DISTRICT WIDE SCHOOL UPGRADES – HVAC NAUGATUCK, CONNECTICUT 06770

S/P+A PROJECT NO. 16.041

Date Issued: July 25, 2016

The following changes to the Drawings and Project Specifications shall become a part of the Drawings and Project Specifications; superseding previously issued Drawings and Project Specifications to the extent modified by Addendum No. 1.

General Information:

• See attached RFIs. (4)

New Specifications:

- SECTION 092900, GYPSUM BOARD, has been added and is attached as part of this addendum (5).
- SECTION 099123, INTERIOR PAINTING, has been added and is attached as part of this addendum. (5)

Changes to the Specifications:

- TABLE OF CONTENTS:
 - o Page 2, Division 9 Finishes, add the following:

"Section 092900 Gypsum Board Section 099123 Interior Painting

5 5"

- SECTION 095113, ACOUSTICAL PANEL CEILINGS, Page 5, Article 2.6, add the following:
 - C. Extruded-Aluminum Edge Trim: Where indicated, provide manufacturer's extruded-aluminum edge trim of profile indicated or referenced by manufacturer's designations, including splice plates, corner pieces, and attachment and other clips, complying with seismic design requirements and the following:
 - 1. Basis-of-Design Product:
 - a. Armstrong World Industries, Inc.; **Axiom Classic Trim**
 - 2. Baked-Enamel or Powder-Coat Finish: Minimum dry film thickness of 1.5 mils. Comply with ASTM C 635 and coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish."

New Drawings:

• S100, ROOF FRAMING PLAN, has been added and is attached as part of this addendum.*

- ESK101-01, ANDREW AVE. HVAC CEILING PLAN & DETAILS, has been added and is attached as part of this addendum. This adds information to Drawing E101.
- ESK101-02, ANDREW AVE. HVAC CEILING PLAN & DETAILS, has been added and is attached as part of this addendum. This adds information to Drawing E101.

Changes to the Drawings:

• COVER SHEET, List of Drawings, add the following:

"S100 ROOF FRAMING PLAN"

The bid date is unchanged by this addendum.

The addendum consists of sixteen (16) pages of $8\frac{1}{2}$ "x11" text, two (2) $8\frac{1}{2}$ "x11" drawings and one (1) 30"x42" drawing*.

End of Addendum '1'





INTELLIGENT BUILDING SOLUTIONS

■■■ Comprehensive Energy Solutions ■ Building Automation ■ HVAC/Mechanical ■ Security/Access/CCTV ■ Fire/Life Safety ■ Multimedia Solutions

Request for Information RFI#1

Date: 7/19/2016

Project: District Wide School Upgrades - Naugatuck

Request: What is the existing DDC Control system at Andrew Avenue ES? Per Spec Section 230923 – 51 and -52, Section 3.2 A.3 and B 1 and 2, specifies integration of the existing control system.

Thank you!

Lauren Marotta

Senior Sales Engineer

Environmental Systems Corporation 18 Jansen Court West Hartford, CT 06110

Cell: 860-712-9180 Work: 860-953-8800 www.esccontrols.com



Response:

The Borough's standard controls provider Siemens, and is a web-based system with remote connection and monitoring capability.

Kenneth Eldridge - Silver/Petrucelli + Associates - 07/19/2016

Headquarters 18 Jansen Court | West Hartford, CT 06110 | 860.953.8800 | Fax 860.953.1094

www.ESCCONTROLS.com

Kenneth J. Eldridge

From: Kenneth J. Eldridge

Sent: Friday, July 22, 2016 11:02 AM **To:** 'Michael Montle'; Ryan Haley

Subject: RE: Naugatuck HVAC

Thanks, Michael. Please see our responses to your RFI below in Blue.

Kenneth J. Eldridge, PE

Senior Mechanical Engineer

SILVER / PETRUCELLI + ASSOCIATES

P: 203.230.9007 x 260 | F: 203.230.8247 | C: 203.671.3976

From: Michael Montle [mailto:mike@mill-city.com]

Sent: Friday, July 22, 2016 10:44 AM

To: Ryan Haley <rhaley@silverpetrucelli.com>; Kenneth J. Eldridge <keldridge@silverpetrucelli.com>

Subject: FW: Naugatuck HVAC

Good Morning,

RFI's:

In communicating with HVAC subcontractors the following questions have arisen:

- Is there anyway the owner would consider a completion date of late August 2017? Feeling that less disturbance to students and overall cost would be lower. Work would commence prior to the end of school year in order to complete by start of school. SPA: The June 2017 deadline is a requirement for funding of the project. This schedule must be adhered to in order for the Contractor to be considered eligible for bidding this work. The Contractor shall coordinate with the Owner for zones to be cordoned off for the work. Work for the most part can be performed during building operation, however power transfer/cut-over and switchover from existing to new HVAC systems and equipment shall be done off-hours, weekends, long weekends and during school vacations, as coordinated between the Contractor and the Owner. Once one zone is operable and uncopiable by the students and staff, a new area will be provided for the next phase of work, and so on. In this manner, off-hour work and disruption to the students should be able to be minimized.
- Drawing "Mechanical Item Key Notes" specifically refer to "Structural Drawing" which there are none. What is
 the structural steel requirements for the RTU's? SPA: The new rooftop units will require structural work to be
 included in this contract. Structural drawings will be incorporated in the upcoming Addendum #1.
- What is the roof material and is the roof under any warranty? SPA: The roof is membrane over board insulation on metal decking. The roof is relatively new and under warranty.
- Asbestos Report provided by Langan excludes the roof within their report. Drawing "Mechanical Notes" state
 asbestos containing material on the roof? Does the roof contain asbestos or not and if so what materials are
 asbestos? SPA: The roof is to be treated as if ACM is present as a precaution, however it is not known at this
 time if it does.
- Asbestos Report identifies sheetrock joint compound as asbestos. Wall types are not identified on the
 drawings. Are we to assume that all wall penetrations are to be done by an abatement contractor? SPA: The
 majority of the walls are CMU. Any sheetrock walls being penetrated can be identified on your 7/26 walkthru.

We are planning a site visit on 7/26.



Kenneth J. Eldridge

From: Kenneth J. Eldridge

Sent: Monday, July 25, 2016 9:17 AM

To: 'Kevin Michaud'

Cc: Vinny Savino; mike.lynch@naugatuck.k12.ct.us; Ryan Haley

Subject: RE: Andrew Ave Elementary School RFI

Kevin, see our responses to your RFI below in Red.

Kenneth J. Eldridge, PE

Senior Mechanical Engineer

SILVER / PETRUCELLI + ASSOCIATES

P: 203.230.9007 x 260 | F: 203.230.8247 | C: 203.671.3976

From: Kevin Michaud [mailto:kevin@actionairsystems.com]

Sent: Wednesday, July 20, 2016 2:21 PM

To: Kenneth J. Eldridge <keldridge@silverpetrucelli.com>

Cc: Vinny Savino <vinny@actionairsystems.com>; mike.lynch@naugatuck.k12.ct.us; Ryan Haley

<rhaley@silverpetrucelli.com>

Subject: Andrew Ave Elementary School

Mr. Eldridge:

After a quick review of the plans and specifications as well as a walk thru of the school we have many questions concerning the project.

- 1) Since this is an occupied school what are the working hours and wok days for the project. It would appear as though we are going to have a lot of 2nd shift, 3rd shift and weekend work on this project which will drive up the project costs considerably. SPA: The Contractor shall coordinate with the Owner for zones to be cordoned off for the work. Work for the most part can be performed during building operation, however power transfer/cut-over and switchover from existing to new HVAC systems and equipment shall be done off-hours, weekends, long weekends and during school vacations, as coordinated between the Contractor and the Owner. Once one zone is operable and able to be occupied by the students and staff, a new area will be provided for the next phase of work, and so on. In this manner, off-hour work should be able to be minimized.
- 2) What is the expectations for ceiling removals and replacements? SPA: The Contractor shall carefully remove, protect and store (in a location as directed by the Owner) the existing ceiling tiles for the Zone being worked on at the same time the Work is underway for that specific Zone only. All other tiles outside of the work area shall remain in place. Contractor shall reinstall existing ceiling tiles as work in these areas allows or as required to set diffusers, etc. Damage to any existing ceiling tiles will be the responsibility of the Contractor and must be replaced to match existing at no additional cost to the Owner.
- 3) Will the building officials allow the school to operate with the ceilings removed? SPA: The Building Inspector has stated that the building can be occupied during the Work for the work phasing/process outlined herein, assumed to be short/minimized periods of time.
- 4) Will the building officials require all loose components above the ceiling to be tied up during the course of this project? SPA: The Building Inspector will require that all loose wires above the ceiling shall be secured while the ceilings are open.

- 5) Will the new roof top equipment require and structural reinforcement? There are several notes which refer to the structural drawings but there are none in the provided documents. SPA: The new rooftop units will require structural work to be included in this contract. Structural drawings will be incorporated in the forthcoming Addendum #1.
- 6) There are many notes referring to asbestos abatement especially at the roof level. As we currently understand it a new roof was installed within the last 5 or 6 years. If this is the case what asbestos would we have to be dealing with and how would you go about doing an asbestos abatement job when the school is fully occupied and there is no available summer period in the schedule in which to perform this work? SPA: Asbestos related "precautionary" work is at the roof level and not within the occupied spaces.
- 7) How did you plan on maintaining heat in the building during the winter months of construction? If we leave the existing system operational we cannot tie in the new equipment without adding sub panels which are not called for. SPA: Power transfer/cut-over and switchover from existing to new HVAC systems and equipment shall be done off-hours, weekends, long weekends and during school vacations, as coordinated between the Contractor and the Owner.
- 8) There are notes in the plans and specifications referring to duct cleaning. Based on the demo drawings it would appear all of the existing duct is being removed. What is there to clean? SPA: Existing ductwork in the gymnasium and cafeteria systems that are to remain and will be tie-in with new systems shall be cleaned and maintained in a clean state during construction.
- 9) The administration office has appears to have a glued in place 1' x 1' ceiling pad. Is this ceiling getting removed and replaced in its entirety? How are we going to work in this area if it is fully occupied? SPA: The Contractor shall coordinate with the Owner for Work in the Administrative Area. The Contractor is required to provide a new suspended ceiling system in this area. Mechanical systems being incorporated in this Zone can be located below the existing ceiling to the extent capable; removal of the 12" x 12" ceiling shall be done as required to facilitate the system installation. Architectural drawings and details addressing the ceiling work will be provided in the forthcoming Addendum #1.
- 10) It would appear based on the amount of work required, the occupancy issues and a completion deadline of June of 2017 there will be some major issues. Is there any chance of extending the project schedule to include the summer of 2017? SPA: The June 2017 deadline is a requirement for funding of the project. This schedule must be adhered to in order for the Contractor to be considered eligible for bidding this work.

Sincerely

Action Air Systems, Inc.

Kevin Michaud Estimator

Phone #860-645-8838 Fax #860-645-0226

Email: kevin@actionairsystems.com

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Interior gypsum board.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For the following products:
 - 1. Trim Accessories: Full-size Sample in 12-inch-long length for each trim accessory indicated.

1.4 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.5 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 GYPSUM BOARD, GENERAL

A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.2 INTERIOR GYPSUM BOARD

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Georgia-Pacific Gypsum LLC.
 - 2. National Gypsum Company.
 - 3. USG Corporation.
 - 4. Substitutions: Under provisions of Section 012500 "Substitution Procedures".
- B. Abuse-Resistant Gypsum Board: ASTM C 1396 gypsum board, tested according to ASTM C 1629, with moisture- and mold-resistant core and paper surfaces.
 - 1. Core: As indicated on Drawings.
 - 2. Surface Abrasion: Meets or exceeds Level 3 requirements.
 - 3. Surface Indentation: Meets or exceeds Level 1 requirements.
 - 4. Single-Drop Soft-Body Impact: Meets or exceeds Level 1 requirements.
 - 5. Long Edges: Tapered.
 - 6. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.

2.3 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.
 - 1. Material: Galvanized or aluminum-coated steel sheet or rolled zinc.
 - 2. Shapes:
 - a. Cornerbead.
 - b. Bullnose bead.
 - c. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - d. L-Bead: L-shaped; exposed long flange receives joint compound.
 - e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
 - f. Expansion (control) joint.

2.4 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475.
- B. Joint Tape:
 - 1. Interior Gypsum Board: Paper.
- C. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.

- 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
- 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying-type, all-purpose compound.
- 3. Fill Coat: For second coat, use drying-type, all-purpose compound.
- 4. Finish Coat: For third coat, use drying-type, all-purpose compound.
- 5. Skim Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound.

2.5 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
- C. Acoustical Joint Sealant: Manufacturer's standard non-sag, paintable, non-staining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
 - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Pecora Corporation; AC-20 FTR
 - b. Specified Technologies, Inc.; Smoke N Sound Acoustical Sealant
 - c. USG Corporation; SHEETROCK Acoustical Sealant
 - d. Substitutions: Under provisions of Section 012500 "Substitution Procedures".
 - 2. Acoustical joint sealant shall have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and substrates including welded hollow-metal frames and framing, with Installer present, for compliance with requirements and other conditions affecting performance.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 APPLYING AND FINISHING PANELS, GENERAL

- A. Comply with ASTM C 840.
- B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one (1) framing member.

- C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
- D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- E. Form control and expansion joints with space between edges of adjoining gypsum panels.
- F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
 - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. in area.
 - 2. Fit gypsum panels around ducts, pipes, and conduits.
- G. Wood Framing: Install gypsum panels over wood framing, with floating internal corner construction. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members or provide control joints to counteract wood shrinkage.

3.3 APPLYING INTERIOR GYPSUM BOARD

- A. Install interior gypsum board where indicated on Drawings.
- B. Single-Layer Application:
 - 1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
 - 2. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

3.4 INSTALLING TRIM ACCESSORIES

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints according to ASTM C 840 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
 - 1. Cornerbead: Use at outside corners, unless otherwise indicated.
 - 2. Bullnose Bead: Use at outside corners.
 - 3. LC-Bead: Use at exposed panel edges.
 - 4. L-Bead: Use where indicated.
 - 5. U-Bead: Use at exposed panel edges.

3.5 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
 - 1. Level 4: At panel surfaces that will be exposed to view, receiving wallcoverings and flat paints.

3.6 PROTECTION

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 092900

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following interior substrates:
 - 1. Gypsum board.

1.3 DEFINITIONS

A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
 - 1. Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.
 - 2. VOC content.
- B. Samples: For each type of paint system and in each color and gloss of topcoat.
 - 1. Submit Samples on rigid backing, 8 inches square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.
- C. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint: Five percent (5%), but not less than 1 gal. of each material and color applied.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.7 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints when relative humidity exceeds eighty-five percent (85%); at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design:
 - 1. Sherwin-Williams Company (The)
- B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Benjamin Moore & Co.
 - 2. ICI Paints
 - 3. Substitutions: Under provisions of Section 012500 "Substitution Procedures".

2.2 PAINT, GENERAL

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."
- B. Material Compatibility:
 - 1. Materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- C. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior paints and coatings applied at Project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 - 1. Flat Paints and Coatings: 50 g/L.

D. Colors: As selected by Architect and Owner from manufacturer's full range.

2.3 SOURCE QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure:
 - 1. Owner will engage the services of a qualified testing agency to sample paint materials. Contractor will be notified in advance and may be present when samples are taken. If paint materials have already been delivered to Project site, samples may be taken at Project site. Samples will be identified, sealed, and certified by testing agency.
 - 2. Testing agency will perform tests for compliance with product requirements.
 - 3. Owner may direct Contractor to stop applying coatings if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two (2) paints are incompatible.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Gypsum Board: Twelve percent (12%).
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
 - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

3.5 CLEANING AND PROTECTION

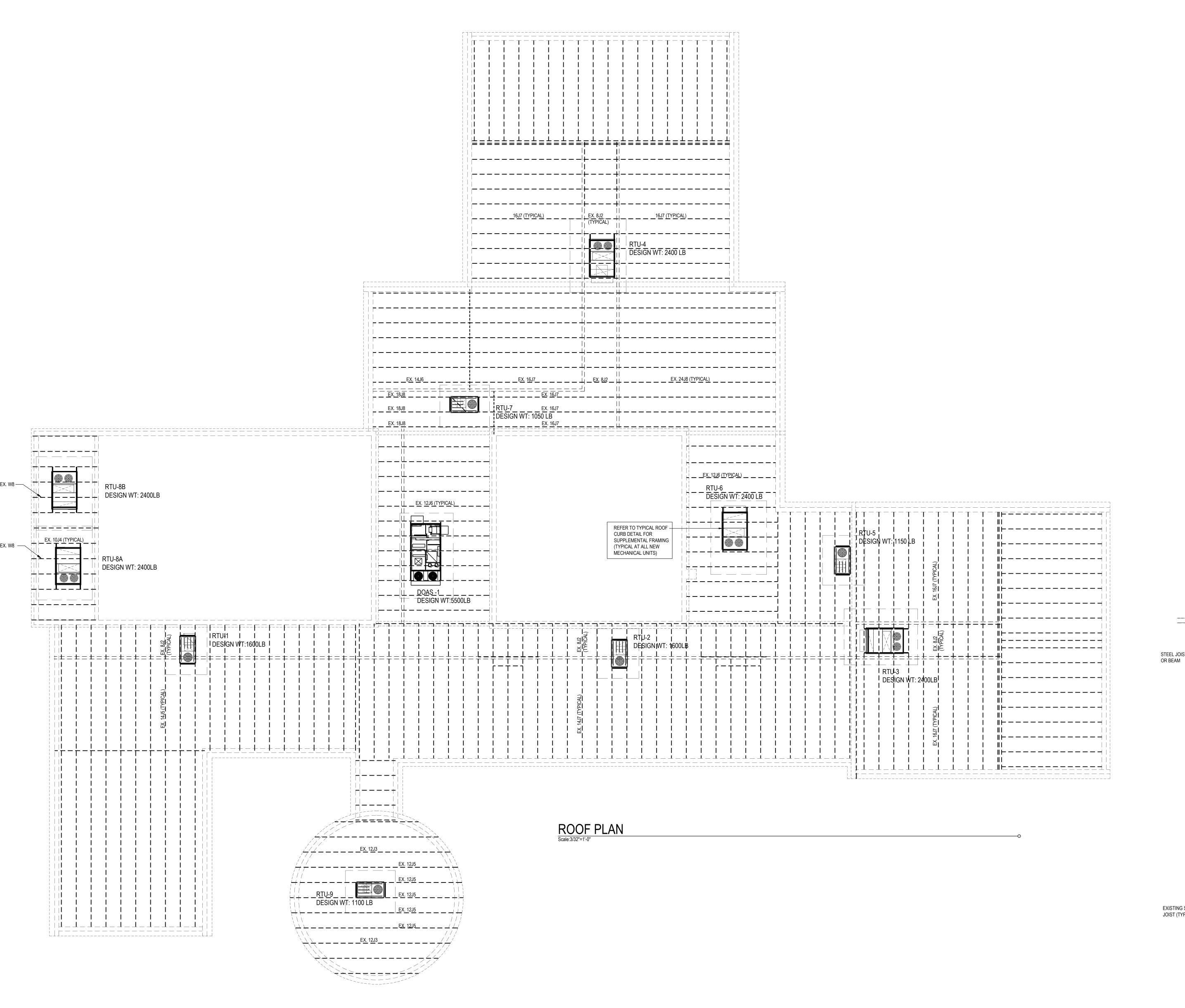
- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINTING SCHEDULE

- A. Gypsum Board and Plaster Substrates:
 - 1. Latex over Latex Sealer System:
 - a. Prime Coat: Primer sealer, latex, interior, MPI #50.
 - b. Intermediate Coat: Latex, interior, matching topcoat.
 - c. Topcoat: Latex, interior, flat, (Gloss Level 1), MPI #53, at ceilings.

END OF SECTION 099123



GENERAL NOTES

GENERAL

GOVERNING CODE: STATE BUILDING CODE, 2005 CONNECTICUT SUPPLEMENT WITH THE 2013 AMENDMENT (2003 INTERNATIONAL BUILDING CODE).

DESIGN LOADS: TOWN OF NAUGATUCK

ROOF LOAD:

ROOF SNOW LOAD CRITERIA: Pg = 30 PSF, Ce = 0.9 AND Is = 1.0, Ct = 1.0 WITH INCREASES FOR SNOW DRIFTING, UNBALANCES AND SLIDING PER SECTION 1608 (2003 IBC).

MINIMUM ROOF LIVE LOAD = 30 PSF

ROOF DEAD LOAD = 20 PSF

1. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THE GENERAL STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

2. LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO REQUIREMENTS OF OTHER (NON-STRUCTURAL) DISCIPLINES ARE SHOWN FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL OBTAIN FROM THE HEATING AND VENTILATING, ELECTRICAL, PLUMBING AND OTHER SUBCONTRACTORS THE FINAL APPROVED SIZE AND LOCATION OF ALL OPENINGS AND WORK TO BE PROVIDED FOR THEIR TRADE IN ROOFS, FLOORS AND WALLS, WHETHER SHOWN OR NOT SHOWN ON STRUCTURAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR TRANSMISSION OF REQUIREMENTS, LOCATIONS AND DETAILS TO STRUCTURAL SUBCONTRACTORS. EXCESS COST RELATED TO VARIATION IN MECHANICAL REQUIREMENTS ARE NOT TO BE BORNE BY THE OWNER.

3. MECHANICAL EQUIPMENT WEIGHTS USED IN DESIGN OF SUPPORTING ELEMENTS HAVE BEEN INDICATED ON THE DRAWINGS. CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO INSTALLATION IF ACTUAL WEIGHT EXCEEDS WEIGHT SHOWN ON DRAWINGS.

4. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

5. SHOP DRAWINGS ARE TO BE CHECKED BY THE CONTRACTOR AND SUBCONTRACTOR AND BEAR CHECKER'S INITIALS BEFORE BEING SUBMITTED TO THE ARCHITECT FOR APPROVAL.

6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS BEFORE PROCEEDING WITH ANY WORK.

7. ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TYPICAL AND APPLY FOR THE SAME AND SIMILAR SITUATIONS THROUGHOUT THE BUILDING, UNLESS OTHERWISE SPECIFICALLY NOTED.

8. CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO SUBMITTING THEIR BID FOR REFERENCE TO ALL NOTES ON ARCHITECTURAL DRAWINGS REFERRING TO (SEE STRUCTURAL DRAWINGS). IF THE SIZE OF ELEMENTS AND DETAILING OF MEMBERS IS NOT INDICATED, THE CONTRACTOR SHALL CONTACT THE ARCHITECT TO REQUEST THE MISSING INFORMATION IN PREPARATION OF THEIR BID. THESE REFERENCED ITEMS SHALL BE PART OF THE BASE BID.

9. IN CASES OF DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND SUBMITTED SHOP DRAWINGS, THE CONTRACT DOCUMENTS SHALL GOVERN INSTALLATION OF MATERIALS.

STRUCTURAL STEEL MATERIALS:

STRUCTURAL STEEL

ASTM A325

ANCHOR BOLTS ASTM F1554 WELDING ELECTRODE ASTM E 70

1. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO CURRENT AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION.

2. WELDING SHALL CONFORM TO THE CODE FOR "ARC AND GAS WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY.

3. FOR MISCELLANEOUS STEEL REFER TO ARCHITECTURAL DRAWINGS.

ASTM A 36

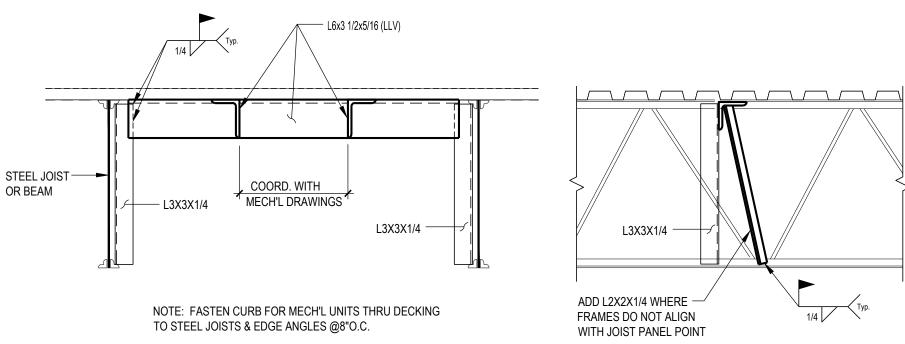
4. ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER IN ACCORDANCE WITH A.W.S. STANDARDS 5. CONNECTIONS:

USE LARGER OF 1/4" FILLET WELDS OR MINIMUM SIZE PER AISC REQUIREMENTS WHERE NO WELD SIZE IS

WELDS IN EXCESS OF 24" IN LENGTH SHALL BE 3" STITCH WELDS AT 8" ON CENTERS, UNLESS SPECIFICALLY SHOWN ON DRAWINGS TO BE CONTINUOUS

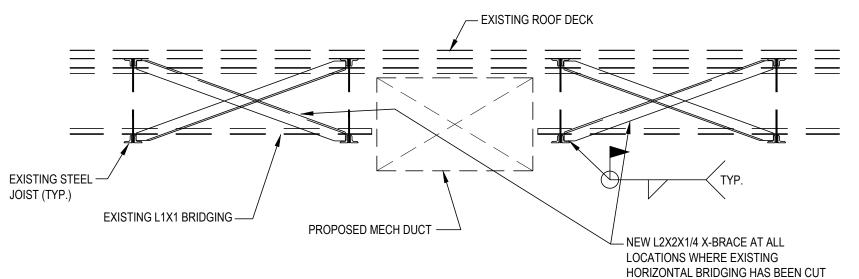
COST TO THE OWNER. SUBSTITUTED MEMBERS MUST BE OF THE SAME NOMINAL DEPTH AS THE MEMBER ORIGINALLY INDICATED AND HAVE A WEIGHT GREATER THAN THAT INDICATED. BEAM FLANGES MUST NOT INFRINGE ON ADJACENT ARCHITECTURAL ELEMENTS.

7. EXISTING STEEL SURFACES TO RECEIVE FIELD WELDS SHALL BE THOROUGHLY CLEANED UNTIL FREE FROM



TYPICAL ROOF CURB DETAIL & JOIST REINF. DETAIL (SIMILAR AT WF BEAMS)

1. TYPICAL FOR ALL OPENINGS 4'-0"X4'-0" OR LESS. FOR LARGER OPENINGS SEE SPECIFIC DETAILS. 2. SIMILAR FRAMES FOR ROOF DRAIN OPENINGS. 3. FRAMES TO BE SHOP WELDED ASSEMBLY. 4. FOR LOCATION, SIZE AND QUANTITY REQUIRED SEE ARCH'L. AND MECH'L. DRAWINGS. 5. FOR FRAMES ON JOISTS, PROVIDE JOIST REINFORCING AT BEARING LOCATIONS.



TYPICAL X-BRACE AT CUT JOIST BRIDGING

Borough of Naugatuck

Naugatuck, Connecticut 06770

District Wide School Upgrades 497 Rubber Ave

SILVER / PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

3190 Whitney Avenue, Hamden, CT 06518-2340 Tel. 203 230 9007 Fax. 203 230 8247 silverpetrucelli.com

MHAI Michael Horton Associates Inc. Consulting Structural Engineers Branford, Connecticut 06405

Revised By:

Date:

Revision: Description:

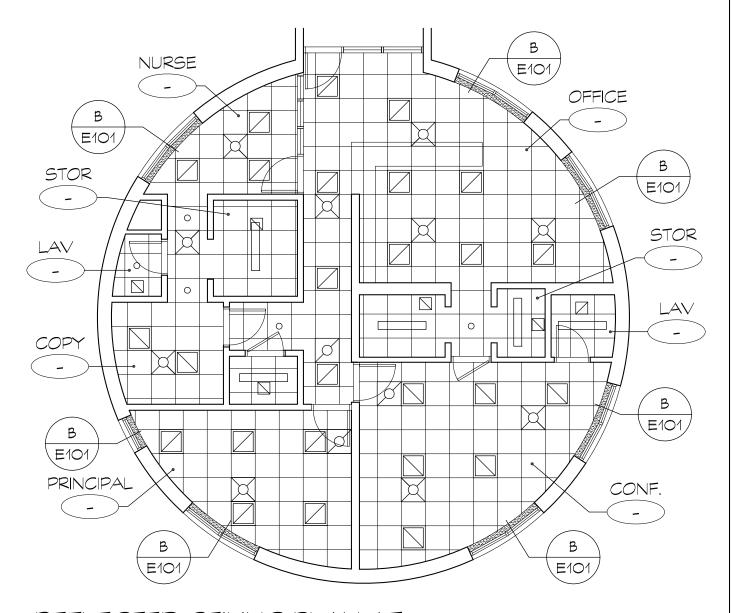
ROOF FRAMING PLAN

16.041

Drawing Number: JULY 1, 2016 S100

CEILING NOTES

- EXISTING ±9'-0' A.F.F. (V.I.F.), IXI ACOUSTICAL CEILING SYSTEM SHALL BE REMOVED AS REQUIRED TO PROVIDE MECHANICAL & ELECTRICAL WORK, AND AS REQUIRED TO PROVIDE NEW SUSPENDED CEILING SYSTEM. REFER TO MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL ITEMS TO BE REMOVED.
- 2. PROVIDE 2X2' SUSPENDED CEILING SYSTEM AT 8'-6" A.F.F. WITH LAY-IN FIXTURES. RELOCATE EXISTING-TO-REMAIN SURFACE MOUNTED FIXTURES (ON WALLS & CEILINGS) AS REQ'D SUCH THAT THEY ARE LOCATED BELOW THE NEW SUSPENDED CEILING SYSTEM. REFER TO MECHANICAL & ELECTRICAL FOR MORE INFO.
- 3. PROVIDE RADIUSED PERIMETER CEILING TRIM & GWB SOFFIT AT WINDOW OPENINGS REFER TO DETAIL B/EIOI FOR MORE INFO.



REFLECTED CEILING PLAN AT MAIN OFFICE & ADMINISTRATIVE AREA

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

2 E101

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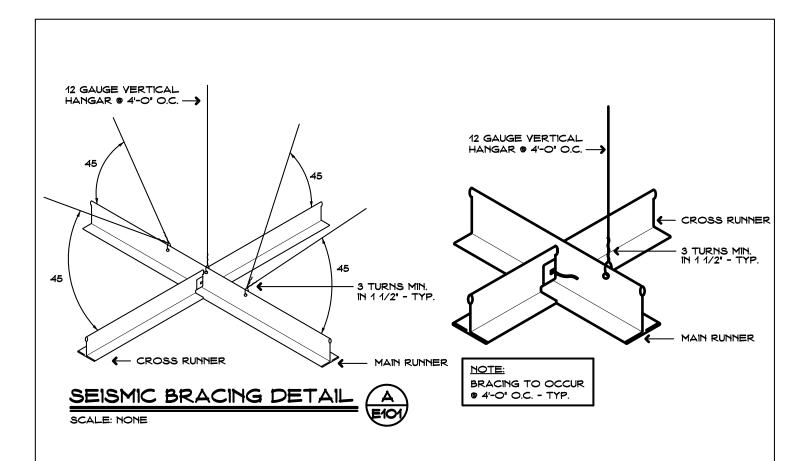
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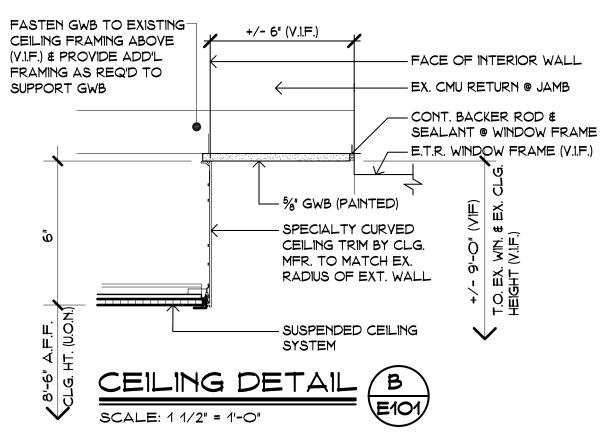
Architects / Engineers / Interior Designers 3190 Whitney Avenue, Hamden, CT 06518-2340 Tel. 203 230 9007 Fax. 203 230 8247 Drawing Tit

Andrew Ave. HVAC Ceiling Plan & Details

Date:	Dra
7/25/2016	
Scale:	
AS NOTED	١.
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Andrew Ave. HVAC Ceiling Plan & Details