a direct contract with the Contractor to supply labor or materials or both for work of the Contractor, but does not include those who merely furnish material or materials not fabricated to a special design according to the plans and specifications of this work.

The term "Surety" includes any person, firm or corporation that has executed, as surety, the Contractor's performance bond securing the performance of the Contract.

The words "Plans" and "Drawings" are used synonymously in this Contract.

Wherever the word "Approved", "Approval", "As selected", appear in the specifications, it shall mean approval or selection by the Consultant or Engineer.

2. DEFINITION OF NOTICE

Where in any of the Contract Documents there is any provision with respect to the giving of notice, such notice shall be deemed to have been given; as to the AS/State Building Division, when written notice shall be delivered to the Administrator of the AS/State Building Division, or shall have been placed in the United States Mail, first class postage prepaid, addressed to the Administrator of the AS/State Building Division, as to the Contractor, when written notice shall be delivered to the chief representative of the Contractor at the site of the project or by mailing such written notice in the United States Mail, first class postage prepaid, addressed to the Contractor at the place stated as the address of his permanent place of business in the Proposal Form; as to the Surety on the performance bond, when a written notice is placed in the United States Mail, first class postage prepaid, addressed to the Surety at a home office of such Surety or to its agent or agents who executed such performance bond on behalf of such surety.

3. AUTHORITY OF THE CONSULTANT OR ARCHITECT/ENGINEER

The AS/State Building Division may for professional service required for certain projects employ consulting architects or engineers -- in these documents referred to as the Consultant. The AS/State Building Division on certain other projects may direct that the professional services be performed by the staff of the AS/State Building Division under the direction of the Architect/Engineer. It will clearly be stated in the Advertisement for Bids, Special Conditions, and Contract, whether professional services are being performed by a Consultant or the Architect/Engineer.

Plans and Specifications. The Consultant or Architect/Engineer, working to serve the interests of the Owner, has prepared the plans and specifications and shall make written interpretations of them. He or she shall approve all samples of material which are specified to be submitted for approval, approve the use of any equipment offered in lieu of that mentioned in the specifications and shall check and approve all shop drawings and details. He or she shall make periodic inspections of the project work and shall decide the quality of the work and material incorporated therein. He or she shall decide all questions which may arise as to the fulfillment of the Contract by the Contractor. Decisions by the Consultant or Architect/Engineer with regard to plans and specifications, work and materials, and contract questions, shall be made after consultation with the Owner.

4. CONTRACTOR'S SUPERINTENDENT

During the course of the work on the site, the Contractor shall employ a competent superintendent and any necessary assistants, all satisfactory to the Consultant or the Architect/Engineer. The Superintendent shall not be changed except with the consent of the Consultant or the Architect/Engineer, unless the Superintendent proves to be unsatisfactory to the Contractor and ceased to be in his employ. The Superintendent shall represent the Contractor in his absence and all directions given by him shall be as binding as if given by the Contractor. All decisions by the Superintendent shall be confirmed in writing to the Contractor. Other directions by the Superintendent shall be so confirmed on written request in each case.

5. PLANS AND SPECIFICATIONS -- CORRELATION

The work shall be executed in strict conformity with the plans and specifications.

Plans, drawings, and specifications are cooperative and supplementary. Portions of the work which can best be illustrated by the plans and drawings may not be included in the specifications and portions of the work best described by the specifications may not be depicted on the plans or drawings. All items necessary to construct or erect a complete improvement, project, building or structure shall be furnished whether called for in the specifications or shown on the plans and drawings. Special conditions shall take priority over General Conditions: Detailed Specifications shall take priority over General Specifications and large scale drawings shall take priority over small scale drawings. In case of disagreement between the plans, drawings and specifications, or within any document itself, the better quality or quantity of work shall be estimated and the matter drawn to the attention of the Consultant or Architect/Engineer for decision.

6. SHOP DRAWINGS

All work on which shop drawings are required must be in strict accordance with such drawings when approved and no work for which shop drawings are required is to be started until after the approval of

said drawings. Each shop drawing shall be submitted to the Consultant or Architect/Engineer in the quantity specified by the Consultant or Architect/Engineer. Sufficient quantity shall be submitted to provide three sets of all approved submittals to the Owner.

All shop drawings must be checked and completed in every respect, numbered consecutively, have the name of the project printed thereon, and each lot must be submitted accompanied by a letter of transmission referring to the number of drawings and the name of project for identification and especially drawing the Consultant's or Architect/Engineer's attention to any modification of plans and specifications that may have been made.

The Contractor shall make any corrections required by the Consultant or Engineer and resubmit corrected sets to him for approval in the same quantity as the initial submittal.

After the shop drawings have been approved, any portion of shop drawings which modify the plans shall be rejected as soon as such modification is discovered unless said modification has been specifically pointed out to the Consultant or Architect/Engineer as stipulated above and specific approval secured. The approval of such shop drawings will be only general in character and shall in no way relieve the Contractor from any responsibility for the accuracy of the shop drawings or from proper fitting and construction of the work, or from the necessity of furnishing all materials and workmanship required by the drawings and specifications which may not be indicated on shop drawings when approved.

7. MATERIALS -- TESTS AND STANDARDS

Samples of materials selected by the Consultant or Architect/Engineer to be tested must be furnished by the Contractor. Tests will be made at no cost to the Contractor. Where not otherwise specified, all materials shall meet the American Standards for Testing of Materials (A.S.T.M.) Standard or tentative specifications for that material. The Contractor, when requested, shall furnish a sample of all material which shall be kept on the job as basis for comparison of material incorporated in the Work.

8. OBSOLETE EQUIPMENT

It is important that the AS/State Building Division be protected as much as possible against the discontinuance of the make of equipment to be purchased, and that repair parts, and services of expert factory representatives, be made available if desired. Under these conditions the Contractor shall not furnish equipment not currently in production.

9. PATENTS

The Contractor and his Surety shall hold harmless the AS/State Building Division, its officers, agents, and employees from liability of any nature or kind including costs and expenses, for or on account of any patented invention, articles or appliances manufactured or used in the performance of this Contract unless otherwise specifically stipulated in this Contract.

10. OTHER CONTRACTS

The AS/State Building Division may award contracts for additional work and the Contractor shall fully cooperate with such other contractors and carefully fit his own work to that provided under the other contracts as may be directed by the Consultant or Architect/Engineer. If the Contractor commits or permits any act which interferes with the performance of work by any other contractor, this shall be

grounds for termination of the contract.

11. ASSIGNMENT OF CONTRACT

The Contractor shall not assign this Contract or any part hereof without the written consent of the AS/State Building Division. No assignment of this Contract shall be valid unless it contains a provision that the funds to be paid to the Assignee under the Assignment are subject to a prior lien for services rendered or materials supplied for the performance of work called for in said Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

12. SUBCONTRACTING

The Contractor shall be fully responsible to the AS/State Building Division for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by them. The Contractor shall be responsible for assigning, coordinating, and achieving completion of all subcontracted work to satisfy all requirements of the Contract Documents in a timely and proper manner. All subcontracted work shall be subject to all requirements of the Contract Documents except those legal contractual duties for which only the Contractor has exclusive responsibility as specifically assigned by the Contract Documents. Nothing contained in the Contract shall create any Contractual relation between any subcontractor and the AS/State Building Division. The attention of the Contractor and subcontractors are called to the Contract Documents which are part of this Contract. The Contractor must notify the AS/State Building Division of each subcontract he intends to award, giving:

Name and address of subcontractor
Branch of work concerned
Total price of subcontract

No part of this Contract shall be sublet without prior approval of the AS/State Building Division.

13. CONTRACTOR'S INSURANCE

The Contractor shall not commence work under this Contract until he or she has obtained all the insurance required hereunder and such insurance has been approved by the Owner nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained and approved by the Owner (or Contractor). Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

If by the terms of any insurance a mandatory deductible is required, or if the Contractor elects to increase the mandatory deductible amount, the contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

(a) WORKERS' COMPENSATION INSURANCE

The Contractor shall take out and maintain during the life of this Contract the statutory Workers' Compensation and Employer's Liability Insurance for all of his employees to be engaged in work on the project under this Contract and, in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation and Employer's Liability Insurance for all of the latter's employees to be engaged in such work. This policy shall be written

to meet the statutory requirements for the state in which the work is to be performed, including Occupational Disease. Where applicable, this policy shall provide USL&H coverage. This policy shall include a waiver of subrogation in favor of the Owner. The amounts of such insurance shall not be less than the limits stated hereinafter.

(b) COMMERCIAL GENERAL LIABILITY INSURANCE AND COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The Contractor shall take out and maintain during the life of this Contract such Commercial General Liability Insurance and Commercial Automobile Liability Insurance as shall protect him and any subcontractor performing work covered by this Contract from claims for damages for bodily injury, including death, as well as from claims for property damage, which may arise from operations under this Contract, whether such operation be by himself or by any subcontractor or by anyone directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than limits stated hereinafter.

The Commercial General Liability Insurance shall be written on an occurrence basis, and provide Premises/Operations, Products/Completed Operations, Independent Contractors, Personal Injury and Contractual Liability coverages. The policy shall include the Owner, and others as required by the Contract Documents, as an Additional Insured. This policy shall be primary, and any insurance or self-insurance carried by the Owner shall be considered excess and non-contributory. The Commercial Automobile Liability Insurance shall be written to cover all Owned, Non-owned and Hired vehicles.

(c) INSURANCE-BUILDER'S RISK

Unless otherwise provided, the Contractor shall purchase and maintain Builder's Risk Insurance for the entire value of the project and work site, from a company or companies lawfully authorized and licensed to do business in the jurisdiction in which the Project is located. This insurance shall be written to cover all risks of direct physical loss, and shall include interests of the Owner, the Contractor, and Sub-contractors in the Work. A loss insured under this insurance shall be adjusted with the Owner and made payable to the Owner as fiduciary for the insured, as their interests may appear.

(d) INSURANCE COVERAGE AMOUNTS REQUIRED

.1	Workers' Compensation and Employer's Liability	
	Coverage A	Statutory
	Coverage B	
	Bodily Injury by Accident	\$100,000 each accident
	Bodily Injury by Disease	\$500,000 policy limit
	Bodily Injury by Disease	\$100,000 each employee
.2	Commercial General Liability	
	General Aggregate	\$2,000,000
	Products/Completed Operations Aggregate	\$2,000,000
	Personal/Advertising Injury	\$1,000,000 any one person
	Bodily Injury/Property Damage	\$1,000,000 per occurrence
	Fire Damage	\$50,000 any one fire

	Medical Payments	\$5,000 any one person
.3	Commercial Automobile Liability Bodily Injury/Property Damage	\$1,000,000 combined single limit
.4	Umbrella/Excess Liability Over primary insurance	\$1,000,000 per occurrence
.5	Builder's Risk	100% of work completed values.

14. EVIDENCE OF COVERAGE

The Contractor shall furnish the Owner with a certificate of insurance coverage, which shall be submitted in duplicate to the Department of Administrative Services, Risk Management Division, 301 Centennial Mall South, Lincoln, NE 68509. These certificates shall include the name of the company, policy numbers, effective dates, dates of expiration and amounts and types of coverage afforded. If the Owner is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall be responsible for all reasonable costs properly attributable thereto.

The following clauses or endorsements must be added to the certificates for the required types of insurance. If the clause or endorsement is placed on the reverse side of such certificate, the signature of the official of the company who signs the certificate should follow it. All certificates must contain the following two clauses or endorsements:

"The insurance contract referred to herein provides complete coverage within the limits stated for the types of insurance mentioned covering all the insured's operations in connection with the insured's contract on the _____ (Project Name)."

"Said insurance contract also provides that it cannot be canceled by the insurer in less than thirty days after the insured has been given written notice of such cancellation."

15. PROTECTION OF PERSONS AND PROPERTY

The Contractor shall take all reasonable and proper precautions to protect persons and property from injury or damage resulting from its operation under this Contract. The requirements of the Nebraska Safety Codes adopted by the Nebraska State Department of Labor shall be applicable.

The Contractor shall protect all existing buildings, roadways, landscaping, and utilities against damage or interruption of services. It shall be the responsibility of the Contractor to correct health or safety hazards and repair property damage that results from their work. Such corrections shall be performed to restore conditions to at least the quality that existed at the time of commencement of this Work.

16. PROSECUTION OF THE WORK AND COMPLETION DATE

The work embraced in this Contract shall be started on the earliest possible date after the signing of contracts by both parties, and shall be carried on regularly and uninterruptedly thereafter, with such forces and by such means as will insure final completion of the entire Contract on or before the completion date set in the documents. The time of beginning, rate of progress and time of completion are essential conditions of the Contract.

The Contractor expressly agrees that in undertaking to complete the work within the Contract period fixed in the Contract Documents, he has taken into consideration and made allowances for all delays and hindrances incidental to such work, whether growing out of delays in securing materials or workmen, or otherwise.

Should the Contractor be delayed in the prosecution and completion of the work by a cause beyond his control, he shall have no claim or right of action for damages from the Owner for any such cause or delay. The Contractor may in such case be granted an extension of time specified for completion of the work as the Owner may award in writing on account of such delay; provided however, that claim for extension of time is made by the Contractor to the Owner, through the Consultant or Architect/Engineer, in writing, within two weeks from the time when such alleged cause for delay occurred. The Owner reserves the right to withhold granting of any time extensions until the stipulated Contract period is about to expire.

The Owner, at his discretion, may waive the above requirements and grant extensions of time for any reasons he deems valid. Time extensions will not be considered for weather delays unless the Contractor provides documentation of the days and hours his or her forces could not be on the job site due to the weather.

An extension of the Contract period may be granted by the Owner for any of the following reasons:

- (a) Additional work resulting from modification of the plan for the project.
- (b) Delays caused by the Owner.
- (c) Other reasons beyond the control of the Contractor which in the Owners' judgment would justify such extension.

No extension of the Contract period will be allowed for variation between contract quantities and actual quantities which cannot be predetermined and which amount to less than twenty-five percent (25%) of the contract quantities.

17. SURVEY STAKES AND LEVELS

The Contractor, unless otherwise specified, will stake out the project work and shall furnish and maintain the batter boards, level, etc.

The Contractor must carefully preserve bench marks and reference points established by the Consultant or Architect/Engineer; in case of their destruction, the Contractor will replace them and be responsible for any mistakes that may be caused by their loss or disturbance.

18. USE OF JOB SITE

The Contractor shall confine his or her equipment, apparatus, the storage of materials, and operations of his or her workers to limits indicated by law, ordinance, permits, or directions of the AS/State Building Division and shall not unnecessarily encumber the premises with his materials.

The Contractor shall not load or permit any part of a structure to be loaded with a weight that will endanger its safety. The Contractor shall enforce the Consultant's or Architect/Engineer's instructions regarding signs, advertisement, fires, and smoke.

19. LABOR

All labor shall be performed in best and most workmanlike manner by mechanics skilled in their respective trades. The standards of the work required throughout shall be of such quality as will produce only first class results.

Mechanics whose work is unsatisfactory to the Consultant or Architect/Engineer, or are considered to be unskilled or otherwise objectionable, shall be instantly dismissed from the work upon notice to the Contractor from the Consultant or Architect/Engineer.

Contractors and subcontractors employed upon the work shall be required to conform to the labor laws of the State of Nebraska, and the various acts amendatory and supplementary thereto; and to all other laws, ordinances, and legal requirements applicable thereto.

20. INSPECTION

The AS/State Building Division, through its authorized representatives and agents, shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and any data and records.

The Architect/Engineer shall, at all times, have access to the work and the premises used by the Contractor and to all places of manufacture where materials are being made for use under this Contract, and shall have full facilities for determining that such materials are being made strictly in accordance with the plans and specifications.

21. DEFECTIVE WORK OR MATERIAL

Work or material not in accordance with the Plans and Specifications, or in any way defective shall be removed at once on order of the Consultant or Architect/Engineer. The Contractor shall replace or rebuild at Contractor's own expense with satisfactory material and in a professional manner any work so removed and shall reimburse the AS/State Building Division or any expense that it is put to by reason of extra work, and shall reimburse any other contractor who may incur expense caused by removal of the defective work.

22. TERMINATION FOR BREACH

In event that any of the provisions of this Contract are violated by the Contractor or any of his subcontractors, the AS/State Building Division may serve written notice upon the Contractor and the Surety of its intention to terminate the Contract, and unless within ten (10) days after the serving of such notice upon the Contractor such violation shall cease and satisfactory arrangements for correction be made, the Contract shall, upon the expiration of said ten (10) days cease and terminate. In the event of any such termination, the AS/State Building Division shall immediately serve notice thereof upon the Surety and the Contractor. The Owner may take over the work and prosecute the same to completion of Contract for the account and at the expense of the Contractor. The Contractor and his Surety shall be liable to the AS/State Building Division for any excess cost occasioned the AS/State Building Division thereby and in such event the AS/State Building Division may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore. Neither the Owner nor any member or employee thereof shall be in any way liable or accountable to the Contractor or his surety for the method by which the completion of the said work, or any portion thereof, may be accomplished or for the price paid therefore.

23. CONSTRUCTION REPORTS -- PAYMENT ESTIMATES

The Contractor shall submit to the Owner a schedule of values and quantities of materials and of other related items. The schedule(s) shall be in a form that correlates to the estimates upon which they are based, or as the Owner may require.

The Contractor shall submit to the Owner the following records on forms to be supplied by the Contractor (Notice - AIA Document forms shall be the latest edition):

- (a) AIA Document G702, Application and Certification for Payment
- (b) AIA Document G703, Continuation Sheet (Schedule of Values)

24. PAYMENT

So long as the work herein contracted for is carried out in accordance with the provisions of the Contract, the Contractor will, on or before the 25th day of each month, make an appropriate estimate of the value of the work performed during the month and the materials suitably stored on the work site, and shall prepare an Application And Certification For Payment and the Continuation Sheet and submit them to the Consultant. Within seven days after receipt of such Application And Certification For Payment it shall be approved either in whole or in part by the Consultant or Architect/Engineer, or disapproved. If disapproved, the Pay Application shall be corrected by the Contractor. Once a payment is approved, then the AS/State Building Division will pay to the Contractor in State warrants, and in accordance with the payment provisions in the Agreement and these General Conditions, the amount approved, which shall be ninety percent (90%) of completed work and stored materials. The AS/State Building Division may at any time reserve and retain payment as authorized in Provision #27 of these General Conditions. However, prior to final payment, the total paid to the Contractor shall not exceed ninety percent (90%) of the estimated value of the work performed and materials stored at the site.

The Contractor shall pay:

(1) for all transportation and utility services not later than the 20th day of the calendar month following that in which such services are rendered;

(2) for all articles, tools, and other expendable equipment for at least 90% of cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools, and equipment are delivered to and properly stored at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in which such materials, tools, and equipment are incorporated or used; and

(3) to each of his subcontractors not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors, to the extent of each such subcontractor's interest therein.

25. EXTRA, ADDITIONAL OR OMITTED WORK -- PAYMENT FOR

The AS/State Building Division shall have the right at any time and without notice to the Sureties, to alter and modify the Plans and Specifications, thus making specific changes in the construction, details, or execution of the work. All changes in plans and specifications will be made by the AS/State Building Division in writing. The Contractor shall make such alterations as may thus be ordered by the AS/State Building Division and in case these changes increase or decrease the amount of work to be done under this Contract, equitable amounts in price and time will be added to or deducted from the Contract price

and Contract time. The amount of such increase or decrease shall be agreed upon between the Owner and the Contractor BEFORE the changes are made.

When directed in writing by the Consultant or Architect/Engineer and with approval of the AS/State Building Division, the Contractor shall furnish all material and labor not otherwise provided for by the terms of this Contract, but which may be connected with or necessary to the proper completion of the Work. Such material and labor shall be furnished and completed as part of this Contract and subject to its provisions. The payment for any such work shall be determined by agreement between the Owner and the Contractor before the extra work is commenced, either on the basis of the unit price, or a lump sum price, or on a limited cost-plus basis not to exceed the specified limit.

The payment for extra, additional or omitted work to be performed by the contractor or subcontractors using their own forces shall be as follows: for all labor and foreman in direct charge of the specific operations, including liability and workers' compensation, the Contractor shall receive the wage rate agreed upon in writing before starting such work, for each hour that said labor, teams and foreman are actually engaged in such work, to which shall be added an amount for profit and overhead combined equal to 10% of the sum thereof. The wages of any foreman or time keeper who is employed partly on "cost-plus" work and partly on other work, shall be prorated between the two classes of work according to the number of employees employed on each class of work as shown by the payroll.

For all materials being permanently incorporated or installed into the Work, the Contractor shall receive the actual cost of such material delivered to the Work, including freight and handling charges as shown by original receipted bills, to which cost shall be added a sum equal to an amount of 10% thereof for profit and overhead combined as agreed to in advance by the Owner.

If it is necessary for the Contractor to rent equipment in the performance of such work, he will be allowed the actual rental price paid, if reasonable, for the actual time that such equipment is in use on the work and to which sum 10% shall be added for profit and overhead combined.

For contractors and subcontractors, prices submitted by their respective subcontractors for labor, materials, rentals, overhead and profit may be marked up a maximum of 5%.

No claims for extra work will be allowed unless accompanied by a written Change Order from the Consultant or Architect/Engineer and approved by the AS/State Building Division authorizing such extra work and defining the agreed basis of payment. Change Orders shall be documented on AIA Form G701 prepared by the Consultant or Architect/Engineer.

The Contractor shall, immediately after completing extra work, file with the Architect/Engineer, in writing, all claims for extra work performed. If the Contractor fails to make such claims within 30 days, Contractor's right to extra pay for such work shall be deemed to have been waived and forfeited and he or she shall not be entitled to any payment on account of such extra work.

26. CONTRACTOR'S PAYMENTS FOR LABOR AND MATERIALS

The Contractor shall pay for all labor and materials used or furnished in the performance of this Contract. Before final payment, the Contractor must certify that all bills for labor and materials have been paid. In event he is requested and fails to furnish satisfactory evidence, the AS/State Building Division may withhold any payments until it is satisfied that all such claims have been paid.

27. OWNER'S RIGHT TO WITHHOLD PAYMENT AND MAKE APPLICATION THEREOF

In addition to the payment to be retained by the AS/State Building Division under the preceding provisions of these General Conditions, the AS/State Building Division may withhold a sufficient amount of any payment otherwise due to the Contractor to cover:

(a) payments that may be earned or due for just claims for labor or materials furnished in and about the performance of the work on the project under this Contract;

(b) for defective work not remedied, and for damage to existing conditions or new work not remedied; and

(c) for failure of the Contractor to make proper payments to his subcontractor.

The AS/State Building Division shall disburse and shall have the right to act as agent for the Contractor in disbursing such funds as have been withheld pursuant to this paragraph to the party or parties who are entitled to payment therefrom. The AS/State Building Division will render to the Contractor a proper accounting of all such funds disbursed on behalf of the Contractor.

28. CLEAN UP

On or before the completion of the work, the Contractor shall clean all parts of the Work under his Contract. He or she shall remove all rubbish and all his materials, tools, and equipment from the construction site, leaving the site in a condition as good or better than that existing at commencement of the Work.

The Contractor shall from time to time clean up and remove from the project rubbish and debris resulting from his work, and shall at completion of the Work remove all construction materials and equipment, leaving the project and site clean.

29. FINAL INSPECTION

When the work has been substantially completed, the Contractor shall notify the Consultant or Architect/Engineer, in writing, that the work is ready for final inspection and testing on a definite date and time as stated in such notice. The notice shall be given at least ten (10) days in advance of said date.

After the final inspection has been completed, the Consultant or Architect/Engineer shall present to the Contractor and the AS/State Building Division a report ("punch list") listing all deficiencies found in the inspection of the Contractor's work which are to be corrected. The Contractor shall immediately make the required corrections to remove the deficiencies reported by the Consultant or Architect/Engineer. When the deficiencies have been removed, the Contractor shall request in writing a re-inspection of the work by the Consultant or Architect/Engineer.

30. FINAL PAYMENT

As soon as practical after completion and acceptance of the Work, the Contractor shall prepare a final payment statement showing the final payment due. After approval by the Contractor, the Consultant or Architect/Engineer and the AS/State Building Division, the final payment shall be processed in accordance with the payment provisions of the Agreement and the General Conditions.

31. GUARANTEE OF WORK

(a) Except as otherwise specified all work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment or workmanship for one year from the date of final completion of the Contract.

(b) If, within any guarantee period, repairs or changes are required in connection with the guaranteed work, which, in the opinion of the Consultant or Architect/Engineer are rendered necessary as a result of the use of materials, equipment, or workmanship which are inferior, defective, or not in accordance with the Contract, the Contractor shall, promptly upon receipt of notice from the Owner, and without expense to the Owner:

- (1) Place in satisfactory condition all of such guaranteed work, correct all defects therein, and
- (2) Make good all damages to the building or project work, or equipment or contents thereof, which, in the opinion of the Consultant or Architect/Engineer is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract; and
- (3) Make good any work or materials, or the equipment and contents of said building or project work disturbed in fulfilling any such guarantee.

(c) In any case where fulfilling the requirements of the Contract, and guarantees, the Contractor disturbs any work guaranteed under another contract, he shall restore such disturbed work to a condition satisfactory to the Consultant or Architect/Engineer and guarantee such restored work to the same extent as it was guaranteed under such other contract.

(d) If the Contractor, 30 days after notice, fails to comply with the terms of the guarantee, the Owner may have defects corrected and the Contractor and Contractor's Surety shall be liable for all expenses incurred.

(e) All special guarantees applicable to definite parts of the work that may be required by the Contract Documents shall be subject to the terms of Provision #31(a) through (e) during the first year of the life of such guarantee.

32. UNEMPLOYMENT COMPENSATION FUND

The Contractor shall make payments to the Unemployment Compensation Fund of the State of Nebraska all contributions and interest due under the provisions of Section 48-601 to 48-669, Revised Reissue Statute of Nebraska, on wages paid to individuals employed in the performance of this Contract as required by Section 48-657, Revised Reissued Statute of Nebraska.

Under the requirements of Section 48-657, Revised Reissue Statute of Nebraska, the AS/State Building Division cannot make payment to the Contractor on the final three percent (3%) of the Contract without first receiving from the Contractor a written clearance from the Commissioner of Labor certifying that all payments then due for contributions or interest which may have arisen under such Contract have been made by the Contractor, or his subcontractors, to the Unemployment Compensation Fund.

33. PRECONSTRUCTION CONFERENCE

A preconstruction conference shall be scheduled before starting construction, no later than 15 days after the date of the Agreement. It shall be held at the project site, or other convenient location. The

meeting shall review responsibilities and personnel assignments of the Owner, Contractor, and the Consultant.

Authorized representatives of the Owner, Contractor, and the Consultant shall attend the preconstruction conference, as will the Contractor's superintendent, major subcontractors, manufacturers, suppliers, and other parties integral to the completion of the Work. All participants shall be familiar with the project and authorized to make decisions for the entities they represent.

The preconstruction conference will include discussion of items necessary for project progress and successful completion, such as: construction scheduling; critical work sequencing; designation of responsible personnel; procedures for processing field decisions and change orders; procedures for processing Applications for Payment; distribution of Contract Documents; submission of Shop Drawings and product data a samples; preparation of record documents; use of the premises; parking availability; office, work, and storage areas; equipment deliveries and priorities; safety and first aid procedures; security; housekeeping; working hours; and other matters deemed important by the Owner.

34. WORK ELIGIBILITY STATUS OF EMPLOYEES

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at www.das.state.ne.us.

2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.

3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

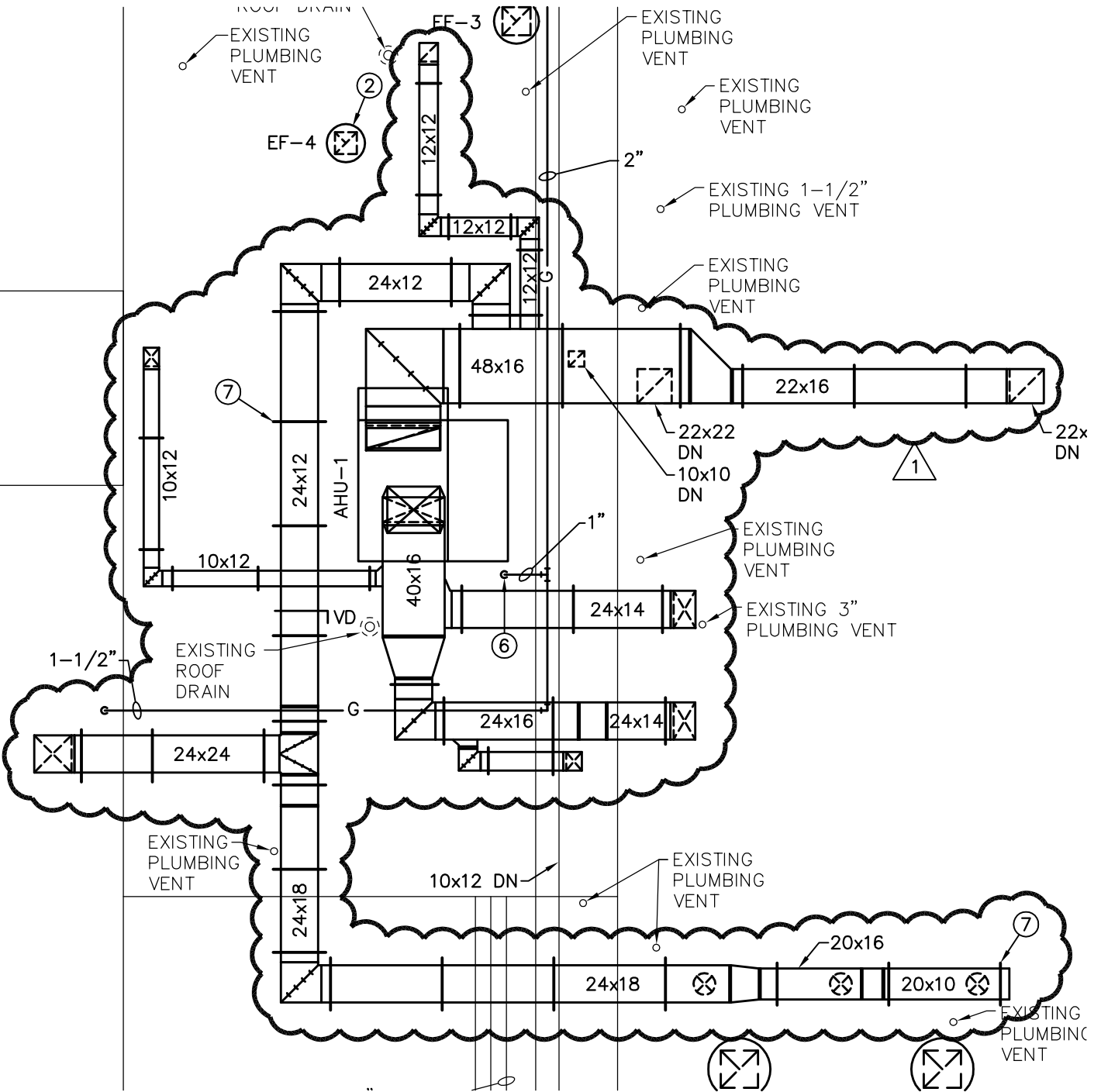
END OF GENERAL CONDITIONS

SHEET NOTES: (SYMBOLS ①, ②, ETC.)

7. DUCT SUPPORTS (TYP.) SEE ALSO DETAIL.

①

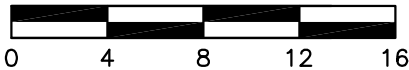
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DATE: Mar 12, 2013 2:22pm
USER: kost
XREFS: xref - fb xref - roof MHN1A



ROOF HVAC AND PLUMBING PLAN

②
M2

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



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(Sheet Number)

M2

(Project Number)
012-1721
(Drawing Number)

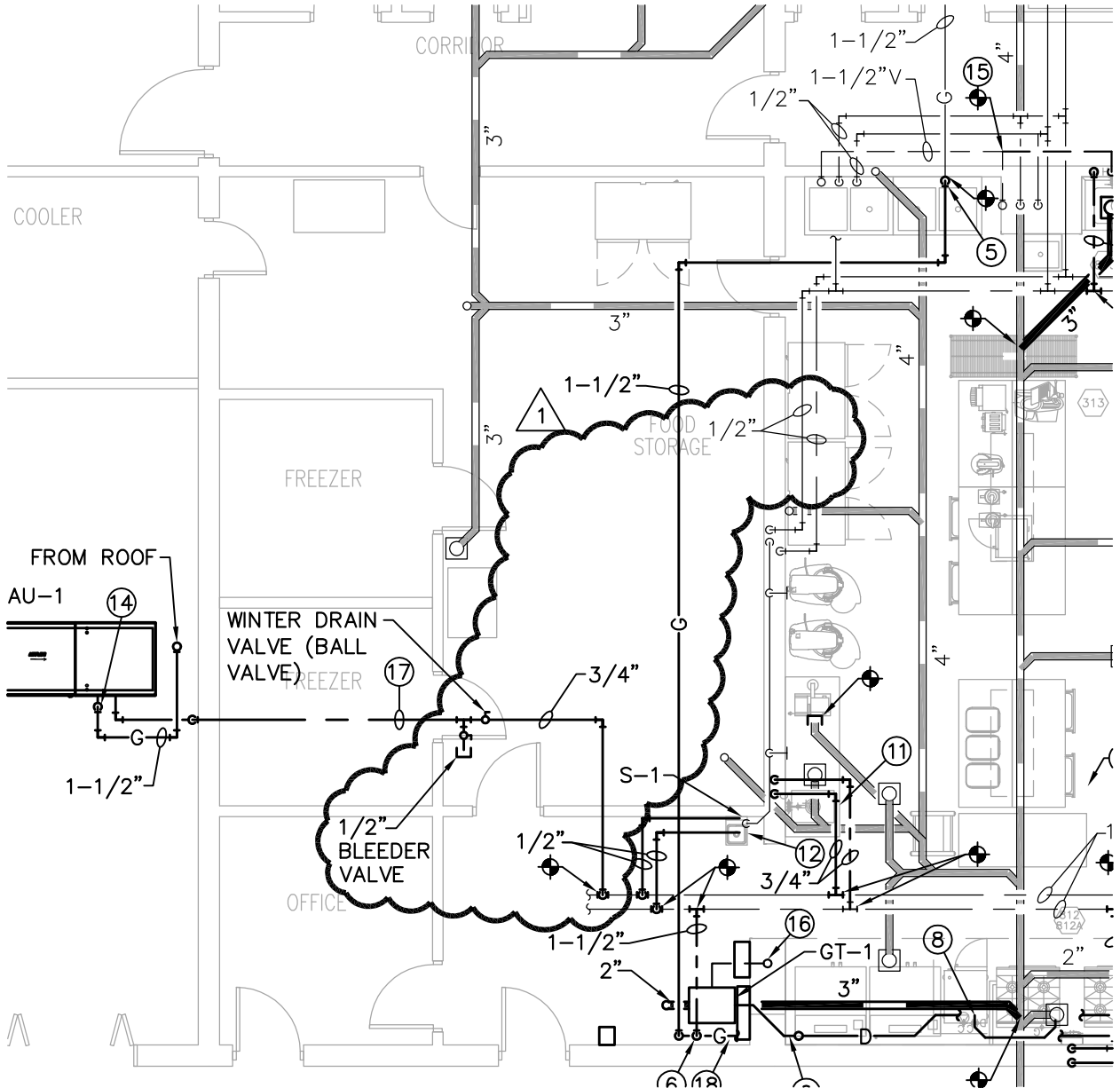
(Date)
02-14-13

ROOF HVAC AND PLUMBING PLANS
KITCHEN HVAC RENOVATION
WESTERN NEBRASKA VETERANS' HOME

①

Attachment No. M2-1 to
Addendum No. 2
Dated: March 12, 2013

DWG: F:\Projects\012-1721\ME\1-NE DAS WNVH Kitchen HVAC Renov\Constructs\Mechanical\MPN1A.dwg
 DATE: Mar 12, 2013 2:05pm
 USER: lkost
 MHN1A
 XREFS: xref - Existing Floor Plan xref - tb xref - Floor Plan

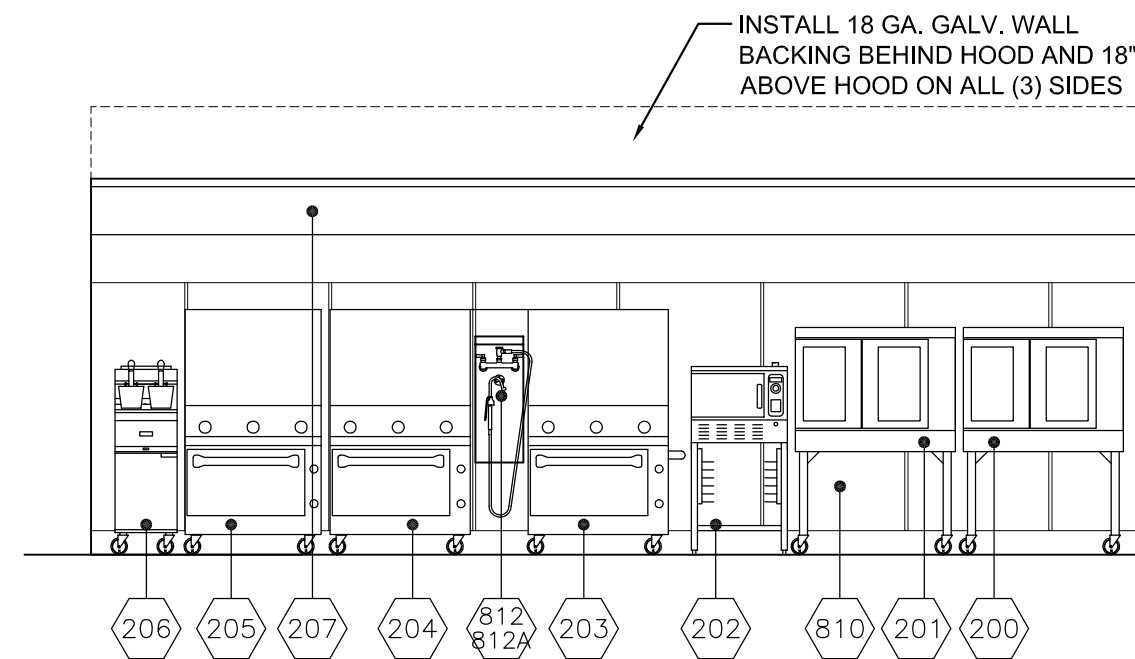


2
M3

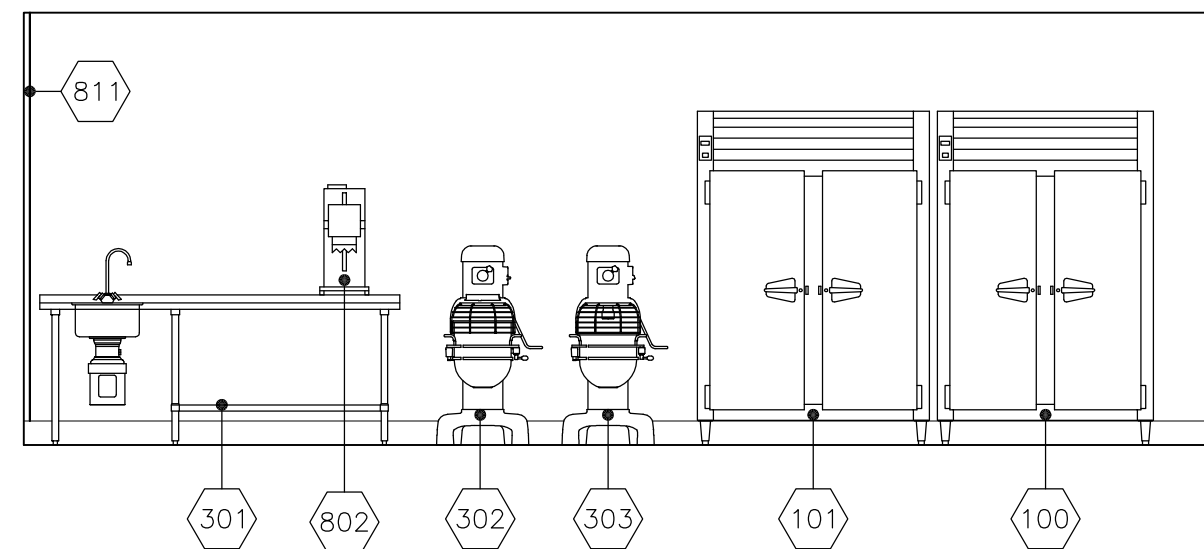
FIRST FLOOR PLUMBING PLAN

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

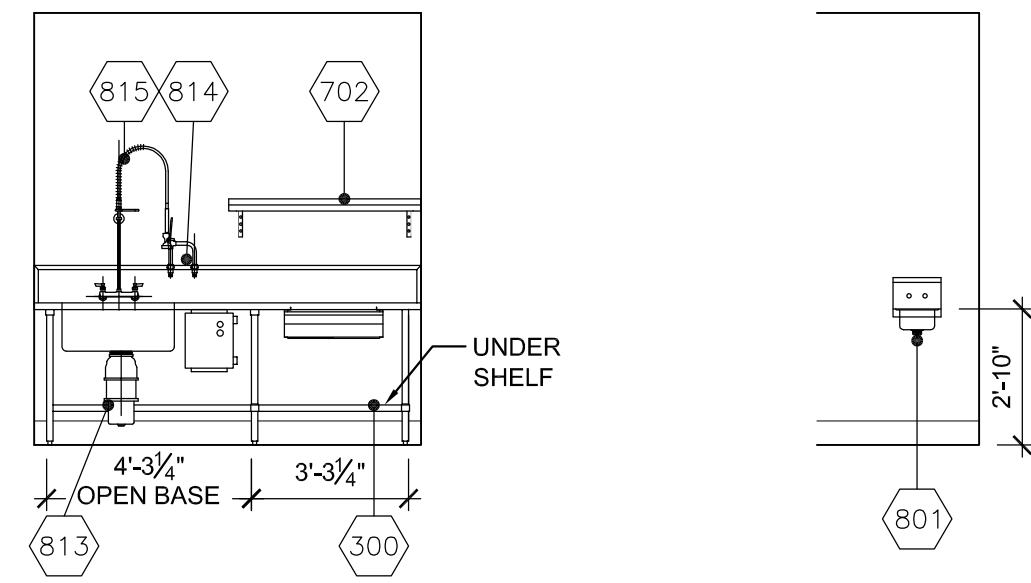




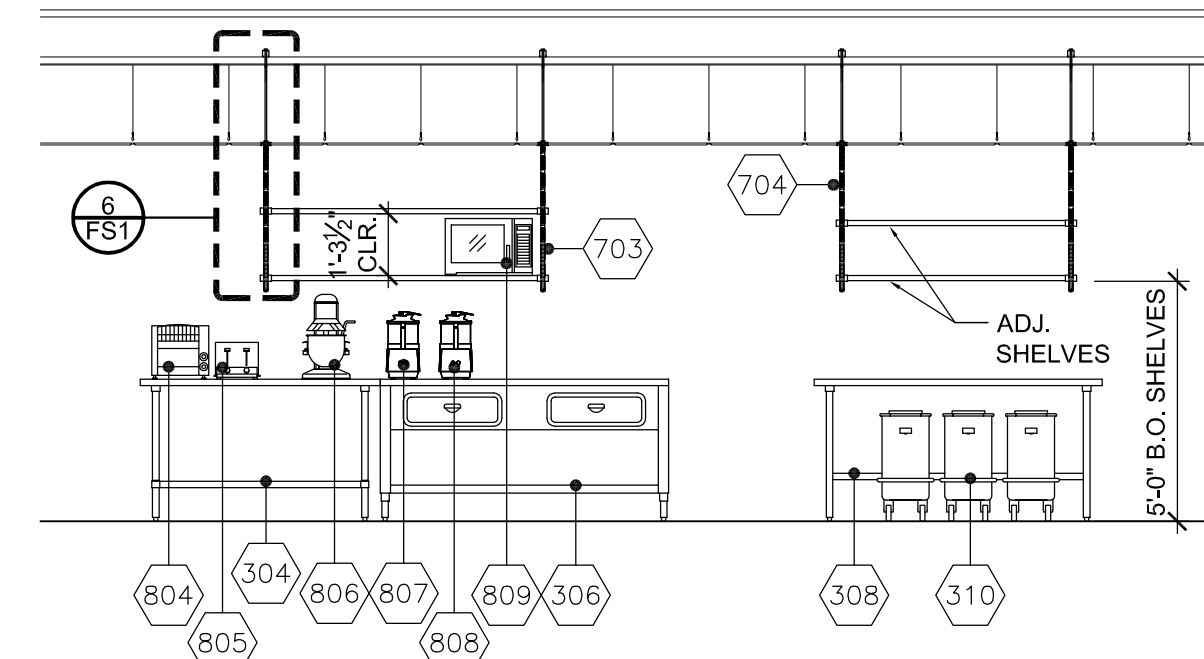
1 ELEVATION
 FS1 SCALE: 1/4" = 1'-0"



2 ELEVATION
 FS1 SCALE: 1/4" = 1'-0"

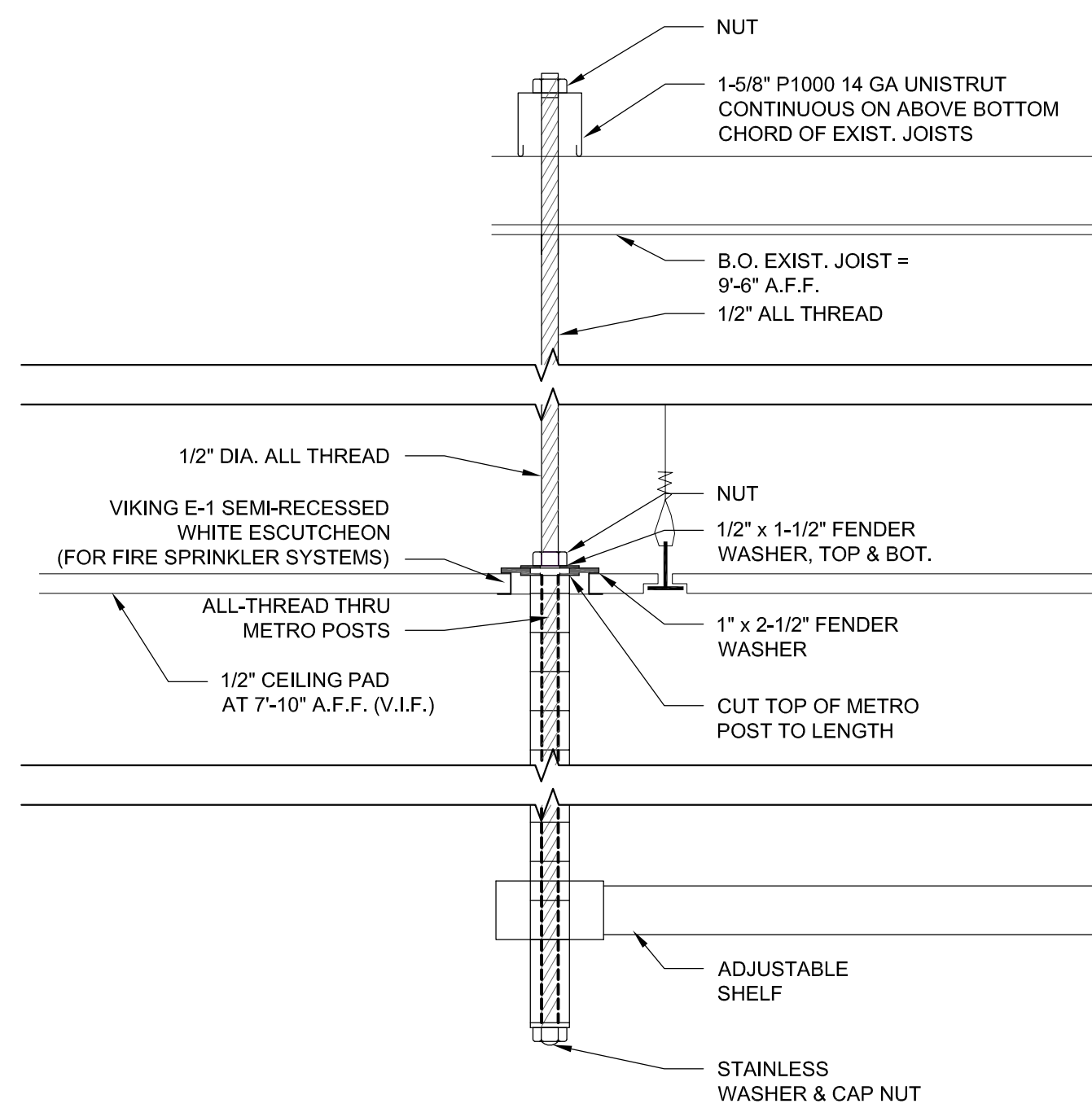


3 ELEVATION
 FS1 SCALE: 1/4" = 1'-0"

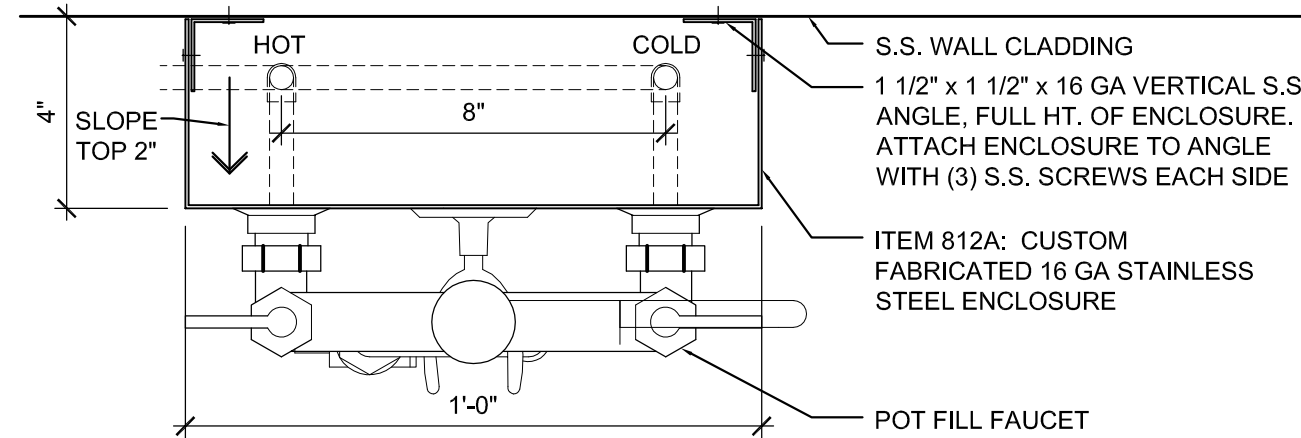


4 ELEVATION
 FS1 SCALE: 1/4" = 1'-0"

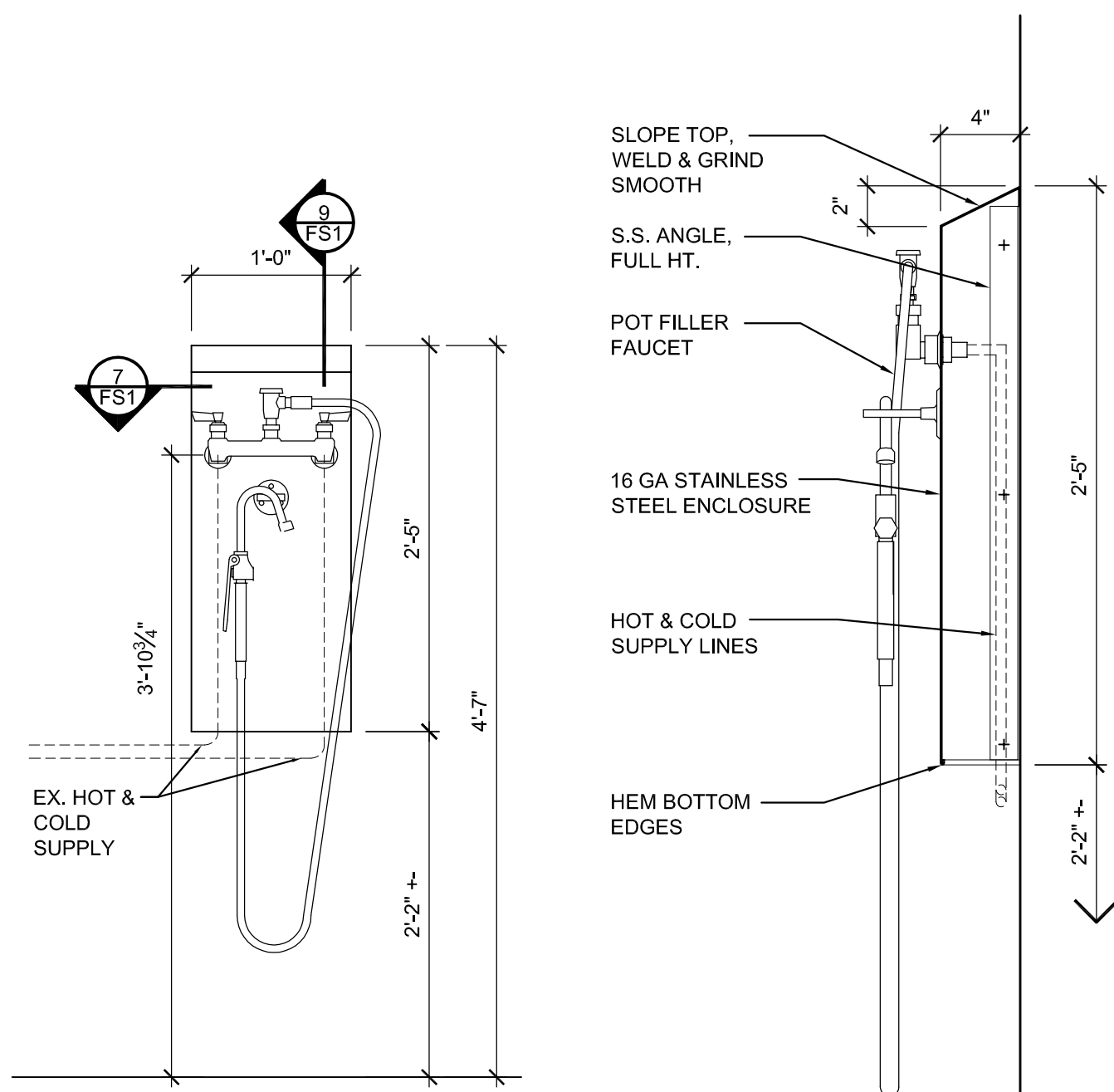
5 ELEVATION
 FS1 SCALE: 1/4" = 1'-0"



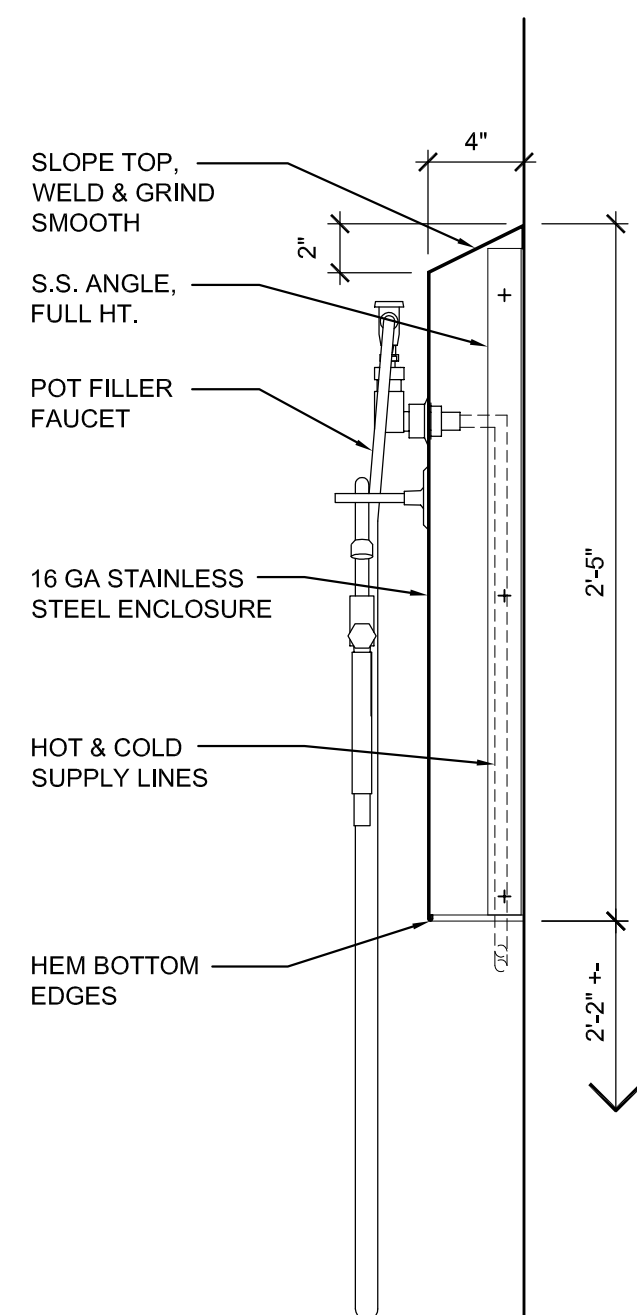
6 SECTION
 FS1 SCALE: 3" = 1'-0"



7 POT FILLER & ENCLOSURE DETAIL
 FS1 SCALE: 3" = 1'-0"



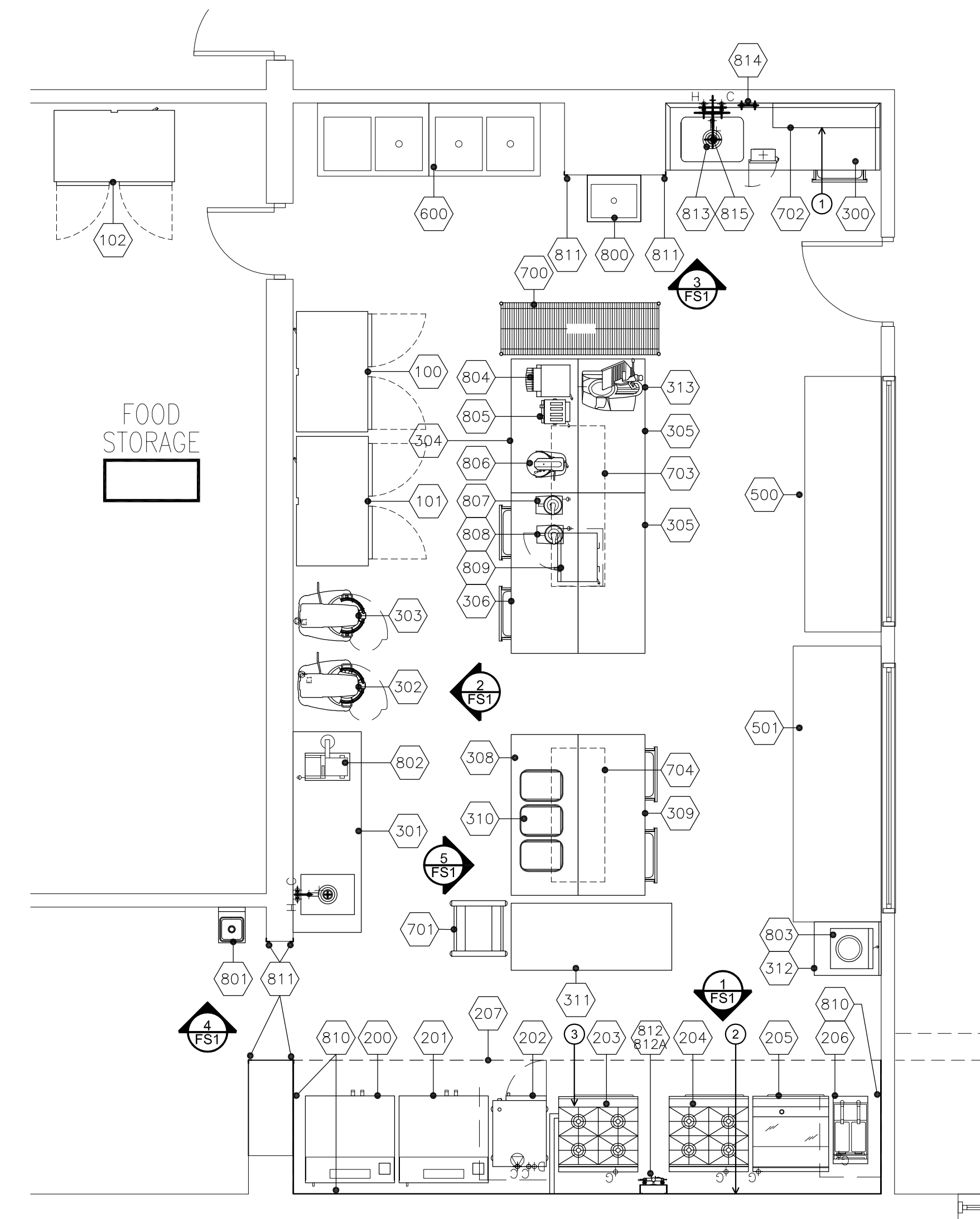
8 ELEVATION
 FS1 SCALE: 1" = 1'-0"



9 SECTION
 FS1 SCALE: 1 1/2" = 1'-0"

EQUIPMENT SCHEDULE

Item No	Description
100	Existing Freezer
101	Existing Refrigerator
102	Existing Refrigerator
200	Existing Convection Oven
201	Existing Convection Oven
202	Existing Steamer
203	Existing Range
204	Existing Range
205	Existing Griddle
206	Existing Fryer
207	New Exhaust Hood By Mechanical
300	New Prep Table with Welded Sink - Custom
301	Existing Prep Table with Sink
302	Existing 40 Quart Mixer
303	Existing 30 Quart Mixer
304	Existing 30" x 60" Prep Table
305	Existing 30" x 60" Prep Table
306	Existing 30" x 72" Prep Table with Drawers
307	Existing 30" x 72" Prep Table with Drawers
308	New 30" x 72" Open Base, Flat Top Prep Table
309	Existing 30" x 72" Prep Table with Drawers
310	(3) Existing Ingredient Bins
311	Existing 30" x 72" Prep Table
312	New 30" x 24" Prep Table
313	Existing Slicer
500	Existing Serving Equipment
501	Existing Serving Equipment
600	Existing Three Compartment Sink
700	Existing Pan Rack
701	Existing Cooling Rack
702	Existing 48" Wall Shelf
703	New 72" Ceiling Mounted Shelf
704	New 60" Ceiling Mounted Shelf
800	Existing Hand Sink
801	New Hand Sink- by Plumbing Contractor
802	Existing Electric Can Opener
803	Existing Pellet Warmer
804	Existing Conveyor Toaster
805	Existing Slot Toaster
806	Existing Counter Mixer
807	Existing Robo Coupe
808	Existing Blender
809	Existing Microwave
810	New 18 ga. Stainless Steel Wall Cladding
811	New 18 ga. Stainless Steel Cornerguards
812	New Pot Fill Faucet
812A	New Custom Stainless Enclosure
813	New Disposer & Disposer Controls
814	New Vacuum Breaker
815	New Pre-Rinse Faucet



11 KITCHEN EQUIPMENT PLAN
 FS1 SCALE: 1/4" = 1'-0"



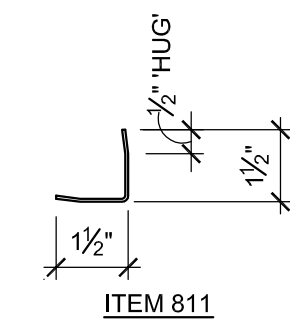
FOODSERVICE CONSTRUCTION KEY NOTES

- REMOVE EXISTING 8'-0" WALL SHELF ABOVE SINK AND RELOCATE (1) EXISTING 11" x 48" WALL SHELF CURRENTLY INSTALLED SOUTH OF EXISTING SERVING LINE.
- NEW STAINLESS STEEL WALL CLADDING (ITEM 810) SHALL BE INSTALLED OVER EXISTING CERAMIC TILE.
- INSTALL DORMONT SAFETY SET WHEEL POSITIONING SYSTEM AT ALL EQUIPMENT WITH CASTERS LOCATED UNDER THE HOOD.

2 DRAWING ADDED TO SET

10 STAINLESS CORNERGUARDS

FS1 SCALE: 3" = 1'-0"



FOODLINES

This document was originally approved and sealed on 02.19.13, by DAVID L. ERIKSSON, a licensed professional architect in the State of NEBRASKA A-1440.

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REV. NO.	DATE	REVISIONS DESCRIPTION
2	2-28-13	ADDED #2

KITCHEN EQUIPMENT PLAN, ELEVATIONS & SCHEDULE
 WESTERN NEBRASKA VETERANS' HOME
 KITCHEN HVAC RENOVATION
 SCOTTSBLUFF, NE

drawn by:	JW
checked by:	DE
approved by:	
QA/QC by:	
project no.:	012-1721
drawing no.:	130741
date:	02.19.2013