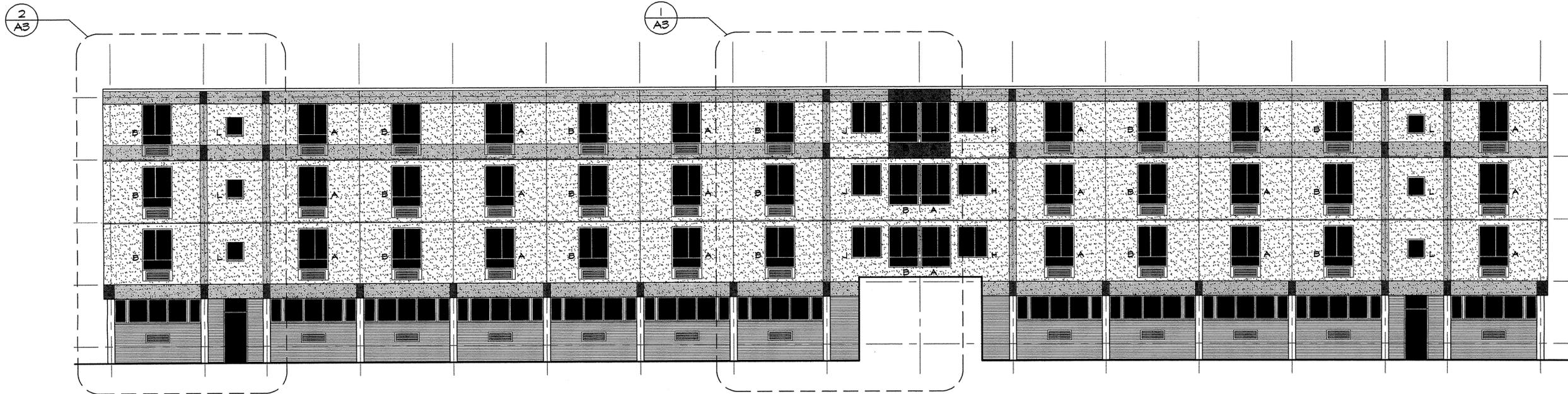


TYPICAL FLOOR PLAN

1/8" = 1'-0"



SOUTH ELEVATION

1/8" = 1'-0"

- E.I.F.S. COLOR 1
- E.I.F.S. COLOR 2
- E.I.F.S. COLOR 3
- WINDOW / WINDOW TYPE

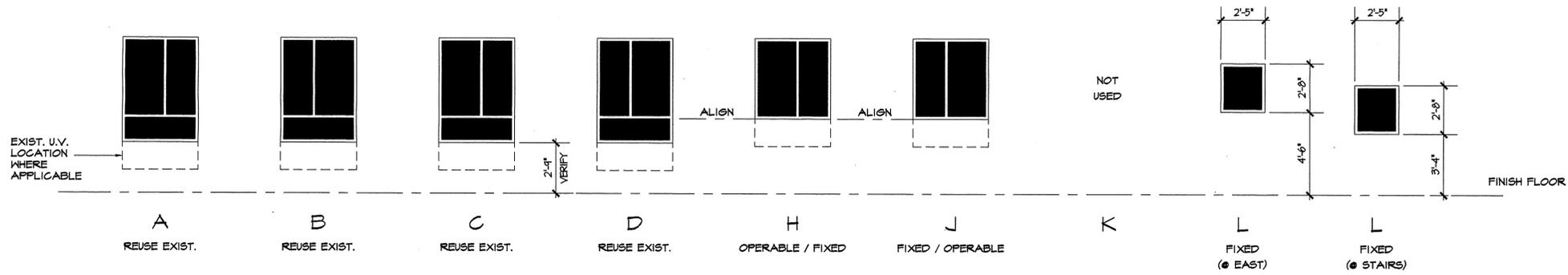
Exterior Wall Replacement
 Building 172, Naval Education and Training Center
 Newport, Rhode Island

Floor Plan, South Elevation

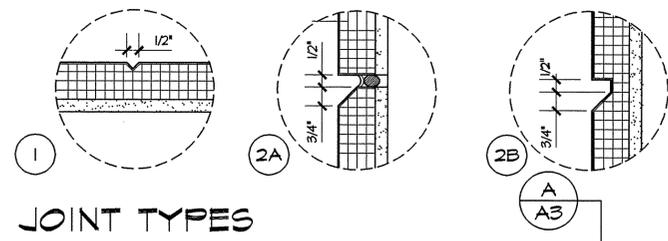
AMES & WHITTAKER Architects
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 21 Church Street Waterbury, Connecticut 06702 Fax (203) 756-8944 Fax (203) 756-9649

PROJECT NO. **9614**
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 CHECKED BY: TGA
 SCALE: 1/8" = 1'-0"
 DATE: 5-23-96

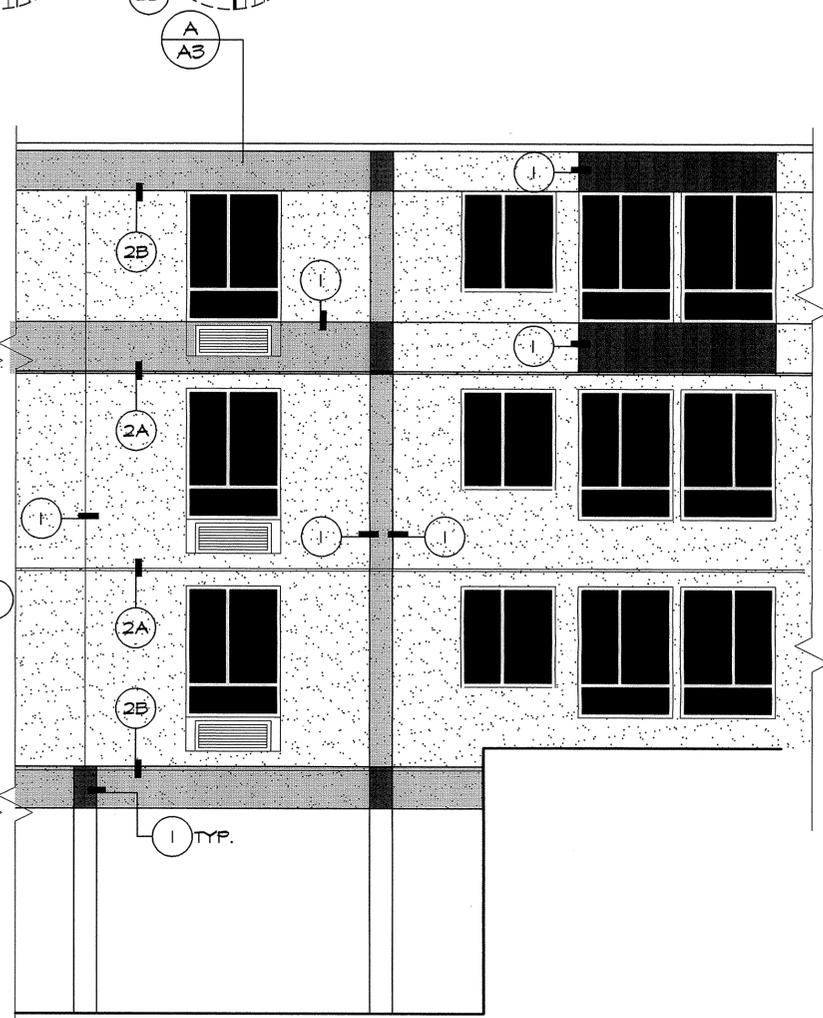
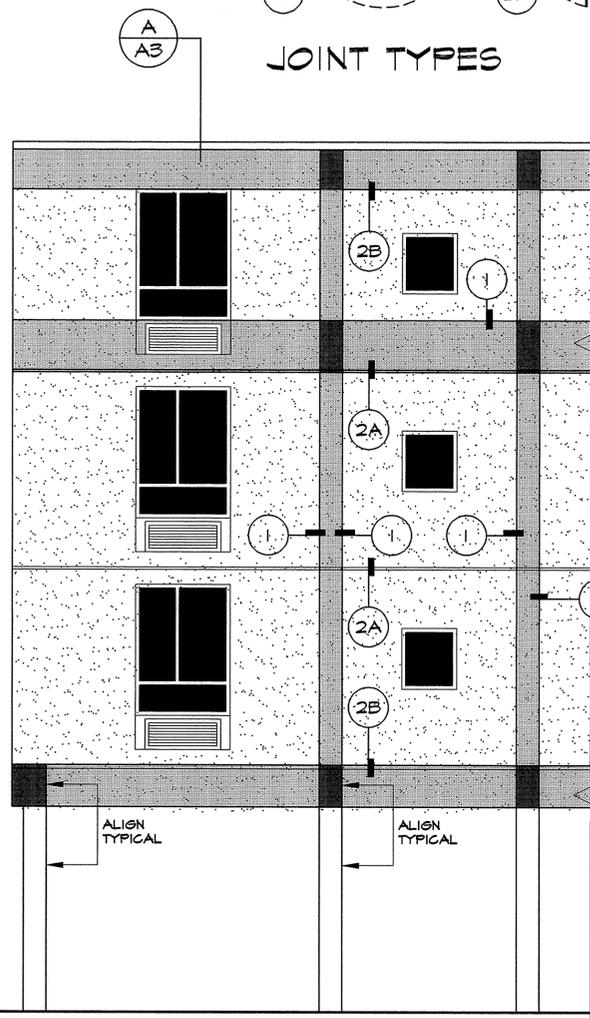
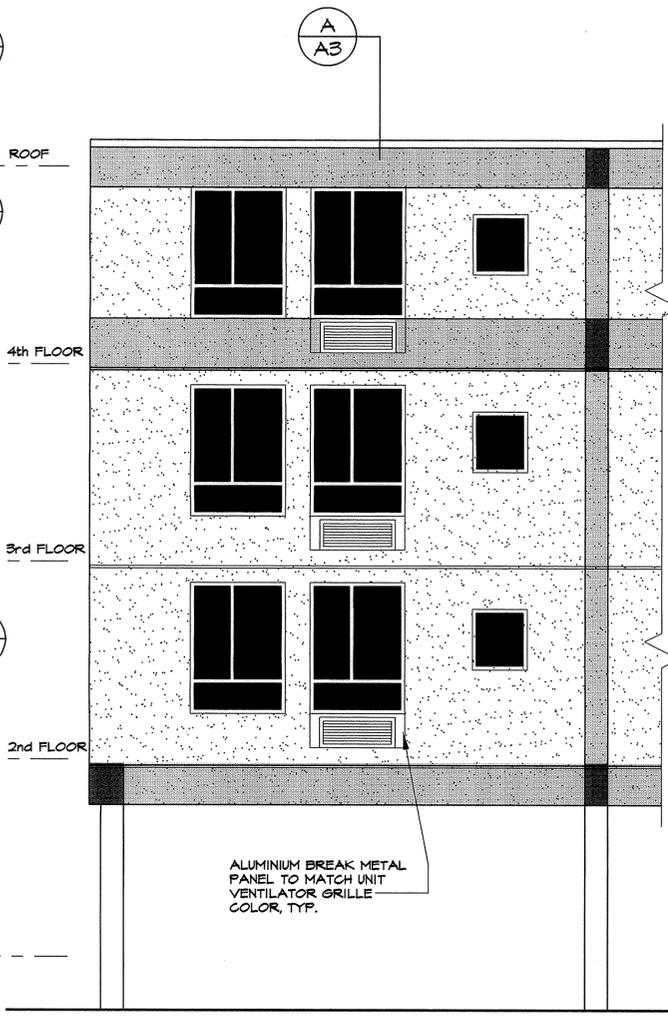
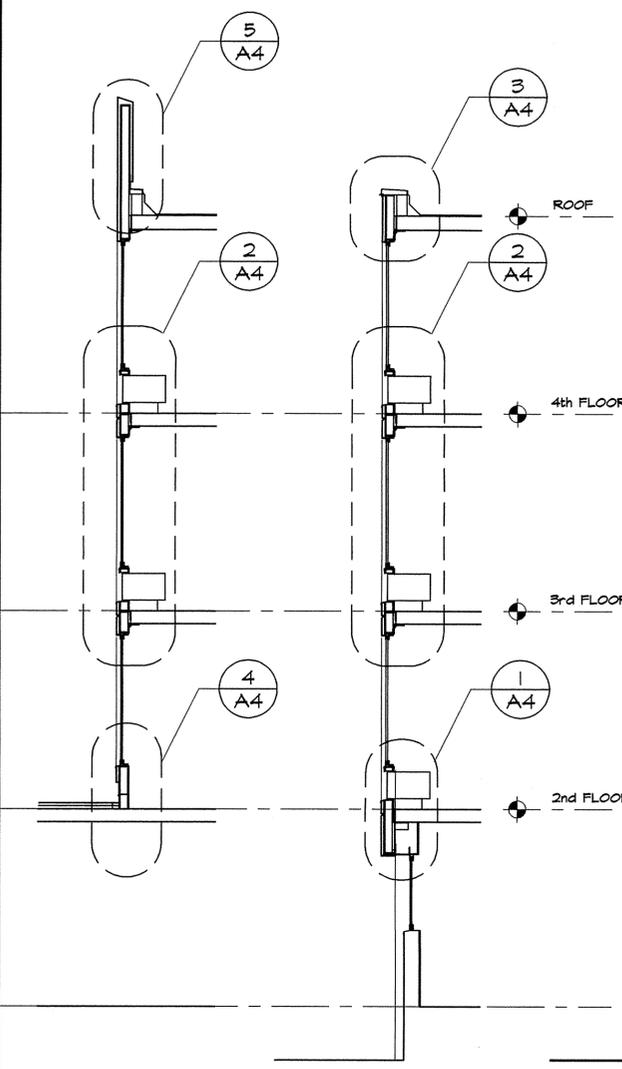
DRAWING NUMBER
A1



4
A3
1/4" = 1'-0"



JOINT TYPES



B
A3
SECT.

A
A3
SECT.

3
A3
PART. ELEV. @ EAST
1/4" = 1'-0"

2
A3
PART. ELEV. @ SOUTH
1/4" = 1'-0"

1
A3
PART. ELEV. @ SOUTH
1/4" = 1'-0"

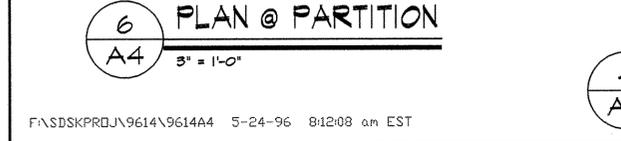
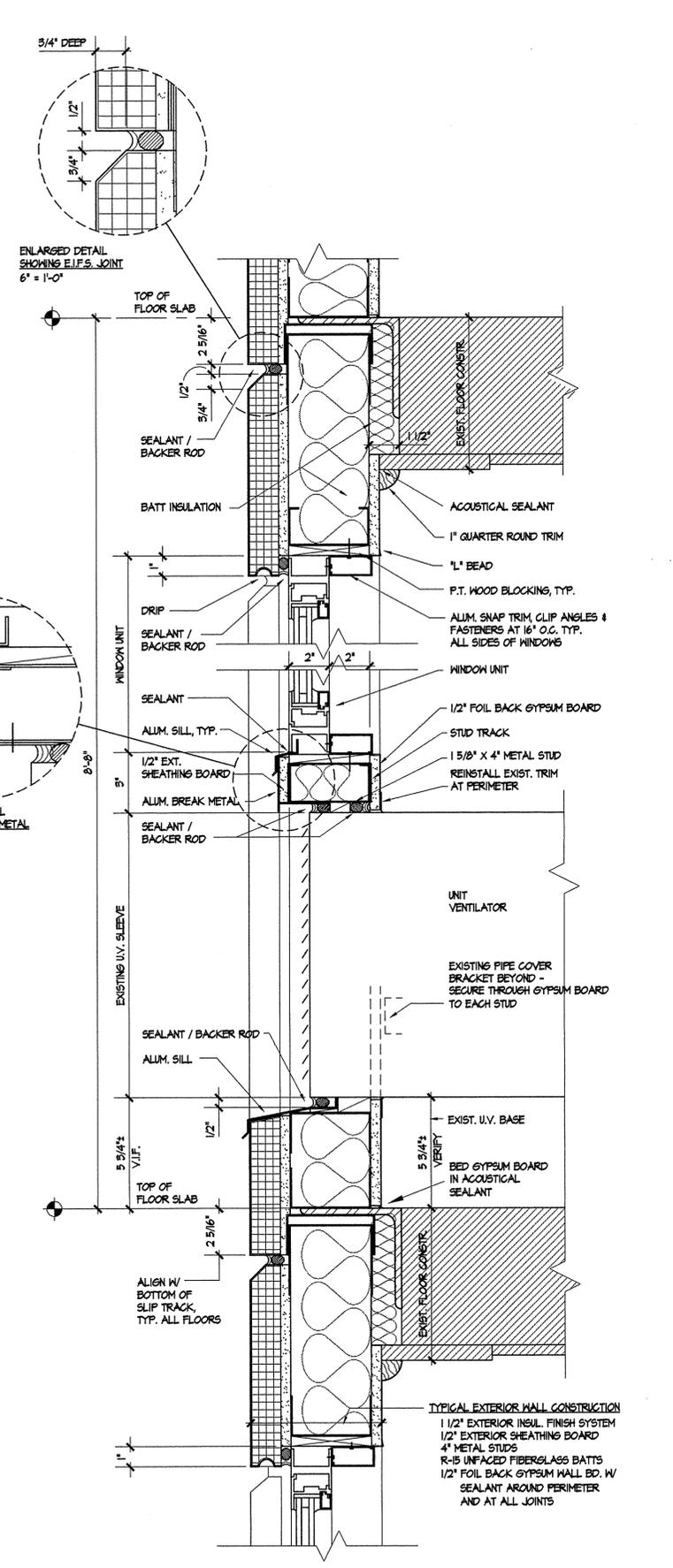
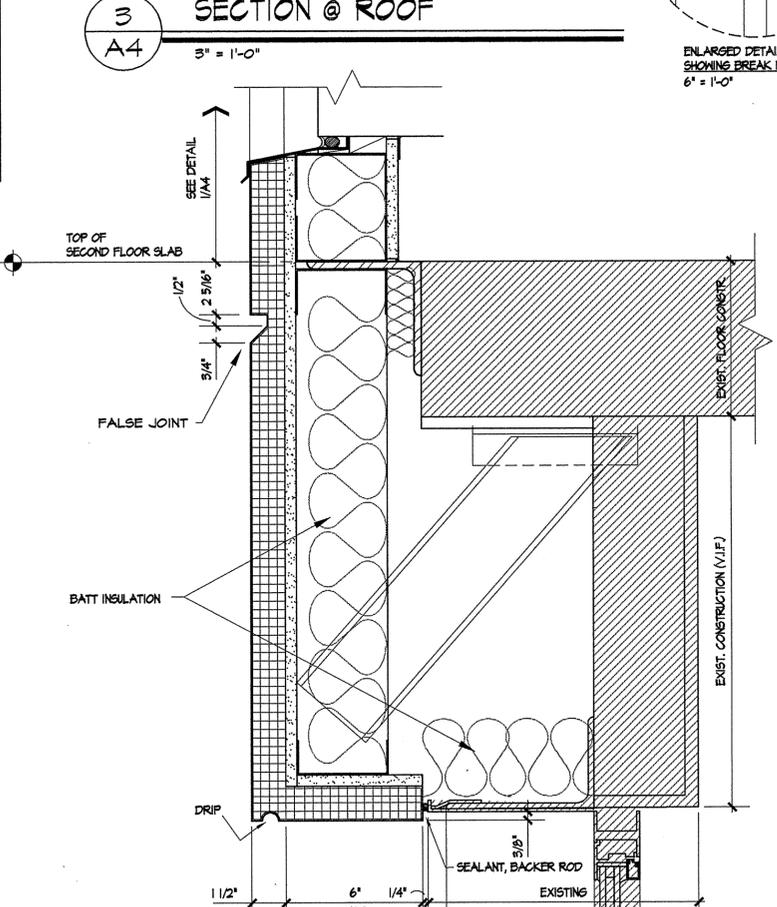
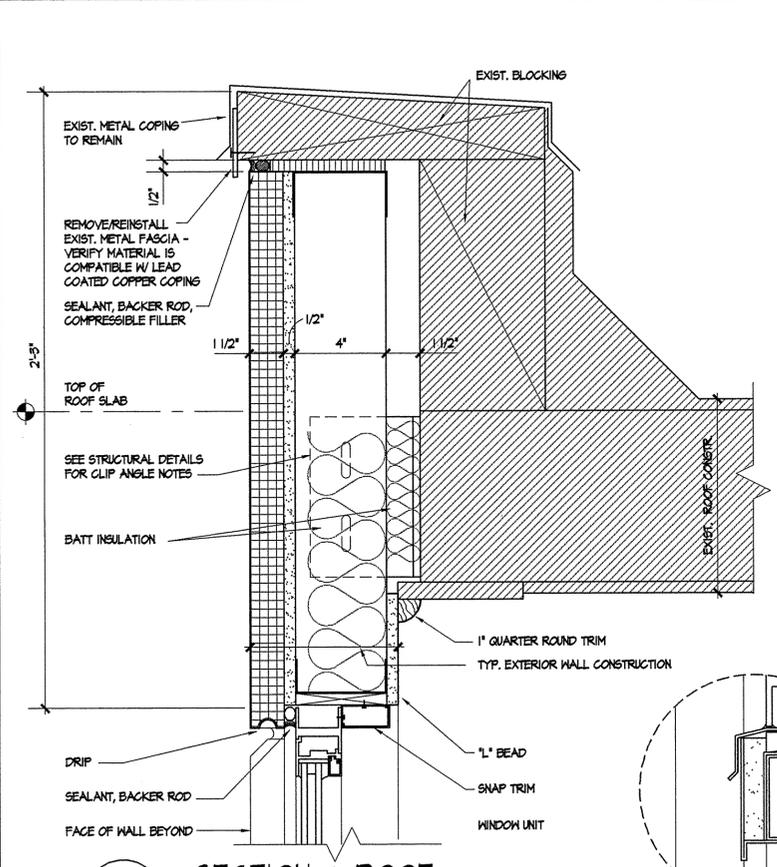
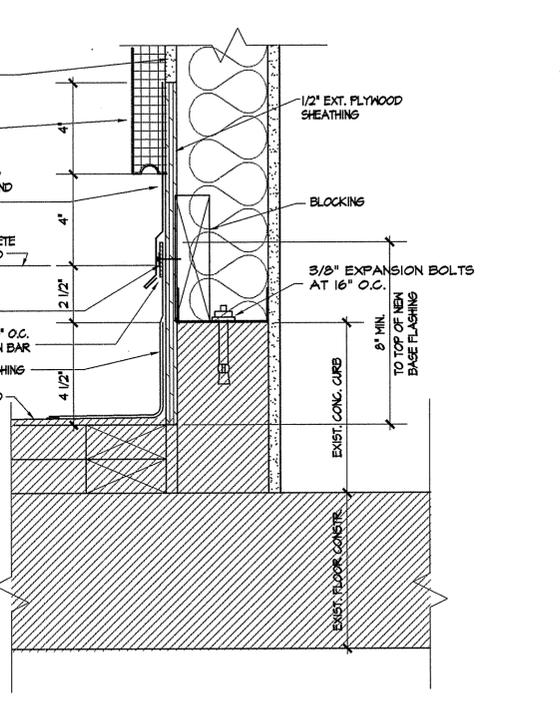
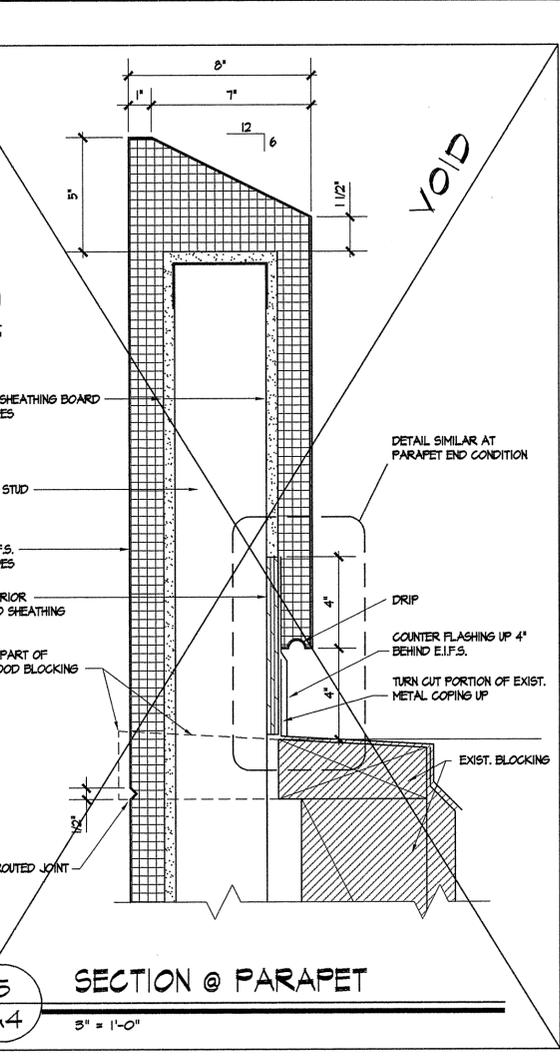
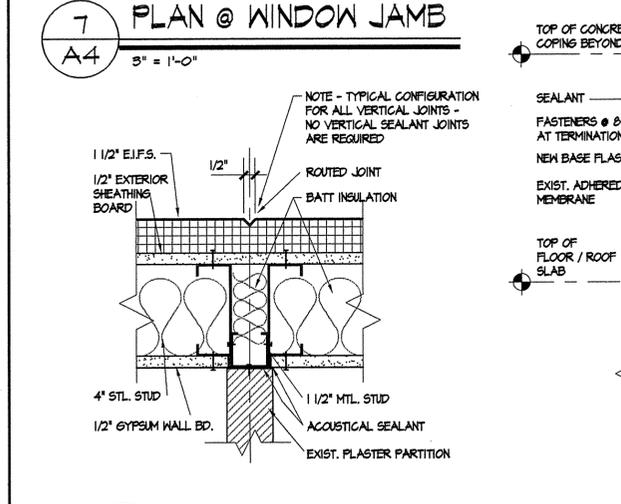
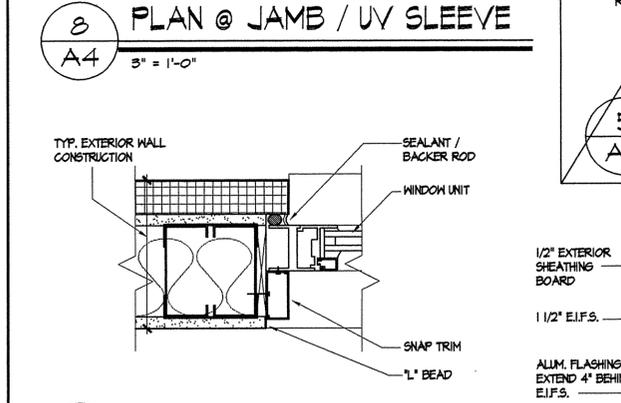
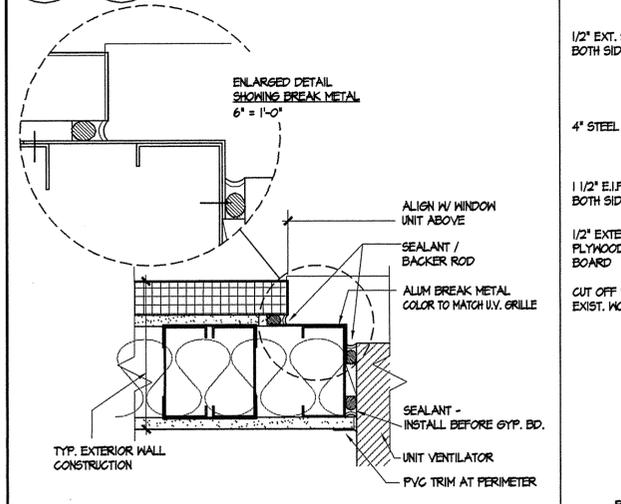
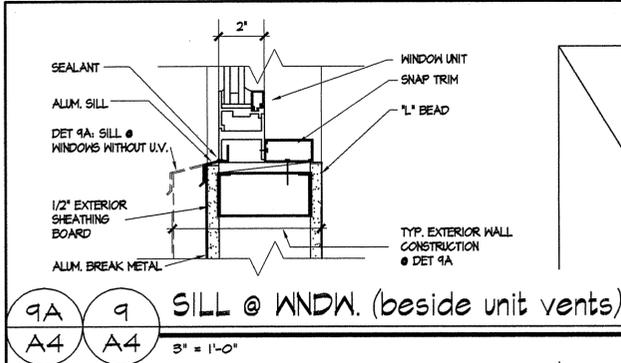


Exterior Wall Replacement
Building 172, Naval Education and Training Center
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SECTIONS, PART ELEVATIONS

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MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS
21 Church Street Waterbury, Connecticut 06702 (203) 756-8944 Fax (203) 756-8949

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DRAWING NUMBER **A3**



Exterior Wall Replacement
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Newport, Rhode Island

AMIES & WHITTAKER Architects
MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS
21 Church Street Waterbury, Connecticut 06702 (203) 756-8844 Fax (203) 756-8849

PROJECT NO. **9614**
DRAWN BY: SCP
CHECKED BY: TGA
SCALE: 3" = 1'-0"
DATE: 5-23-96
DRAWING NUMBER **A4**

31153-307

DIVISION 5

STRUCTURAL STEEL

- Description of Work**
- Work includes, but not necessarily limited to, the following:
 - All structural steel as shown on the drawings and as specified herein, including all items listed under Section 2 of the code mentioned below and shop painting.
 - Furnishing, fabricating, and erection of all structural steel: Conform to AISC "Code of Standard Practice for Steel Buildings and Bridges", unless otherwise specified.
 - Reference to AISC Specification shall mean the "Specification for Design, Fabrication, and Erection of Structural Steel for Buildings", latest edition.
- Submittals**
- Submit shop drawings for Architect's acceptance.
- Products**
- Structural Steel: ASTM Standard Specification A36.
 - Adhesive Dowelling Anchors: Hilli Corp., Tulsa, OK.
 - Expansion Bolts: Hilli Corp., Tulsa, OK.
 - High strength bolts ASTM A325.
 - Arc-Welding Electrodes: Conform to American Welding Society Specification A51. Electrode Classification: E70 Series.
 - Touch-up Paint: ZRC.
 - Galvanizing: A.S.T.M. Standard Specification A304.
- Shop Drawings**
- Complete erection drawings, shop details and dowelling anchors and expansion bolt setting plans, and index of all details of all structural steel are to be made by this Contractor and submitted for acceptance. The method of presenting information with respect to elevation of finished floors and roof shall conform to the method used on the design drawings. Such acceptance will cover the location of steel members in relation to walls, partitions, and openings and the general design of details only. All dimensions shall be Contractor's responsibility.
 - Field measure all existing conditions prior to submitting shop drawings and proceeding with fabrication.
- Preparation**
- Expansion and Adhesive Anchors: Expansion and adhesive anchors shall be placed with embedment in concrete as shown on drawings. Contractor to alert Architect immediately if placing of bolts interferes with existing rebars.
- Fabrication**
- Workmanship shall be equal to the best practice in the trade.
 - Holes: All holes shall be accurately drilled or punched at right angles to the member. Burning or drifting unfair holes will not be permitted. Holes that must be enlarged shall be reamed.
 - Steel shall be clean and straight.
 - Fitted plates shall be flush bearing against main member.
 - Welders: Welding for structural steel shall be performed by qualified welders and shall be in accordance with the "Structural Steel Welding Code" of the American Welding Society, latest edition, and with the AISC specification heretofore mentioned.
 - Welds: All welds shall be subject to visual inspection. All fillet welds may be subject to non-destructive testing when the appearance is suspect.
 - All shop connections shall be welded.
 - All field connections shall be anchored per details and specification. Provide washers under all elements turned.
 - All connections shall be sufficient to develop the capacity of the member for size and spans shown except where details or reactions are given, indicating a greater capacity.
 - Adhesive thread rod anchors are to be by Hilli Corp. Minimum size 5/8" diameter with a minimum concrete embedment of 7-1/2". Minimum ultimate shear capacity of 11,240# and bond strength of 17,500#. Installation shall be in strict accordance with manufacturer's requirements using appropriate Hilli adhesive, HT C-100. Provide temporary support of angle during curing phase of adhesive. See manufacturer's recommendation for minimum curing time.
 - Expansion bolts are to be by Hilli Corp., Type Kwik Bolt II carbon steel, minimum size 1/2" diameter, length 2-1/2" embedment.
 - All steel members, fasteners and their accessories shall be hot-dipped galvanized. Galvanizing shall be after all shop welded assemblies are completed.
 - Field touch-up all galvanized surfaces that have exposed bare steel.

COLD-FORMED METAL FRAMING

- Description of Work**
- Work includes types of cold-formed metal framing units including the following:
 - C-shaped curtain-wall steel studs for exterior walls.
 - Miscellaneous steel stud framing at soffits and fascias.
- Related Sections:**
- Structural Steel.
 - Exterior Insulation and Finish System, Sheet Metal Flashing and Trim.
 - Fascia and Soffit Systems.
 - Section for Fenestration systems.
- Submittals**
- Submit the following:
 - Product data and installation instructions for each item of cold-formed metal framing and accessories.
 - Shop drawings for components and installations not fully dimensioned or detailed in manufacturer's product data.
 - Include erection drawings for all framing members showing size and gage designations, number, type, location, and spacing. Indicate supplemental strapping, bracing, splices, bridging, accessories, and details required for proper installation. Coordinate with adjacent and applied systems and components.
 - Full plan or elevation views, as applicable, of each area of work.
 - Details of all connections, opening perimeters, and other special conditions.
- Quality Assurance**
- Component Design: Design is based on structural properties of studs in accordance with American Iron and Steel Institute (AISI) "Specification for Design of Cold-Formed Steel Structural Members", and wall system in accordance with applicable code provisions for wind and seismic for components and cladding.
 - Limit deflections as follows:
 - Metal framing and soffits/fascias: L/360.

DIVISION 7

INSULATION

- Unfaced fiberglass batt insulation ASTM 665.
 - Certainteed Corp. building insulation, 3-1/2" thick, R-15 or equal.
 - Extend insulation full thickness to envelop entire area to be insulated. Cut and fit tightly around obstructions. Fill voids with insulation.
 - Protect insulation from weather, replace any insulation that has gotten wet.
- EXTERIOR INSULATION & FINISH SYSTEM**
- Senergy Senerflex Wall System: Composite wall (and soffit) exterior insulation and finish system consisting of rigid insulation, base coat, reinforcing mesh and finish coat.
 - Applicator: Approved by Senergy, Inc. in performing work of this Section
 - Regulatory Requirements: Conform to applicable code requirements for finish system.
 - Deliver Senerflex Wall System materials in original unopened packages with manufacturer's labels intact.
 - Store Senerflex Wall System materials in cool, dry place protected from freezing. Store at no less than 4°C/40°F. Protect from extreme heat and direct sunlight.
 - Store insulation board flat and protected from direct sunlight and extreme heat. Do not apply Senerflex Wall System in ambient temperatures below 4°C/40°F. Provide supplementary heat during installation and drying period when temperatures less than 4°C/40°F prevail.
 - Do not apply Senerflex Wall System materials to frozen surfaces.
 - Coordinate and schedule installation of trim, flashing, and joint sealers to prevent water infiltration behind the system.
 - Provide Senergy, Inc. standard five-year labor and material warranty for Senerflex Wall System installations greater than 10,000 square feet of wall area.
 - Comply with Senergy, Inc. project review requirements and notification procedures to assure qualification for warranty.
 - Senerflex Wall System (Class PB System) manufactured by Senergy, Inc.
 - Senerprime: black tinted, 100% acrylic based sheathing primer.
 - Insulation Board: Expanded Polystyrene; ASTM C578, Type I; Flame spread less than 25, smoke developed less than 450 per ASTM E84, UL T23; minimum density 14.41 kg/m³ (1 lb./ft³); K=6.04 per millimeter (0.24 per inch); 19 mm (3/4" thickness minimum as indicated on Drawings; meeting the following:
 1. Air dried (aged) six weeks, or equivalent, prior to installation.
 2. Edges: Square within .8 mm per meter (1/32" per foot).
 3. Thickness: Tolerance of plus or minus 1.6 mm (1/16").
 4. Size: .6 m x 1.22 m (2' x 4').
 5. Length and width: Tolerance of plus or minus 1.6 mm (1/16").
 - Senerflex INSUL-FILTM: Trowel-applied, white, fluffy, insulation board gap-filler; manufactured by Senergy, Inc.
 - NC-II BASE: 100% acrylic polymer-based, non-cementitious base coat; manufactured by Senergy, Inc.
 - Water: Clean and potable without foreign matter.
 - Senerflex Reinforcing Mesh: MIL-Y-1140G; Balanced, open weave glass fiber reinforcing mesh; twisted multi-end strands treated for compatibility with Senerflex Wall System components.
 - FLEXGUARD 6: Standard/medium weight.
 - Corner Grid: Intermediate weight, for reinforcing at corners.
 - Senergy ASAP: 100% acrylic-based coating; manufactured by Senergy, Inc. for sealant joint preparation.
 - Senergy TINTED PRIMER: 100% acrylic-based primer; color to closely match the selected Senergy Finish Coat color; manufactured by Senergy, Inc.
 - Senergy Finish Coat: 100% acrylic resin finish; air cured, compatible with Base Coat; Finish color factory-mixed; color as selected; Finish texture SAHARA.

INSTALLATION

- Protect all surrounding areas and surfaces from damage and staining during application of Senerflex Wall System.
- Protect finished work at end of each day to prevent water penetration.
- Senerprime- required for Dens-Glas Gold, ext. plywood and OSB sheathing substrates.
 - Apply Senerprime uniformly to substrate with roller or good quality brush or spray as recommended by Senergy.
 - Note: apply to areas that will receive insulation board of same day.
 - Note: Senerprime shall be dry to the touch before proceeding to Base coat application.
- Senerflex insulation board:
 - Apply horizontally in a running bond.
 - Pre-cut insulation board to fit openings, projections. Insulation board must be a single piece around corners of openings. Stagger vertical joints and corners. Stagger insulation and sheathing board joints.
 - Sheathing Substrates: Apply mixed SENERQUICK ADHESIVE to entire surface of insulation board using a stainless steel trowel with 5 mm x 5 mm (3/16" x 3/16") notches spaced 5 mm (3/16") apart.
 - Immediately slide board into place and apply pressure over entire surface of board to ensure uniform contact and high initial grab. Do not allow SENERQUICK ADHESIVE/NC-II BASE to dry prior to installing.
 - Fill gaps between insulation boards with INSUL-FIL as noted below, or silvers of insulation board.
 - Allow application of insulation board to dry (normally 8 to 10 hours) prior to application of NC-II BASE/Reinforcing Mesh.
 - Install expansion joints and other joints as indicated on Drawings. Do not align aesthetic grooves with insulation board joints.
- Senerflex INSUL-FIL
 - Apply mixed INSUL-FIL to minor gaps (13 mm 1/2") maximum width between insulation boards with a clean, stainless steel trowel. Gaps larger than 12 mm (1/2") must be filled with silvers of insulation board.
 - Fill gaps completely and to a minimum depth of 19 mm (3/4").
 - Ensure wet INSUL-FIL material is level with or slightly above the surface of insulation board.
 - Remove excess INSUL-FIL from face of insulation board.
 - Allow INSUL-FIL to dry completely, normally 24 hours, before rasping flush with adjoining insulation boards.
- NC-II BASE/Reinforcing Mesh: NC-II BASE shall be applied so as to achieve Reinforcing Mesh embedment with no Reinforcing Mesh color visible.
 - Senerflex CORNER GRID:
 - Install CORNER GRID at exterior corners.
 - Apply CORNER GRID prior to application of FLEXGUARD Reinforcing Mesh.
 - Cut CORNER GRID to workable lengths.
 - Immediately place CORNER GRID against the wet NC-II BASE and embed the CORNER GRID into the NC-II BASE is dry and hard, apply a layer of FLEXGUARD 6 Reinforcing Mesh over the entire surface of the CORNER GRID as noted below.
 - FLEXGUARD 6 Reinforcing Mesh:
 - Install FLEXGUARD throughout.
 - Apply mixed NC-II BASE to entire surface of insulation board with a stainless steel trowel to embed the Reinforcing Mesh.
 - Immediately place FLEXGUARD 6 Reinforcing Mesh against wet NC-II BASE and embed the Reinforcing Mesh into the NC-II BASE by troweling from the center to the edges.

- Lap Reinforcing Mesh 64 mm (2-1/2") minimum at edges.
- Ensure Reinforcing Mesh is continuous at corners, free of wrinkles and embedded in NC-II BASE so that no Reinforcing Mesh color is visible.
- If required, apply a second layer of NC-II BASE to achieve total nominal NC-II BASE/Reinforcing Mesh thickness of 1.6 mm (1/16").
- Allow NC-II BASE with embedded Reinforcing Mesh to dry hard (normally 8 to 10 hours).
- Senergy ASAP:
 - Apply material to the NC-II BASE/Reinforcing Mesh in sealant joints with a high-quality, latex-type paint brush.
 - Work material continuously until a uniform appearance is obtained.
 - Allow to dry thoroughly (approximately 24 hours) prior to application of sealant primer and sealant.
- Senergy TINTED PRIMER:
 - Apply TINTED PRIMER to the NC-II BASE/Reinforcing Mesh with a sprayer.
 - 10 mm (3/8") nap roller, or good-quality latex paint brush at a rate of approximately 150-250 sf per gallon.
 - TINTED PRIMER shall be dry to the touch before proceeding to the Senergy Finish Coat application.
- Senergy Finish Coat:
 - Apply Finish Coat directly to NC-II BASE/Reinforcing Mesh with a clean stainless steel trowel.
 - Apply and level Finish Coat during same operation to minimum obtainable thickness consistent with uniform coverage.
 - Maintain a wet edge on Finish Coat by applying and texturing continually over the wall surface.
 - Work Finish Coat to corners, joints, or natural breaks and do not allow material to set up within an uninterrupted wall area.
 - Float Finish Coat to achieve final texture.
 - Clean adjacent surfaces and remove excess material, droppings, and debris.
 - Protect finished work.

SEALANTS

- Provide continuous acoustical sealant where new gypsum board meets floor, walls and ceiling and at all joints. ASTM C834.
 - Pecora AC-20-FTR, BA-48 or equal.
- Exterior, elastomeric sealant - urethane base, type S, grade NS, class 25, exposure NT.
 - Pecora Dynatrol I.
- Use joint filler compatible with sealant manufacturer's recommendations.

DIVISION 8

METAL WINDOWS

- New clear anodized aluminum thermally broken fixed window units. Conform to NETC alteration project specification requirements. Finish to match WINCO replacement window units.
 - Extruded members shall be 6063 T6 aluminum alloy, minimum 1/8" thickness.
 - Thermal insulator between interior and exterior members to be poured in place polyurethane.
 - Extruded aluminum snap-in glazing bead to accept glazing up to 1" thick.
 - Insulated glazing to be (2) panes of 3/16" clear annealed glass separated by a 1/2" air space.
- Existing metal windows to be removed from aluminum curtain wall system and reinstalled in new metal stud framed exterior wall system.
 - Remove existing sealant form perimeter of window frames.
 - Install level and plumb, check that operable sash function properly.
- Installation at new and reinstalled windows to be with new extruded aluminum clip angles and snap trim.
- Provide new extruded aluminum sills and aluminum trim at all new and reinstalled window units and at unit ventilators on floors 2, 3 and 4. Finish to match WINCO replacement window units.

DIVISION 9

PAINTING

- Paint new gypsum board, touch up existing plaster and wood ceiling trim.
- Prime new gypsum board and wood trim per manufacturer's recommendations.
- Match existing paint material, color and sheen.

GYPSUM BOARD

- Interior Fall Back Gypsum Board: ASTM C58B thickness as indicated, non-rated with tapered edge.
 - Trim Accessories: ASTM C840; manufacturer's standard trim accessories, including cornerbead and edge trim of beaded type with face flanges for concealment in joint compound.
 - Gypsum Board Joint Treatment Materials: ASTM C 475 and ASTM C 840 and as follows:
 - Joint Tape: Paper reinforcing tape.
 - Drying-Type Joint Compounds: Factory-prepackaged, pre-mixed, vinyl-based all-purpose compound.
 - Install and finish gypsum board to comply with ASTM C 840 and as follows:
 - Isolate drywall construction from abutting structural and masonry work; provide edge trim and acoustical sealant as recommended by manufacturer.
 - Screw gypsum board to supports.
 - Drywall Finishing: Apply joint tape and joint compound at joints between gypsum boards. Apply compound at accessory flanges, penetrations, fastener heads and surface defects.
 - Install compound in 3 coats (plus prefill of cracks where recommended by manufacturer); sand between coats and after last coat.
 - Exterior Sheathing Board: 1/2" Dens-Glas Gold, 1/2" exterior plywood-exposure I or OSB exposure I.
 - Install sheathing board with Water head corrosion resistant fasteners manufactured by Bulldex corporation. Space fasteners to accommodate 110 mph wind speed.

Exterior Wall Replacement
 Building 172, Naval Education and Training Center
 Newport, Rhode Island

SPECIFICATIONS

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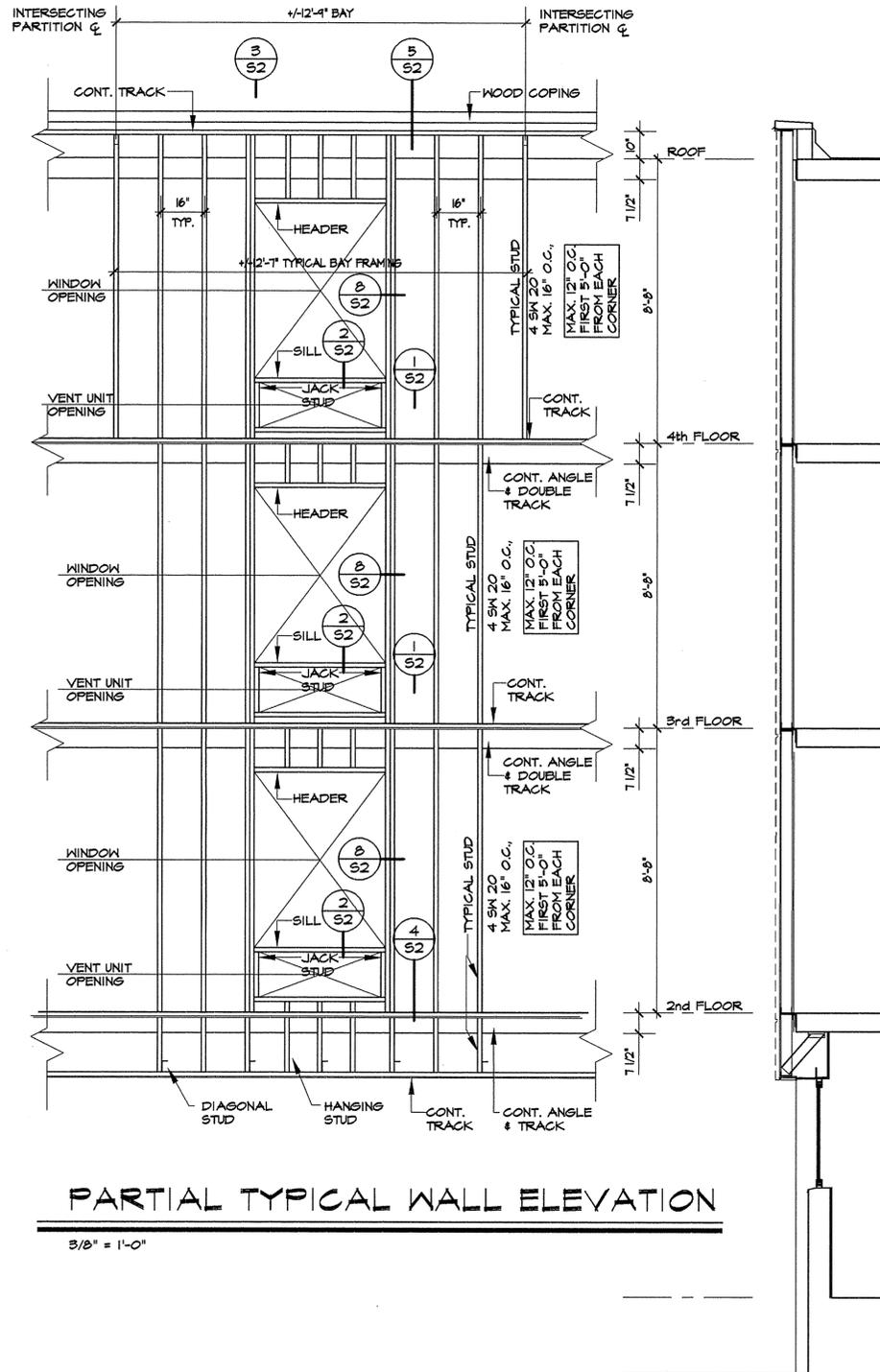
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 Waterbury, Connecticut 06702 (203) 756-8844
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PROJECT NO.
9614

DRAWN BY: DB
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 SCALE: N.A.
 DATE: 5-23-96

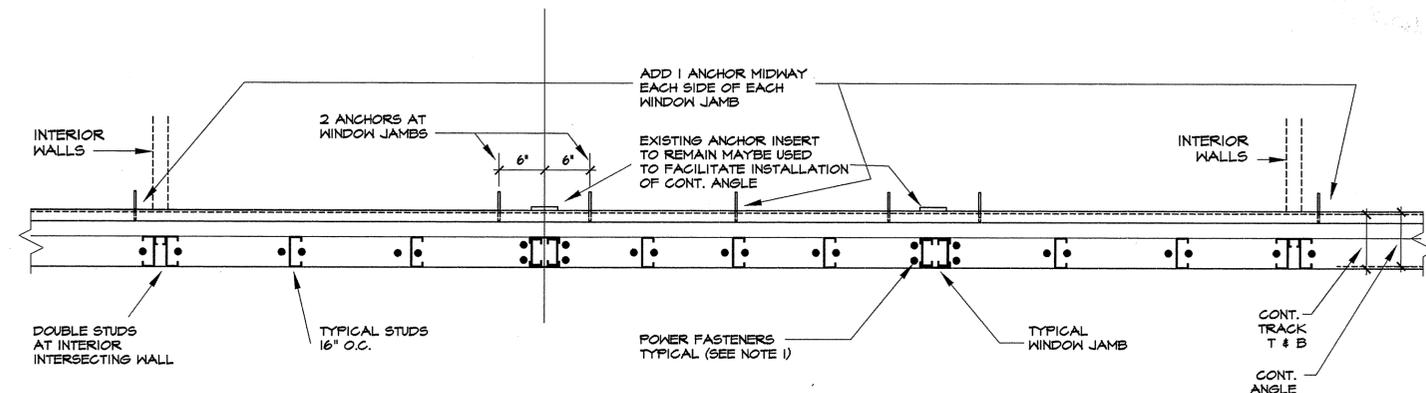
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31154-307



PARTIAL TYPICAL WALL ELEVATION

3/8" = 1'-0"



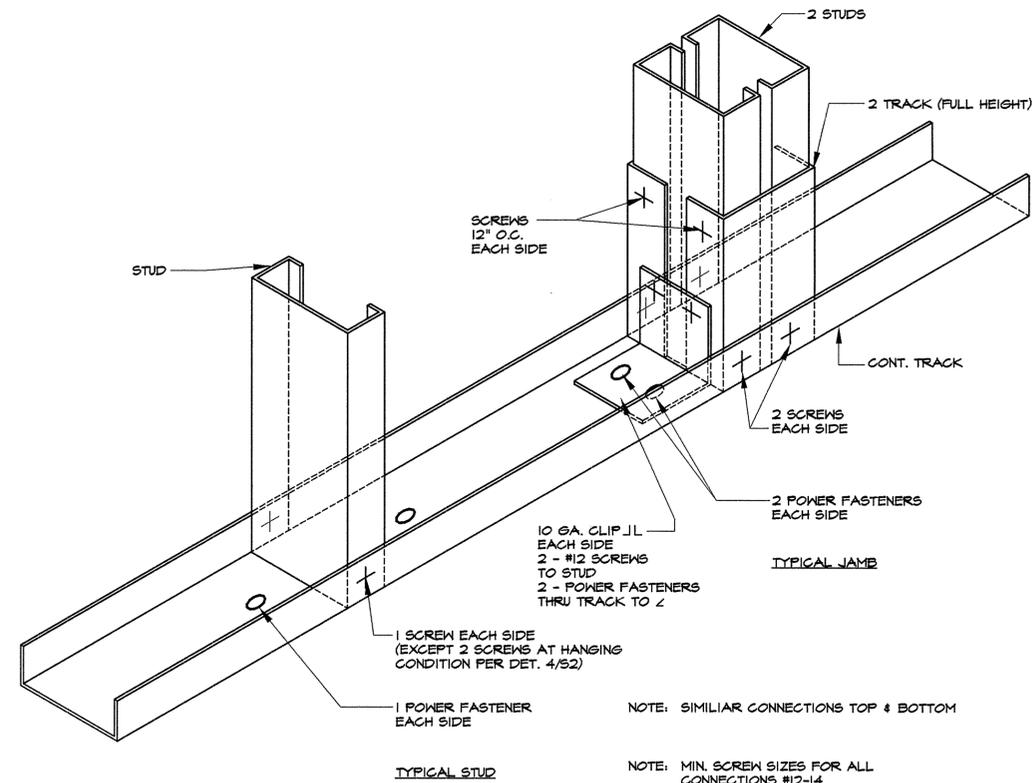
TYP. PLAN OF ANCHOR LOCATION FOR CONT. 5 X 5 ANGLE, 2ND, 3RD & 4TH FLOOR

1" = 1'-0"

MAX. 9" FROM END OF CONC, SEE DET. 10 / S2

NOTE 1:

- TYP. TRACK TO 5 X 5 ANGLE ALL LEVELS (POWER FASTENER SHOWN THUS ●)
- MIN. SHANK 0.171"
- (2) AT EACH SINGLE STUD, ONE EACH SIDE
- (4) AT EACH WINDOW JAMB, TWO EACH SIDE



PARTIAL TYPICAL WALL ELEVATION

3" = 1'-0"

Exterior Wall Replacement

Building 172, Naval Education and Training Center
Newport, Rhode Island

STRUCTURAL DETAILS

Tor Smolen Calini & Anastos, Consulting Engineers

424 Chapel Street PO Box 8206 New Haven, CT 06530 (203) 866-1174

AMES & WHITTAKER Architects

21 Church Street Waterbury, Connecticut 06702 (203) 756-8944 Fax: (203) 756-8849

PROJECT NO.

9614

DRAWN BY: DB

CHECKED BY: AC

SCALE: AS NOTED

DATE: 5-23-96

DRAWING NUMBER

S1

