DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

**ADDENDUM NO. 3 TO PROJECT NO. 45009**
**CONSTRUCTION, HVAC, PLUMBING AND ELECTRICAL WORK**
**PROVIDE MEDICAL/DENTAL AND OFFICE SPACE**
**MACCORMICK SECURE CENTER**
**300 SOUTH ROAD**
**BROOKTONDALE, NY**

February 24, 2016

**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 1:**

1. Refer to Section 221100 - Plumbing Piping:

    a. Replace with revised Section 221100, attached.

**CONSTRUCTION SPECIFICATIONS:**

2. Refer to Section 000110 - Table of Contents:

    1. Refer to Division 03 - Concrete. Add Section 035400 Cementitious Self-Leveling Topping.

    2. Refer to Division 07 - Thermal and Moisture Protection. Add Section 072600 Moisture Control System.

    3. Refer to Division 07 - Thermal and Moisture Protection. Add Section 072726 Fluid-Applied Weather Barriers.

    4. Refer to Division 07 - Thermal and Moisture Protection. Add Section 077200 Roof Accessories.

    5. Refer to Division 10 - Specialties. Add Section 102814 Electric Hand Dryers.

    6. Refer to Division 10 - Specialties. Add Section 104400 Fire Extinguishers and Cabinets.

3. Section 035400 Cementitious Self-Leveling Topping:

    a. Add Section 035400 Cementitious Self-Leveling Topping, attached.

4. Section 072600 Moisture Control System:

    a. Add Section 072600 Moisture Control System, attached.

5. Section 072726 Fluid-Applied Weather Barriers:

    a. Add 072726 Fluid-Applied Weather Barriers, attached.

6. Section 077200 Roof Accessories:

    a. Add 077200 Roof Accessories, attached.

7. Refer to Section 075323 - Modification to Existing Warrantied Roof System:

    a. Refer to Article 2.01. Add Paragraph B to read as follows:

        "B. Walkway, Protection Pads: Manufacturer's nonporous, pressure sensitive, solid molded rubber walkway pads. 30 inch by 30 inch with factory rounded corners."

8. Refer to Section 093013 - Ceramic Tile:

    a. Refer to Article 2.02.B. Revise paragraph 2.03.B. numbering to 2.03.C.

    b. Refer to Article 2.02. Add new paragraph 2.03.B. as follows:

        "B. Portland Cement Mortar: Complying with ANSI A 108.1, or ANSI A 108.5 in combination with ANSI A 108.1.
            1. Portland Cement: ASTM C 150, Type 1.
            2. Sand: ASTM C 144.
            3. Hydrated Lime: ASTM C 206 or ASTM C 207, Type S.
            4. Water: Clean and potable."

    c. Refer to Article 2.03.A. Replace Paragraph A with the following:

        "A. Epoxy Grout: Two or three component epoxy resin and hardener, filler, formulated for chemical resistance, factory blended for the type of tile to be grouted, and complying with ANSI A 118.3."

    d. Refer to Article 2.03.B. Delete Paragraph B in its entirety.

    e. Refer to Article 2.03.C. Revise paragraph 2.03.C. numbering to 2.03.B.

9. Refer to Section 099101 - Construction Painting:

    a. Refer to Article 2.03.B. Revise paragraph 2.03.B.3. numbering to 2.03.B.1.

    b. Refer to Article 2.03.B. Add paragraph 2.03.B.2. as follows:

        "2. Paint Type EP-1: Interior Water Based Epoxy Floor Covering
            1. Solids by weight: 50%
            2. Solids by volume: 41%
            3. Solvent: Water
            4. Wet film thickness: 5.0-10.0 mils
            5. Dry film thickness: 2.0-4.0 mils
            6. Basis of Design: Armorseal 8100, by Sherwin Williams."

10. Section 102814 Electric Hand Dryers:

    a. Add Section 102814 Electric Hand Dryers, attached.

11. Section 104400 Fire Extinguishers and Cabinets:

    a. Add Section 104400 Fire Extinguishers and Cabinets, attached.

**PLUMBING SPECIFICATIONS:**

12. Refer to Section 220577 - Floor And Area Drains:

    a. Replace with revised Section 220577, attached.

**CONSTRUCTION DRAWINGS:**

13. Refer to Drawing G-002 - Code Plan and Reference:

    a. Add note:

    "Install (3) semi-recessed fire extinguisher cabinets. Final location to be coordinated in the field as required by the Building Code of New York State (BCNYS) 2010."

14. Refer to Drawing S-001:

    a. Reference General Notes; Cast-in-Place Concrete Notes, Note #3:

        1) Delete the text: "No coring of slab permitted."

        2) Replace with the text: "Core drilling is not permitted without the submission of a coordinated core drilling plan and detail. Core drilling to be approved by structural engineer."

15. Refer to Drawing S-200:

    a. Reference Drawing S-200, Detail 8, Brick Shelf Detail:

        1) Add note:

        "All masonry visible to exterior to be brick. Reference Architectural drawings."

16. Refer to Drawing A-100 - Floor Finish Plans, Room Finish Schedule and Interior Elevations:

    a. Refer to Room Finish Schedule, at Room 132 Shower, add the following comment:

    "Ceramic tile floors and walls, reference Floor Plan."

17. Refer to Drawing A-101 - Floor Plans - Area A:

    a. Replace with new Drawing A-101, attached.

18. Refer to Drawing A-102 - Floor Plans - Areas B & C:

    a. Replace with new Drawing A-102, attached.

19. Refer to Drawing A-103 - Roof Plan:

    a. Detail 2/A-301:

    "Provide EPDM walkway pads from existing roof hatch to and around each serviceable piece of equipment. Total linear foot of walkway pads to be 280 lf."

    b. Add note:

    "Provide hatch mounted guardrail and gate, ladder mounted handrail extension and free standing skylight guardrail and roof edge fall protection system. Reference specification section 077200 Roof Accessories."

20. Refer to Drawing A-301 - Wall Sections:

    a. Refer to Detail 2/A-301:

        1) Delete the list:

        "TYP. EXTERIOR MASONRY WALL
        - 4" UTILITY BRICK VENEER W/ BRICK TIES 16" O.C., EA. WAY
        - 1 1/2" AIR SPACE
        - AIR BARRIER
        - 3" RIGID BRD. INSULATION
        - 8" CMU W/ JOINT REINFORCING @ 16" O.C. VERT
        - INTERIOR PLASTER."

        2) Replace with the following list:

        "TYP. EXTERIOR MASONRY WALL
        - 4" UTILITY BRICK VENEER W/ BRICK TIES 16" O.C., EA. WAY
        - 1 1/2" AIR SPACE
        - 3" RIGID BRD. INSULATION
        - AIR BARRIER
        - 8" CMU W/ JOINT REINFORCING @ 16" O.C. VERT
        - INTERIOR PLASTER."

21. Refer to Drawing A-502 - Construction Details:

    a. Replace with new Drawing A-502, attached.

**HVAC DRAWINGS:**

22. Refer to Drawing M-001 - HVAC Symbols, Abbreviations and General Notes:

    a. Refer to HVAC General Note 16. Add the following to the end of Note 16:

    "…All piping, conduit and duct penetrations through new structural slabs and new walls are to be sleeved or chased, closely coordinate with Construction Contractor. Core drilling is not permitted without the submission of a core drilling plan and detail. Core drilling to be approved by Structural Engineer."

23. Refer to Drawing M-500 - Details - HVAC:

    a. Refer to Detail 2/M-500. Add the following to the end of Detail Note C:

    "…All restraint systems shall be installed in accordance with the manufacturer's restraint guidelines and all certified submittal data. Fasten curbs to building structure (provide additional framing between existing structural members as required). Attach equipment to curb with restraint brackets (quantity and type as required by equipment and curb manufacturers)."

    b. Refer to Detail 4/M-500. Add the following to the end of Detail Note F:

    "…All restraint systems shall be installed in accordance with the manufacturer's restraint guidelines and all certified submittal data. Fasten curbs to building structure (provide additional framing between existing structural members as required). Attach equipment to curb with restraint brackets (quantity and type as required by equipment and curb manufacturers)."

    c. Refer to Detail 5/M-500. Add the following to the end of Detail Note E:

    "…All restraint systems shall be installed in accordance with the manufacturer's restraint guidelines and all certified submittal data. Fasten curbs to building structure (provide additional framing between existing structural members as required). Attach equipment to curb with restraint brackets (quantity and type as required by equipment and curb manufacturers)."

    d. Refer to Detail 6/M-500. Add the following to the end of Detail Note D:

    "…All restraint systems shall be installed in accordance with the manufacturer's restraint guidelines and all certified submittal data. Fasten curbs to building structure (provide additional framing between existing structural members as required). Attach equipment to curb with restraint brackets (quantity and type as required by equipment and curb manufacturers)."

**PLUMBING DRAWINGS:**

24. Refer to Drawing P-001 - Symbol and General Notes - Plumbing:

    a. Refer to Plumbing General Note G. Add the following to the end of Note G:

    "…All piping, conduit and duct penetrations through new structural slabs and new walls are to be sleeved or chased, closely coordinate with Construction Contractor. Core drilling is not permitted without the submission of a core drilling plan and detail. Core drilling to be approved by Structural Engineer."

25. Refer to Drawing F-001 - Symbols and General Notes - Fire Protection:

    a. Refer to Fire Protection General Note H. Add the following to the end of Note H:

    "…All piping, conduit and duct penetrations through new structural slabs and new walls are to be sleeved or chased, closely coordinate with Construction Contractor. Core drilling is not permitted without the submission of a core drilling plan and detail. Core drilling to be approved by Structural Engineer."

26. Refer to Drawing P-102 - Floor Plan Area A & B - Plumbing:

    a. Refer to Underground - Area A & B Plumbing Plan 1/P-102.

        1) Provide 2 in. sanitary piping from sink in Dental 42 to below slab and connect to new 3 in. sanitary main in corridor to the southeast of Dental 42.

27. Refer to Drawing P-501 - Details - Plumbing:

    a. Refer to Detail No. 2. Add the following new Detail Note C:

        "C. Coordinate mixing valve final location with Director's Representative."

    b. Delete Detail No. 4, Trap Primer Detail.

**ELECTRICAL DRAWINGS:**

28. Refer to Drawing E-001 - Symbol Schedule and Abbreviations:

    a. Refer to Electrical General Note J. Add the following to the end of Note J:

    "…All piping, conduit and duct penetrations through new structural slabs and new walls are to be sleeved or chased, closely coordinate with Construction Contractor. Core drilling is not permitted without the submission of a core drilling plan and detail. Core drilling to be approved by Structural Engineer."

**END OF ADDENDUM**

Margaret F. Larkin
Executive Director
Design and Construction

**SECTION 035400**

**CEMENTITIOUS SELF-LEVELING TOPPING**

## PART 1 GENERAL

### 1.01 RELATED WORK SPECIFIED ELSEWHERE

**A.** Resilient Sheet Flooring: Section 096516.

B. Tile Carpet: Section 096813.

### 1.02 REFERENCES

A. This system consists of a primer and a mix of special cements and binders which, when mixed with water, becomes a highly liquid cement compound that seeks its own level and produces a flat, smooth surface. Surface shall be true to plane within 1/8" maximum deviation under a 10' straight edge in accordance with ACI 302 1R-96, Flatness Tolerance.

### 1.03 SUBMITTALS

A. Product Data: Manufacturer's catalog sheets, specifications, and installation instructions for each item specified.

### 1.04 QUALITY ASSURANCE

A. Material Container Labels: Material containers shall bear the manufacturer's label indicating manufacturer's name, trade name of product, lot number, shelf life of product, and mix ratio (if applicable).

### 1.05 DELIVERY AND STORAGE

A. Deliver materials to the site in original, sealed containers. Do not deliver materials which have exceeded shelf life limitation set forth by the manufacturer.

B. Comply with manufacturer's printed instructions for storing materials.

### 1.06 PROJECT CONDITIONS

A. Environmental Requirements: Comply with the product manufacturer's printed limitations and instructions.

### 1.07 TEST SAMPLE

A. Provide field applied 5' x 5' x contract thickness sample of topping.

## PART 2 PRODUCTS

## 2.01 MATERIALS

A. The following brand names are specified to establish product generic type and standard of quality. Other comparable products in the manufacturer's same product series may be required to closely fit the particular job conditions. Use appropriate product for depth of patch and temperature at time of application. More than one product may be required for a particular type of patching mortar. When choice of color is available, select color to match adjoining concrete. A bonding agent/primer and/or sealer shall be used as recommended by the patching mortar manufacturer.

B. Cementitious Self-Leveling Topping: Cement Base, Self-Leveling, Ardex K15 Self-Leveling Underlayment by Ardex, or Level Finish by CMP Specialty Products.
   1. Compressive Strength at 28 Days: ASTM C 109, minimum 4,000 psi. Cement: One of the following complying with the indicated requirements:
   2. Flexural Strength at 28 Days: ASTM C 348, minimum 900 psi.
   3. Aggregate: Underlayment mortar manufacturer's recommended sizes, for thicknesses involved, if required.

C. Cleaning Agent, Bonding Agent/Primer, Sealer: As recommended by the patching mortar manufacturer.

D. Water: Clean and free of deleterious amounts of acids, alkalis, and organic materials.

# PART 3 EXECUTION

## 3.01 PREPARATION

A. Protection: Cover or otherwise protect adjacent surfaces not being repaired. Protect mortar after placement in accordance with the product manufacturer's printed instructions.

B. Surface Preparation:
   1. Prepare surface in accordance with the product manufacturers printed instructions.
   2. Remove paint, oils, grease, dirt, salt deposits, laitance and other contaminants from surfaces to be patched. Use cleaning agent where required.
   3. Clean areas to be filled with air or water under pressure, except as otherwise recommended by the mortar manufacturer.

C. Coat contact surfaces of existing materials with a bonding agent/primer if recommended in the product manufacturer's instructions.

## 3.02 APPLICATION

A. Mixing Underlayment Mortar: Comply with mortar manufacturer's printed instructions. Proportion components and sizes of aggregate as recommended by mortar manufacturer for the particular job conditions. Do not over water underlayment mortar.

B. Apply the underlayment mortar in accordance with the product manufacturer's printed instructions.

## 3.03 CLEANING

A. Clean up spatters and droppings.

**END OF SECTION**

## SECTION 072600

## MOISTURE CONTROL SYSTEM

### PART I - GENERAL

### 1.01 SUMMARY

A. Moisture control 2-part application prior to installation of any self-leveling underlayment.

B. This moisture control system is also required at all slab areas that are scheduled to receive new resilient flooring, including tile and sheet products, and carpeting, even if self-leveling underlayment is not specified.

C. Basis of Design is Ardex MC - Moisture Control.

### 1.02 RELATED SECTIONS

A. Cementitious Self-Leveling Topping: Section 035400.

B. Resilient Sheet Flooring: Section 096516.

C. Tile Carpeting: Section 096813.

### 1.03 QUALITY ASSURANCE

A. Installation of Moisture Control System must be by a factory-trained contractor who has specific experience with the installation of the product.

B. Applicator must file a pre-installation checklist with the manufacturer and receive written confirmation of the approval to proceed in order to obtain the 10-year Manufacturer's Warranty.

C. The Moisture Control System shall be installed only over concrete surfaces that have been properly mechanically prepared to a minimum surface profile of ICRI CSP #3 and which have a moisture emission level of 20 lbs. or less at the time of testing when measured in accordance with ASTM F1869, or an RH value of 95% or less when measured in accordance with ASTM F2170.

D. Moisture Control System shall reduce the vapor emissions of the concrete to less than 3 lb. and the underlayment or topping surface shall be suitable to receive all types of floor coverings or sealers when allowed to properly dry in accordance with manufacturer's recommendations.

E. Manufacturer's certification that the system has been tested in accordance with ASTM D1653 and has a perm rating of less than 0.05.

### 1.04 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in their unopened packages and protect from extreme

temperatures and moisture. Protect liquids from freezing.

## 1.05 SITE CONDITIONS

A. The Moisture Control System involves the use of epoxies and cementitious materials. Observe the basic rules for working with epoxy and concrete. Do not install below 50‘F surface temperature. Install quickly if substrate and job site con‹1itions are above 70‘F.

# PART 2 - PRODUCTS

## 2.01 MATERIALS - BASIS OF DESIGN: ARDEX

A. The epoxy—based moisture control system shall be provided on a Basis of Design: Adrex MC.

B. For pre-smoothing very uneven substrates, the compound shall be as recommended by manufacturer.

C. To fill cracks, the material shall be Ardex ARDIFIX or approved equal.

D. At areas requiring patching, the material shall be: Ardex MRP or approved equal.

E. The sand broadcast into the fresh Moisture Control Sealer coat shall be fine sand that is less than 1/50 of an inch in grain size or 98.5% passing sieve size #35.

F. Where required to extend the cementitious products, the aggregate shall be well graded, washed gravel, 1/8" to 1/4" or larger.

G. Water for mixing the cementitious materials shall be clean, potable, and sufficiently cool (not warmer than 70‘F).

## 2.02 MIX DESIGNS

A. Each individual unit of Primer and Sealer contains separate, pre-measured quantities of the hardener (Part A) and the resin (Part B). The hardening agent (Paid A) is added to the resin (Part B).

B. Smoothing Compound is mixed in 2-bag batches at one time. Mix each bag (50 lb.) with 5 quarts of water. Mix thoroughly for approximately 2-3 minutes to obtain a lump-free mixture. Follow written instructions per the Smoothing Compound bag label.

C. For instructions on the filling of dormant cracks and joints, follow the written instructions of the selected epoxy manufacturer.

# PART 3 - EXECUTION

## 3.01 PREPARATION

A. All concrete substrates must be structurally sound, solid, and mechanically prepared to a minimum surface profile of ICRI CSP #3 (light shotblast).

1. All concrete subfloors must be of adequate tensile strength (minimum 200 psi when tested in accordance with ASTM D4541 Method 5).
2. The concrete must be clean, and free of all oi1, grease, dirt, curing compounds and any substance that might act as a bond breaker. Mechanically clean using shot blasting or other method to achieve the specified profile. Acid etching and the use of sweeping compounds and solvents are not acceptable means of preparing the concrete.
3. Substrates shall be tested for moisture vapor emissions in accordance with ASTM F1869 and shall be deemed to be at a measured emission rate of 12 lb. or less at the time of installation of the Moisture Control System.
4. Where the mechanical preparation has resulted in a surface profile that is CSP #6 or higher, the use of Smoothing Compund is recommended to pre-smooth the concrete prior to installing the Moisture Control System. Allow the Smoothing Compound to dry for 24 hours and proceed with the installation of the Moisture Control System. No additional surface preparation is necessary for the dry Smoothing Compound surface.
5. All cracks in the subfloor shall be repaired to minimize telegraphing through the underlayment.

B. Joint and Crack Preparation

1. Moving Joints - honor all expansion and isolation joints up through the Moisture Control System, and underlayment or topping.
2. Saw Cuts, Control Joints and Dormant Cracks - fill all non-moving joints and cracks greater than 1/32" with MM80 or approved equal. Once the cracks and joints have been properly filled, allow these areas to cure for a minimum of 16 hours prior to proceeding with the installation of the Moisture Control System.

## 3.02 APPLICATION OF MOISTURE CONTROL SYSTEM

A. Mixing of Primer and Sealer.

1. Each individual unit of Primer and Sealer contains separate, pre-measured quantities of the hardener (Part A) and the resin (Part B). The hardening agent (Part A) is added to the resin (Part B).
2. First separate the two units to relieve the small amount of pressure that may have built up during storage. Reseat the top unit and pierce the plastic cap at the top center of the unit with a sharp object all the way through the bottom of the top unit several times. Let the top unit drain completely into the bottom unit.
3. Once empty, remove the top unit and thoroughly mix the two components together using a low-speed drill and mixing paddle.

B. The Moisture Control System is a two-coat system consisting of a primer and a sealer with sand broadcast into the second layer.

1. Apply the first coat of freshly mixed Primer (yellow) to the prepared concrete surface in a uniform direction at an application rate of 125 sq. ft. per unit to achieve a coating thickness of 10 mils. Use a short-nap

paint roller or notched squeegee for smoother surfaces and a longer nap roller for more uneven substrates. Primer can also be applied with a paintbrush for hard reach areas and in comers. Allow this coat to dry for a minimum of 6 hours at 70‘F before applying the sealer coat.

2. Working in a direction that is at a 90’ angle to direction that the first coat was applied, apply the sealer coat of Sealer (green) as above, again at a coverage rate of 125 sq. ft. per unit (10 mils).
3. While this second coat is still in a fresh state (maximum 30 minutes), broadcast an excess of fine sand that is less than 1/50 of an inch in grain size (98.5% passing sieve size #35) consistently over the entire area. Avoid standing or walking on the freshly applied sealer when broadcasting the sand.
4. Once an area has been completely covered with sand, the surface of the sand can be walked on being careful not to expose the sealer at any time. Use about 2/3 lb. of sand per square foot of area. Once the sanding process is complete, avoid all traffic over the surface for a minimum of 6 hours.
    a. Note: When broadcasting the sand use a NIOSH approved dust mask in conformance with OSHA requirements regarding the handling of sand.
5. After 16 hours, broom sweep and vacuum the surface to remove all loose sand. Protect this surface from construction traffic and dirt and debris using Masonite or similar until the Ardex underlayment or topping is installed.
6. The clean prepared surface of sand is the priming system for the underlayment or topping. No additional priming is required. Install the underlayment or topping in accordance with printed instructions found in the corresponding technical brochure. It is not necessary to retest the substrate for moisture emissions prior to installing the floor covering or sealer.

## 3.03 FIELD QUALITY CONTROL

A. Where specified, field sampling of the Ardex products is to be done by taking an entire unopened unit or bag of the product being installed to an independent testing facility to perform the specified testing. There are no in situ test procedures for the evaluation of the materials specified.

## 3.04 PROTECTION

A. Prior to the installation of the underlayment or topping, or finish flooring or sealer, the surface of the system should be protected from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

**END OF SECTION**

**SECTION 072726**

**FLUID-APPLIED WEATHER BARRIERS**

## PART 1 - GENERAL

### 1.01 SECTION INCLUDES

A. Fluid-applied, vapor permeable weather barrier membrane.

B. Joint Treatment:
   1. Joint Tape.
   2. Joint Compound. *(DuPont™ Tyvek® Fluid Applied Flashing and Joint Compound, trowel grade)*

C. Flashing:

   1. Vapor Permeable Fluid-Applied Elastomeric Flashing.
   2. Flexible Flashing.
   3. Sheet Flashing.

D. Sealant.

E. Primers for flexible flashing and sheet flashing.

### 1.02 REFERENCES

A. ASTM International

   1. ASTM C 1250 – Standard Test Method for Nonvolatile Content of Cold Liquid-Applied Elastomeric Waterproofing Membranes.
   2. ASTM D 412 – Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension.
   3. ASTM D 2240 – Standard Test Method for Rubber Property – Durometer Hardness.
   4. ASTM D 4541 – Standard Test Method for Pull-off Strength of Coatings Using Portable Adhesion Testers.
   5. ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
   6. ASTM E 96 - Test Method for Water Vapor Transmission of Materials
   7. ASTM E 283 – Standard Test Method for Determining the Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors under Specified Pressure Differences Across the Specimen.
   8. ASTM E 331 – Standard Test Method for Water Penetration of Exterior Windows, Skylight, Doors and Curtain Walls by Uniform Static Air Pressure Differences.
   9. ASTM E 779 – Standard Test Method for Determining Air Leakage Rate by Fan Pressurization.

10. ASTM E 783 – Standard Test Method for Field Measurement of Air Leakage through Installed Exterior Windows and Doors.
11. ASTM E 1105 – Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference.
12. ASTM E 1186 – Standard Practices for Air Leakage Site Detection in Building Envelopes and Air Barrier Systems.
13. ASTM E 1677 - Specification for Air Retarder Material or System for Framed Building Walls.
14. ASTM E 2178 – Standard Test Method for Air Permeance of Building Materials
15. ASTM E 2357 – Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.
16. ASTM G155 – Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials.
17. ASTM C 1305 - Standard Test Method for Crack Bridging Ability of Liquid-Applied Waterproofing Membrane.

B. AATCC – American Association of Textile Chemists & Colorists

1. Test Method 127 Water Resistance: Hydrostatic Pressure Test.

C. TAPPI

1. Test Method T-460; Air Resistance of Paper (Gurley Hill Method).

## 1.03 SUBMITTALS

A. Product Data: Submit manufacturer's current technical literature for each component.

B. Quality Assurance Submittals:

1. Design Data, Test Reports: Provide manufacturer test reports indicating product compliance with indicated requirements.
2. Manufacturer Instructions: Provide manufacturer's written installation instructions.
3. Manufacturer's Field Service Reports: Provide site reports from authorized field service representative, indicating observation of weather barrier system installation.

C. Warranty Certification:

1. Weather Barrier Warranty: Manufacturer's executed warranty form with authorized signatures and endorsements indicating date of Substantial Completion.

## 1.04 QUALITY ASSURANCE

A. Qualifications:

1. Installer shall have experience with installation of commercial fluid-applied weather barrier assemblies under similar conditions.
2. Installer shall be trained and certified for installation by manufacturer.

B. Installation shall be in accordance with manufacturer's installation guidelines and recommendations.

C. Source Limitations: Provide weather barrier and accessory materials produced by single manufacturer.

D. Mock-up:

1. Install mock-up using approved weather barrier system including membrane, flashing, joint and detailing compound and related weather barrier accessories according to weather barrier manufacturer's current printed instructions and recommendations.

   a. Mock-up size: 6 feet by 6 feet
   b. Mock-up Substrate: Match wall assembly construction, including window opening.
   c. Mock-up may remain as part of the work.

2. Contact manufacturer's designated representative prior to weather barrier system installation, to perform required mock-up visual inspection and analysis as required for warranty.

E. Pre-installation Meeting

1. Hold a pre-installation conference, two weeks prior to start of weather barrier installation. Attendees shall include Contractor, Architect, certified installer, Owner's Representative, and weather barrier manufacturer's designated field representative.
2. Review all related project requirements and submittals, status of substrate work and preparation, areas of potential conflict and interface, availability of weather barrier system materials and components, installer's training requirements, equipment, facilities and scaffolding, and coordinate methods, procedures and sequencing requirements for full and proper installation, integration and protection.

## 1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver weather barrier materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact.

B. Store weather barrier materials as recommended by manufacturer.

## 1.06 SCHEDULING

A. Review requirements for sequencing of installation of weather barrier system with installation of windows, doors, louvers and flashings to provide a weather-tight barrier system.

B. Schedule installation of exterior cladding within nine months of weather barrier system installation.

## 1.07 WARRANTY

A. Limited Warranty

1. Manufacturer's warranty for weather barrier for a period of ten (10) years from date of Purchase.
2. Pre-installation meeting and jobsite observations by weather barrier manufacturer for warranty are required.

# PART 2 - PRODUCTS

## 2.01 WEATHER BARRIER

A. A single-component, low VOC, 25 mil thick synthetic polymer fluid-applied product with superior elasticity and flexibility providing resistance to air flow, bulk water and wind driven rain yet allows moisture vapor to escape.

1. Basis of Design: DuPont™ Tyvek® Fluid Applied WB System, by DuPont Building Innovations; 4417 Lancaster Pike, Chestnut Run Plaza 728, Wilmington, DE 19805; 1.800.44TYVEK (8-9835); http://weatherization.tyvek.com

B. Performance Characteristics:

1. Air Penetration Resistance (Material):
   a. 0.0002 cfm/ft2 at 75 Pa, when tested in accordance with ASTM E 2178.
   b. Air infiltration greater than 10,000 seconds per 100cc, when tested in accordance with TAPPI Test Method T-460.
2. Air Penetration Resistance (System / Assembly):
   a. ≤ 0.01 cfm/ft2 at 75 Pa, when tested in accordance with ASTM E 2357.
   b. ≤ 0.01 cfm/ft2 at 75 Pa, Type I Air Barrier, when tested in accordance with ASTM E 1677.
3. Water Vapor Transmission: 25 perms, when tested in accordance with ASTM E 96, Method B at 25 mils DFT (Dry Film Thickness).

4. Water Penetration Resistance: Greater than 1000 cm when tested in accordance with AATCC Test Method 127. No leakage at 15 psf when tested in accordance with ASTM E 331.
5. Tensile Strength: Minimum 169 lbs/in$^2$, when tested in accordance with ASTM D 412.
6. Estimated Elongation: 420% in accordance with ASTM D 412.
7. Hardness: Passes at a Shore A hardness of 71, when tested in accordance with ASTM D 2240.
8. Surface Burning Characteristics: Class A, when tested in accordance with ASTM
   E 84. Flame Spread: 25, Smoke Developed: 25.
9. UV Resistance: 9 months
10. Volatile Organic Content (VOC): Less than 2% (25-30 g/L) when measured in accordance with ASTM C 1250.
11. Adhesion Strength (Concrete): Greater than 33 psi when measured in accordance with ASTM D 4541.
12. Low Temperature Crack Bridging: Pass, when tested in accordance with ASTM C 1305.

## 2.02 ACCESSORIES

A. Joint Treatment:
   1. Joint Tape:
      a. Product: Self-adhered fiberglass mesh tape as recommended by weather barrier manufacturer.
   2. Joint Compound: Fluid-applied, vapor permeable, elastomeric flashing material; trowel applied.
      a. Product: as recommended by manufacturer

B. Flashing:
   1. Vapor permeable fluid-applied elastomeric flashing:

      a. Product: as recommended by manufacturer Flexible flashing with butyl adhesive layer.

      b. Product: as recommended by manufacturer
   2. Sheet flashing with butyl adhesive layer.

      a. Product: as recommended by manufacturer

C. Sealant: Elastomeric; non-vapor permeable sealant; compatible with weather barrier.

   1. Product: as recommended by manufacturer.

D. Primers for flexible flashing and sheet flashing:

   1. Provide flashing manufacturer recommended primer to assist in adhesion between substrate and flashing.
   2. Products:

a. 3M High Strength 90
b. Denso Butyl Spray
c. SIA 655
d. Permagrip 105
e. ITW TACC Sta' Put SPH

## PART 3 - EXECUTION

### 3.01 EXAMINATION

A. Verify substrate and surface conditions are in accordance with weather barrier manufacturer recommended tolerances prior to installation of weather barrier and accessories.

### 3.02 PREPARATION

A. Complete surface preparation, priming, flashing and detailing of openings, cracks, and material transitions prior to beginning installation of fluid-applied weather barrier system.

B. Surfaces shall be clean and free of frost, oil, grease, mold and efflorescence prior to application of fluid-applied weather barrier system.

### 3.03 INSTALLATION - DETAILING

A. Corners: Apply primer to outside and inside corners, extend 2 inches on each side of corner. Center sheet flashing over corner and press firmly in place per manufacturer's recommendations.

B. Joint treatment:

1. Sheathing:

a. Joints shall be prepared per manufacturer's approved joint treatment details.
b. Apply joint tape as recommended by fluid-applied weather barrier manufacturer.

1) No joint treatment required for joints up to 1/16 inch.
2) Joints 1/16 to 1/4 inch: Fluid-applied joint compound applied to form a 1 inch width on each side of sheathing joint; smooth joint compound across sheathing joint. Thickness shall be 15 to 25 mils.
3) Joints 1/16 to 1/2 inch: Apply joint tape to bridge both sides of joint equally. Apply fluid-applied joint compound and trowel smooth embedding joint compound uniformly into joint tape to form a 1 inch width on each side of sheathing joint at a consistent thickness of 15 to 25 mils.

4) Joints 1/2 to 1 inch: Apply sheet flashing primer above and below sheathing joint. Center sheet flashing over sheathing joint and press firmly in place per manufacturer's recommendations.

2. Non-movement joints in masonry and transitions to columns and beams:

a. Joints 1/4 inch wide or less: Apply fluid-applied joint compound a minimum of 2 inches wide by 60 mils thick to each side of joint or crack.
b. Joints 1/4 to 1/2 inch: Apply joint tape to joint, then apply joint compound to joint 2 inches wide by 60 mils thick.

C. Apply fluid-applied joint compound to cladding anchors prior to installation of weather barrier membrane per manufacturer's instructions.

D. Apply fluid-applied joint compound around penetrations in exterior walls forming a fillet bead minimum ½ inch onto each surface.

E. Installation – Vapor permeable fluid-applied elastomeric flashing at openings:

1. At jambs and head of rough opening: Apply 25 mil thickness of fluid-applied flashing to full depth of opening and 2 inches onto outside face of opening.
2. At sills: Apply primer to substrates as recommended by manufacturer. Cut sheet flashing to fit directly between jambs of opening. Install sheet flashing to full width of sill opening and down onto outside face of opening a minimum of 2 inches. Cover sheet flashing with 25 mil thickness of vapor permeable fluid-applied elastomeric flashing per fluid-applied weather barrier manufacturer's instructions.

F. Allow Fluid-Applied Flashing, Joint Compound and Sealant to cure for minimum 24 hours before coating with Fluid-applied Weather Barrier.

## 3.04 INSTALLATION - FLUID-APPLIED WEATHER BARRIER

A. Install fluid-applied weather barrier prior to installation of windows, doors, and louvers.

B. Mask and protect any adjacent finished surfaces from fluid-applied weather barrier material.

C. Install fluid-applied weather barrier over exterior face of required exterior wall substrates in accordance with weather barrier manufacturer recommendations and instructions.

D. Install fluid-applied weather barrier by spray and back rolling method to achieve 25 mils providing a consistent and uniform thickness.

E. Repair any voids, holidays, or non-uniform installations or damage by other trades to proper mil thickness prior to installation of final cladding assemblies.

## 3.05 FIELD QUALITY CONTROL

A. Notify weather barrier manufacturer's designated representative to obtain periodic observations of weather barrier system installation.

B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections as required in Contract Documents.

C. Inspections: Weather barrier materials, accessories, and installation are subject to inspection for compliance with performance requirements.

D. Tests: As determined by Owner's testing agency from among the following tests:

1. Quantitative Air-Leakage Testing: Weather barrier assemblies will be tested for air infiltration according to ASTM E 783.
2. Quantitative Air-Leakage Testing: Whole building air leakage will be tested in accordance with ASTM E 779, ASTM E 1827 or equivalent.
3. Qualitative Air-Leakage Testing: Weather barrier assemblies will be tested for evidence of air leakage according to ASTM E 1186.
4. Qualitative Water-Leakage Testing: Weather barrier assemblies will be tested for water leakage according to ASTM E 1105.

E. Weather barriers assemblies will be considered defective upon failure of inspections and specific project testing required.

1. Apply additional fluid-applied weather barrier material, in accordance with manufacturer's instructions, where inspection results indicate insufficient thickness, voids, skips, pinholes or other defects as recommended by weather barrier manufacturer.
2. Remove and replace deficient weather barrier system components for retesting as specified above.

F. Repair damage to weather barriers caused by destructive testing; follow manufacturer's written instructions.

## 3.06 PROTECTION AND CLEANING

A. Protect weather barrier from contact with incompatible materials and sealants not approved per weather barrier manufacturer's recommendation.

B. Protect installed weather barrier system from damage during construction prior to cladding installation.

1. If damaged or exposed to UV beyond nine (9) months, clean and prepare surfaces and install additional, full-thickness, fluid-applied weather barrier application in accordance with weather barrier manufacturer's instructions.

C. Remove masking materials and adjacent protection after weather barrier installation.

**END OF SECTION**

**SECTION 077200**

**ROOF ACCESSORIES**

## PART 1 GENERAL

### 1.01 SUBMITTALS

A. Product Data: Manufacturer's catalog sheets, specifications, and installation instructions.

B. Contract Closeout Submittals:
   1. Operation and Maintenance Data: Deliver 2 copies, covering the installed products, to the Director's Representative.

### 1.02 SEQUENCING AND SCHEDULING

A. Coordinate installation of roof accessories with roofing and flashing.

## PART 2 PRODUCTS

### 2.01 SAFETY POST

A. Basis of design: Ladder Up Safety Post by The Bilco Company, P.O. Box 1203, New Haven, CT 06505; (800) 366-6530, www.bilco.com.
   1. Model No. LU-1: Steel, yellow powder coat.

### 2.02 HATCH RAIL SYSTEM

A. Basis of design: Bil-Guard Hatch Rail System by The Bilco Company, P.O. Box 1203, New Haven, CT 06505; (800) 366-6530, www.bilco.com.
   1. Hatch mounted rail and gate system.
      a. Self-closing gate with automatic latching mechanism.
      b. Corrosion resistant construction with 25 year warranty.

### 2.03 FREE STANDING SKYLIGHT GUARDRAIL

A. OSHA compliant, non-penetrating, skylight fall protection railing system including pipe railings, uprights, heavy-duty rubber bases and fittings.

B. Configuration: 42" high, minimum of two horizontal rails.

C. Design loading: withstand minimum load of 200 lbs. in any direction to the top rail.

D. Basis of Design: KeeDome Skylight Guardrail System by Kee Safety, Inc. of Rochester, NY.

E. Configuration: Verify existing skylight. Provide approximately 5’-0” x 5’-0” four sided rail.

## 2.04 FREE STANDING ROOF EDGE FALL PROTECTION RAILING

A. OSHA compliant, non-penetrating, counterbalanced roof edge fall protection railing system including pipe railings, uprights, bases, counterweights and fittings.

B. Configuration: 42” high, minimum of two horizontal rails.

C. Design loading: withstand minimum load of 200 lbs. in any direction to the top rail.

E. Basis of Design: KeeGuard Roof Edge Protection System by Kee Safety, Inc. of Rochester, NY.

E. Configuration: Provide 140’-0” linear foot run along existing roof edge with two corners. Final layout to be coordinated with Director’s Representative.

# PART 3 EXECUTION

## 3.01 INSTALLATION

A. Install units in accordance with the manufacturer’s instructions, unless shown otherwise on the Drawings. Securely anchor units in place to the substrate by bolting, screwing or welding.

B. Where mounting flanges are set directly in the roofing, embed the flanges in roofing cement or other waterproof mastic or adhesive as recommended by the manufacturer of the roofing. On sloping surfaces, integrate mounting flanges with roofing elements to properly shed water.

**END OF SECTION**

**SECTION 102814**

**ELECTRIC HAND DRYERS**

## PART 1 GENERAL

### 1.01 SUBMITTALS

A. Product Data: Catalog sheets, specifications and installation instructions.

B. Contract Closeout Submittals:
   1. Operation & Maintenance Data: Deliver 2 copies, covering the installed product to the Director's Representative.

## PART 2 PRODUCTS

### 2.01 ELECTRIC HAND DRYERS - RECESSED

A. Sensor Operated: American Specialties, Inc. Model No 0198-MH recess mounted sensor hand dryer, 115v stainless steel, satin finish:
   1. Furnish with security screws.
   2. Location: Resident toilet room.

### 2.02 ELECTRIC HAND DRYERS - SURFACE MOUNTED

A. Sensor Operated: Dyson Airblade AB06 120v, Aluminum, silver finish:
   1. Locations:
      a. Staff toilet.
      b. Waiting toilet.

## PART 3 EXECUTION

### 3.01 INSTALLATION

A. Unless otherwise indicated install hand dryers at the following heights:

| **DRYER MOUNTING HEIGHTS (in inches as measured from finish floor to bottom of dryer housing)** | | |
|---|---|---|
| | **SURFACE** | **RECESSED** |
| MEN | 46 | 44 |
| WOMEN | 44 | 40 |
| CHILDREN | --- | --- |
| Ages 3-7 | 32 | 28 |
| Ages 8-10 | 36 | 32 |
| Ages 11-13 | 40 | 36 |
| Ages 14-18 | 44 | 40 |
| HANDICAPPED | 40 | 40 |
| | | |

**END OF SECTION**

## SECTION 10 4400

## FIRE EXTINGUISHERS AND CABINETS

### PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Fire extinguishers.

B. Fire extinguisher cabinets.

### 1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Rough Carpentry: Section 061000.

### 1.03 REFERENCE STANDARDS

A. NFPA 10 - Standard for Portable Fire Extinguishers; 2013.

B. UL (FPED) - Fire Protection Equipment Directory; Underwriters Laboratories Inc.; current edition.

### 1.04 SUBMITTALS

A. Shop Drawings: Indicate wall bracket mounted measurements.

B. Product Data: Provide extinguisher operational features, color and finish, and anchorage details.

C. Manufacturer's Installation Instructions: Indicate special criteria and wall opening coordination requirements.

D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

E. Maintenance Data: Include test, refill or recharge schedules and re-certification requirements.

### 1.05 FIELD CONDITIONS

A. Do not install extinguishers when ambient temperature may cause freezing of extinguisher ingredients.

### PART 2 PRODUCTS

### 2.01 FIRE EXTINGUISHERS

A. Fire Extinguishers - General: Comply with product requirements of NFPA 10 and applicable codes, whichever is more stringent.

B. Provide extinguishers labeled by Underwriters Laboratories Inc. for the purpose specified and indicated. Basis of Design is: Larsen's Manufacturing Company, Model MP10 Multi-Purpose Dry Chemical Extinguisher.

## 2.02 FIRE EXTINGUISHER CABINETS

A. Basis of Design is: Larsen’s Manufacturing Company, Architectural Series Model 2409-R7 Semi-recessed with 1-1/2” Trim Projection, 24 x 9-1/2 x 6 Inside Box Dimensions; 27-1/2 x 13 Outside Trim Dimensions, 25 x 10-1/2 x 5 Rough Opening. Solid door with Larsen-Loc with institutional door (emergency access only with a key) option. Door and trim shall be clear satin anodized finish.

# PART 3 EXECUTION

## 3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify rough openings for cabinet are correctly sized and located.

## 3.02 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Secure rigidly in place.

C. Place extinguishers and accessories on wall brackets.

**END OF SECTION**

## SECTION 220577

## FLOOR AND AREA DRAINS

### PART 1 GENERAL

### 1.01 REFERENCES

A. Unless otherwise specified, the Work of this section shall meet the applicable requirements of FS WW-P-541 - Plumbing Fixtures, and ASME A112.21.1M - Floor Drains.

### 1.02 SUBMITTALS

A. Product Data: Catalog sheets, specifications and installation instructions for each type drain specified.

### 1.03 MAINTENANCE

A. Special Tools: Deliver to the Director's Representative.
   1. Tools for Vandal Resistant Fasteners: One for each type and size.

### PART 2 PRODUCTS

### 2.01 TYPE A FLOOR DRAIN

A. Drain Body: Coated cast iron, two-piece body with reversible flashing clamp, minimum 9 inch dia drainage flange, corrosion resistant bolts, weep holes, bottom outlet, and connection to match piping option selected.

B. Strainer Head: Round, minimum 7 inch dia, nickel bronze with threaded shank for height adjustment.

C. Strainer Grate: Polished nickel bronze, heel proof; secured with stainless steel vandal resistant fasteners.

D. Acceptable Drain Series: Josam 30000A, Smith 2010A, Wade W1100, and Zurn Z415.

### 2.02 TYPE H FLOOR DRAIN

A. Drain Body: Coated cast iron, two-piece body with flashing clamp, minimum 15 inch dia drainage flange, corrosion resistant bolts, weep holes, bottom outlet, and connection to match piping option selected.

B. Strainer Head: Round, minimum 12 inch dia, coated cast iron, height adjustable, with loose setting cast iron sediment bucket.

C. Strainer Grate: Cast iron, loose setting, anti-tilt, deep flange grate.

1. Grate cannot be installed until sediment bucket set in position.

D. Acceptable Drain Series: Josam 31220, Smith 2360, Wade W1240TD, and Zurn Z521.

## 2.03 FASTENERS

A. Corrosion Resistant Fasteners: Brass, bronze, or Type 302 or 304 or stainless steel bolts.

B. Vandal Resistant Fasteners: Torx head with center pin.

## 2.04 FREE AREA OF GRATE

A. Minimum strainer grate free area listed below for each connecting pipe size:

| CONNECTING PIPE SIZE (Inches Nominal) | INTERIOR DRAINS FREE AREA (Square Inches) | EXTERIOR DRAINS FREE AREA (Square Inches) |
|---|---|---|
| 1-1/2 | 3.06 | 4.08 |
| 2 | 4.71 | 6.28 |
| 3 | 10.59 | 14.12 |
| 4 | 18.90 | 25.20 |

## 2.05 TRAP GUARDS

A. Elastomeric, normally closed seal to prevent evaporation of P-traps. Inserts into throat of floor drain. Provide for each new floor drain.

B. Make: ProVent Systems, Inc. "ProSet Trap Guard".

# PART 3 EXECUTION

## 3.01 INSTALLATION

A. Install the Work of this section in accordance with the manufacturer's printed installation instructions, unless otherwise specified.

B. Protect weep holes from plugging during installation. Rod out weep holes after installation to remove obstructions.

C. Set drainage flange flush with top of structural floor slab, or at elevation otherwise indicated.

D. After membrane waterproofing installed and cured, secure clamping ring.

E. Adjust strainer head to height indicated. If height not indicated, set at 1/2 inch below finished floor elevation.

F. Secure external components in place with vandal resistant fasteners or devices which cannot be removed without special tools.

**END OF SECTION**

**SECTION 221100**

**PLUMBING PIPING**

## PART 1 GENERAL

### 1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Through Penetration Firestops: Section 078400.

B. Sealants: Section 079200.

### 1.02 SUBMITTALS

A. Product Data:
   1. Catalog sheets and specifications indicating manufacturer name, type, applicable reference standard, schedule, or class for specified pipe and fittings.
   2. Material Schedule: Itemize pipe and fitting materials for each specified application in Pipe and Fittings Schedule in Part 3 of this Section. Where optional materials are specified indicate option selected.

B. Quality Control Submittals
   1. Brazer Qualification Data: Copies of certification; include names, home addresses and social security numbers of brazers.

### 1.03 QUALITY ASSURANCE

A. Qualification of Brazers: Comply with the following:
   1. The persons performing the brazing and their supervisors shall be personally experienced in brazing procedures.

## PART 2 PRODUCTS

### 2.01 STEEL PIPE AND FITTINGS

A. Steel Pipe for Threading: Standard weight, Schedule 40, black or galvanized; ASTM A 53 or ASTM A 135.

B. Cast Iron Fittings:
   1. Drainage Pattern, Threaded: ASME B16.12.

C. Couplings: Same material and pressure rating as adjoining pipe, conforming to standards for fittings in such pipe. Use taper tapped threaded type in screwed pipe systems operating in excess of 15 psig.

D. Nipples: Same material and strength as adjoining pipe, except nipples having a length of less than one inch between threads shall be extra heavy.

## 2.02 COPPER AND BRASS PIPE, TUBING AND FITTINGS

A. Copper Tube, Type L: ASTM B 88.

B. Copper Tube for Medical Gas, Type K: ASTM B 819.

C. Wrot Copper Tube Fittings, Solder Joint: ASME B16.22.

D. Cast Copper Alloy Tube Fittings, Solder Joint: ASME B16.18.

E. Drainage Tube, Type DWV: ASTM B 306.

F. Wrot Copper Drainage Tube Fittings, Solder Joint: ASME B16.29.

G. Cast Copper Alloy Drainage Fittings, Solder Joint: ASME B16.23.

H. Unions: Cast bronze, 150 lb Class, bronze to bronze seats, threaded or solder joint.

I. Flared Tube Fittings:
   1. Water Tube Type: ASME B16.26.

J. Flanges: Conform to the Standards for fittings used in systems.
   1. Brazing Flanges: ASME B16.24, hubs modified for brazing ends.

## 2.03 CAST IRON PIPE AND FITTINGS

A. Bell and Spigot Soil Pipe: Service Weight, Bitumin coated; ASTM A 74.

B. Bell and Spigot Soil Pipe Fittings: Service Weight, Bitumin coated; ASTM A 74.

C. Hubless Pipe: Bitumin coated; Cast Iron Soil Pipe Institute Standard No. 301.

D. Hubless Pipe Fittings: Drainage Pattern, Bitumin coated; Cast Iron Soil Pipe Institute Standard No. 301.

E. Hubless Joint Couplings: Stainless steel shield and clamp assembly, and elastomer sealing sleeve; CISPI-310.

F. Water Pipe Fittings: Bitumin coated, cement-mortar lined; AWWA C110.

## 2.04 JOINING AND SEALANT MATERIALS

A. Thread Sealant:
   1. LA-CO Industries', Slic-Tite Paste with Teflon.
   2. Loctite Corp.'s No. 565 Thread Sealant.
   3. Thread sealants for potable water shall be NSF approved.

B. Solder: Solid wire type conforming to the following:
   1. Type 3: Lead-free tin-silver solder (ASTM B 32 Alloy Grade E, AC, or HB); Engelhard Corp.'s Silvabrite 100, Federated Fry Metals' Aqua Clean, or J.W. Harris Co. Inc.'s Stay-Safe Bridgit.

C. Soldering Flux for Soldered Joints: All-State Welding Products Inc.'s Duzall, Engelhard Corp.'s General Purpose Liquid or Paste, Federated Fry Metals' Water Flow 2000, or J.W. Harris Co. Inc.'s Stay-Clean.

D. Brazing Alloys:
   1. Type 1: AWS A5.8, Class BCuP-5, for brazing copper to brass, bronze, or copper; Engelhard's Silvaloy 15, J.W. Harris Co. Inc.'s Stay-Silv 15, and Handy & Harman's Sil-Fos.
   2. Type 2: AWS A5.8, Class BAg-7, for brazing copper to steel or stainless steel; Engelhard's Silvaloy-56T, J.W. Harris Co. Inc.'s Safety-Silv 56, and Handy & Harman's Braze 560.

E. Brazing Flux: FS O-F-499, Type B; Handy & Harman's Handy Flux or J.W. Harris Co. Inc.'s Stay-Silv.

F. Joint Packing:
   1. Oiled Oakum: Manufactured by Nupak of New Orleans, Inc., 931 Daniel St., Kenner, LA 70062, (504) 466-1484.
   2. Acid Resistant Joint Packing: Sealite Inc.'s Red Stripe, Asbestos-Free Acid-Resistant White Oakum, No. 312.

G. Gaskets For Use With Ductile Iron Water Pipe and Cast Iron Drainage Pipe: Synthetic rubber rings (molded or tubular): Clow Corp.'s Belltite, Tyler Pipe Industries Inc.'s Ty-Seal, or U.S. Pipe and Foundry Co.'s Tyton.

H. Flange Gasket Material:
   1. For Use with Cold Water: 1/16 inch thick rubber.
   2. For Use with Hot Water or Air: Waterproofed non-asbestos ceramic or mineral fiber, or a combination of metal and water-proofed non-asbestos ceramic or mineral fiber, designed for the temperatures and pressures of the piping systems in which installed.

I. Anti-Seize Lubricant: Bostik Inc.'s Never Seez or Dow Corning Corp.'s Molykote 1000.

## 2.05 PIPE SLEEVES

A. Type A: Schedule 40 steel pipe.

B. Type B: No. 16 gage galvanized sheet steel.

C. Type C: Schedule 40 steel pipe with 1/4 inch steel collar continuously welded to pipe sleeve. Size steel collars as required to span a minimum of one cell or corrugation, on all sides of the rough opening thru the metal deck.

## 2.06 FLOOR, WALL AND CEILING PLATES

A. Cast Brass: Solid type with polished chrome plated finish, and set screw.
   1. Series Z89 by Zurn, 929 Riverside Drive, Grosvenordale, CT 06255, (800) 243-1830.
   2. Model 127XXXX by Maguire Mfg., Cheshire CT 06410, (203) 699-1801.

# PART 3 EXECUTION

## 3.01 INSTALLATION

A. Install piping at approximate locations indicated, and at maximum height.

B. Install piping clear of door swings, and above sash heads.

C. Make allowances for expansion and contraction.

D. Allow for a minimum of one inch free air space around pipe or pipe covering, unless otherwise specified.

E. Install horizontal piping with a constant pitch, and without sags or humps.
   1. Water Piping: Pitch 1/4 inch per 10 feet upward in direction of flow, unless otherwise noted. If it is not possible to maintain constant pitch, establish a new low point and continue. At the low point, provide a 1/2 inch drip leg and gate valve with a hose bibb end. Provide an air vent at the high point.
   2. Drainage Piping: Pitch 1/4 inch per foot downward, in direction of flow, unless otherwise noted.
   3. Vent Piping: Pitch 1/4 inch per foot upward, unless otherwise noted.

F. Install vertical piping plumb.

G. Use fittings for offsets and direction changes, except for Type K soft annealed copper temper water tube.

H. Cut pipe and tubing ends square; ream before joining.

I. Threading: Use American Standard Taper Pipe Thread Dies.
   1. Thread brass pipe with special brass threading dies.

## 3.02 DRAINAGE SYSTEMS

A. Fittings:
   1. Use long turn drainage pattern fittings, unless space conditions prohibit their use; in such cases, short turn pattern fittings may be used.
   2. Vertical Offsets: Make vertical offsets with 45 degree elbows, or 1/8 bends.
   3. Tucker Fittings: Tucker fittings may only be installed in vertical piping.

B. Cleanouts:
   1. Install cleanouts with sufficient side and end clearance to allow for the removal of the cleanout plug, and the use of cleaning tools.
   2. Lubricate cleanout plugs with anti-seize lubricant.

## 3.03 DOMESTIC WATER PIPING SYSTEM

A. Connect runouts to the upper quadrant of the main, and run upward at not less than 45 degrees before extending laterally.

B. Make final connections to plumbing fixtures and equipment with unions, or flanges:
   1. Do not use unions in ferrous piping larger than 3 inches.
   2. Do not use unions in brass or copper piping larger than 2 inches.

## 3.04 MEDICAL AIR AND VACUUM PIPING

A. Install in compliance with NFPA 99, Standard for Health Care Facilities.
   1. Clean and degrease all piping as specified for oxygen service.

## 3.05 PIPE JOINT MAKE-UP

A. Threaded Joint: Make up joint with a pipe thread compound applied in accordance with manufacturer's printed application instructions for the intended service.
   1. Chrome Plated Brass Pipe: Tighten joint with a strap or Parmalee wrench; do not mar pipe finish. Install piping so that no threads are visible.

B. Soldered Joint: Thoroughly clean tube end and inside of fitting with emery cloth, sand cloth, or wire brush. Apply flux to the pre-cleaned surfaces. Install fitting, heat to soldering temperature, and join the metals with type solder specified. Remove residue.

C. Flanged Pipe Joint:
   1. Install threaded companion flanges on steel pipe; flanges on galvanized pipe are not required to be galvanized.
   2. Provide a gasket for each joint.
      a. Hot Water Pipe Gasket: Coat with a thin film of oil before making up joint.
      b. Air Pipe Gasket: Coat with a thin film of oil before making up joint.
   3. Coat bolt threads and nuts with anti-seize lubricant before making up joint.

D. Rubber Ring Push-on Joint: Clean hub, bevel spigot, and make up joint with lubricated gasket in conformance with the manufacturer's printed installation instructions.

E. Hubless CI Pipe Joint: Make up joint with hubless fitting and couplings, in conformance with the manufacturer's printed installation instructions.

F. Brazed Joint: Thoroughly clean tube end and inside of fitting with emery cloth, sand cloth, or wire brush. Apply flux to the pre-cleaned surfaces. Install fitting, heat to brazing temperature, and join the metals with brazing alloy. Remove residue.

G. Mechanical Joint: Make up joint in conformance with the manufacturer's printed installation instructions, with particular reference to tightening of bolts.

H. Dissimilar Pipe Joint:
1. Joining Bell and Spigot and Threaded Pipe: Install a half coupling on the pipe or tube end to form a spigot, and calk into the cast iron bell.
2. Joining Dissimilar Threaded Piping: Make up connection with a threaded coupling or with companion flanges.
3. Joining Dissimilar Non-Threaded Piping: Make up connection with adapters recommended by the manufacturers of the piping to be joined.
4. Joining Galvanized Steel Pipe and Copper Tubing: Make up connection with a dielectric connector.

## 3.06 PIPING PENETRATIONS

A. Sleeve Schedule: Unless otherwise shown, comply with the following schedule for the type of sleeve to be used where piping penetrates wall or floor construction:

| | CONSTRUCTION | SLEEVE TYPE |
|---|---|---|
| 1. | Frame construction. | None Required |
| 2. | Non-waterproof interior walls. | B* |
| 3. | Non-waterproof interior floors not on metal decks. | B* |
| 4. | Floors not on grade having a floor drain. | A |
| 5. | Earth supported concrete floors. | None Required |
| 6. | Metal roof decks. | C |
| 7. | Non-metal roof decks. | A |
| 8. | Waterproof floors not on metal decks. | A |
| 9. | Waterproof walls. | A |

*Core drilling is permissible in lieu of sleeves where marked with asterisks.

B. Diameter of Sleeves and Core Drilled Holes:
1. Unless otherwise specified, size holes thru floors and walls in accordance with the through penetration fire stopping system being used.
2. Size holes thru exterior walls or waterproofed walls above inside earth or finished floors, and exterior concrete slabs in accordance with the following:
   a. Uninsulated (Bare) Pipe: Inside diameter of sleeve or core drilled hole 1/2 inch greater than outside diameter of pipe, unless otherwise specified.
   b. Insulated Pipe: Inside diameter of sleeve or core drilled hole 1/2 inch greater than outside diameter of insulation, unless otherwise specified.
   c. Mechanical Modular Seals: Size holes in accordance with the manufacturer's recommendations.
3. Size holes for sprinkler and fire standpipe piping in accordance with NFPA 13.

C. Length of Sleeves (except as shown otherwise on Drawings):
1. Walls and Partitions: Equal in length to total finished thickness of wall or partition.
2. Floors with Finish: Equal in length to total finished thickness of floor and extending 1/2 inch above the finished floor level, except as follows:

a. In furred spaces at exterior walls, extend sleeve one inch above the finished floor level.

3. Roofs: Equal in length to the total thickness of roof construction, including insulation and roofing materials, and extending one inch above the finished roof level.

D. Packing of Sleeves and Core Drilled Holes:

1. Unless otherwise specified, pack sleeves or cored drilled holes in accordance with Section 078400 - FIRESTOPPING.
2. Pack sleeves in exterior walls or waterproofed walls above inside earth or finished floors with oakum to within 1/2 inch of each wall face, and finish both sides with Type 1C (one part) sealant. See Section 079200.
   a. Mechanical modular seals may be used in lieu of packing and sealant for sleeves and core drilled holes.

E. Weld metal collars of Type C and D sleeves to the upper surface of the metal deck. Seal voids under the metal collar as recommended by the manufacturer of the metal deck.

## 3.07 FLOOR, WALL AND CEILING PLATES

A. Install plates for exposed uninsulated piping passing thru floors, walls, ceilings, and exterior concrete slabs as follows:

1. In Finished Spaces:
   a. Piping 4 Inch Size and Smaller: Solid, chrome plated cast brass.
2. Unfinished Spaces (Including Exterior Concrete Slabs): Solid, unplated cast iron.
3. Fasten plates with set screws.
4. Plates are not required in pipe shafts or furred spaces.

## 3.08 PIPE AND FITTING SCHEDULE

A. Where options are given, choose only one option for each piping service. No deviations from the selected option will be allowed.

B. Compressed Air (Above Ground) Pressures up to 175 psig:

1. Option No. 1: Type L hard drawn copper tube, with cast copper alloy or wrot copper solder type fittings, and joints made up with Type 3 solder.

C. Compressed Air (Below Ground) Pressures up to 175 psig:

1. Option No. 2: Standard weight galvanized steel pipe, with threaded ends, and 150 psi galvanized malleable iron fittings, and threaded joints.

D. Domestic Water (Above Ground):

1. 3 inch and Under: Type L hard drawn copper tube, with cast copper alloy or wrot copper solder type fittings, and joints made up with Type 3 solder, or hydraulic press joints.

E. Drainage (Sanitary) Above Ground:
   1. Option No. 3: Service weight, coated, cast iron bell and spigot pipe and fittings with rubber ring push-on joints.
   2. Option No. 4: Hubless, coated, cast iron pipe, fittings, and joint couplings.

F. Drainage (Storm) Above Ground:
   1. Option No. 1: Standard weight galvanized steel pipe, with galvanized cast iron drainage pattern fittings, and threaded joints.
   2. Option No. 4: Service weight, coated, cast iron bell and spigot pipe and fittings, with rubber ring push-on joints.
   3. Option No. 5: Hubless, coated, cast iron pipe, fittings and joint couplings.

G. Drainage Piping (Below Ground):
   1. Option No. 2: Service weight, coated, cast iron bell and spigot pipe and fittings, with rubber ring push-on joints.

H. Medical Air, Gas, and Vacuum (Above Ground): Type K hard drawn copper tube for medical gas, with wrot copper tube fittings, and joints made up with brazing alloy.

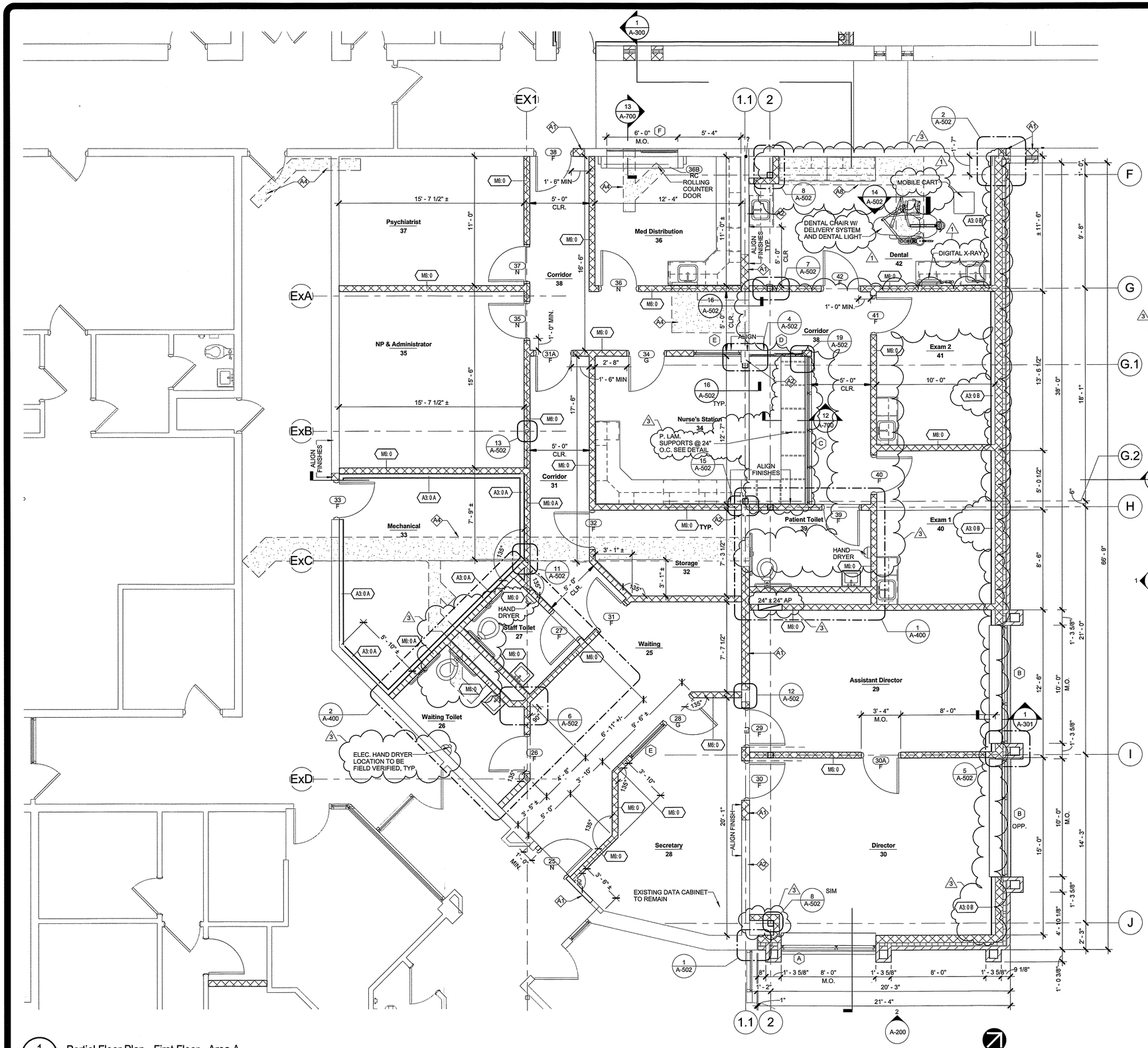
I. Medical Air, Gas, and Vacuum (Below Ground): Type K hard drawn copper tube for medical gas, with wrot copper tube fittings, and joints made up with brazing alloy.

J. Vent Piping: Same materials that are used for piping system to which vent is connected.

K. Compressed Air Intake: Type L hard drawn copper.

L. Vacuum Exhaust: Type L hard drawn copper.

**END OF SECTION**




1 A-101 — Partial Floor Plan - First Floor - Area A
1/4" = 1'-0"

## General Architectural Notes

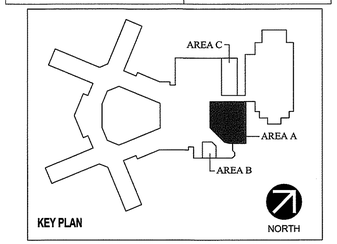
1. VERIFY EXISTING UTILITIES AND SERVICES PRIOR TO START OF WORK. NOTIFY OWNER'S REPRESENTATIVE OF DISCREPANCIES FOR RESOLUTION PRIOR TO PROCEEDING WITH ASSOCIATED WORK.
2. DIMENSIONS ARE FROM FACE OF MASONRY AND/OR FACE OF METAL STUD UNLESS NOTED OTHERWISE.
3. FULLY PROTECT ITEMS FROM DAMAGE. REPLACE ITEMS DAMAGED DURING CONSTRUCTION WITHOUT ADDITIONAL COST TO THE OWNER.
4. SEAL WALL PENETRATION THROUGH RATED WALLS WITH SPECIFIED FIRE STOPPING SYSTEM. COORDINATE WITH CODE PLAN.
5. COORDINATE WORK OF THIS CONTRACT WITH THE WORK OF THE HVAC, PLUMBING, AND ELECTRICAL CONTRACTS. SPECIFICALLY, COORDINATE SUBMITTED, REVIEWED, AND APPROVED HVAC METAL DUCTWORK & DUCTWORK ACCESSORIES, PLUMBING SPRINKLERS HEAD SHOP DRAWINGS, AND ELECTRICAL LIGHTING & FIXTURES SHOP DRAWINGS WITH THE REQUIRED SHOP DRAWINGS FOR THE CEILING AS DESCRIBED HEREIN. PROVIDE ANY DETAILED COMMENTS AND/OR CHANGES TO THE HVAC, PLUMBING, AND ELECTRICAL SHOP DRAWINGS TO THE OWNER'S REPRESENTATIVE FOR THEIR TRANSMITTAL TO THE HVAC, PLUMBING, AND ELECTRICAL CONTRACT SHOP DRAWING REVIEWERS FOR THEIR ACTION.
6. REFER TO FINISH PLANS FOR FINISHES.
7. SKYLIGHT TO BE PATCHED AND FILLED. COORDINATE WITH OTHER CONTRACTORS.
8. CORNER GUARDS TO BE INSTALLED AT ALL WALL CORNERS.
9. ALL CMU WALLS, INCLUDING EXISTING, ARE TO RECEIVE 1/2" PLASTER ON EXPOSED SIDES OF WALLS. EXISTING CORRIDOR WALLS ARE PAINTED CMU AND SHALL REMAIN AS PAINTED CMU.
10. ALL EXPOSED STRUCTURAL STEEL TO BE PAINTED.
11. PROVIDE MOISTURE CONTROL COATING TO ALL SLABS TO RECEIVE CARPET TILE OR RESILIENT SHEET FLOORING. COORDINATE WITH SPECIFICATIONS.

## Construction Key Notes

| | |
|---|---|
| A1 | WALL INFILL TO MATCH ADJACENT. |
| A2 | PLASTER EXISTING CMU WALL. |
| A3 | SINK BY PLUMBING CONTRACTOR. COORDINATE REMOVALS AND PATCHING. |
| A4 | APPROXIMATE LOCATION OF TRENCH INFILL BY PC. GC TO FLASH PATCH AS REQ'D TO PROVIDE A SMOOTH FINISH. |
| A5 | INSTALL FRP PANELS FLOOR TO CEILING. |
| A6 | INSTALL CONCRETE LEVELING BED AT CERAMIC TILE REMOVAL. PATCH WALLS TO MATCH EXISTING ADJACENT SURFACE. |
| A7 | PATCH FLOOR FINISH TO MATCH EXISTING. |
| A8 | PROVIDE TRENCH FOR UNDERSLAB DENTAL CHAIR CONNECTIONS. SEE TRENCH DETAIL. COORDINATE WITH WORK FROM OTHER TRADES |

## Drawings Symbol Legend

| | |
|---|---|
| 1\| | WINDOW TYPE REFERENCE |
| 101 Door Type | DOOR REFERENCE |
| 1 A101 SIM / 1 A101 SIM | BUILDING SECTION REFERENCE |
| DETAIL # 1 SIM / SHEET # A101 | WALL SECTION/ SECTION DETAIL REFERENCE |
| First Floor +/- 0'-0" | FLOOR ELEVATION REFERENCE |
| Name 101 150 SF | ROOM INFORMATION TAG |
| 12 / 6 | ROOF SLOPE |
| Wall Type / Fire Rating / M6: A / Wall Thickness / Modifier | WALL TYPE REFERENCE |
| 3'-0" | SLASH INDICATES DIMENSIONS FROM FACE TO FACE OF STUD |
| 3'-0" M.O. | M.O. INDICATES MASONRY OPENING DIMENSION |
| 3'-0" | ARROW INDICATES CLEAR DIMENSION FROM FINISH TO FINISH SURFACE |
| 1 A101 SIM | ENLARGED PLAN/ DETAIL AREA REFERENCE |
| 1 Ref / Ref A101 1 / Ref 1 Ref | INTERIOR/ EXTERIOR ELEVATION REFERENCE |
| AP | ACCESS PANEL |
| ℄ | INDICATION OF CENTER LINE |




NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT:

www.Synthesisllp.com
SYNTHESIS
162 Jay Street Schenectady, NY 12305 T: (518) 370-1576

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.

REGISTERED ARCHITECT JAMES EDWARD GRIFFIN 023813 STATE OF NEW YORK

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE MEDICAL/DENTAL AND OFFICE SPACE

LOCATION:
MACCORMICK SECURE CENTER
300 SOUTH ROAD
BROOKTONDALE, NY 14817

CLIENT:
OFFICE OF CHILDREN AND FAMILY SERVICES

| MARK | DATE | DESCRIPTION |
|---|---|---|
| 3 | 02/23/2016 | ADDENDUM No. 3 |
| 1 | 02/04/2016 | ADDENDUM No. 1 |
| | 01/07/2016 | BID DOCUMENTS |

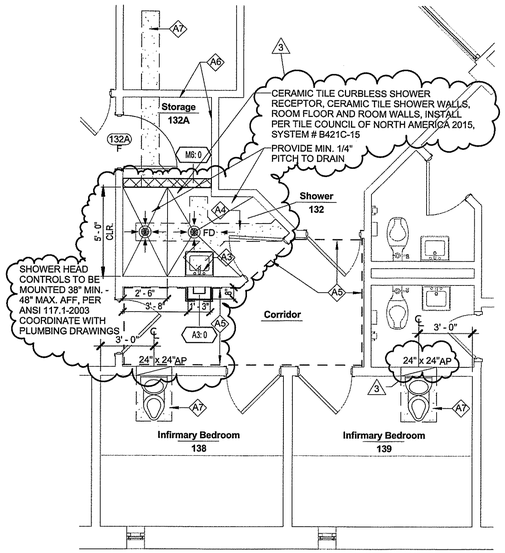
PROJECT NUMBER: **45009-C**

| | |
|---|---|
| DESIGNED BY: | MSE |
| DRAWN BY: | MSE, AEG |
| FIELD CHECK: | |
| APPROVED: | JG |

SHEET TITLE:
FLOOR PLANS – AREA A

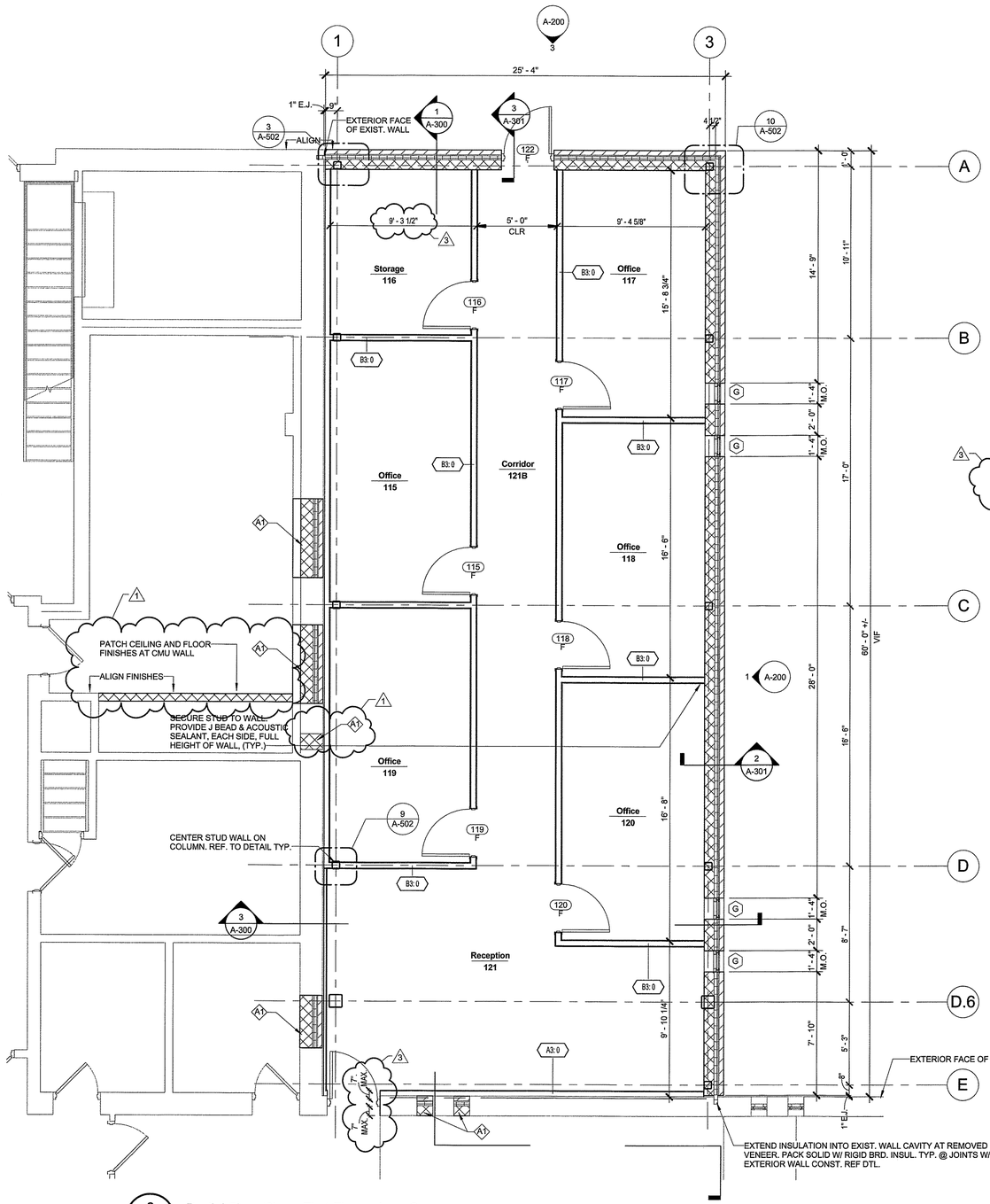
DRAWING NUMBER:
A–101

SHEET 24 OF 81




1 A-102 Partial Floor Plan - First Floor - Area B

1/4" = 1'-0"




2 A-102 Partial Floor Plan - First Floor - Area C

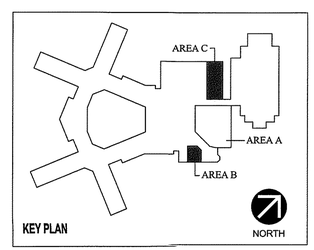
1/4" = 1'-0"

## General Architectural Notes

1. VERIFY EXISTING UTILITIES AND SERVICES PRIOR TO START OF WORK. NOTIFY OWNER'S REPRESENTATIVE OF DISCREPANCIES FOR RESOLUTION PRIOR TO PROCEEDING WITH ASSOCIATED WORK.
2. DIMENSIONS ARE FROM FACE OF MASONRY AND/OR FACE OF METAL STUD UNLESS NOTED OTHERWISE.
3. FULLY PROTECT ITEMS FROM DAMAGE. REPLACE ITEMS DAMAGED DURING CONSTRUCTION WITHOUT ADDITIONAL COST TO THE OWNER.
4. SEAL WALL PENETRATION THROUGH RATED WALLS WITH SPECIFIED FIRE STOPPING SYSTEM. COORDINATE WITH CODE PLAN.
5. COORDINATE WORK OF THIS CONTRACT WITH THE WORK OF THE HVAC, PLUMBING, AND ELECTRICAL CONTRACTS. SPECIFICALLY, COORDINATE SUBMITTED, REVIEWED, AND APPROVED HVAC METAL DUCTWORK & DUCTWORK ACCESSORIES, PLUMBING SPRINKLERS HEAD SHOP DRAWINGS, AND ELECTRICAL LIGHTING & FIXTURES SHOP DRAWINGS WITH THE REQUIRED SHOP DRAWINGS FOR THE CEILING AS DESCRIBED HEREIN. PROVIDE ANY DETAILED COMMENTS AND/OR CHANGES TO THE HVAC, PLUMBING, AND ELECTRICAL SHOP DRAWINGS TO THE OWNER'S REPRESENTATIVE FOR THEIR TRANSMITTAL TO THE HVAC, PLUMBING, AND ELECTRICAL CONTRACT SHOP DRAWING REVIEWERS FOR THEIR ACTION.
6. REFER TO FINISH PLANS FOR FINISHES.
7. SKYLIGHT TO BE PATCHED AND FILLED. COORDINATE WITH OTHER CONTRACTORS.
8. CORNER GUARDS TO BE INSTALLED AT ALL WALL CORNERS.
9. ALL CMU WALLS, INCLUDING EXISTING, ARE TO RECEIVE 1/2" PLASTER ON EXPOSED SIDES OF WALLS. EXISTING CORRIDOR WALLS ARE PAINTED CMU AND SHALL REMAIN AS PAINTED CMU.
10. ALL EXPOSED STRUCTURAL STEEL TO BE PAINTED.
11. PROVIDE MOISTURE CONTROL COATING TO ALL SLABS TO RECEIVE CARPET TILE OR RESILIENT SHEET FLOORING. COORDINATE WITH SPECIFICATIONS.

## Construction Key Notes

| | |
|---|---|
| A1 | WALL INFILL TO MATCH ADJACENT. |
| A2 | PLASTER EXISTING CMU WALL. |
| A3 | SINK BY PLUMBING CONTRACTOR. COORDINATE REMOVALS AND PATCHING. |
| A4 | APPROXIMATE LOCATION OF TRENCH INFILL BY PC. GC TO FLASH PATCH AS REQ'D TO PROVIDE A SMOOTH FINISH. |
| A5 | INSTALL FRP PANELS FLOOR TO CEILING. |
| A6 | INSTALL CONCRETE LEVELING BED AT CERAMIC TILE REMOVAL. PATCH WALLS TO MATCH EXISTING ADJACENT SURFACE. |
| A7 | PATCH FLOOR FINISH TO MATCH EXISTING. |
| A8 | PROVIDE TRENCH FOR UNDERSLAB DENTAL CHAIR CONNECTIONS. SEE TRENCH DETAIL. COORDINATE WITH WORK FROM OTHER TRADES |




NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT:

www.Synthesisllp.com

SYNTHESIS

162 Jay Street Schenectady, NY 12305 T: (518) 370-1576

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.

REGISTERED ARCHITECT JAMES EDWARD GRIFFIN 022817 STATE OF NEW YORK

CONTRACT: CONSTRUCTION

TITLE: PROVIDE MEDICAL/DENTAL AND OFFICE SPACE

LOCATION: MACCORMICK SECURE CENTER 300 SOUTH ROAD BROOKTONDALE, NY 14817

CLIENT: OFFICE OF CHILDREN AND FAMILY SERVICES

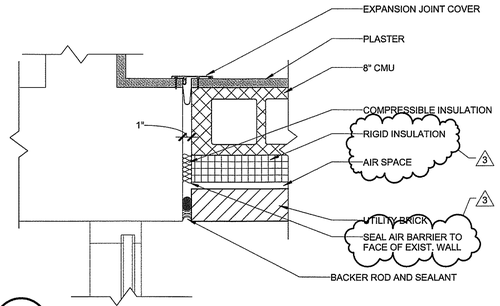
| MARK | DATE | DESCRIPTION |
|---|---|---|
| 3 | 02/23/2016 | ADDENDUM No. 3 |
| 1 | 02/04/2016 | ADDENDUM No. 1 |
| | 01/07/2016 | BID DOCUMENTS |

| | |
|---|---|
| PROJECT NUMBER: | 45009-C |
| DESIGNED BY: | MSE |
| DRAWN BY: | MSE, AEG |
| FIELD CHECK: | |
| APPROVED: | JG |

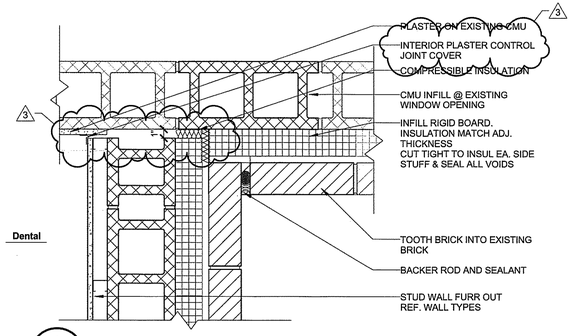
SHEET TITLE: FLOOR PLANS – AREAS B & C

DRAWING NUMBER: A–102

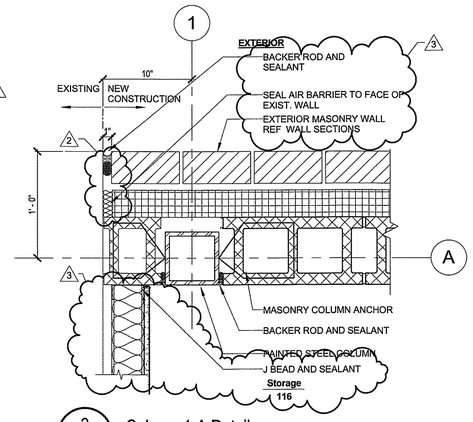
SHEET 25 OF 81



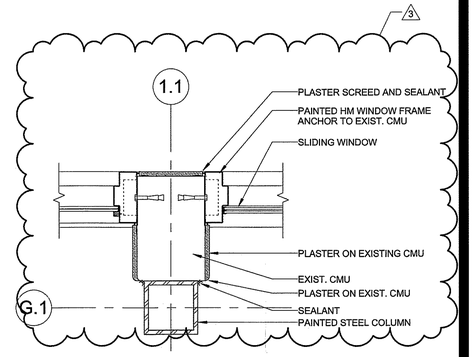

1 A-502 South Expansion Joint Detail
1 1/2" = 1'-0"



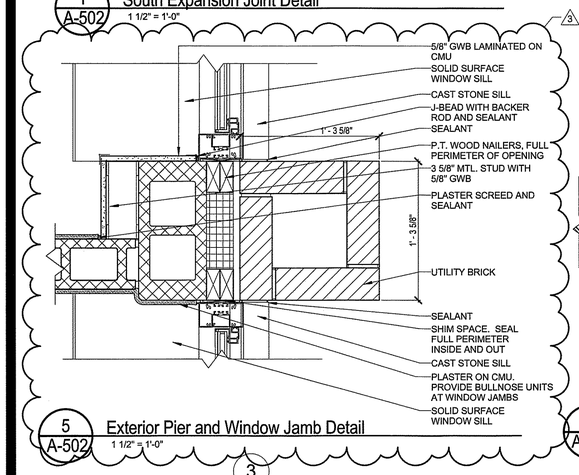

2 A-502 North Expansion Joint Detail
1 1/2" = 1'-0"



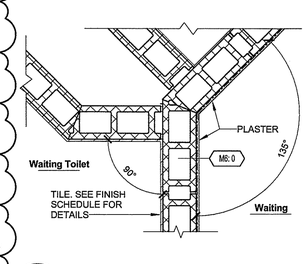

3 A-502 Column 1-A Detail
1 1/2" = 1'-0"



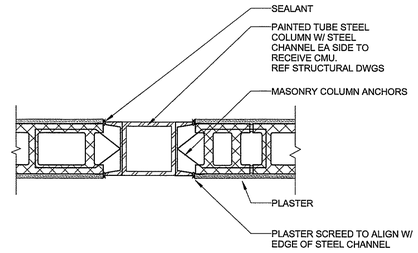

4 A-502 Existing CMU Wall Detail
1 1/2" = 1'-0"



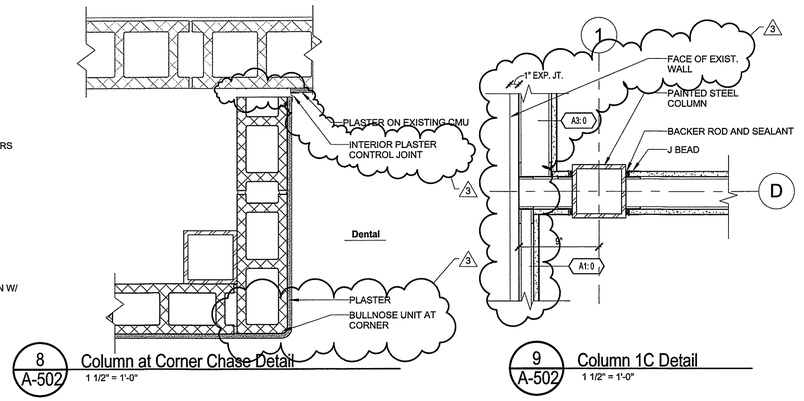

5 A-502 Exterior Pier and Window Jamb Detail
1 1/2" = 1'-0"




6 A-502 Toilet Room Junction Detail
1" = 1'-0"



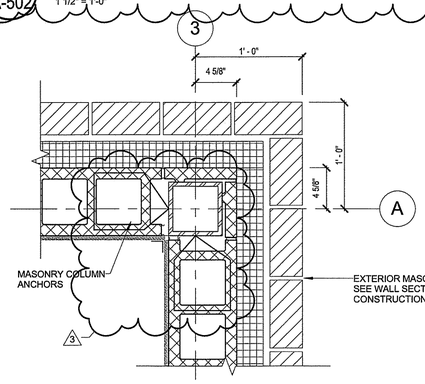

7 A-502 Interior Column Detail
1 1/2" = 1'-0"



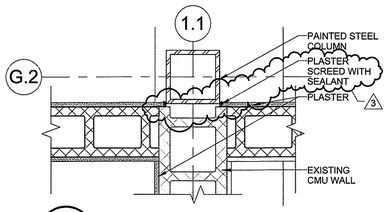

8 A-502 Column at Corner Chase Detail
1 1/2" = 1'-0"



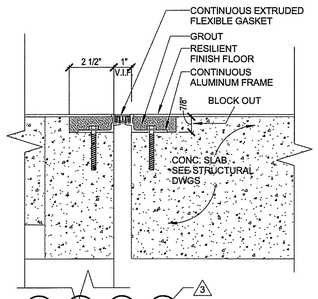

9 A-502 Column 1C Detail
1 1/2" = 1'-0"



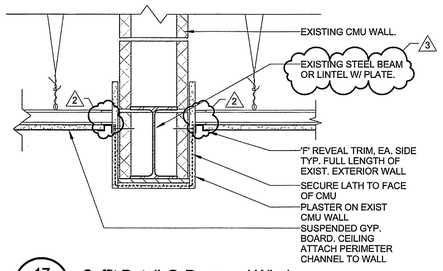

10 A-502 Column 3A Detail
1 1/2" = 1'-0"




15 A-502 Interior Column Detail
1 1/2" = 1'-0"



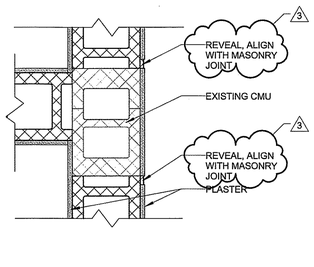

16 A-502 Floor Joint
3" = 1'-0"



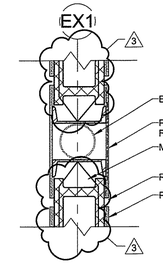

17 A-502 Soffit Detail @ Removed Windows
1 1/2" = 1'-0"



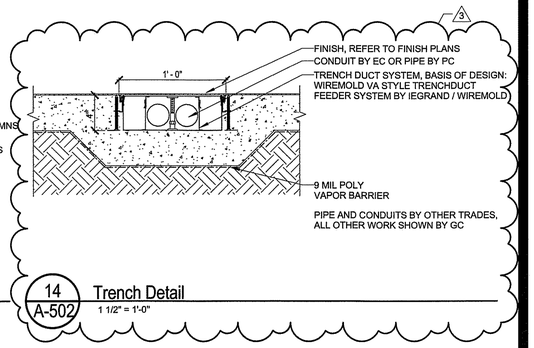

11 A-502 Existing Column Detail
1" = 1'-0"



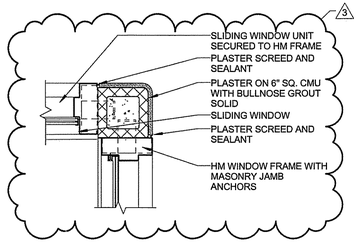

12 A-502 Infill Wall Detail
1 1/2" = 1'-0"




13 A-502 Wall at Existing Column Detail
1 1/2" = 1'-0"




14 A-502 Trench Detail
1 1/2" = 1'-0"




19 A-502 Interior Window Jamb Detail
1 1/2" = 1'-0"

NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT:
www.SynthesisIlp.com
SYNTHESIS
162 Jay Street Schenectady, NY 12305 T: (518) 370-1576

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.

REGISTERED ARCHITECT JAMES EDWARD [illegible] 029879 STATE OF NEW YORK

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE MEDICAL/DENTAL AND OFFICE SPACE

LOCATION:
MACCORMICK SECURE CENTER
300 SOUTH ROAD
BROOKTONDALE, NY 14817

CLIENT:
OFFICE OF CHILDREN AND FAMILY SERVICES

| | | |
|---|---|---|
| 3 | 02/23/2016 | ADDENDUM No. 3 |
| 1 | 02/04/2016 | ADDENDUM No. 1 |
| | 01/07/2016 | BID DOCUMENTS |
| MARK | DATE | DESCRIPTION |

| | |
|---|---|
| PROJECT NUMBER: | 45009-C |
| DESIGNED BY: | MSE |
| DRAWN BY: | MSE, AEG |
| FIELD CHECK: | |
| APPROVED: | JG |

SHEET TITLE:
CONSTRUCTION DETAILS

DRAWING NUMBER:
A-502

SHEET 36 OF 81