



**ADDENDUM NO. 7 TO PROJECT NO. 44014
CONSTRUCTION WORK, HVAC WORK, PLUMBING WORK, AND ELECTRICAL WORK
PROVIDE CITYSCAPE COMPLEX
STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY**

September 13, 2012

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

CHANGES TO ADDENDUM NO. 6

1. Item No. 28: Delete Revised Drawing No. P-000 from this Item. Discard Drawing No. P-000, noted "Revised Drawing 9/5/12" that accompanied Addendum No. 6.

CONSTRUCTION WORK SPECIFICATIONS

2. Page 042000-2, PART 2 PRODUCTS: Add the following Article:

"2.08 SLIP-SET STABILIZER

- A. Type: Type H slip-set stabilizer by Hohmann & Barnard, Inc., 30 Rasons Court, Hauppauge, NY 11788, (800) 645-0616, www.h-b.com.
- B. Features:
 1. Material: Stainless steel.
 2. Connects level horizontal mortar joints.
 3. Field bendable to connect intersecting walls, or new walls to existing walls.
 4. Bonds masonry walls and restrains lateral movements while allowing expansion and control joints to perform as designed."
3. Page 061000-1, Subparagraph 1.02 A.1.: Add the following Subparagraph:

"b. Fire-Retardant Treatment: Certification by treating plant stating treated material complies with specified standards and treatment will not bleed through specified finishes."
4. Page 061000-1, Paragraph 1.03 A.: Add the following Subparagraph:

"2. Fire-Retardant Treated Material: Accredited testing agency mark on each piece of wood indicating compliance with the fire hazard classification."

5. Page 061000-2, PART 2 PRODUCTS: Add the following Article:

“2.04 FIRE-RETARDANT TREATMENT

- A. Furnish “FR-S” lumber where indicated, complying with AWPA U1 Standards for pressure impregnation with fire-retardant chemicals to achieve a flamespread rating of 25 or less, when tested in accordance with UL Test 723, ASTM E 84 or NFPA Test 255.
1. Where treated items are indicated to receive a transparent or paint finish, use a fire-retardant treatment which will not bleed through or adversely affect bond of finish.
 2. Provide UL label or identifying mark on each piece of fire-retardant lumber.
 3. Redry treated items to a maximum moisture content of 19 percent after treatment.”
6. Page 093013-3, Subparagraph 2.01 C.1.: Delete this Paragraph in its entirety and replace with the following:
“1. Module Size: 3 inches x 6 inches.”
7. Page 133419-12, Subparagraph 2.05 C. 1.a.: Delete this Paragraph in its entirety, and replace with the following:
“a. Metal Thickness: 0.030 inch/22 gage.”

HVAC WORK SPECIFICATIONS

8. SECTION 230700 PIPING INSULATION: Delete this Section in its entirety.
9. SECTION 230719 INSULATION: Add the attached Section (pages 230719-1 thru 230719-16) to the Project Manual.

CONSTRUCTION WORK DRAWINGS

10. Drawing No. S-003, DETAIL 1 FLEX ROOM PANEL LOADING CONDITIONS: Delete reference to “movable bollard typ.”
11. Drawing No. A-419, ROOM FINISH SCHEDULE:
a. Delete Room Nos. 138 and 139 from schedule.
b. Add the following to the Comments Column for Bathroom Nos. 209A, 210A, and 216A:
“The CT base tile shall match the CT floor tile.”
12. Addendum Drawings:
a. Drawing Nos. A-614, and A-615 noted “ADDENDUM DRAWING 9/12/12” accompany this Addendum and form part of the Contract Documents.
13. Revised Drawings:
a. Drawing No. A-502 noted “REVISED DRAWING 9/12/12” accompanies this Addendum and supersedes the same numbered originally issued drawing.

- b. Drawing Nos. A-103, A-105, A-200, A-201, and A-501, noted “REVISED DRAWING 9/12/12” accompany this Addendum and supersede the same numbered originally issued drawings, as well as same numbered Revised Drawings issued with Addendum No. 2 dated 8/15/12.
- c. Drawing No. A-607, noted “REVISED DRAWING 9/12/12” accompanies this Addendum and supersedes the same numbered originally issued drawing, as well as same numbered Revised Drawing issued with Addendum No. 6 dated 9/5/12.

HVAC WORK DRAWINGS

- 14. Revised Drawings:
 - a. Drawing Nos. M-104 noted “REVISED DRAWING 9/12/12” accompaies this Addendum and supersedes the same numbered originally issued drawing.

PLUMBING WORK DRAWINGS

- 15. Revised Drawings:
 - a. Drawing Nos. P-000 noted “REVISED DRAWING 9/12/12” accompanies this Addendum and supersedes the same numbered originally issued drawing.

ELECTRICAL WORK DRAWINGS

- 16. Revised Drawings ES-101 and ES-102 (Issued with Addendum No. 2 dated 8/29/12): Add the following Note:
“All power manholes shown on this drawing are existing.”

END OF ADDENDUM

James Dirolf, P.E.
Director of Design

SECTION 230719

INSULATION

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Through Penetration Firestops: Section 078400.
- B. Painting: Section 099103.
- C. Pipe Hangers and Supports: Section 230529.

1.02 ABBREVIATIONS

- A. FS: Federal Specification.
- B. K: Thermal Conductivity, i.e., maximum Btu per inch thickness per hour per square foot.
- C. pcf: Pounds per cubic foot.
- D. PVC: Polyvinylchloride.

1.03 SUBMITTALS

- A. Product Data:
 - 1. Manufacturer's catalog sheets, specifications and installation instructions for insulation materials and jacket materials.
 - 2. Materials Schedule: Itemize insulation materials and thicknesses for each specified application in Insulation Material Schedules in Part 3 of this Section. Where optional materials are specified, indicate option selected.
- B. Quality Control Submittals:
 - 1. Installers Qualification Data:
 - a. Name of each person who will be performing the Work, and their employer's name, business address and telephone number.
 - b. Furnish names and addresses of the required number of similar projects that each person has worked on which meet the qualifications.

1.04 QUALITY ASSURANCE

- A. Qualifications: The persons installing the Work of this Section and their Supervisor shall be personally experienced in mechanical insulation work and shall have been regularly employed by a company installing mechanical insulation for a minimum of 5 years.

- B. Regulatory Requirements:
 - 1. Insulation installed inside buildings, including duct lining materials, laminated jackets, mastics, sealants and adhesives shall have a Fire Spread/Smoke Developed Rating of 25/50 or less based on ASTM E 84.

PART 2 PRODUCTS

2.01 INSULATION

- A. Fibrous Glass (Mineral Fiber) Insulation: Composed principally of fibers manufactured from rock, slag, or glass, with or without binders, and asbestos free.
 - 1. Preformed Pipe Insulation: Minimum density 3 pcf; ASTM C 547:
 - a. Class 1 (Suitable for Temperatures Up to 450 degrees F): K of 0.26 at 75 degrees F.
 - 2. Premolded Fitting Insulation: Minimum density 4.0 pcf, K of 0.26 at 75 degrees F; ASTM C 547, Class 1.
 - 3. Insulation Inserts for PVC Fitting Jackets: Minimum density 1.5 pcf, K of 0.28 at 75 degrees F; ASTM C 553, Type III.
 - a. Suitable for temperatures up to 450 degrees F.
 - 4. Block or Board Insulation: Minimum density 3.0 pcf and 6.0 pcf as specified; ASTM C 612:
 - a. Type IA or IB (Suitable for Temperatures Up to 450 degrees F): K of 0.26 at 75 degrees F.
 - 5. Thermal and Acoustic Board Insulation: Minimum density 3.0 pcf, K of 0.27 at 75 degrees F; ASTM C 1071, Type II.
 - a. Air Stream Side: Erosion, temperature, and fire resistant type; NFPA 90-A and 90-B.
 - 6. Blanket Insulation:
 - a. For Ductwork (Suitable for Temperatures Up to 450 Degrees F): Minimum density 1.0 pcf, K of 0.31 at 75 degrees F; ASTM C 553, Type II.
- B. Flexible Elastomeric Foam Insulation:
 - 1. FM tested and approved, meeting the following:
 - a. Maximum Water Vapor Transmission: 0.10 perm - inch based on ASTM E 96, Procedure A.
 - b. K of 0.27 at 75 degrees F based on ASTM C 518 or C 177.
 - c. Fire Spread/Smoke Developed Rating: 25/50 or less based on ASTM E 84.
 - 2. Pipe Insulation: ASTM C 534, Type I.
 - 3. Sheet Insulation for Ductwork and Equipment: ASTM C 534, Type II, smooth skin one side.
 - 4. Polyethylene and polyolefin insulation is not acceptable.
- C. High Density Jacketed Insulation Inserts for Hangers and Supports:
 - 1. For Use with Fibrous Glass Insulation:
 - a. Cold Service Piping:

- 1) Polyurethane Foam: Minimum density 4 pcf, K of 0.13 at 75 degrees F, minimum compressive strength of 125 psi.
 - b. Hot Service Piping:
 - 1) Calcium Silicate: Minimum density 15 pcf, K of 0.50 at 300 degrees F; ASTM C 533.
 - 2) Perlite: Minimum density 12 pcf, K of 0.60 at 300 degrees F; ASTM C 610.
 - c. Ductwork: Fibrous glass board, minimum density 6 pcf, K of 0.26 at 75 degrees F, conforming to ASTM C 612, Type IA or IB.
2. For Use with Flexible Elastomeric Foam Insulation:
- a. Ductwork and Piping: Hardwood dowels and blocks, length or thickness equal to insulation thickness, other dimensions as specified or required.
- D. Cements:
1. Fibrous Glass Thermal Insulating Cement: Asbestos free; ASTM C 195.
 2. Fibrous Glass Hydraulic Setting Thermal Insulating and Finishing Cement: ASTM C 449/C 449M.

2.02 JACKETS

- A. Laminated Vapor Barrier Jackets for Piping and Ductwork: Factory applied by insulation manufacturer, conforming to ASTM C 1136, Types I and II.
1. Type I: Reinforced white kraft and aluminum foil laminate with kraft facing out.
 - a. Pipe Jackets: Furnished with integral 1-1/2 inch self sealing longitudinal lap, and separate 3 inch wide adhesive backed butt strips.
 2. Type II: Reinforced aluminum foil and kraft laminate with foil facing out.
 3. Laminated vapor barrier jackets are not required for flexible elastomeric foam insulation.
- B. Canvas Jackets: Cotton duck, fire retardant, complying with NFPA 701, 4 oz or 6 oz per sq yd as specified.
- C. Premolded PVC Fitting Jackets:
1. Constructed of high impact, UV resistant PVC.
 - a. ASTM D 1784, Class 14253-C.
 - b. Working Temperature: 0-150 degrees F.
- D. Metal Jacketing:
1. Aluminum: ASTM B 209, Alloys 1100, 30003, 3105 or 5005, Temper H14, 0.016 inch thick.
 - a. Factory Pre-formed Sectional Pipe Jacketing:
 - 1) Smooth outer finish with integral bonded laminated polyethylene film - kraft paper moisture barrier underside.
 - 2) Pittsburg or modified Pittsburg longitudinal lock seams.

- 3) 2 inch overlapping circumferential joints with integral locking clips, or butt joints sealed with 2 inch wide mastic backed aluminum snap bands.
- b. Roll Jacketing: Smooth outer finish with integral bonded laminated polyethylene film - kraft paper moisture barrier underside.
- c. Sheet Jacketing: Corrugated 1-1/4 inch x 1/4 inch deep with integral bonded laminated polyethylene film - kraft paper moisture barrier underside.
- d. Fastening Devices:
 - 1) Strapping: Type 18-8 stainless steel, 0.020 inch thick, 1/2 and 3/4 inch wide as specified.
 - 2) Wing Seals: Type 18-8 stainless steel, 0.032 inch thick.
 - 3) Sheet Metal Screws: Panhead, Type A, hardened aluminum, and stainless steel.
2. Circumferentially Corrugated Aluminum Jacketing: Childers' Corrolon.
 - a. Construction: 3/16 inch circumferentially corrugated embossed aluminum, ASTM B 209, Types 1100, 3003, 3105, or 505, H-14 temper, 0.016 inch thick.
 - b. Moisture Barrier: Integrally bonded to jacket over entire surface in contact with insulation.
 - c. Fastening Devices:
 - 1) Strapping: 0.020 inch thick by 1/2 inch wide, Type 3003, 3105, 5005, H-14 temper.
 - 2) Wing Seals: 0.032 inch thick Type 5005, H-14 temper aluminum.

2.03 ADHESIVES, MASTICS, AND SEALERS

- A. Lagging Adhesive (Canvas Jackets): Childers' CP-50A, Epolux's Cadalag 336, Foster's 30-36.
- B. Vapor Seal Adhesive (Fibrous Glass Insulation): Childers' CP-82, Epolux's Cadoprene 400, Foster's 85-75 or 85-20.
- C. Vapor Barrier Mastic/Joint Sealer (Fibrous Glass Insulation): Childers' CP-30, Epolux's Cadalar 670, Foster's 95-44 or 30-35.
- D. Adhesive (Flexible Elastomeric Foam): Armstrong's 520, Childers' CP-80, Epolux's Cadoprene 488, Foster's 82-40.
- E. Adhesive (Reinforcing Membrane): Childers' Chil-Spray WB CP-56.
- F. Mastic (Reinforcing Membrane): Childers' AK-CRYL CP-9.
- G. Sealant (Metal Pipe Jacket): One-part silicone sealant for high temperatures; Dow Corning's Silastic 736 RTV or General Electric's RTV 106.

2.04 MISCELLANEOUS MATERIALS

- A. Insulation Fasteners for Ductwork and Equipment:
 - 1. Acceptable Manufacturers: Duro-Dyne Corp.; Erico Fastening Systems, Inc.
 - 2. Type: Weld pins, complete with self-locking insulation retaining washers.
- B. Pressure Sensitive Tape for Sealing Laminated Jackets:
 - 1. Acceptable Manufacturers: Alpha Associates, Childers, Ideal Tape, Morgan Adhesive.
 - 2. Type: Same construction as jacket.
- C. Wire, Bands, and Wire Mesh:
 - 1. Binding and Lacing Wire: Nickel copper alloy or copper clad steel, gage as specified.
 - 2. Bands: Galvanized steel, 1/2 inch wide x 0.015 inch thick, with 0.032 inch thick galvanized wing seals.
 - 3. Wire Mesh: Woven 20 gage steel wire with 1 inch hexagonal openings, galvanized after weaving.
- D. Metal Corner Angles: Galvanized steel, 2 x 2 inch 28 gage.
- E. Reinforcing Membrane: Glass or Polyester, 10 x 10 mesh. Alpha Associates Style 59, Childer's Chil-Glas, Foster's MAST-A-FAB.

PART 3 EXECUTION

3.01 PREPARATION

- A. Perform the following before starting insulation Work:
 - 1. Install hangers, supports and appurtenances in their permanent locations.
 - 2. Complete testing of piping, ductwork, and equipment.
 - 3. Clean and dry surfaces to be insulated.

3.02 INSTALLATION, GENERAL

- A. Install the Work of this Section in accordance with the manufacturer's printed installation instructions unless otherwise specified.
- B. Piping Insulation: Provide continuous insulation and jacketing when passing thru interior wall, floor, and ceiling construction.
 - 1. At Through Penetration Firestops: Coordinate insulation densities with the requirements of approved firestop system being installed. See Section 078400.
 - a. Insulation densities required by approved firestop system may vary with the densities specified in this Section. When this occurs use the higher density insulation.
- C. Do not intermix different insulation materials on individual runs of piping.

3.03 INSTALLATION AT HANGERS AND SUPPORTS

- A. Reset and realign hangers and supports if they are displaced while installing insulation.
- B. Install high density jacketed insulation inserts at hangers and supports for insulated ductwork, piping, and equipment.
- C. Insulation Inserts For Use with Fibrous Glass Insulation:
 - 1. Ductwork: Install 6 pcf density jacketed fibrous glass board, same thickness as adjoining insulation, sized for full bearing on supporting trapeze member, and as required to enable abutting to adjoining insulation and overlapping of jacketing.
 - 2. Piping: Where clevis hangers are used, install insulation shields and high density jacketed insulation inserts between shield and pipe.
 - a. Where insulation is subject to compression at points over 180 degrees apart, e.g. riser clamps, U-bolts, trapezes, etc.; fully encircle pipe with 2 protection shields and 2 high density jacketed fibrous glass insulation inserts within supporting members.
 - 1) Exception: Locations where pipe covering protection saddles are specified for hot service piping, 6 inch and larger.
- D. Insulation Inserts For Use with Flexible Elastomeric Foam Insulation:
 - 1. Ductwork: Install hardwood block, same thickness as adjoining insulation, sized for full bearing on supporting trapeze member and as required to abutt and seal vapor tight with adjoining insulation.
 - 2. Piping:
 - a. Where clevis hangers are used, install insulation shields with hardwood filler pieces, same thickness as adjoining insulation, inserted in undersized die cut or slotted holes in insulation at support points.
 - b. Contour hardwood blocks to match the curvature of pipe, and shield.
 - c. Coat dowels and blocks with insulation adhesive, and insert while still wet.
 - d. Vapor seal outer surfaces of dowels and blocks with adhesive after insertion.
 - e. Install filler pieces as follows:

PIPE/TUBING SIZE	FILLER PIECES	POSITION
Thru 1-1/2"	2 dowel plugs	6 o'clock; in tandem
2" thru 4"	1 block 2 dowel plugs	6 o'clock, and 4 & 8 o'clock respectively

3.04 INSTALLATION OF FIBROUS GLASS COLD SERVICE INSULATION

- A. Install insulation materials with a field or factory applied ASTM C 1136 Type I laminated vapor barrier jacket, unless otherwise specified.

- B. Piping:
1. Butt insulation joints together, continuously seal minimum 1-1/2 inch wide self sealing longitudinal jacket laps and 3 inch wide butt adhesive backed strips.
 - a. Substitution: 3 inch wide pressure sensitive sealing tape, of same material as jacket, may be used in lieu of butt strips.
 2. Bed insulation in a 2 inch wide band of vapor barrier mastic, and vapor seal exposed ends of insulation with vapor barrier mastic at each butt joint between pipe insulation and equipment, fittings or flanges at the following intervals:
 - a. Horizontal Pipe Runs: 21 ft.
 - b. Vertical Pipe Runs: 9 ft.
- C. Fittings, Valves, Flanges and Irregular Surfaces:
1. Insulate with mitre cut or premolded fitting insulation of same material and thickness as pipe insulation.
 2. Secure insulation in place with 16 gage wire, with ends twisted and turned down into insulation.
 3. Butt insulation against pipe insulation and bond with joint sealer.
 4. Insulate valves up to and including bonnets, without interfering with packing nuts.
 5. Apply leveling coat of insulating cement to smooth out insulation and cover wiring.
 6. When insulating cement has dried, seal fitting, valve and flange insulation, by imbedding a layer of reinforcing membrane or 4 oz. canvas jacket between 2 flood coats of vapor barrier mastic, each 1/8 inch thick wet.
 7. Lap reinforcing membrane or canvas on itself and adjoining pipe insulation at least 2 inches.
 8. Trowel, brush or rubber glove outside coat over entire insulated surface.
 9. Exceptions:
 - a. In Mechanical Equipment Rooms, Steam Service Rooms, Machine Rooms, Boiler Rooms, Penthouses, Finished Rooms and Finished Spaces: Cover fittings, valves and flanges insulated with fibrous glass with an additional 6 oz canvas jacket, lapped on adjoining insulation and pasted with lagging adhesive.
 - b. Type C and D Piping Systems: Valves, fittings and flanges may be insulated with premolded PVC fitting jackets, with fibrous glass insulation inserts.
 - 1) Additional insulation inserts are required for services with operating temperatures under 45 degrees F or where insulation thickness exceeds 1-1/2 inches. The surface temperature of PVC fitting jacket must not go below 45 degrees F.

3.05 INSTALLATION OF FIBROUS GLASS HOT SERVICE INSULATION

- A. Install insulation materials with field or factory applied ASTM C 1136 Type I laminated vapor barrier jacket unless otherwise specified.
- B. Canvas Jackets on Piping, Fittings, Valves, Flanges, Unions, and Irregular Surfaces:
 - 1. For Piping 2 inch Size and Smaller: 4 oz per sq yd unless otherwise specified.
 - 2. For Piping Over 2 inch Size: 6 oz per sq yd unless otherwise specified.
- C. Piping:
 - 1. Butt insulation joints together, continuously seal minimum 1-1/2 inch wide self sealing longitudinal jacket laps and 3 inch wide adhesive backed butt strips.
 - a. Substitution: 3 inch wide pressure sensitive sealing tape, of same material as the jacket, may be used in lieu of butt strips.
 - 2. Fill voids in insulation at hanger with insulating cement.
 - 3. Exceptions:
 - a. Piping in Accessible Shafts, Attic Spaces, Crawl Spaces, Unfinished Spaces and Concealed Piping: Butt insulation joints together and secure minimum 1-1/2 inch wide longitudinal jacket laps and 3 inch wide butt strips of same material as jacket, with outward clinching staples on maximum 4 inch centers. Fill voids in insulation at hangers with insulating cement.
- D. Fittings, Valves, Flanges and Irregular Surfaces:
 - 1. Insulate with mitre cut or premolded fitting insulation of same material and thickness as insulation.
 - 2. Secure in place with 16 gage wire, with ends twisted and turned down into insulation.
 - 3. Butt fitting, valve and flange insulation against pipe insulation, and fill voids with insulating cement.
 - 4. Insulate valves up to and including bonnets, without interfering with packing nuts.
 - 5. Apply leveling coat of insulating cement to smooth out insulation and cover wiring.
 - 6. After insulating cement has dried, coat insulated surface with lagging adhesive, and apply 4 oz or 6 oz canvas jacket as required by pipe size.
 - a. Lap canvas jacket on itself and adjoining pipe insulation at least 2 inches.
 - b. Size entire canvas jacket with lagging adhesive.
 - 7. Exceptions:
 - a. In Types E and F Service Piping Systems: Valves, fittings and flanges may be insulated with premolded PVC fitting jackets, with fibrous glass insulation inserts.
 - 1) Additional insulation inserts are required for services with operating temperatures over 250 degrees F or where insulation thickness exceeds 1-1/2 inches. The surface temperature of PVC fitting jacket must not exceed 150 degrees F.

- b. In Types E and F Service Piping Systems: Insulate fittings, valves, and irregular surfaces 3 inch size and smaller with insulating cement covered with 4 oz or 6 oz canvas jacket as required by pipe size.
 - 1) Terminate pipe insulation adjacent to flanges and unions with insulating cement trowelled down to pipe on a bevel.
 - c. Fittings, Valves, Flanges, and Irregular Surfaces In Concealed Piping, Piping in Accessible Shafts, Attic Spaces, Crawl Spaces, Unfinished Rooms, Unfinished Spaces, and Tunnels: Sizing of canvas surface is not required.
- E. Equipment:
- 1. Secure fibrous glass block or board insulation in place with wire or galvanized steel bands.
 - a. Small Areas: Secure insulation with 16 gage wire on maximum 6 inch centers.
 - b. Large Areas: Secure insulation with 14 gage wire or .015 inch thick by 1/2 inch wide galvanized steel bands on maximum 10 inch centers. Stagger insulation joints.
 - c. Irregular Surfaces: Where application of block or board insulation is not practical, insulate with insulating cement built-up to same thickness as adjoining insulation.
 - 2. Fill joints, voids and irregular surfaces with insulating cement, to a uniform thickness.
 - 3. Stretch wire mesh over entire insulated surface and secure to anchors, with wire edges laced together.
 - 4. Apply finishing cement, total of 1/2 inch thick, in 1/4 inch thick coats.
 - a. Trowel second coat to a smooth hard finish.
 - 5. Neatly bevel insulation around manholes, handholes, cleanouts, ASME stamp, boiler manufacturer's name and catalog number.

3.06 INSTALLATION OF FLEXIBLE ELASTOMERIC FOAM INSULATION

- A. Where possible, slip insulation over the pipe, and seal butt joints with adhesive.
 - 1. Where the slip-on technique is not possible, slit the insulation and install.
 - 2. Re-seal with adhesive, making sure the mating surfaces are completely joined.
- B. Insulate fittings and valves with miter cut sections. Use templates provided by the manufacturer, and assemble the cut sections in accordance with the manufacturer's printed instructions.
 - 1. Insulate threaded fittings and valves with sleeved fitting covers. Over lap and seal the covers to the adjoining pipe insulation with adhesive.
- C. Carefully mate and seal with adhesive all contact surfaces to maintain the integrity of the vapor barrier of the system.

- D. Insulated Covers for Pumps:
 - 1. Do not extend pump insulation beyond or interfere with stuffing boxes, or interfere with adjustment and servicing of parts requiring regular maintenance or operating attention.

- E. Piping Exposed Exterior to a Building, Totally Exposed to the Elements:
 - 1. Apply flexible elastomeric foam insulation to piping with adhesive.
 - 2. Apply reinforcing membrane around piping insulation with adhesive or mastic.
 - 3. Adhesive Applied System: Apply 2 coats of finish. See Section 099103.
 - 4. Mastic Applied System: Apply another coat of mastic over reinforcing membrane.

3.07 INSTALLATION OF SHEET METAL JACKETING ON PIPING

- A. Secure jacketing to insulated piping with preformed aluminum snap straps and stainless steel strapping installed with special banding wrench.

- B. Jacket exposed insulated fittings, valves and flanges with mitred sections of aluminum jacketing.
 - 1. Seal joints with sealant and secure with preformed aluminum bands.
 - 2. Substitution: Factory fabricated, preformed, sectional aluminum fitting covers or premolded polyvinylchloride fitting covers may be used in lieu of mitred sections of aluminum jacketing for covering fittings, valves and flanges.

3.08 INSTALLATION OF DUCTWORK INSULATION

- A. Fibrous Glass Board Insulation Application:
 - 1. Secure insulation to ductwork, with duct insulation fasteners spaced 3 inch in from all corners of ducts, with intermediate fasteners on maximum 16 inch centers in all directions.
 - 2. Butt edges of insulation and fill voids with similar insulation.
 - 3. Seal minimum 1-1/2 inch wide longitudinal jacket laps continuously with vapor seal adhesive.
 - 4. Lap circumferential joints with 4 inch wide jacket material and seal laps continuously with vapor barrier lap adhesive, or seal continuously with minimum 3 inch wide pressure sensitive sealing tape, of same material as jacket.
 - 5. Install metal corner angles over the jacketed insulated corners. Seal exposed ends of insulation with vapor barrier mastic.
 - 6. Vapor seal breaks in vapor barrier jacketing, exposed surfaces of duct insulation fasteners and metal corner angles, with pressure sensitive sealing tape of same material as jacket or coat with vapor barrier mastic.
 - 7. Field apply 6 oz canvas jacket over the vapor barrier jacketed insulation where indicated on Ductwork Service Insulation Material Schedule in Part 3 of this Section.
 - a. Apply canvas jacket with lagging adhesive, with a 2 inch lap on circumferential and longitudinal seams.

- b. Outward clinching staples may be utilized for additional securement of canvas to bottom of ducts in excess of 48 inch in width.
- c. Apply heavy coat of lagging adhesive to entire canvas surface.
- 8. Place trapeze hangers, fabricated of steel rods and structural steel channels or angles, outside of jacketed insulated ducts.
 - a. Install high density insulation inserts, of thickness equal to insulation, minimum of 4 inch in width by the bottom dimension of the duct, at points of support.
 - b. Continuously jacket insulated ducts and filler pieces through supports.

B. Fibrous Glass Blanket Insulation Application:

1. Cut insulation to stretch-out dimensions as recommended by insulation manufacturer.
2. Remove 2 inch wide strip of insulation material from the jacketing on the longitudinal and circumferential joint edges to form an overlapping staple/tape flap.
3. Install insulation with jacketing outside so staple/tape flap overlaps insulation and jacketing on other end.
4. Butt ends of insulation tightly together.
 - a. Rectangular and Square Ductwork: Do not compress insulation at duct corners.
5. Staple longitudinal and circumferential joints with outward clinching staples minimum 6 inches on center, and seal with pressure sensitive sealing tape.
6. Cut off pretruding ends of fasteners flush with insulation surface and seal with pressure sensitive sealing tape.
7. Install duct insulation fasteners on bottom side of horizontal duct runs, when bottom dimension of the duct is in excess of 24 inches in width.
8. Install duct insulation fasteners on sides of duct risers having a dimension over 24 inches in size.
9. Seal tears, punctures, and penetrations of insulation jacketing with sealing tape.
10. Secure insulation to ductwork with fasteners spaced in accordance with the following schedule:

DUCT DIMENSION	SPACING OF FASTENERS (MINIMUM)
Up to 24 inches	None required.
24 inches to 48 inches	Horizontal Runs: 2 rows - 16 inches on center. Risers: 16 inches on center, all directions.
49 inches to 60 inches	Horizontal Runs: 3 rows - 16 inches on center. Risers: 16 inches on center, all directions.
61 inches and over	Horizontal Runs: 16 inches on center, all directions. Risers: 16 inches on center, all directions.

- C. Bench Insulated Ductwork:
 - 1. Insulate ducts prior to erection in place when ducts are required to be installed proximate to walls, ceilings, equipment or other ductwork, which will not permit adequate space for installation of insulation after ducts are installed.

- D. Flexible Elastomeric Foam Insulation on Ductwork Exposed to the Elements, Exterior to a Building:
 - 1. Apply 2 inch thick flexible elastomeric foam sheet insulation to ductwork with adhesive.
 - a. Insulate sheet metal duct seams, angle bracing, and reinforcing with same insulation thickness specified for ductwork.
 - 2. Apply reinforcing membrane around ductwork insulation with adhesive or mastic.
 - 3. Adhesive Applied System: Apply 2 coats of finish. See Section 099103.
 - 4. Mastic Applied System: Apply another coat of mastic over reinforcing membrane.

3.09 FIELD QUALITY CONTROL

- A. Field Samples: The Director's Representative, may at his discretion, take field samples of installed insulation for the purpose of checking materials and application. Reinsulate sample cut areas.

3.10 PIPING AND EQUIPMENT INSULATION SCHEDULE

- A. Insulate all cold service and hot service piping, equipment, and appurtenances except where otherwise specified.

- B. Schedule of Items Not to be Insulated:
 - 1. Do not insulate the following cold service items:
 - a. Actual heat transfer surfaces.
 - b. Cold water piping buried in direct contact with ground.
 - c. Chromium plated piping, unless otherwise specified.
 - d. Flexible vibration eliminators.
 - e. Refrigerant liquid piping, unless sub-cooled below 70 degrees F.
 - f. Boiler water treatment equipment and piping.
 - g. Water meters.
 - h. Chemical feed piping.
 - i. Boiler header drains.
 - 2. Do not insulate the following hot service piping:
 - a. Plated or white metal piping.
 - b. Exposed risers (hot water, low pressure steam and condensate return) in finished rooms.
 - c. Piping inside convector and finned tube radiation enclosures.
 - d. Short vertical and horizontal piping connections (less than 24 inches in length):
 - 1) Located exposed above floors in finished rooms or finished spaces.
 - 2) Serving one fixture, or one piece of equipment.

- 3) Connected to horizontal mains, branch mains or riser mains.
- 4) Conveying liquids or vapors at temperatures from 75 degrees F to 215 degrees F, unless otherwise specified.
- e. Drains from heating equipment and appurtenances that flow to waste.
- f. Gas piping.
- g. Water and other fluids 81 degrees F to 104 degrees F.
- h. Branch blow-down piping connections, from continuous blow-down piping to boiler sample water coolers.
- i. Boiler blow-off and blow-down piping.
- j. Discharge piping from steam safety and water relief valves.
- k. Vent piping to atmosphere from installed exposed in Mechanical Equipment Rooms, Steam Service Rooms, Machine Rooms, Boiler Rooms, Penthouses and Power Plants, and connected to the following:
 - 1) Blow-off tanks.
 - 2) Flash tanks.
 - 3) Condensate tanks.
- 3. Do not insulate the following hot service fittings, valves, flanges and irregular surfaces:
 - a. Flanges and unions in Type E, F and G service piping systems.
 - b. Hydronic Specialties:
 - 1) Flow indicators.
 - 2) Zone control valves.
 - 3) Air vents.
 - 4) Air control fittings.
 - c. Safety and relief valves.
 - d. Back pressure valves.
 - e. Boiler water columns.
- 4. Do not insulate the following hot service equipment:
 - a. Actual heat transfer surfaces.
 - b. Hot water pumps.
 - c. Boiler return pumps.
 - d. Chemical feed pumps.
 - e. Gas meters and boiler feed water meters.
 - f. Equipment manholes, handholes, and cleanouts.
 - g. ASME stamps, nameplates with manufacturer's name and model number.
- 5. Do not insulate items installed under other Contracts.
- 6. Do not insulate mechanical equipment with a factory applied insulated steel jacket.

3.11 COLD SERVICE INSULATION MATERIAL SCHEDULE

TYPE	SERVICE AND TEMPERATURES	INSULATION MATERIAL	PIPE SIZES (INCHES)	MINIMUM (NOMINAL) INSULATION THICKNESS (INCHES)
A & B	Refrigerants, Brine, and Fluids below 40 F.	Flex. Elastomeric Foam	1 & less	1
			1-1/4 and Up	1-1/2
D	Domestic cold water, and as specified. 33 F to 80 F.	Flex. Elastomeric Foam or Fibrous Glass	All Sizes	1/2

A. NOTES:

1. Double the insulation thickness above for piping, installed in tunnels and conduits.
2. Equipment Insulation: Insulation thicknesses above also apply for flat, curved and irregular equipment surfaces.
 - a. Insulate equipment with fibrous glass board insulation with minimum density 6 pcf.
 - b. Exceptions: Minimum insulation thickness for Type A service shall be a minimum of 1 inch thick for flat, curved and equipment irregular surfaces.
3. Type D Insulation Materials: In addition to the services shown on the schedule above, use Type D materials and thicknesses for the following:
 - a. Condensate Drain Piping:
 - 1) Piping connected to drain pans under cooling coils within unit enclosure, except where over drain pans.
 - 2) Horizontal condensate drain piping outside unit enclosures.
 - 3) Vertical condensate drain piping of less than one story immediately following horizontal run.

3.12 HOT SERVICE INSULATION MATERIAL SCHEDULE

	SERVICE AND TEMPERATURES	INSULATION MATERIAL	PIPE SIZES (INCHES)	MINIMUM (NOMINAL) INSULATION THICKNESS (INCHES)
E	Water and other fluids 105 F to 140 F.	Flex. Elastomeric Foam or Fibrous Glass	1-1/2 & Less	1
			Over 1-1/2	2

F	Water and other fluids 141 F to 250 F.	Fibrous Glass	6 & Less	2
			8 & Up	2-1/2

A. NOTES:

1. Insulate piping in tunnels and conduits with insulation of thickness as follows:
 - a. Types E, F, and G Service: Minimum 2 inch thick unless greater thickness is specified in Hot Service Insulation material Schedule above.
2. Equipment Insulation:
 - a. Insulate the following with fibrous glass block or board insulation:
 - 1) Low pressure steam and heating hot water boilers.
 - 2) Instantaneous type domestic hot water heaters.
 - 3) Combination domestic hot water heater and storage tanks.
 - 4) Domestic hot water storage tanks.
 - b. Insulate equipment with fibrous glass board insulation with minimum density 6 pcf.
 - c. Minimum thickness for flat, curved and irregular equipment surfaces:
 - 1) 1-1/2 inch for E and F service.

3.13 SCHEDULE OF METAL JACKETING FOR INSULATED PIPE

- A. Jacket exposed insulated risers with preformed sectional aluminum metal jacketing, in Types E to H service piping systems, installed in finished rooms or finished spaces above Basement Floor Level.
 1. Exception: Preformed sectional aluminum metal jacketing is not required on piping in Mechanical Equipment Rooms, Steam Service Rooms, Penthouse, Mechanical Equipment Rooms and Machine Rooms.
- B. Install jacketing from floor to ceiling or from floor to first change of direction in riser, when such change in direction is a minimum of 9'-0" above finished floor, whichever is applicable.
 1. The aforementioned also applies to down feed piping systems.
- C. Piping Exterior to Building: Jacket insulated piping with circumferentially corrugated aluminum jacketing.
 1. Lap longitudinal and circumferential joints a minimum of 2 inches.
 2. Secure jacketing in place with 1/2 inch x 0.020 inch thick aluminum bands secured with aluminum wing type seals, on maximum 12 inch centers.
 3. Cover insulated fittings, valves, and offsets with mitered sections of jacketing. Seal joints with mastic, and secure with aluminum strapping and wing seals.
 4. Factory fabricated, preformed fitting covers of same material as jacketing may be used instead of mitered jacketing.

5. Install jacketing so as to avoid trapping condensation and precipitation.

3.14 DUCTWORK SERVICE INSULATION SCHEDULE

- A. Insulate all ductwork service except where otherwise specified.
- B. Do not insulate the following ductwork service items:
 1. Exhaust ductwork, unless otherwise shown.
 2. Return fans.
 3. Exhaust fans.
 4. Interior lined ductwork.
 5. Flexible ductwork connections.
 6. Interior lined air terminal units.
 7. Sound absorbers.
 8. Ductwork located within equipment.
 9. Ductwork where design temperature difference between interior and exterior of duct or plenum does not exceed 15 degrees F.

3.15 DUCTWORK SERVICE INSULATION MATERIAL SCHEDULE

LOCATION	SERVICE	INSUL. MATERIAL	MINIMUM INSUL. THICKNESS	JACKET TYPE	MINIMUM REQUIRED R VALUE
Concealed, inside building insul. envelope in unconditioned spaces (in shafts, ceilings, walls, and floors)	Air Conditioning Supply and Returns Under 65 F, 100% Outside Air, Heating Supply Over 85 F.	Fibrous Glass Blanket	2	I or II	R-5
	Returns with Temp. Diff. With Ambient Greater than 15 degrees F	Fibrous Glass Board	1-1/2	I or II	
Inside building but exposed to outside air temp., e.g., ventilated attic.	Air Conditioning Supply, Heating Supply, All Returns including returns mixed with outside air.	Fibrous Glass Blanket	2-1/2	I or II	R-8
		Fibrous Glass Board	2	I or II	
Exposed exterior to building.	Air Conditioning Supply, Heating Supply, All Returns including returns mixed with outside air.	Elastomeric Foam Sheet	2-1/2	None Required	R-8

- A. **NOTES:**
 1. Equipment: Insulate air handling equipment, not furnished with factory applied insulated jacket or internal insulation, with minimum 1-1/2 inch thick fibrous glass board with an ASTM C 1136 Type I jacket, installed and finished as specified for exposed ductwork in finished spaces.

END OF SECTION

- GENERAL NOTES:
- REFER TO DRAWING A-601 FOR DOOR SCHEDULE INFORMATION.
 - REFER TO DRAWING A-607 FOR WINDOW SCHEDULE INFORMATION.
 - REFER TO DRAWINGS A-504 & A-505 FOR COLUMN DETAILS.
 - REFER TO DRAWINGS A-407 - A-418 FOR CASEWORK INFORMATION.
 - REFER TO DRAWING A-419 FOR FINISH SCHEDULE.
 - FIRST FLOOR FINISH SLAB IS DESIGNATED AS 0'-0".
 - REFER TO SITE DRAWINGS FOR ADDITIONAL INFORMATION.
 - REFER TO DRAWING A-500 FOR PARTITION TYPES.
 - REFER TO DRAWINGS A-421 - A-422 FOR GRAPHICS AND SIGNAGE.

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT: CONSTRUCTION

TITLE: PROVIDE CITYSCAPE COMPLEX

LOCATION: STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424

CLIENT: DIVISION OF HOMELAND SECURITY & EMERGENCY SERVICES

REVISED DRAWING
09/12/2012

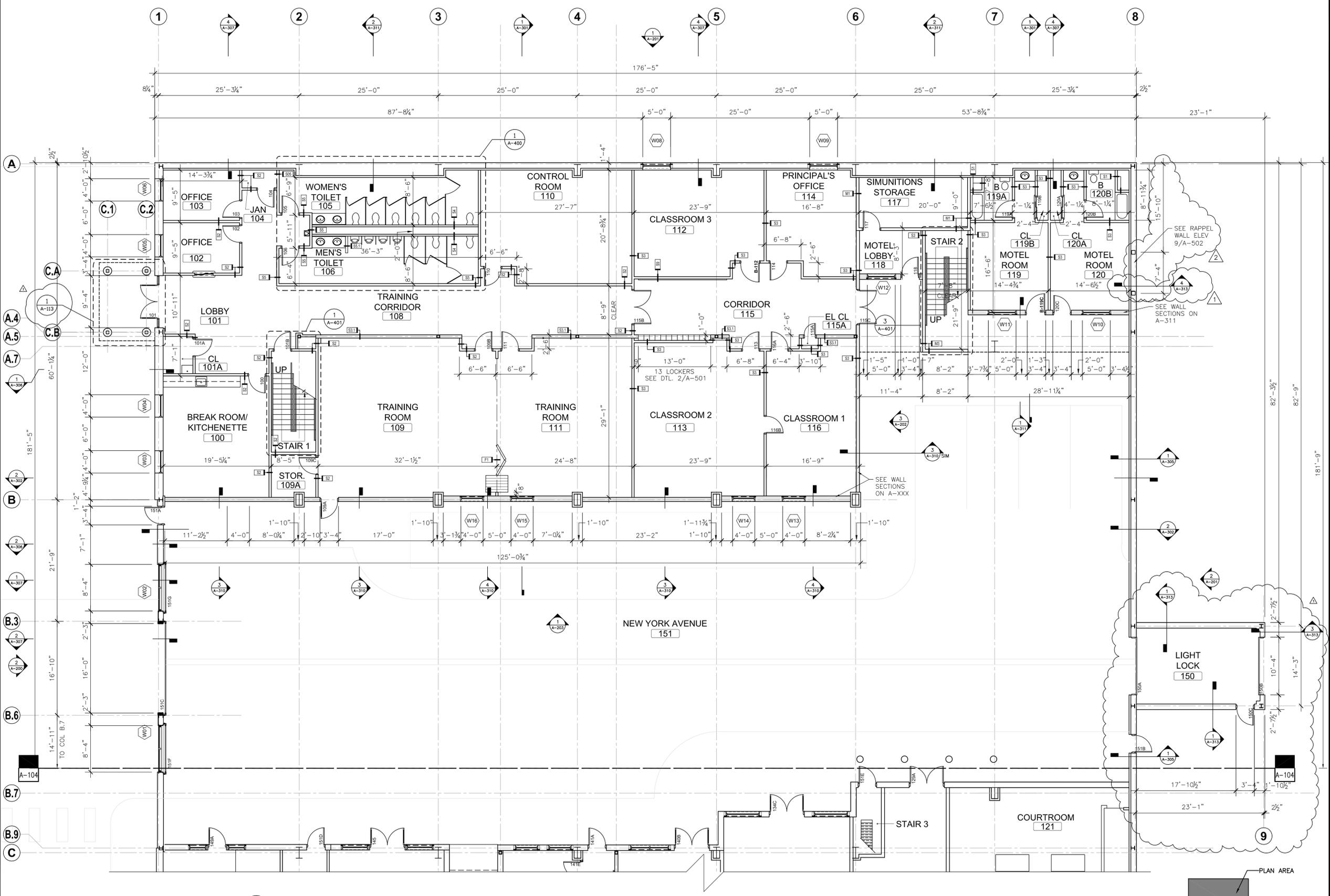
MARK	DATE	DESCRIPTION
2	09/12/2012	ADDENDUM NO 7
1	08/15/2012	ADDENDUM NO 2
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER:	44014 - C
DESIGNED BY:	XXXXX
DRAWN BY:	XXXXX
FIELD CHECK:	XXXXX
APPROVED:	XXXXX

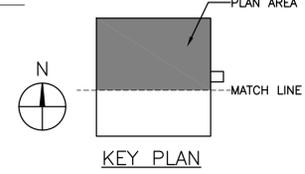
SHEET TITLE:
NORTH FIRST FLOOR PLAN

DRAWING NUMBER:
A-103

SHEET X OF X



1 NORTH FIRST FLOOR PLAN
A-103 1/8" = 1'-0"





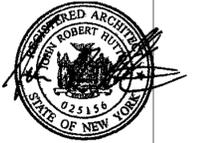
NYS OFFICE OF GENERAL SERVICES

Serving New York

ANDREW M. CUOMO
Governor
ROANN M. DESTITO
Commissioner
JAMES M. DAVIES, A.I.A.
Deputy Commissioner, Design and Construction

- GENERAL NOTES:
- REFER TO DRAWING A-601 FOR DOOR SCHEDULE INFORMATION.
 - REFER TO DRAWING A-607 FOR WINDOW SCHEDULE INFORMATION.
 - REFER TO DRAWINGS A-504 & A-505 FOR COLUMN DETAILS.
 - REFER TO DRAWINGS A-407 - A-418 FOR CASEWORK INFORMATION.
 - REFER TO DRAWING A-419 FOR FINISH SCHEDULE.
 - FIRST FLOOR FINISH SLAB IS DESIGNATED AS 0'-0".
 - REFER TO SITE DRAWINGS FOR ADDITIONAL INFORMATION.
 - REFER TO DRAWING A-500 FOR PARTITION TYPES.
 - REFER TO DRAWINGS A-421 - A-422 FOR GRAPHICS AND SIGNAGE.

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPETENT PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT: **CONSTRUCTION**
TITLE: **PROVIDE CITYSCAPE COMPLEX**
LOCATION: **STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424**
CLIENT: **DIVISION OF HOMELAND SECURITY
& EMERGENCY SERVICES**

REVISED DRAWING
09/12/2012

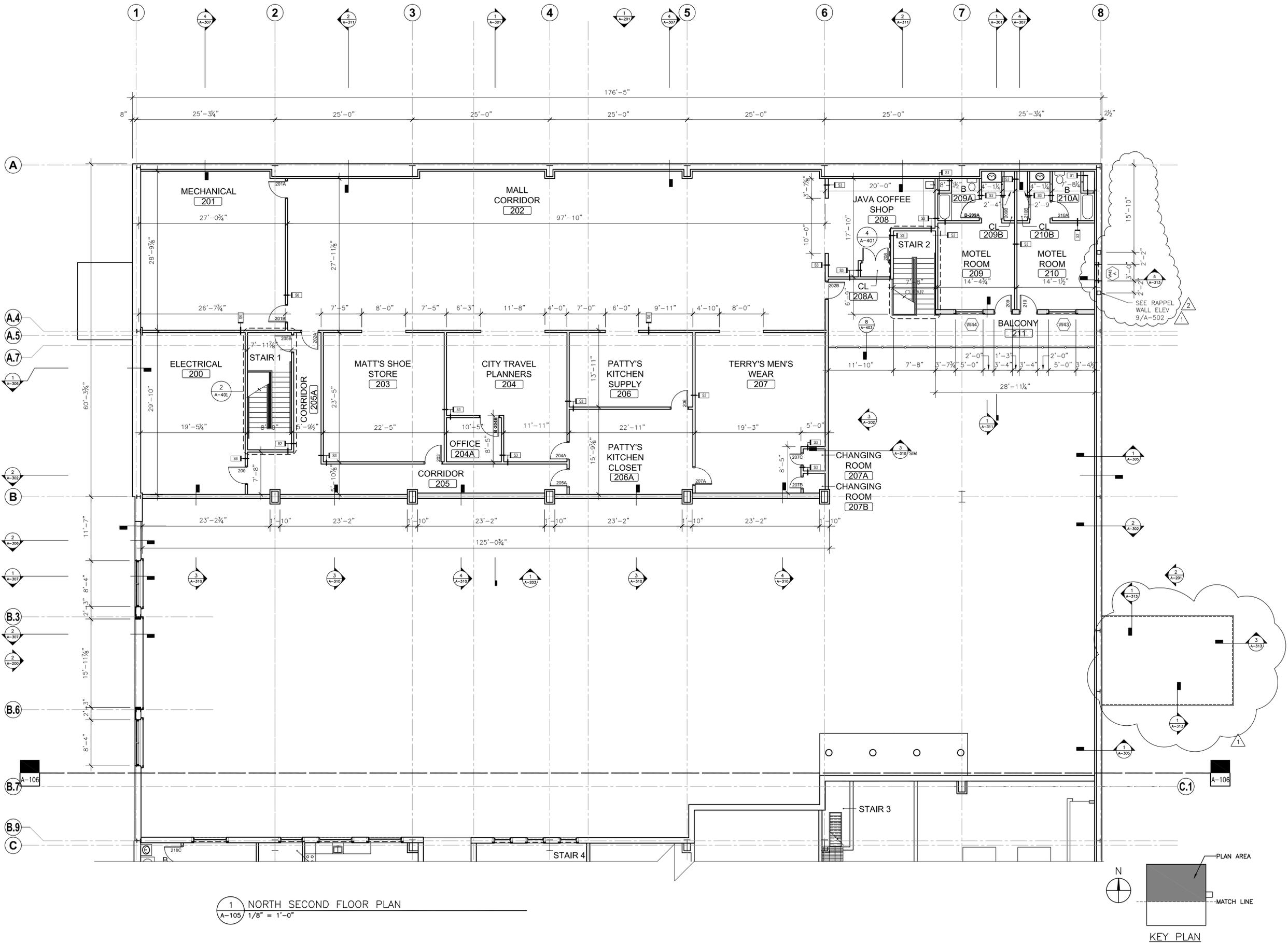
MARK	DATE	DESCRIPTION
2	09/12/2012	ADDENDUM NO 7
1	08/15/2012	ADDENDUM NO 2
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER: **44014 - C**
DESIGNED BY: XXXXX
DRAWN BY: XXXXX
FIELD CHECK: XXXXX
APPROVED: XXXXX

SHEET TITLE:
NORTH SECOND FLOOR PLAN

DRAWING NUMBER:
A-105

SHEET X OF X



1 NORTH SECOND FLOOR PLAN
A-105 1/8" = 1'-0"

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT: **CONSTRUCTION**

TITLE: **PROVIDE CITYSCAPE COMPLEX**

LOCATION:
STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424

CLIENT:
DIVISION OF HOMELAND SECURITY
& EMERGENCY SERVICES

REVISED DRAWING
09/12/2012

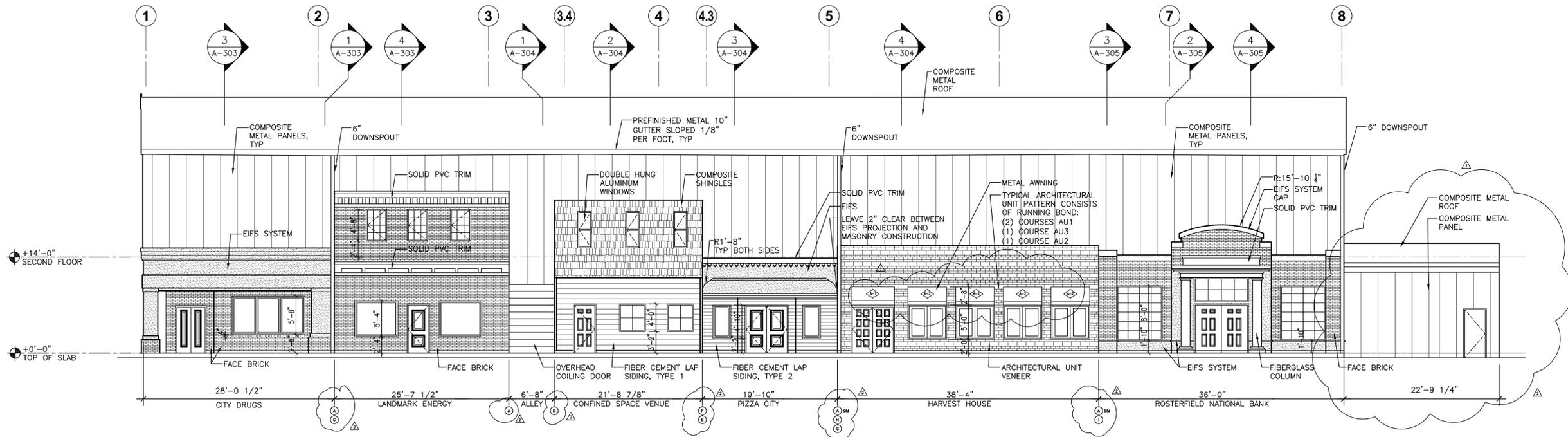
MARK	DATE	DESCRIPTION
2	09/12/2012	ADDENDUM NO 7
1	08/15/2012	ADDENDUM NO 2
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER:	44014-C
DESIGNED BY:	XXXXX
DRAWN BY:	XXXXX
FIELD CHECK:	XXXXX
APPROVED:	XXXXX

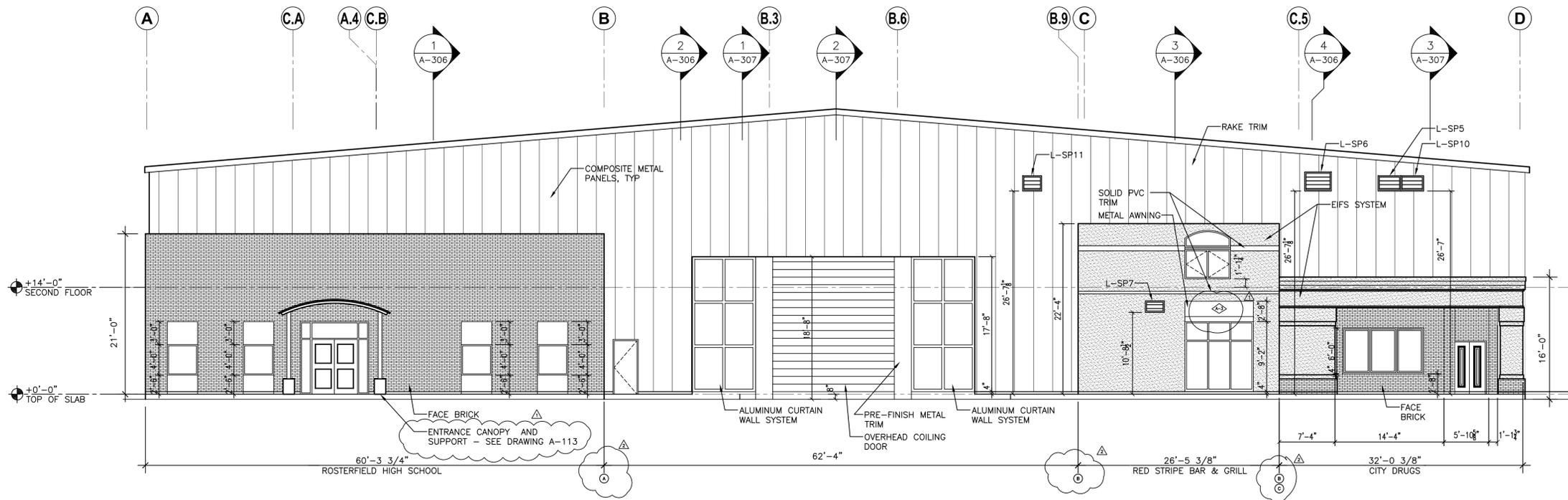
SHEET TITLE:
SOUTH AND WEST ELEVATIONS

DRAWING NUMBER:
A-200

SHEET X OF X



1 SOUTH ELEVATION
A-200 1/8" = 1'-0"



2 WEST ELEVATION
A-200 1/8" = 1'-0"

⊗ DENOTES TRANSITIONS BETWEEN EXTERIOR MATERIALS. SEE DETAILS 4/A-501 FOR CORRESPONDING DETAILS.

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT:

CONSTRUCTION

TITLE:
PROVIDE CITYSCAPE COMPLEX

LOCATION:
STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424

CLIENT:
DIVISION OF HOMELAND SECURITY
& EMERGENCY SERVICES

REVISED DRAWING
09/12/2012

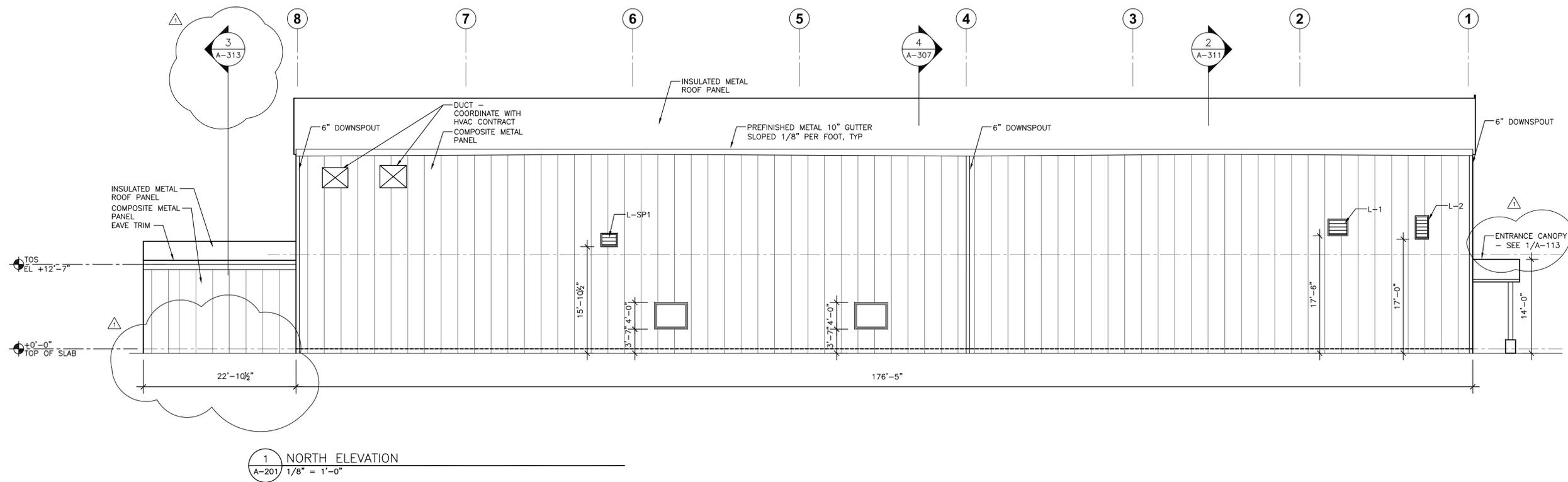
MARK	DATE	DESCRIPTION
2	09/12/2012	ADDENDUM NO 7
1	08/15/2012	ADDENDUM NO 2
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER:	44014- C
DESIGNED BY:	XXXXX
DRAWN BY:	XXXXX
FIELD CHECK:	XXXXX
APPROVED:	XXXXX

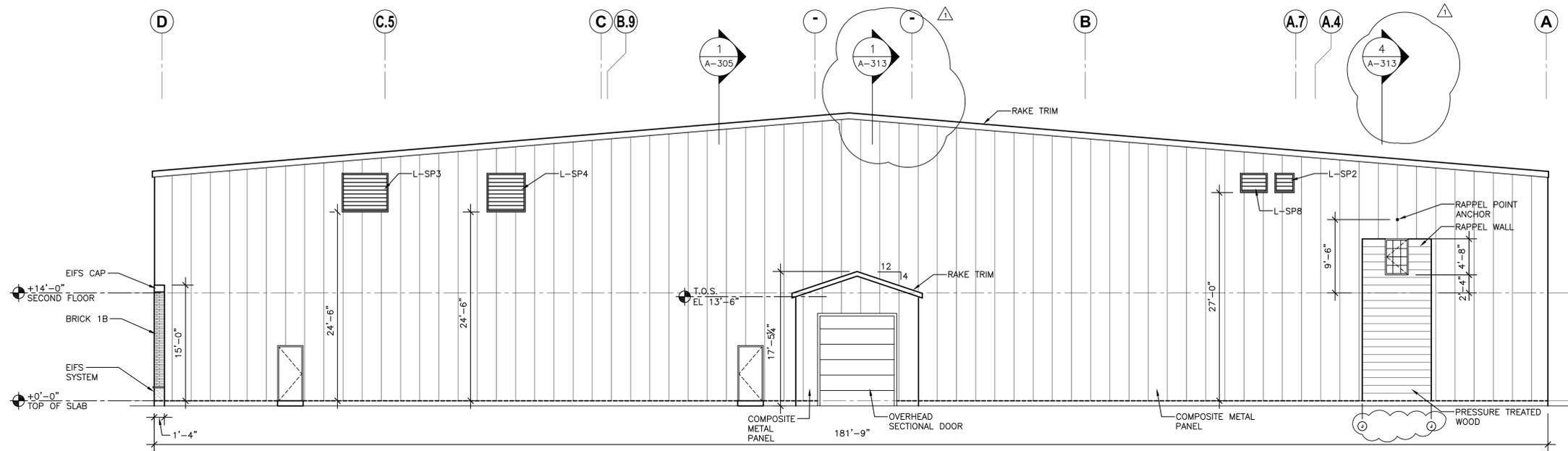
SHEET TITLE:
NORTH AND EAST ELEVATIONS

DRAWING NUMBER:
A-201

SHEET X OF X

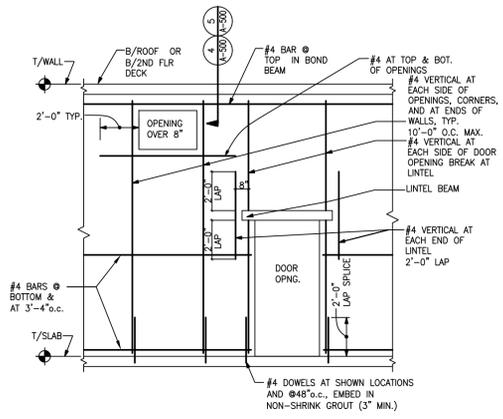


1 NORTH ELEVATION
A-201 1/8" = 1'-0"

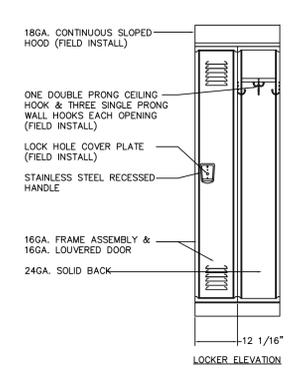


2 EAST ELEVATION
A-201 1/8" = 1'-0"

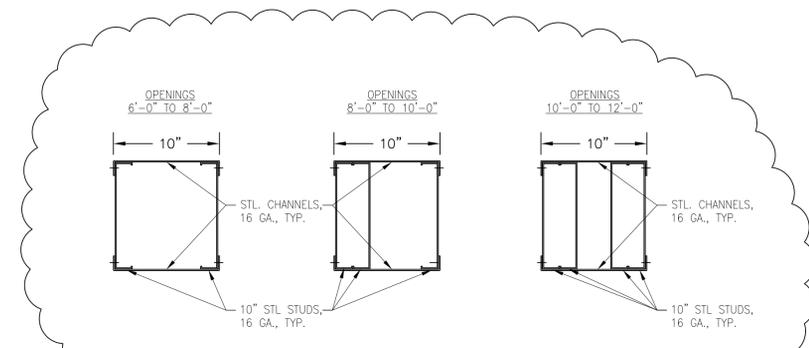
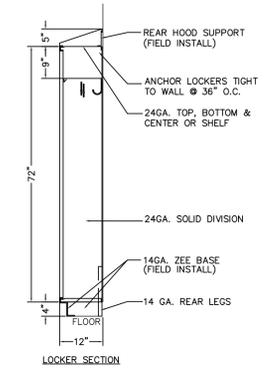
⊙ DENOTES TRANSITIONS BETWEEN EXTERIOR MATERIALS. SEE DETAILS 4/A-501 FOR CORRESPONDING DETAILS.



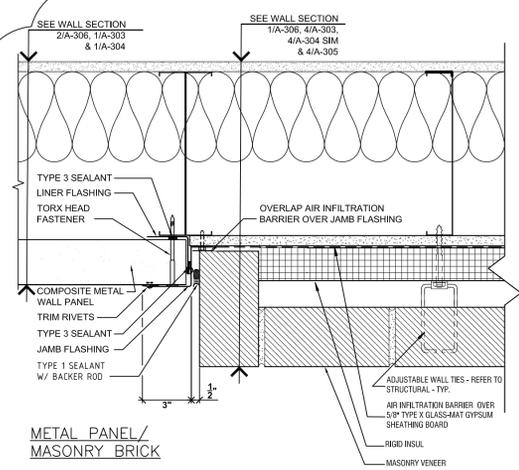
1 ELEV.-TYP. PARTITION REINF.
A-501 N.T.S.



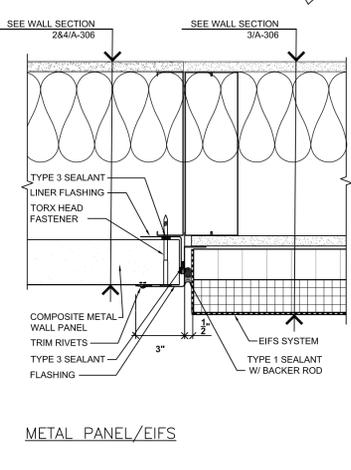
2 LOCKER ELEV. & SECTION
A-501 1" = 1'-0"



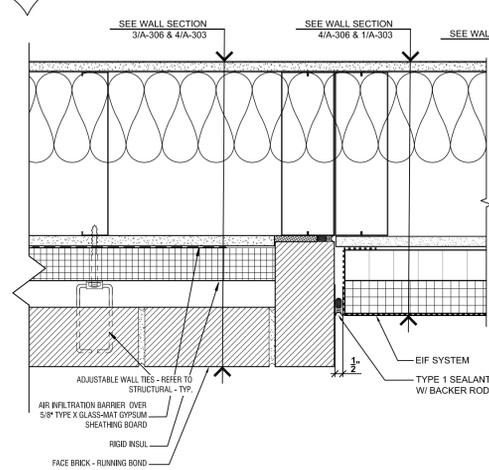
3 STUD LINTELS
A-501 1 1/2" = 1'-0"



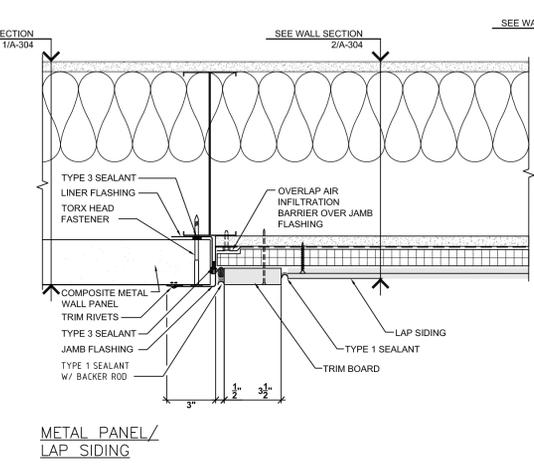
METAL PANEL/
MASONRY BRICK



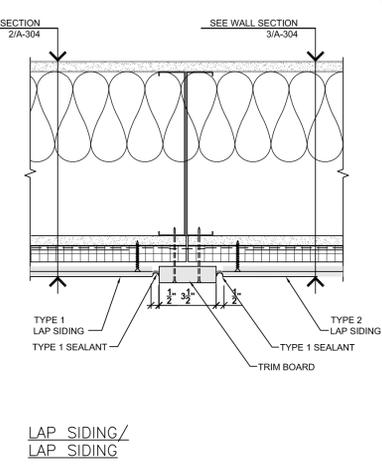
METAL PANEL/EIFS



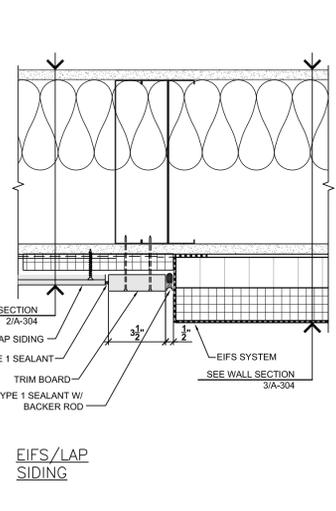
MASONRY
BRICK/EIFS



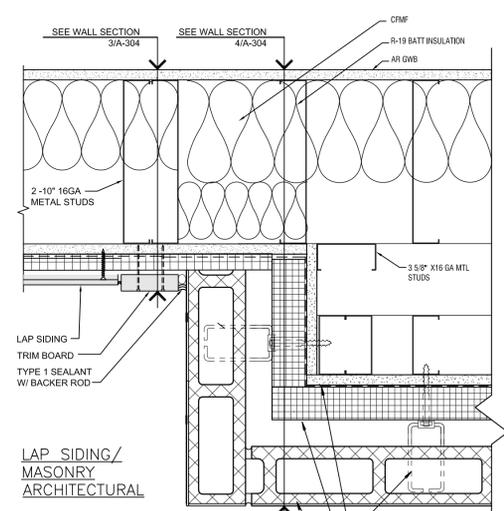
METAL PANEL/
LAP SIDING



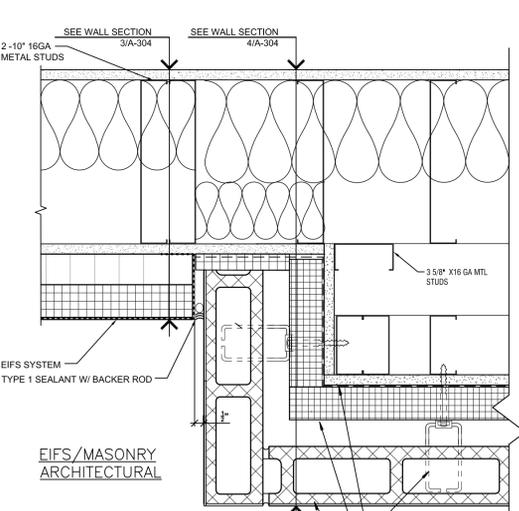
LAP SIDING/
LAP SIDING



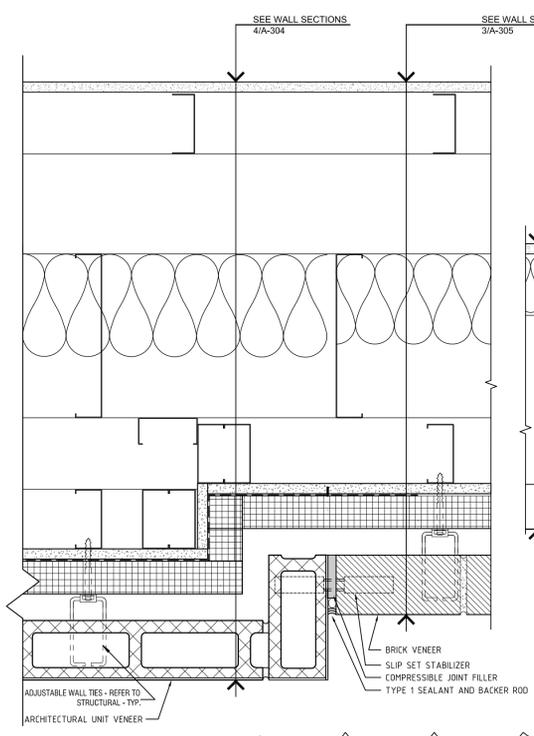
EIFS/LAP
SIDING



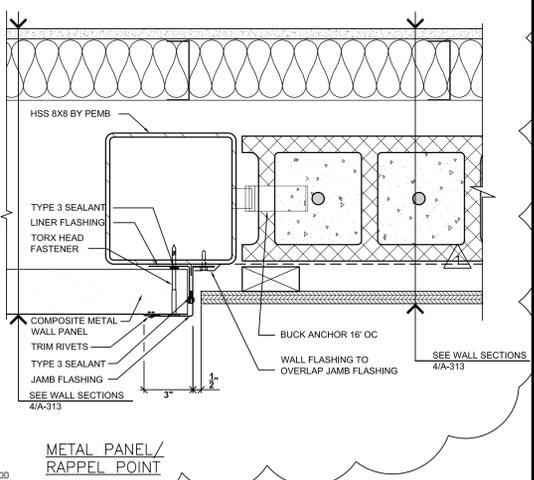
LAP SIDING/
MASONRY
ARCHITECTURAL



EIFS/MASONRY
ARCHITECTURAL



MASONRY
ARCHITECTURAL/
MASONRY BRICK



METAL PANEL/
RAPPEL POINT

4 EXTERIOR VERTICAL JOINT DTLS.
A-501 N.T.S.

DETAIL NOTES:
SEE DETAILS ABOVE FOR TRANSITIONS BETWEEN EXTERIOR MATERIALS. CROSS REFERENCE WITH BUILDING ELEVATIONS AND FLOOR PLANS FOR LOCATIONS.

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT: **CONSTRUCTION**

TITLE: **PROVIDE CITYSCAPE COMPLEX**

LOCATION: **STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424**

CLIENT: **DIVISION OF HOMELAND SECURITY
& EMERGENCY SERVICES**

REVISED DRAWING
09/12/2012

MARK	DATE	DESCRIPTION
2	09/12/2012	ADDENDUM NO. 7
1	08/15/2012	ADDENDUM NO. 2
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER: **44014-C**
DESIGNED BY: XXXXX
DRAWN BY: XXXXX
FIELD CHECK: XXXXX
APPROVED: XXXXX

SHEET TITLE: **PARTITION DTLS.**

DRAWING NUMBER: **A-501**

SHEET X OF X

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

CONSTRUCTION

TITLE: PROVIDE CITYSCAPE COMPLEX

LOCATION: STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424

CLIENT: DIVISION OF HOMELAND SECURITY & EMERGENCY SERVICES

REVISED DRAWING
09/12/2012

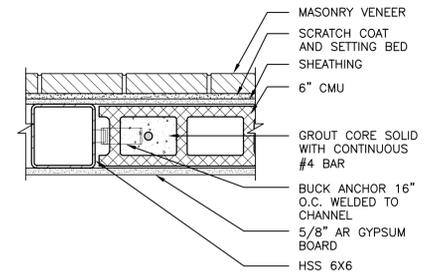
MARK	DATE	DESCRIPTION
▲	09/12/2012	ADDENDUM NO 7
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER:	44014-C
DESIGNED BY:	XXXXX
DRAWN BY:	XXXXX
FIELD CHECK:	XXXXX
APPROVED:	XXXXX

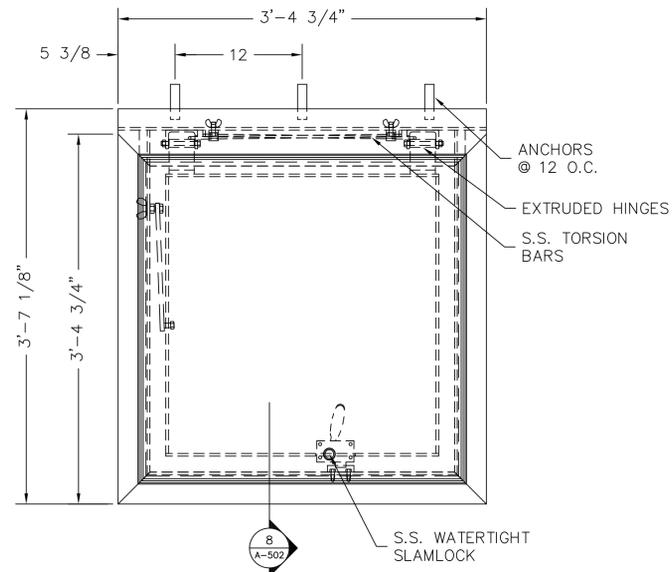
SHEET TITLE: DETAILS

DRAWING NUMBER: A-502

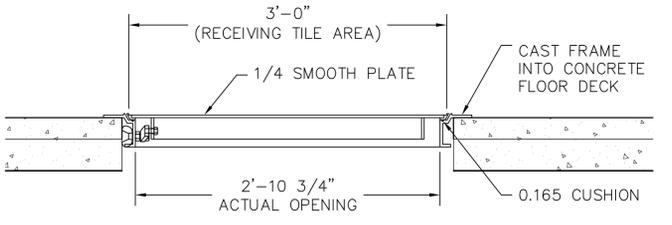
SHEET X OF X



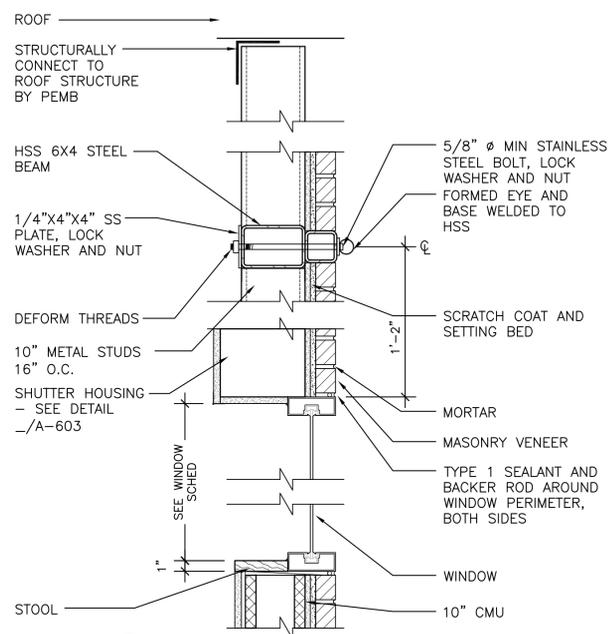
6 STEEL COLUMN/MASONRY JAMB DETAIL
A-502 1 1/2" = 1'-0"



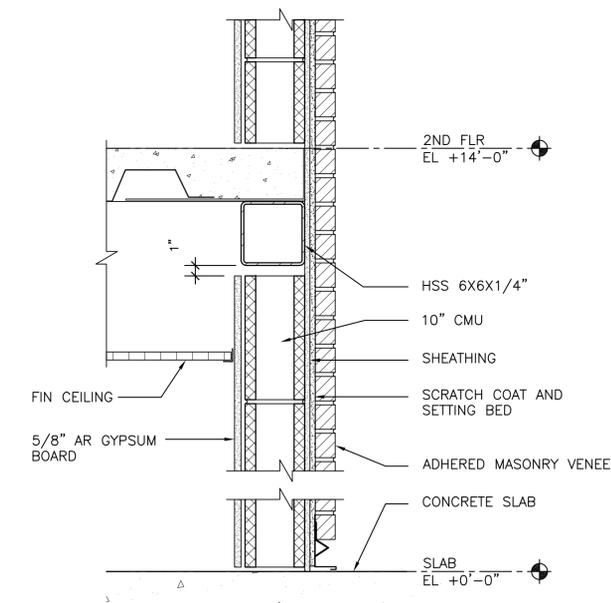
7 FLOOR DOOR
A-502 1 1/2" = 1'-0"



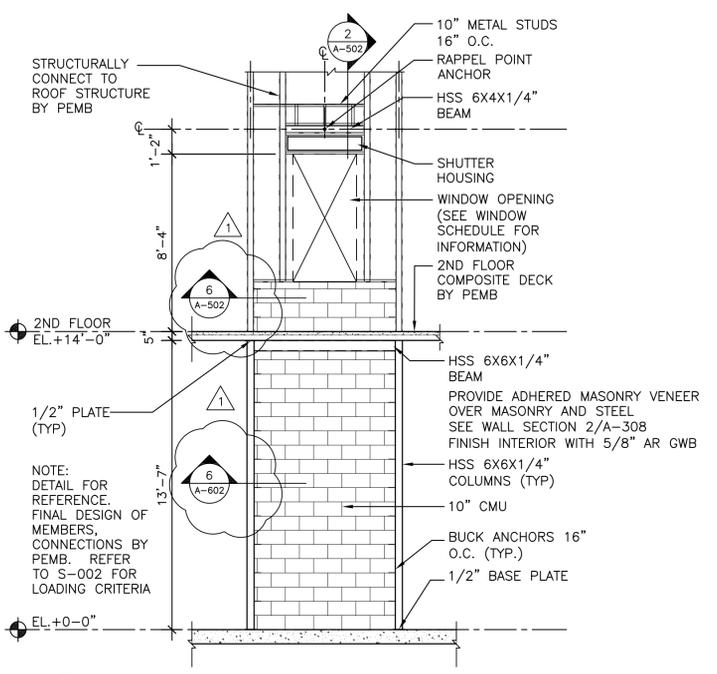
8 FRAME DETAIL
A-502 1 1/2" = 1'-0"



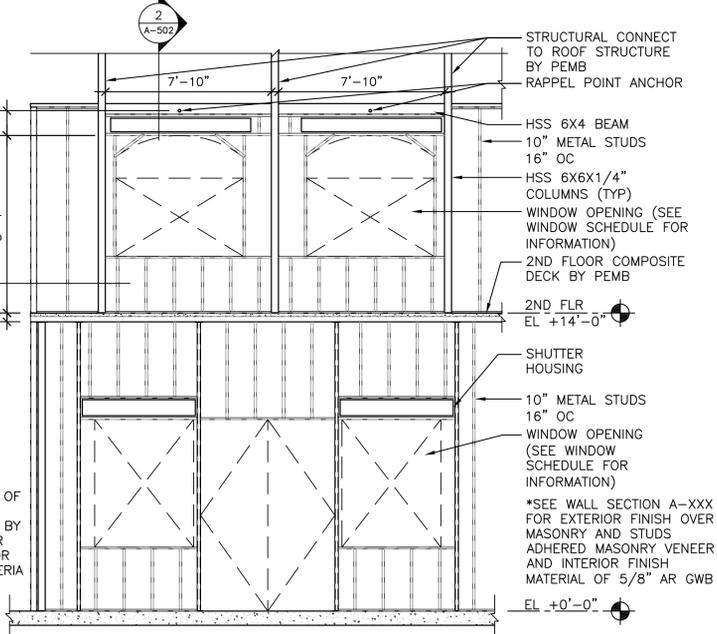
2 RAPPEL WALL SECTION
A-502 1 1/2" = 1'-0"



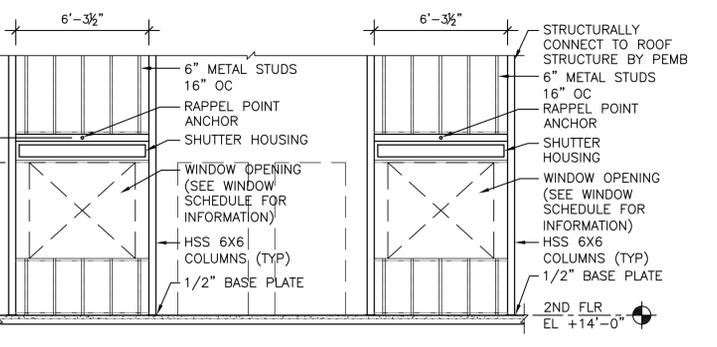
4 RAPPEL WALL SECTION
A-502 1 1/2" = 1'-0"



1 RAPPEL WALL ELEVATION - ALLEY & EXT WALL
A-502 1/4" = 1'-0"



3 RAPPEL WALL ELEVATION - LANDMARK ENERGY
A-502 1/4" = 1'-0"



5 RAPPEL WALL ELEVATION - MOTEL
A-502 1/4" = 1'-0"

NOTES:
 1. ALL WINDOWS WITH EXCEPTION OF WINDOWS W01, W02, W03, W04, W05, AND W06, ARE TO BE PROVIDED WITH ROLLING SHUTTERS.

2. ALUMINUM FRAMES ARE TO BE FINISHED WITH CLEAR ANODIZED FINISH. STEEL FRAMES ARE TO BE PRE-FINISHED, COLORS SELECTED BY DIRECTOR'S REPRESENTATIVE.

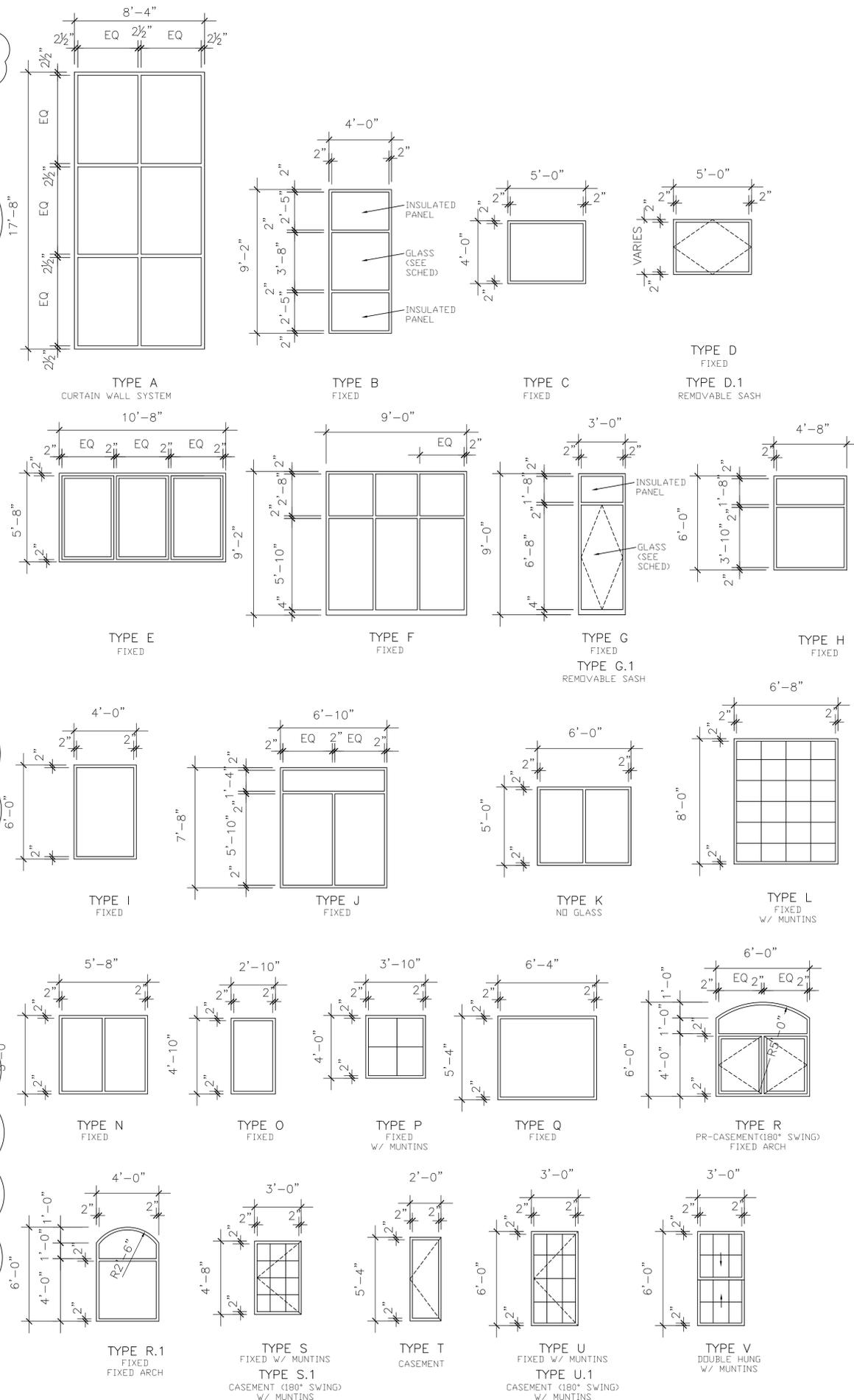
3. WINDOWS NOTED AS 180° SWING CASEMENT ARE TO BE PROVIDED WITH HINGES TO ALLOW THE SASH TO SWING CLEAR OF THE WINDOW OPENING. PROVIDE LATCH TO HOLD WINDOW IN THE FULLY POSITION.

4. WINDOWS NOTED WITH REMOVABLE SASH ARE TO BE PROVIDED WITH HARDWARE TO HOLD THE SASH SECURELY IN THE FRAME AND ALLOW FOR REMOVAL.

5. REFER TO STRUCTURAL DWGS. LINTEL SCHEDULE. REFER TO DTL. STUD LINTEL SCHEDULE.

WINDOW SCHEDULE

MARK	ROOM	WINDOW TYPE	OPENING		FRAME MATL	GLASS TYPE	DETAIL			SHUTTER	NOTES	MARK
			WD	HGT			HEAD	JAMB	SILL			
W01	-	A	8'-4"	17'-8"	ALUM	M	6/A-606	4/A-606	6/A-606	N.A.	CURTAIN WALL W/ROLLING DOOR	W01
W02	-	A	8'-4"	17'-8"	ALUM	M	6/A-606	4/A-606	6/A-606	N.A.	CURTAIN WALL W/ROLLING DOOR	W02
W03	100	B	4'-0"	9'-2"	ALUM	M/IP	1/A-608	2/A-608	1/A-608	N.A.		W03
W04	100	B	4'-0"	9'-2"	ALUM	M/IP	1/A-608	2/A-608	1/A-608	N.A.		W04
W05	102	B	4'-0"	9'-2"	ALUM	M/IP	1/A-608	2/A-608	1/A-608	N.A.		W05
W06	103	B	4'-0"	9'-2"	ALUM	M/IP	1/A-608	2/A-608	1/A-608	N.A.		W06
W07	-	-	-	-	-	-	-	-	-	-	NOT USED	W07
W08	112	C	5'-0"	4'-0"	ALUM	S-1	3/A-608	4/A-608	3/A-608	GEAR		W08
W09	114	C	5'-0"	4'-0"	ALUM	S-1	3/A-608	4/A-608	3/A-608	GEAR		W09
W10	120	D.1	5'-0"	4'-6"	STL	S-1	5/A-608	6/A-608	5/A-608	GEAR	REMOVABLE SASH	W10
W11	119	D.1	5'-0"	4'-6"	STL	S-1	5/A-608	6/A-608	5/A-608	GEAR	REMOVABLE SASH	W11
W12	118	D	5'-0"	3'-0"	STL	S-1	5/A-608	6/A-608	5/A-608	GEAR		W12
W13	116	B	4'-0"	9'-2"	ALUM	S-1/IP	1/A-609	2/A-609	1/A-609	GEAR W/ASSIST		W13
W14	113	B	4'-0"	9'-2"	ALUM	S-1/IP	1/A-609	2/A-609	1/A-609	GEAR W/ASSIST		W14
W15	111	B	4'-0"	9'-2"	ALUM	S-1/IP	1/A-609	2/A-609	1/A-609	GEAR W/ASSIST		W15
W16	109	B	4'-0"	9'-2"	ALUM	S-1/IP	1/A-609	2/A-609	1/A-609	GEAR W/ASSIST		W16
W17	-	-	-	-	-	-	-	-	-	-	NOT USED	W17
W18	148	E	10'-8"	5'-8"	ALUM	S-1	3/A-609	4/A-609	3/A-609	MOTOR		W18
W19	149	F	9'-2"	10'-0"	ALUM	S-1	5/A-610	6/A-610	5/A-610	MOTOR		W19
W20	149	G	3'-0"	9'-0"	STL	S-1	7/A-610	8/A-610	7/A-610	GEAR W/ASSIST		W20
W21	149	G.1	3'-0"	9'-0"	STL	S-1	7/A-610	8/A-610	7/A-610	GEAR W/ASSIST	REMOVABLE SASH	W21
W22	145	H	4'-8"	6'-0"	ALUM	S-1	1/A-610	2/A-609	1/A-610	GEAR W/ASSIST		W22
W23	145	H	4'-8"	6'-0"	ALUM	S-1	1/A-610	2/A-609	1/A-610	GEAR W/ASSIST		W23
W24	141	I	4'-0"	6'-0"	ALUM	S-1	5/A-609	2/A-609	5/A-609	GEAR W/ASSIST		W24
W25	141	I	4'-0"	6'-0"	ALUM	S-1	5/A-609	2/A-609	5/A-609	GEAR W/ASSIST		W25
W26	140	J	6'-10"	7'-8"	ALUM	S-1	3/A-610	4/A-610	3/A-610	MOTOR		W26
W27	134	K	6'-0"	5'-4"	ALUM	-	7/A-609	8/A-609	7/A-609	GEAR W/ASSIST	NO GLASS	W27
W28	134	K	6'-0"	5'-4"	ALUM	-	7/A-609	8/A-609	7/A-609	GEAR W/ASSIST	NO GLASS	W28
W29	122	L	6'-8"	8'-0"	ALUM	S-1	1/A-611	2/A-611	1/A-611	MOTOR		W29
W30	-	-	-	-	-	-	-	-	-	-	NOT USED	W30
W31	123	L	6'-8"	8'-0"	ALUM	S-1	3/A-611	4/A-611	3/A-611	MOTOR		W31
W32	130	N	5'-8"	5'-0"	ALUM	S-1	2/A-613	3/A-613	2/A-613	GEAR W/ASSIST		W32
W33	130	N	5'-8"	5'-0"	ALUM	S-1	2/A-613	3/A-613	2/A-613	GEAR W/ASSIST		W33
W34	130	N	5'-8"	5'-0"	ALUM	S-1	5/A-611	6/A-611	5/A-611	GEAR W/ASSIST		W34
W35	130	N	5'-8"	5'-0"	ALUM	S-1	5/A-611	6/A-611	5/A-611	GEAR W/ASSIST		W35
W36	136	O	2'-8"	4'-10"	ALUM	S-1	7/A-608	8/A-608	7/A-608	GEAR		W36
W37	136	O	2'-8"	4'-10"	ALUM	S-1	7/A-608	8/A-608	7/A-608	GEAR		W37
W38	141	P	3'-10"	4'-0"	ALUM	S-1	7/A-608	8/A-608	7/A-608	GEAR		W38
W39	141	P	3'-10"	4'-0"	ALUM	S-1	7/A-608	8/A-608	7/A-608	GEAR		W39
W40	143	Q	6'-4"	5'-4"	ALUM	S-1	1/A-612	2/A-612	1/A-612	GEAR W/ASSIST		W40
W41	143	Q	6'-4"	5'-4"	ALUM	S-1	1/A-612	2/A-612	1/A-612	GEAR W/ASSIST		W41
W42	148	E	10'-8"	5'-8"	ALUM	S-1	3/A-609	4/A-609	3/A-609	MOTOR		W42
W43	210	D.1	5'-0"	4'-6"	STL	S-1	5/A-608	6/A-608	5/A-608	GEAR	REMOVABLE SASH	W43
W43A	210	S.1	3'-0"	4'-8"	STL	S-1	3/A-612	4/A-612	3/A-612	GEAR	180° SWING CASEMENT-NO MUNTINS	W43A
W44	209	D.1	5'-0"	4'-6"	STL	S-1	5/A-608	6/A-608	5/A-608	GEAR	REMOVABLE SASH	W44
W45	218	R	6'-0"	6'-0"	STL	S-1	5/A-612	6/A-612	5/A-612	GEAR W/ASSIST	180° SWING CASEMENT	W45
W46	218	R	6'-0"	6'-0"	STL	S-1	5/A-612	6/A-612	5/A-612	GEAR W/ASSIST	180° SWING CASEMENT	W46
W47	STAR 7	R.1	4'-0"	6'-0"	STL	S-1	1/A-613	2/A-609	1/A-613	GEAR W/ASSIST		W47
W48	216	R	6'-0"	6'-0"	STL	S-1	1/A-613	2/A-609	1/A-613	GEAR W/ASSIST	180° SWING CASEMENT	W48
W49	216	R	6'-0"	6'-0"	STL	S-1	1/A-613	2/A-609	1/A-613	GEAR W/ASSIST	180° SWING CASEMENT	W49
W50	212	S	3'-0"	4'-8"	STL	S-1	1/A-610	2/A-610	1/A-610	GEAR		W50
W51	212	S	3'-0"	4'-8"	STL	S-1	1/A-610	2/A-610	1/A-610	GEAR		W51
W52	212	S.1	3'-0"	4'-8"	STL	S-1	1/A-610	2/A-610	1/A-610	GEAR	180° SWING CASEMENT	W52
W53	212	T	2'-0"	5'-4"	STL	S-1	4/A-613	5/A-613	4/A-613	GEAR	CASEMENT	W53
W54	212	T	2'-0"	5'-4"	STL	S-1	4/A-613	5/A-613	4/A-613	GEAR	CASEMENT	W54
W55	212	T	2'-0"	5'-4"	STL	S-1	4/A-613	5/A-613	4/A-613	GEAR	CASEMENT	W55
W56	213	S.1	3'-0"	4'-8"	STL	S-1	1/A-612	2/A-612	1/A-612	GEAR	180° SWING CASEMENT	W56
W57	217	S.1	3'-0"	4'-8"	STL	S-1	1/A-612	2/A-612	1/A-612	GEAR	180° SWING CASEMENT	W57
W58	217	S.1	3'-0"	4'-8"	STL	S-1	1/A-612	2/A-612	1/A-612	GEAR	180° SWING CASEMENT	W58
W59	213	U.1	3'-0"	6'-0"	STL	S-1	5/A-609	2/A-609	5/A-609	GEAR	180° SWING CASEMENT	W59
W60	214	U	3'-0"	6'-0"	STL	S-1	5/A-609	2/A-609	5/A-609	GEAR		W60
W61	215	U	3'-0"	6'-0"	STL	S-1	5/A-609	2/A-609	5/A-609	GEAR		W61
W62	216	V	3'-0"	6'-0"	STL	S-1	5/A-609	2/A-609	5/A-609	GEAR	DOUBLE HUNG	W62
W63	212	U	3'-0"	6'-0"	STL	S-1	5/A-609	2/A-609	5/A-609	GEAR		W63
W64	212	U	3'-0"	6'-0"	STL	S-1	5/A-609	2/A-609	5/A-609	GEAR		W64
W65	212	U	3'-0"	6'-0"	STL	S-1	5/A-609	2/A-609	5/A-609	GEAR		W65



OCS
 NYS OFFICE OF GENERAL SERVICES
 Serving New York
 ANDREW M. CUOMO
 Governor
 ROANN M. DESTITO
 COMMISSIONER
 JAMES M. DAVIES, A.I.A.
 Deputy Commissioner, Design and Construction

WARNING:
 THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONSTRUCTION
 TITLE: PROVIDE CITYSCAPE COMPLEX
 BUILDING NO. XXX
 LOCATION: STATE PREPAREDNESS TRAINING CENTER
 5900 AIRPORT ROAD
 ORISKANY, NY 13424
 CLIENT: DIVISION OF HOMELAND SECURITY & EMERGENCY SERVICES

REVISED DRAWING
 09/12/2012

MARK	DATE	DESCRIPTION
2	09/12/2012	ADDENDUM NO 7
1	09/05/2012	ADDENDUM NO 6
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER:	44014-C
DESIGNED BY:	XXXXX
DRAWN BY:	XXXXX
FIELD CHECK:	XXXXX
APPROVED:	XXXXX

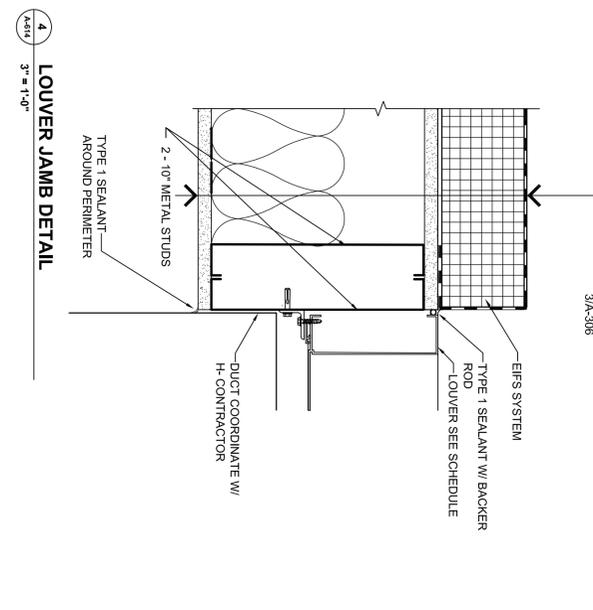
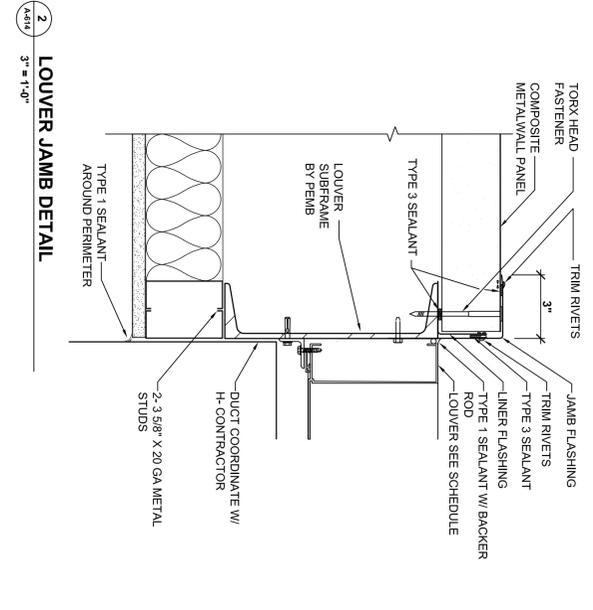
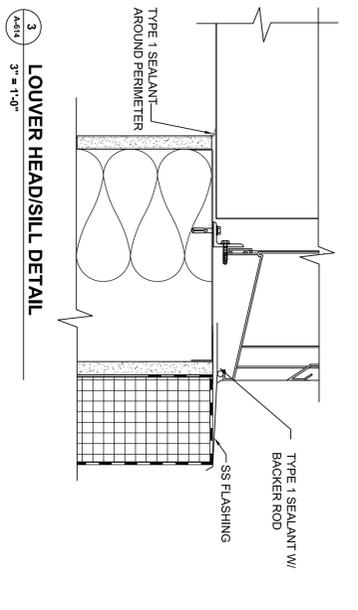
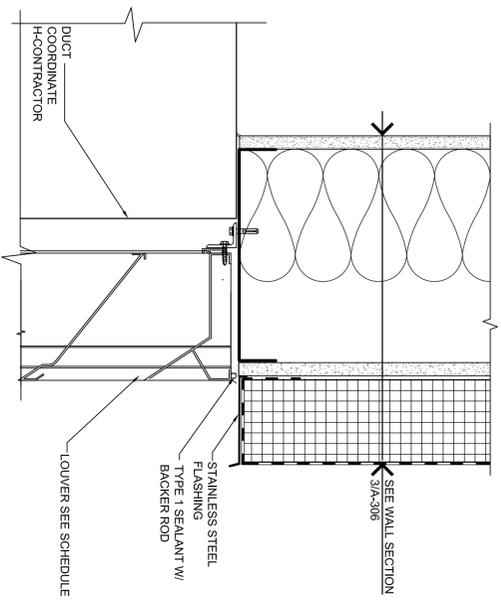
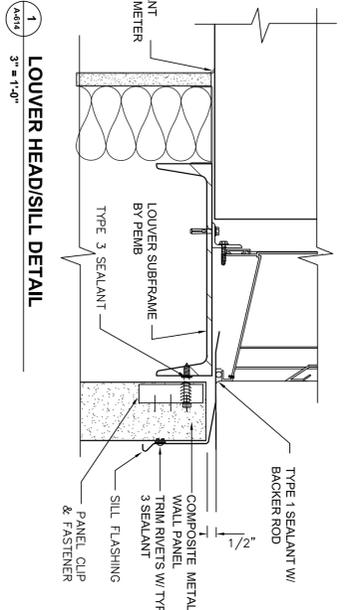
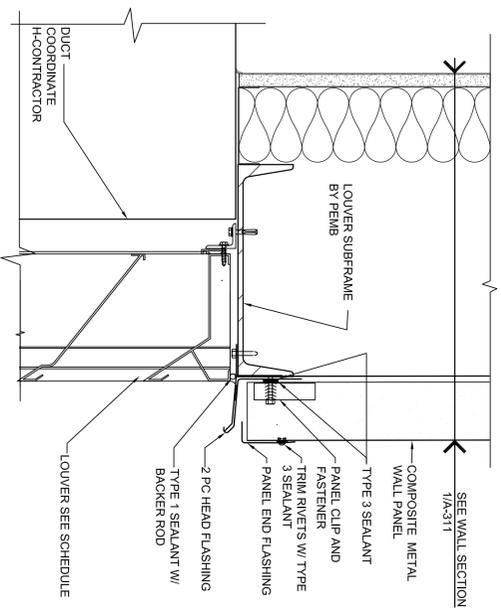
SHEET TITLE: **WINDOW SCHEDULE**
 DRAWING NUMBER: **A-607**
 SHEET X OF X

Sep 13, 2012 - 11:44am
 V:\Design\Drawings\44014\Code\A-607.dwg
 36x24 PLOT SHEET

LOUVER SCHEDULE

No.	Location	Service	Size	Depth	GH	APD (in)	Fd (sqft)	Type	Remarks	Bird Screen	Matl	Finish	Manufacturer	Model	Head/Sill Detail	Jamb Detail
L-1	MECHANICAL ROOM NORTH WALL	INLET	30"x30"	6.5"	2870	.07	3.87	NOTE 1		YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-2	MECHANICAL ROOM NORTH WALL	EXHAUST	24"x24"	6.5"	2870	.06	3.72	NOTE 1		YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-3	CLASS ROOM 113	TRANSER	24"x18"	6"	1155	.09	2.05			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-4	CLASS ROOM 118	TRANSER	24"x18"	6"	800	.09	2.05			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-5	MOTEL ROOM 119	TRANSER	18"x18"	6"	585	.09	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	7/A-615	8/A-615
L-6	MOTEL ROOM 120	TRANSER	18"x18"	6"	585	.09	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	7/A-615	8/A-615
L-7	MOTEL ROOM 209	TRANSER	18"x18"	6"	585	.09	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	7/A-615	8/A-615
L-8	MOTEL ROOM 210	TRANSER	18"x18"	6"	585	.09	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	7/A-615	8/A-615
L-9	LANDMARK ELECTRIC 1ST FLOOR	TRANSER	24"x24"	6"	1230	.06	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	2/A-615	2/A-615
L-10	LANDMARK ELECTRIC 1ST FLOOR	TRANSER	24"x18"	6"	850	.075	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-11	RED STRIPE BAR	TRANSER	24"x24"	6"	1255	.06	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-12	LANDMARK ELECTRIC 2ND FLOOR	TRANSER	24"x24"	6"	1000	.06	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-13	LANDMARK ELECTRIC 2ND FLOOR	TRANSER	24"x24"	6"	855	.08	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-14	APARTMENT 216	TRANSER	24"x18"	6"	855	.075	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-15	APARTMENT 217	TRANSER	24"x18"	6"	855	.075	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-16	COMBINED SPACE 441	TRANSER	24"x18"	6"	1710	.08	2.4			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-17	FLEX SPACE 212	TRANSER	30"x24"	6"	1956	.08	2.4			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-18	MATS SHOE STORE 203	TRANSER	30"x24"	6"	1000	.06	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	3/A-615	4/A-615
L-19	QTY TRAVEL PLANNERS 204	TRANSER	24"x24"	6"	1000	.06	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	3/A-615	4/A-615
L-20	PATTY'S KITCHEN CLOSET 208	TRANSER	24"x24"	6"	1000	.06	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-21	TEHRAN'S MEN'S WEAR 207	TRANSER	24"x24"	6"	1000	.06	1.89			NO	AL	NOTE 2	RUSKIN	LO83750	1/A-615	2/A-615
L-S91	SMOKE PURGE FAN 1	EXHAUST	30"x24"	6"	1955	.08	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S92	SMOKE PURGE FAN 2	EXHAUST	30"x24"	6"	2175	.08	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S93	SMOKE PURGE FAN 3	EXHAUST	30"x24"	6"	1050	.08	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S94	SMOKE PURGE FAN 4	EXHAUST	30"x24"	6"	1050	.08	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S95	SMOKE PURGE FAN 5	EXHAUST	30"x24"	6"	1710	.08	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S96	SMOKE PURGE FAN 6	EXHAUST	42"x30"	6"	4800	.095	4.54			YES	AL	NOTE 2	RUSKIN	EH83750X	3/A-614	4/A-614
L-S97	SMOKE PURGE FAN 7	EXHAUST	30"x18"	6"	1555	.07	1.89			YES	AL	NOTE 2	RUSKIN	EH83750X	3/A-614	4/A-614
L-S98	SMOKE PURGE FAN 8	EXHAUST	42"x30"	6"	4000	.09	4.54			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S99	SMOKE PURGE FAN 9	EXHAUST	30"x24"	6"	1955	.08	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S910	SMOKE PURGE FAN 10	EXHAUST	30"x24"	6"	1955	.08	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614
L-S911	SMOKE PURGE FAN 11	EXHAUST	30"x24"	6"	1900	.07	2.4			YES	AL	NOTE 2	RUSKIN	EH83750X	1/A-614	2/A-614

NOTES:
 1. PROVIDE UPLOUVER WITH FINISHING GLASS.
 2. PROVIDE UPLOUVER FINISH COLOR AS SELECTED BY ARCHITECT.

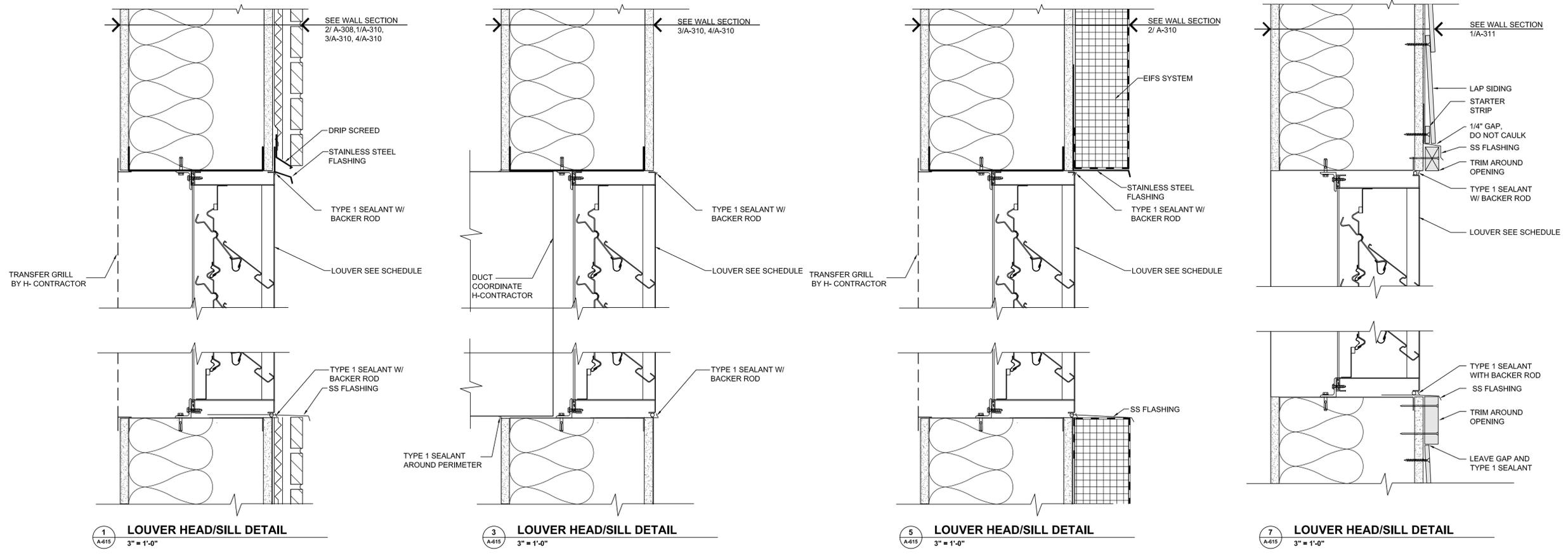


OCS
 NY'S OFFICE OF GENERAL SERVICES
 Serving New York
 ANDREW M. CLOMO
 Governor
 ROYANN M. DESTITO
 COMMISSIONER
 JAMES CANTERINO, AIA
 Deputy Commissioner, Design and Construction

WARNING:
 THE ATTRIBUTION OF THIS MATERIAL, IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPETENT PROFESSIONAL, I.E. ARCHITECT OR AN ARCHITECT ENGINEER OR AN ENGINEER OR LANDSCAPE ARCHITECT, IS PROHIBITED. THIS DOCUMENT IS THE PROPERTY OF NEW YORK STATE EDUCATION, LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

CONSTRUCTION
 BUILDING NO. XXX
 TITLE: PROVIDE CITYSCAPE COMPLEX
 LOCATION: PREPAREDNESS TRAINING CENTER
 5900 AIRPORT ROAD
 ORISKANY, NY 13424
 CLIENT: DIVISION OF HOMELAND SECURITY & EMERGENCY SERVICES

ADDENDUM DRAWING
 09/12/2012
 MARK: XXXXX
 DATE: 09/12/2012
 DESCRIPTION: ADDENDUM NO 7
 PROJECT NUMBER: 44014-C
 DESIGNED BY: XXXXX
 DRAWN BY: XXXXX
 FIELD CHECK: XXXXX
 APPROVED: XXXXX
 SHEET TITLE: LOUVER SCHEDULE AND DETAILS
 DRAWING NUMBER: A-614
 SHEET X OF X

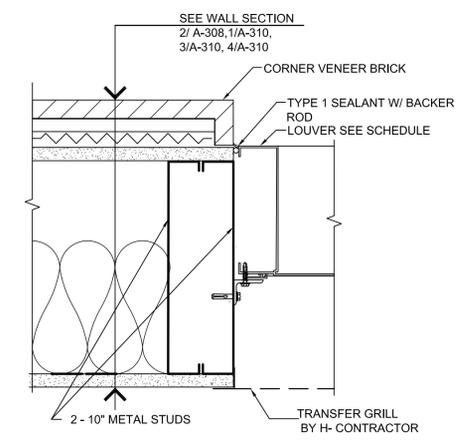


1 LOUVER HEAD/SILL DETAIL
 3" = 1'-0"

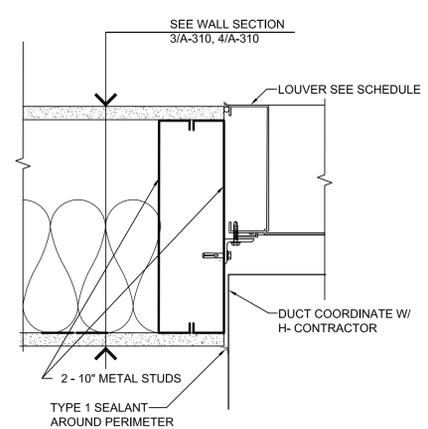
3 LOUVER HEAD/SILL DETAIL
 3" = 1'-0"

5 LOUVER HEAD/SILL DETAIL
 3" = 1'-0"

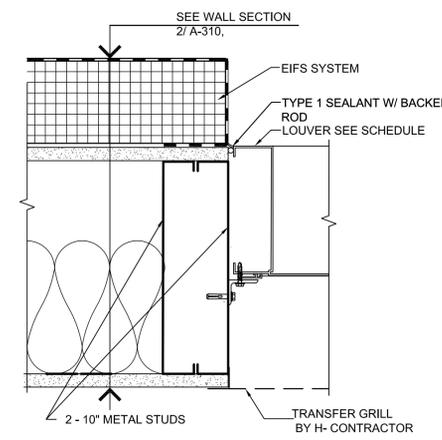
7 LOUVER HEAD/SILL DETAIL
 3" = 1'-0"



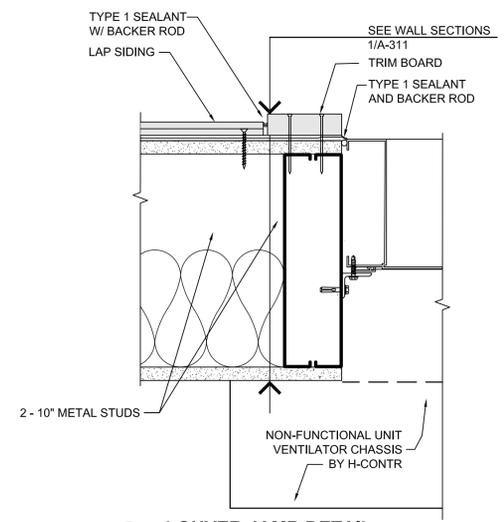
2 LOUVER JAMB DETAIL
 3" = 1'-0"



4 LOUVER JAMB DETAIL
 3" = 1'-0"



6 LOUVER JAMB DETAIL
 3" = 1'-0"



8 LOUVER JAMB DETAIL
 3" = 1'-0"

WARNING:
 THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT:
CONSTRUCTION
 TITLE:
PROVIDE CITYSCAPE COMPLEX
 BUILDING NO. XXX
 LOCATION:
STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424
 CLIENT:
DIVISION OF HOMELAND SECURITY
& EMERGENCY SERVICES

ADDENDUM
 DRAWING
 09/12/2012

MARK	DATE	DESCRIPTION
	09/12/2012	ADDENDUM NO 7
	07/05/2012	FINAL SUBMISSION
PROJECT NUMBER:	44014- C	
DESIGNED BY:	XXXXX	
DRAWN BY:	XXXXX	
FIELD CHECK:	XXXXX	
APPROVED:	XXXXX	

SHEET TITLE:
LOUVER DETAILS

DRAWING NUMBER:
A-615

SHEET X OF X



Serving New York
 NYS OFFICE OF GENERAL SERVICES
 ANDREW M. CUOMO
 Governor
 ROANN M. DESITTERO
 COMMISSIONER
 JAMES M. DAVIES, A.I.A.
 Deputy Commissioner, Design and Construction
 CONSULTANT

LABELLA
 Engineering
 Architectural
 Environmental
 Planning
 Associates, P.C.
 300 STATE STREET, SUITE 201
 ROCHESTER, NY 14614
 P: (585) 464-6000
 F: (585) 464-6006
 www.labella.com
 Copyright © 2011

WARNING:
 THE ALTERATION OF THIS MATERIAL IN ANY WAY, WITHOUT THE WRITTEN CONSENT OF THE PROFESSIONAL ENGINEER OR ARCHITECT, IS A VIOLATION OF THE PROFESSIONAL ENGINEERING AND ARCHITECTURE ACT AND IS A CLASS "A" MISDEMEANOR.

CONTRACT:
 TITLE: PROVIDE CITYSCAPE COMPLEX
 LOCATION: STATE PREPAREDNESS TRAINING CENTER
 5900 AIRPORT ROAD
 ORISKANY, NY 13424
 CLIENT: DIVISION OF HOMELAND SECURITY & EMERGENCY SERVICES

REVISED DRAWING
09/12/2012

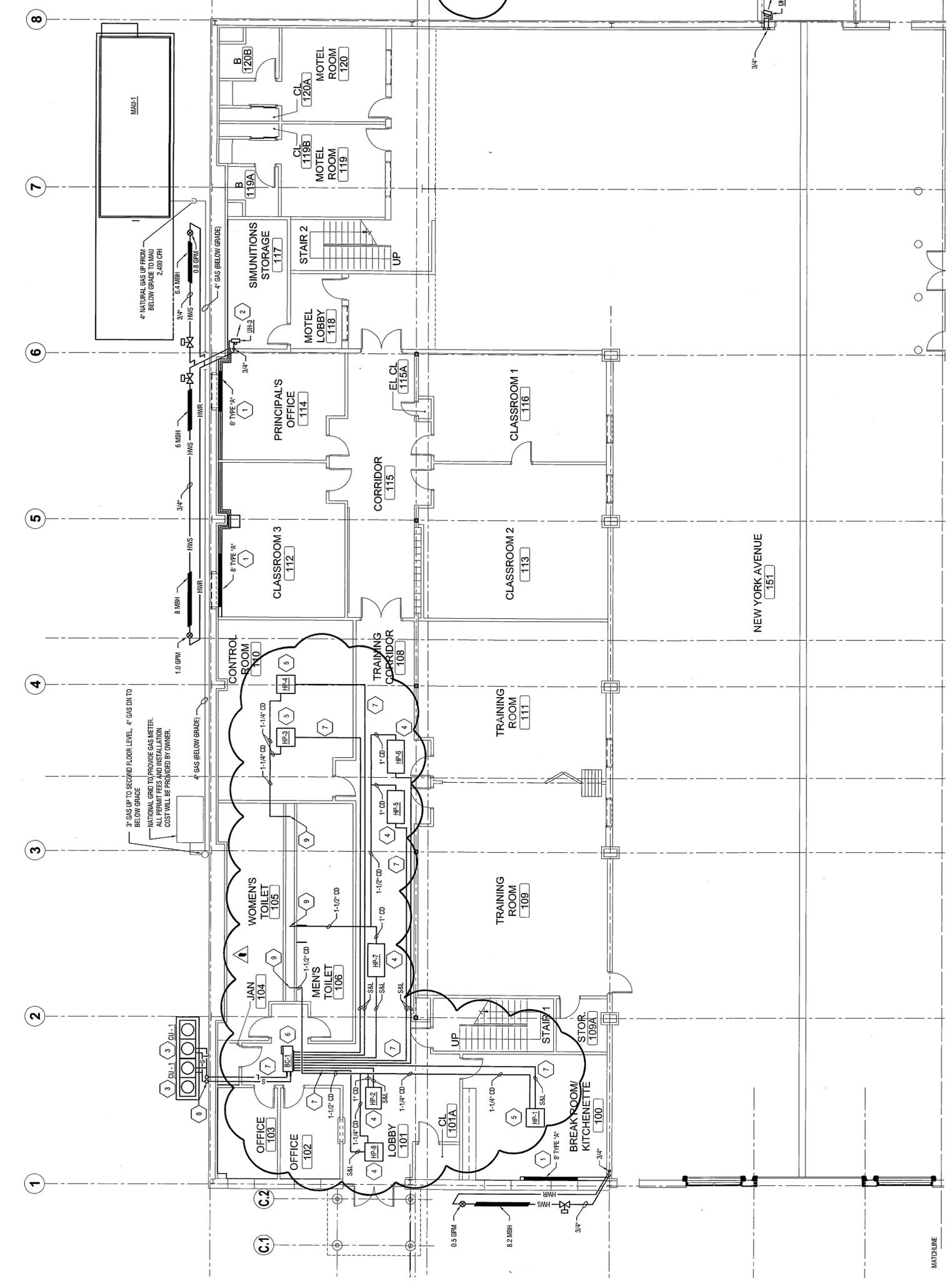
MARK	DATE	DESCRIPTION
1	09/12/2012	ADDENDUM 7
	07/05/2012	FINAL SUBMISSION

PROJECT NUMBER:	44014 - H
DESIGNED BY:	NKF
DRAWN BY:	NKF
FIELD CHECK:	XXXXX
APPROVED:	RWM

NORTH FIRST FLOOR PIPING PLAN

DRAWING NUMBER: M-104
 SHEET 6 OF 19

- KEY NOTES:**
- REFER TO HOT WATER RIVET TUBE RADIATION DETAIL SHOWN ON M-500. PROVIDE PIPING AS SHOWN ON DETAIL. SET BALANCE VALVE FOR QUANTITY SHOWN ON THIS DRAWING.
 - REFER TO UNIT HEATER DETAIL (UW) SHOWN ON DRAWING M-500. PROVIDE PIPING AS SHOWN ON DETAIL. SET BALANCE VALVE FOR QUANTITY SHOWN ON UNIT HEATER SCHEDULE SHOWN ON M-600. CONFIRM UNIT HEATER LOCATION AND HEIGHT CLEARANCE DOES NOT OBSTRUCT PERSONNEL PATH OR EQUIPMENT ACCESSIBILITY. PROVIDE UNIT SUPPORT FROM STRUCTURE ABOVE.
 - PROVIDE VRF HEAT PUMP CONDENSING UNIT AS SCHEDULED. PROVIDE 6" THICK CONCRETE PAD THAT EXTENDS A MINIMUM OF 6" AROUND THE PERIMETER OF THE UNIT. PROVIDE FIELD FABRICATED STRUCTURAL STEEL MOUNTING STAND TO PROVIDE A MINIMUM OF 12" OPEN CLEARANCE FROM TOP OF CONCRETE PAD TO UNDERSIDE OF CONDENSING UNIT. PROVIDE REFRIGERANT PIPING SEED IN ACCORDANCE WITH THE UNIT MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - PROVIDE SPLIT SYSTEM VRF HEAT PUMP CONCEALED UNIT AS SCHEDULED. SUPPORT UNIT FROM STRUCTURE ABOVE. PROVIDE REFRIGERANT PIPING CONFIGURED PER THE MANUFACTURER'S PRINTED INSTRUCTIONS. PROVIDE CONDENSATE DRAIN CONNECTION TO UNIT.
 - PROVIDE SPLIT SYSTEM VRF HEAT PUMP MOUNTED CASSETTE UNIT AS SCHEDULED. SUPPORT UNIT FROM STRUCTURE ABOVE. PROVIDE REFRIGERANT PIPING CONFIGURED PER THE MANUFACTURER'S PRINTED INSTRUCTIONS. PROVIDE CONDENSATE DRAIN CONNECTION TO UNIT.
 - PROVIDE REFRIGERANT DISTRIBUTION MAINS SYSTEM AS REQUIRED BY MANUFACTURER OF VRF SYSTEM ABOVE LAY IN CEILING. SUPPORT UNIT FROM STRUCTURE ABOVE. PROVIDE ALL REFRIGERANT AND CONDENSATE DRAIN PIPING AND CONNECTIONS.
 - REFRIGERANT PIPING RUNS ABOVE LAY IN CEILING. COORDINATE EXACT LOCATION WITH OTHER TRADES. SUPPORT PIPING FROM STRUCTURE ABOVE.
 - REFRIGERANT PIPING RUNS ABOVE GRADE FROM CONDENSING UNITS TO EXTERIOR WALL OF BUILDING. PIPING RUNS UP WALL SO THAT IT WILL WEATHER BUILT UP INSULATION AS SHOWN ON EXTERIOR PIPING SECT. WALL PENETRATION WEATHER TIGHT.
 - PROVIDE CONDENSATE PIPING WITH G-TRAP AND CONNECTION TO SANITARY PIPING SYSTEM WITHIN CHASE. COORDINATE LOCATION OF CONNECTION WITH PLUMBING CONTRACTOR.



1 FIRST FLOOR PIPING PLAN
 M-104 SCALE 1/8" = 1'-0"

PLUMBING SYMBOLS

-----DCW-----	DOMESTIC COLD WATER PIPING
-----DHW-----	DOMESTIC HOT WATER PIPING
-----DHWR-----	DOMESTIC HOT WATER RECIRCULATION PIPING
---SAN---	SANITARY DRAIN PIPING BELOW SLAB
---SAN---	SANITARY DRAIN PIPING
-----	VENT PIPING
○	PIPING RISES UP
○	PIPING DROPS DOWN
├──┘	PIPING BRANCH CONNECTION
┌──┘	SHUT-OFF VALVE
┌──┘	PRESSURE REDUCING VALVE
┌──┘	CHECK VALVE
SA-#	SHOCK ABSORBER
⊗	BALANCING VALVE
○ FCO	FLOOR CLEANOUT
□ FD-#	FLOOR CLEANOUT
┌──┘	CLEANOUT (EXPOSED)
○	P-TRAP FOR FLOOR DRAINS AND FLOOR SINKS
┌──┘	EQUIPMENT
┌──┘	HOSE BIBB (HB)
┌──┘	FREEZE PROOF WALL HYDRANT (FPWH)
┌──┘	TRAP PRIMER

ABBREVIATIONS

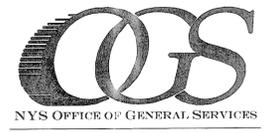
AFF	ABOVE FINISHED FLOOR	OD	OUTSIDE DIMENSION
AP	ACCESS PANEL	ODWH	ON DEMAND WATER HEATER
BFP	BACK FLOW PREVENTOR	OPB	OPENING
BLDG	BUILDING	OS	OPEN SITE
BSMT	BASEMENT	OT	OFF TOP
		OZ	OUNCE
CFH	CUBIC FEET PER HOUR	PART	PARTIAL
CI	CAST IRON	PDR	PLENUM DRAIN
C	CENTER LINE	PERF	PERFORATED
CLG	CLEARING	PH	PHASE
CO	CLEAR OUT	PV	POST INDICATOR VALVE
CONN	CONNECTION	POS	POSITIVE
CW	COLD WATER	PRESS	PRESSURE
CC	CONSTRUCTION CONTRACTOR	PS	PRESSURE SWITCH
		PSI	POUNDS PER SQUARE INCH
DB	DRAIN BOX	PSIG	POUNDS PER SQUARE INCH GAUGE
DEG	DEGREE	PSIA	POUNDS PER SQUARE INCH ABSOLUTE
DF	DRINKING FOUNTAIN	PT	PRESSURE TRANSMITTER
DIA	DIAMETER	PV	PLUG VALVE
DN	DOWN	PVC	POLYVINYL CHLORIDE
DRS	DARK ROOM DOUBLE BOWL SINK	PVS	POLYVINYL COATED STEEL
DCW	DOMESTIC COLD WATER		
DHW	DOMESTIC HOT WATER		
DHWR	DOMESTIC HOT WATER RECIRCULATING		
DWG	DRAWING	QUAN	QUANTITY
DWH	DOMESTIC WATER HEATER	RD	ROOF DRAIN
		REL	RELIEF
(E)	EXISTING	REQD	REQUIRED
EA	EACH	RL	RAIN LEADER
ELEV	ELEVATION	RM	ROOM
ENT	ENTERING	RP	RECIRCULATION PUMP
EQ	EQUAL	RPM	REVOLUTIONS PER MINUTE
EQUIP	EQUIPMENT		
EQUIV	EQUIVALENT	SA	SHOCK ABSORBER
°F	DEGREES FAHRENHEIT	SCH	SCHEDULE
FAI	FRESH AIR INTAKE	SCHM	SCHEMATIC
FD	FLOOR DRAIN	SK	STAINLESS STEEL SINK
FIN	FINISHED	S/S	SERVICE SINK
FL	FLOOR	SPEC	SPECIFICATION
FLA	FULL LOAD AMPS	SFS	SUMP PUMP SYSTEM
FPWH	FREEZE PROOF WALL HYDRANT	SD	SQUARE
FT	FEET	SS	STAINLESS STEEL
GA	GAUGE	SST	SUPPORT STEEL
GALV	GALVANIZED	STD	STANDARD
GPD	GALLONS PER DAY	STR	STRUCTURAL
GPH	GALLONS PER HOUR	SUP	SUPPLY
GPM	GALLONS PER MINUTE	SYS	SYSTEM
		S/SHO	SAFETY SHOWER
HT	HEIGHT	TP	TRAP PRIMER
HB	HOSE BIBB	TYP	TYPICAL
HD	HEAD (SEE SCHEDULES)		
HP	HORSE POWER	UR	URINAL
HR	HOSE REEL		
HTR	HEATER	VB	VACUUM BREAKER
		VS	VIVARIUM SINK
ID	INTERNAL DIAMETER	VTR	VENT THRU ROOF
INCL	INCLUDING		
INV	INVERT	W	WIDTH
		WC	WITHOUT WATER CLOSET
K	TYPE OF COPPER TUBING	WM	WATER METER
KW	KILOWATT		
LAV	LAVATORY	XRD	X-RAY DEVELOPER CABINET
HC	HVAC CONTRACTOR		
MED	MEDIUM		
MFR	MANUFACTURER		
MISC	MISCELLANEOUS		
MIN	MINIMUM		
MSS	MOP SERVICE SINK		
MTD	MOUNTED		
NC	NORMALLY CLOSED		
NH	NO HUB		
No	NUMBER		
NO	NORMALLY OPEN		
NTS	NOT TO SCALE		

GENERAL NOTES

- DO NOT SHUT DOWN ANY PLUMBING, FIRE PROTECTION, OR RELATED SYSTEMS WITHOUT ENGINEER IN CHARGE PRIOR WRITTEN APPROVAL. FOLLOW ALL FACILITY REQUIREMENTS AND SHUT DOWN PROCEDURES AS WELL AS ALL REQUIREMENTS OF THIS PROJECT.
- IF REQUIRED, PROVIDE SHUT DOWNS AND TIE-INS DURING OFF HOURS TO AVOID DISRUPTION OF BUILDING SYSTEMS. COORDINATE ALL SHUT DOWN REQUIREMENTS PRIOR TO SUBMITTING BID (INCLUDE ALL REQUIRED DURING OFF HOURS IN BID).
- PROVIDE ALL WORK IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL CODES. OBTAIN ALL REQUIRED PERMITS.
- PROVIDE ALL REQUIRED EXCAVATION, BACKFILL AND COMPACTION FOR ALL UNDERGROUND WORK.
- FIELD VERIFY EXACT LOCATION, DEPTH, COMPOSITION AND CONDITION OF ALL PIPING, VALVES AND SYSTEMS AS REQUIRED FOR WORK OF THE CONTRACT.
- PROVIDE CUTTING, CORING AND PATCHING OF ALL WALLS, SLABS AND DECKS AS REQUIRED FOR WORK SHOWN. COORDINATE ALL WORK WITH OWNER AND GENERAL CONTRACTOR AND ALL TRADES.
- PROVIDE PIPE SLEEVES FOR ALL UNDERGROUND PIPING PASSING THROUGH OR UNDER FOOTINGS, WALLS, FOUNDATION WALLS, SLABS FLOORS AND/OR UNDERGROUND STRUCTURES. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- WHERE PIPING IS LOCATED OVER FOOTINGS AND/OR OTHER UNDERGROUND STRUCTURES, ROLL DOWN AS REQUIRED TO CONNECT TO SYSTEMS NOTED. PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND CONNECTIONS.
- PITCH ALL SANITARY, WASTE, AND STORM PIPING AS FOLLOWS:
1/4" PER FOOT MINIMUM DOWNWARD, IN DIRECTION OF FLOW UNLESS OTHERWISE NOTED.
VENT PIPING: 1/4" PER FOOT MINIMUM UPWARD, UNLESS OTHERWISE NOTED.
- CONNECT TO SITE PIPING OUTSIDE BUILDING AS SHOWN. PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND CONNECTIONS. FIELD VERIFY EXACT LOCATION, DEPTH AND COMPOSITION OF SITE SERVICES AND COORDINATE ALL WORK WITH SITE CONTRACTOR.
- COORDINATE ALL VENT TERMINATIONS ABOVE ROOF WITH HVAC CONTRACTOR. ALL VENT TERMINATIONS ABOVE ROOF SHALL BE A MINIMUM 25'-0" AWAY FROM ANY HVAC OUTSIDE AIR INTAKE (ROOFTOP UNIT, LOUVER, ETC.).
- PROVIDE SINGLE HOSE BIBB WITH VACUUM BREAKER (HB) UNDER LAVATORY(S) IN ALL TOILET ROOMS WITH FLOOR DRAINS. ONE REQUIRED PER ROOM. PROVIDE TRAP PRIMERS ON ALL FLOOR DRAINS IN AREAS WITH OUT HOSE BIBBS.
- PROVIDE BARRIER TYPE SEAL DEVICE ON ALL FLOOR DRAINS.
- REFER TO ARCHITECTURAL DRAWINGS AND THE PROJECT SPECIFICATIONS FOR ANY PROJECT FINISHING REQUIREMENTS.
- FINISHED MAIN LEVEL FINISHED SLAB ELEVATION IS 0'-0" (434.5).

GENERAL PLUMBING NOTES

- THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE PLUMBING CODE OF NEW YORK STATE AND LOCAL PLUMBING INSPECTOR.
- THE EXISTING PIPING INDICATED ON THESE PLANS SHALL BE VERIFIED IN THE FIELD FOR EXACT LOCATIONS, QUANTITY, AND PIPE SIZES.
- THE PIPING INDICATED ON THESE PLANS ARE DIAGRAMATIC. ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING WITH EXISTING CONDITIONS AND SHALL PROVIDE ANY NECESSARY OFFSETS, REROUTING, TEES, ELBOWS, ETC. REQUIRED FOR A COMPLETE AND COORDINATED INSTALLATION.
- OBTAIN AND PAY ALL FEES RELATED TO PERMITTING, INSPECTIONS, TAP-ON FEES, ETC.
- COORDINATE ANY PLUMBING OR PIPING SYSTEM SHUTDOWN WITH THE ENGINEER IN CHARGE 48 HOURS IN ADVANCE.
- ALL WORK SHALL BE COORDINATED WITH THE EQUIPMENT VENDORS.
- COORDINATE THE INSTALLATION OF ALL UNDERSLAB PIPING WITH EXISTING STRUCTURAL FOUNDATIONS. UNDERGROUND UTILITY LOCATIONS SHALL BE VERIFIED PRIOR TO ANY WORK BEING PERFORMED. REPAIR OR REPLACE ALL PIPING NOT IN PROPER WORKING ORDER OR DAMAGED DURING INSTALLATION OF THE NEW UNDERSLAB PIPING.
- SUPPORT ALL PLUMBING & PIPING SYSTEMS AS REQUIRED BY THE STATE AND LOCAL CODE REQUIREMENTS, AND PER MANUFACTURERS RECOMMENDATIONS.
- SEAL ALL PIPING PENETRATIONS THROUGH WALLS, OR FLOORS EQUAL THE RATING OF THE WALL OR FLOOR.
- TEST THE PLUMBING SYSTEM AS REQUIRED BY STATE AND LOCAL CODE OR BY THE REQUIREMENTS OF THE LOCAL PLUMBING INSPECTOR.
- DISENPECT THE ENTIRE DOMESTIC WATER SYSTEM IN ACCORDANCE TO THE LOCAL CODE & HEALTH DEPARTMENT REQUIREMENTS.
- INSTALL THE BACKFLOW PREVENTION DEVICE PER STATE AND LOCAL CODE & PER AUTHORITY HAVING JURISDICTION REQUIREMENTS.
- ALL (VTR'S) VENT THRU ROOF PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH ALL TRADES. ALL VTR'S SHALL BE A MINIMUM OF 25'-0" FROM ALL FRESH AIR INTAKE OPENINGS.

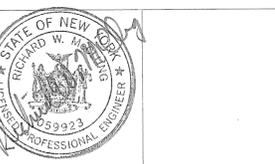


ANDREW M. CIOMO
Governor
ROANNA M. DESTITTO
COMMISSIONER
JAMES M. DAVIES, A.I.A.
Deputy Commissioner, Design and Construction



300 STATE STREET, SUITE 201
ROCHESTER, NY 14614
P: (585) 454-6110
F: (585) 454-3066
www.labeliacp.com
Copyright © 2011

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS "A" MISDEMEANOR.



CONTRACT: PLUMBING

TITLE:
PROVIDE CITYSCAPE COMPLEX

LOCATION:
STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NY 13424

CLIENT:
DIVISION OF HOMELAND SECURITY
& EMERGENCY SERVICES

**REVISED DRAWING
09/05/2012**

1	09/05/2012	ADDENDUM 5
	07/05/2012	FINAL SUBMISSION

MARK	DATE	DESCRIPTION
PROJECT NUMBER:	44014	P
DESIGNED BY:	DWM	
DRAWN BY:	DWM	
FIELD CHECK:	XXXXX	
APPROVED:	RWM	

**PLUMBING
SYMBOLS, LEGENDS,
ABBREVIATIONS**

DRAWING NUMBER:
P-000
SHEET X OF X