State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Department of Administrative Services
Kimberly Hood
Executive Director

Division of Facilities Construction and Management
David G. Buxton
Director

ADDENDUM

Date:	20 August 2007	
To:	Contractors	
From:	Darrell Hunting, DFCM – Project Manager	
Reference:	UCAT – BATC West Campus Renovations and Improvements. DFCM Project No. 07138210	
Subject:	**Addendum No. 1**	
Pages	Cover Page	1 page
	Revised Schedule	1 page
	Addendum	2 pages
	Details	8 pages
	Spec section 09111	5 pages
	Spec section 09671	4 pages
	Prior Approvals	1 page
	Total	**22 pages**

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

1.1 SCHEDULE CHANGES – There has been changes to the project schedule, the new bid date is August 23, 2007 at 3:30 PM.

1.2 GENERAL – See attached "Addendum No. 01"

Stage II
PROJECT SCHEDULE – REVISED
PER ADDENDUM NO. 1 ISSUED AUGUST 20, 2007

PROJECT NAME: **WEST CAMPUS RENOVATION/IMPROVEMENTS – BATC CAMPUS**
UTAH COLLEGE OF APPLIED TECHNOLOGY – LOGAN, UTAH
DFCM PROJECT #: **07138210**

Event	Day	Date	Time	Place
Stage II Bidding Documents Available	Wednesday	August 1, 2007	2:00 PM	DFCM 4110 State Office Building SLC, UT and the DFCM web site*
Mandatory Pre-bid Site Meeting	Wednesday	August 8, 2007	10:30 AM	1000 West 1400 North Logan, UT Use west entrance
Deadline for Submitting Questions	Monday	August 13, 2007	4:00 PM	Darrell Hunting – DFCM E-mail dhunting@utah.gov
Addendum Deadline (exception for bid delays)	**Monday**	**August 20, 2007**	**2:00 PM**	**DFCM web site**
Prime Contractors Turn in Bid and Bid Bond	**Thursday**	**August 23, 2007**	**3:30 PM**	**DFCM** **4110 State Office Building** **SLC, UT**
Subcontractors List Due	**Friday**	**August 24, 2007**	**3:30 PM**	**DFCM** **4110 State Office Building** **SLC, UT** **Fax 801-538-3677**
Substantial Completion Date	Friday	November 30, 2007	5:00 PM	Project site

* **NOTE: DFCM's web site address is http://dfcm.utah.gov**

addendum 001

project: BATC Bourns Building Remodel

project no.: 06645

date: August 16, 2007

owner:

bid date: 08/23/2007

bid time: 03:30 AM

no. pages:

This Addendum shall be considered part of the Contract Documents and Project Manual for the above mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract Documents and Project Manual, the Addendum shall govern and take precedence.

Drawings

Item	Description
AE 101	Wall Types Legend - all new stud walls to be steel studs as per new Wall Types Legend, use wood studs only at repair of existing stud walls. See attached revised legend ADD 001.
C1/AE 101	Detail revised with metal studs. See attached ADD 002.
A3/AE 101A	The dimensions have been revised to reflect metal studs instead of wood studs for new walls. See attached ADD 006.
A6/AS001	Existing concrete driveway approach to remain, provide new concrete slab at door threshold as indicated.See attached revised detail ADD 007
A1/AE 101	Detail revised with metal studs. See attached ADD 004.
B1/AE101	Detail revised with metal studs. See attached ADD 003.
A2/AE 101	Detail revised with metal studs. See attached ADD 005.
A3/AE101	Door to existing boiler room to remain. See attached partial plan ADD 008
B1/AE111	All studs to be steel.
A1/AE111	All studs to be steel.
D101	Door to existing boiler room to remain. See attached partial plan ADD 008.
A1/ME 501	Add the following note to the detail: "Single ply membrane roofing by Carlisle's to match existing roofing system. All work to be in compliance with Manufacturer's recommendations and warranty requirements.Provide Owner written confirmation that the work maintains the existing warranty.
D1/AE 501	Cabinet type SB020 to be 34" to top of countertop to meet accessibility requirments, provide finished ends on countertop each side of this cabinet.
AE 501	All wood studs to be steel studs.
AE 601	Door and frame schedule: Door 101-1 to have HM frame, not aluminum.
D101	Remove existing wall mounted gas lines and electrical outlets not in service on west walls of Rooms 103, 108, 109, 111, 112, and the column at grids B/5; confirm service status with Owner prior to work. Cap off above new ceiling, maintain any "downstream" service. Cut off any vent or exhaust fan

	ductwork not in service that would be below new ceiling.

Specifications

Item	Description
Section 09110	Add this specification section 09111 Non-Load bearing Steel Framing.
Section 08710-10	Hardware Group 2, Door #112-1 modify as follows: -provide 1 classroom lock instead of 2 -delete the removable mullion -provide 1 cylinder instead of 2 -2 surface closers to be 4041 HEDA instead of 4041 EDA -add 2 flush bolts, 555 Rockwood (top & bottom)
Section 0900	Flooring Types F2 & F3 to be Concrete Coatings Incorporated (or equivilent) 2 coat epoxy with integral color. Delete all reference to "traffic coatings".
Section 01500, 1.1B-Temporary Facilities	Owner will allow Contractor to use on site waste disposal facilities for demolition and construction debris. Any hazardous materials to be disposed of by Contractor. Owner will allow Contractor to utilize existing facility's Sanitary Facilities.

Details

Item	Description
none	see above

Approvals

In addition to the manufacturers called out in the contract documents, the following manufacturers, trade names and products are acceptable with the provisions that they shall completely satisfy every requirement of the drawings, specifications, and all addenda, and shall conform to the design, quality and standards specified, established and required for the complete and satisfactory installation and performance of the building and all its respective parts. Any costs incurred due to the use of the following manufacturers shall be paid by the contractor.

Section	Material	Manufacturer	Action
Section 10100	Visual Display Boards	Aarco	Approved

End of Addendum # 001

cc :

WALL TYPES LEGEND

W1	EXISTING PRECAST CONCRETED TILT-UP WALL WITH EXTERIOR INSULATION
W2	EXISTING INTERIOR PRECAST TILT-UP CONCRETE WALL
W3	EXISTING 2"X4" STUD WALL WITH 2 LAYERS $\frac{5}{8}$" GYP BOARD EACH SIDE ADJACENT TO AND INCLUDED IN NEW WORK. MAINTAIN EXISTING WALL, PATCH AND REPAIR EXISTING WALL WHERE REQUIRED
W4	NEW 3 5/8" MTL STUD WALL WITH $\frac{5}{8}$" GYPSUM BOARD & BATT INSULATION, EXTEND TO 12" ABOVE FINISH CEILING, BRACE TO STRUCTURE AT 48" O.C. MAXIMUM
W5	NEW 3 5/8" OR 6" MTL. STUD WALL WITH $\frac{5}{8}$" TYPE 'X' GYPSUM BOARD EACH SIDE W/ BATT INSULATION, EXTEND TO STRUCTURAL ROOF DECK- SEE DIMENSION PLAN FOR WIDTH.
W6	NEW 3 5/8" MTL. STUD WALL WITH $\frac{5}{8}$" GYPSUM BOARD, EXTEND TO 12" ABOVE FINISH CEILING, BRACE TO STRUCTURE AT 48" O.C. MAXIMUM WITH SOUND BLANKET INSULATION, EXTEND INSULATION ACROSS CEILING 4' BOTH SIDES
W7	EXISTING INTERIOR PRECAST TILT-UP CONCRETE WALL WITH FURRING

NOTES

1) 1/2" CEMENTITIOUS BACKER BOARD, IN LIEU OF GYP. BD., REQUIRED BEHIND ALL WALL TILE OR F.R.P. PANELS.
2) WHERE SHOWN - ALL FURNITURE SHOWN DASHED ARE FOR REFERENCE ONLY, SEE PLANS AND SPECIFICATIONS FOR ANY BASE CONTRACT FURNITURE TO BE PROVIDED.
3) SOUND BATT INSULATION TO RUN FULL LENGTH AND HEIGHT OF STUD WALLS, EXTEND OVER ADJACENT CEILINGS 4'
4) WHERE FINISH IS NOT NOTED PROVIDE FINISH OF ADJACENT WALL OR FLOOR SURFACE.
5) ALL EXPOSED STRUCTURAL STEEL, DUCTWORK, CONDUIT, PIPING, ETC., THAT IS EXPOSED TO VIEW SHALL BE FULLY PAINTED; COLOR BY ARCHITECT.

WALL TYPES LEGEND

Scale:

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Detail Number

ADD 001

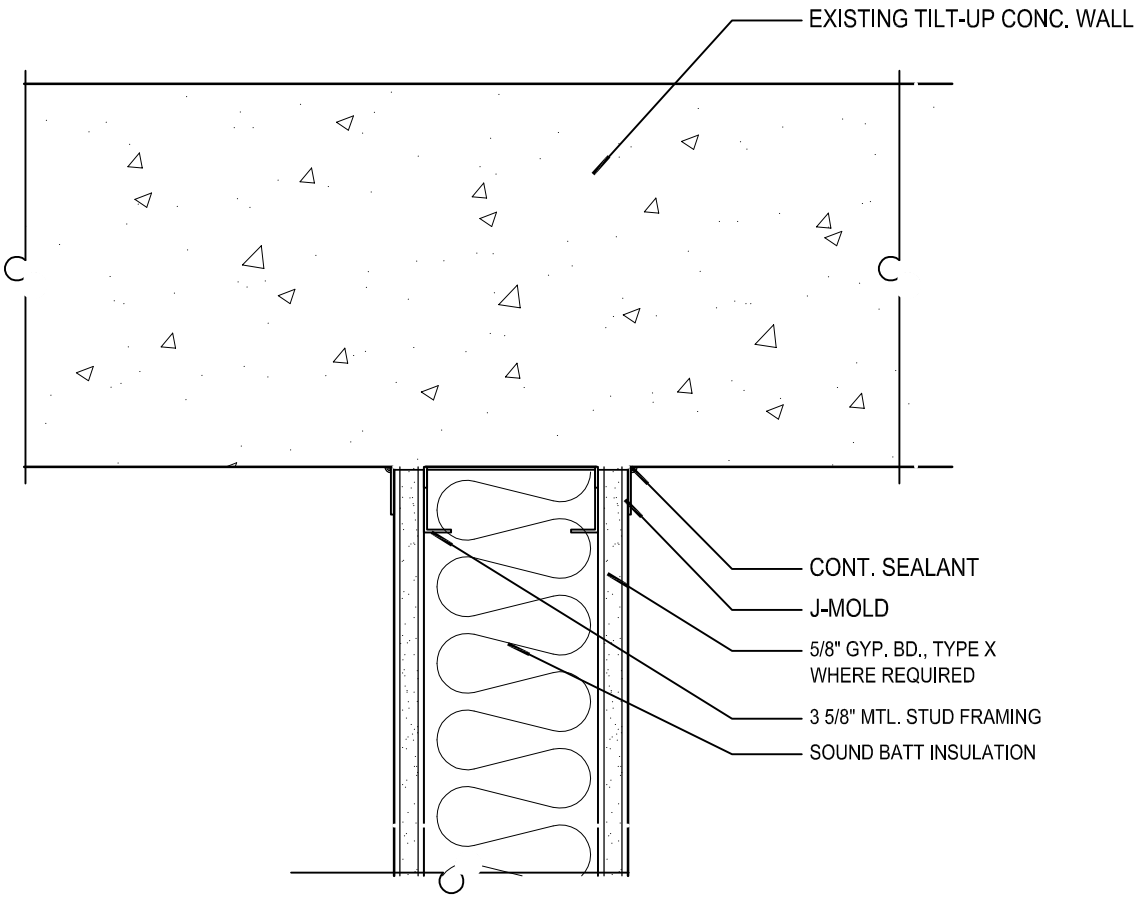
Issued:

VCBO Architecture

BRIDGERLAND APPLIED TECHICAL COLLEGE

VETERINARY TECHNICIAN CLASSROOM AND LABORATORY

04/18/07



C1 AE 101 - PLAN DETAIL @ STUD WALL TO TILT UP

Scale: 3" = 1'-0"

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Detail Number

ADD 002

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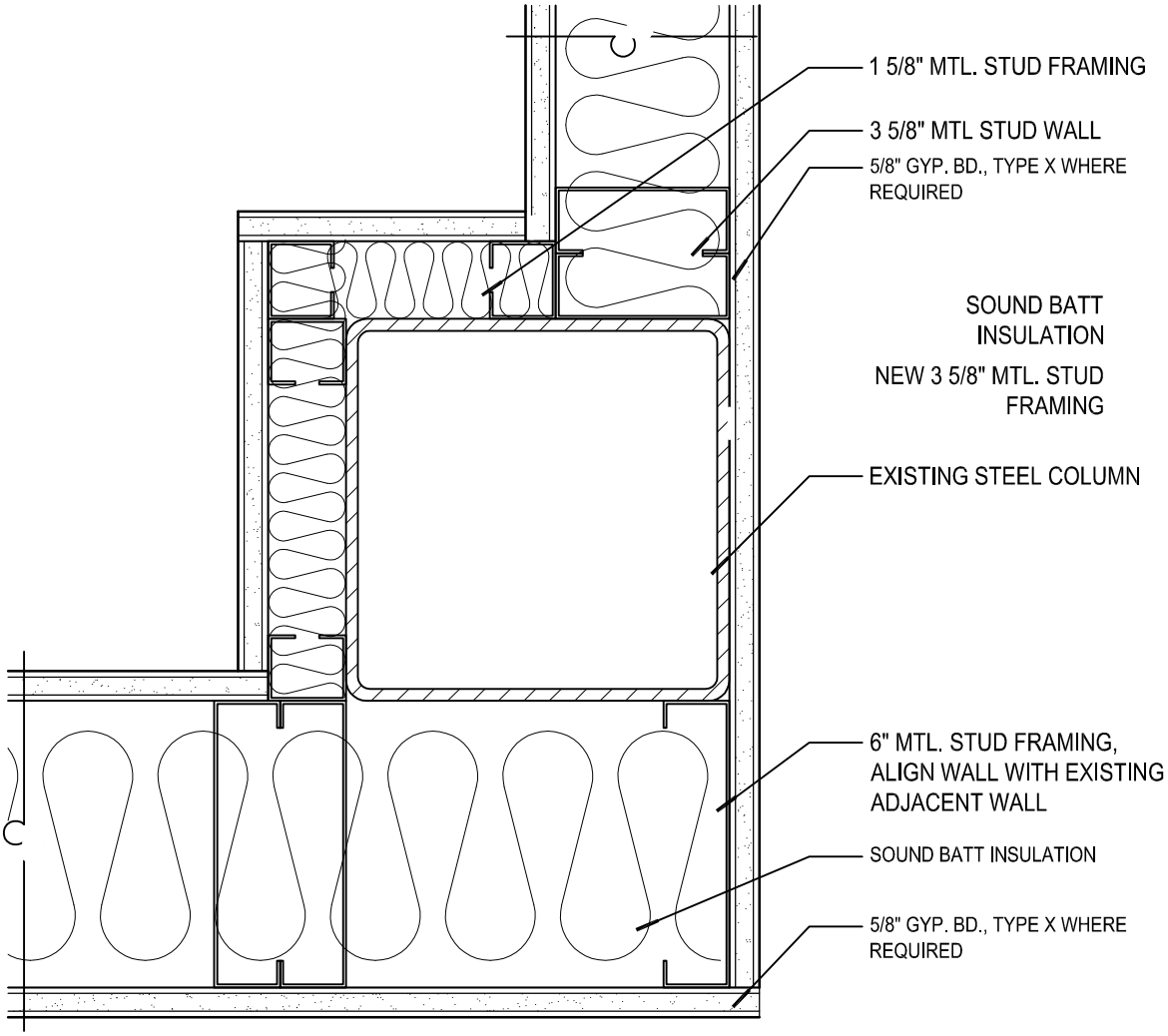
VCBO Architecture
BRIDGERLAND APPLIED TECHICAL COLLEGE

VETERINARY TECHNICIAN CLASSROOM AND LABORATORY



A1 AE101 PLAN DETAIL @ COLUMN

Scale: 3" = 1'-0"

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Detail Number

ADD 004

VCBO Architecture

BRIDGERLAND APPLIED TECHICAL COLLEGE

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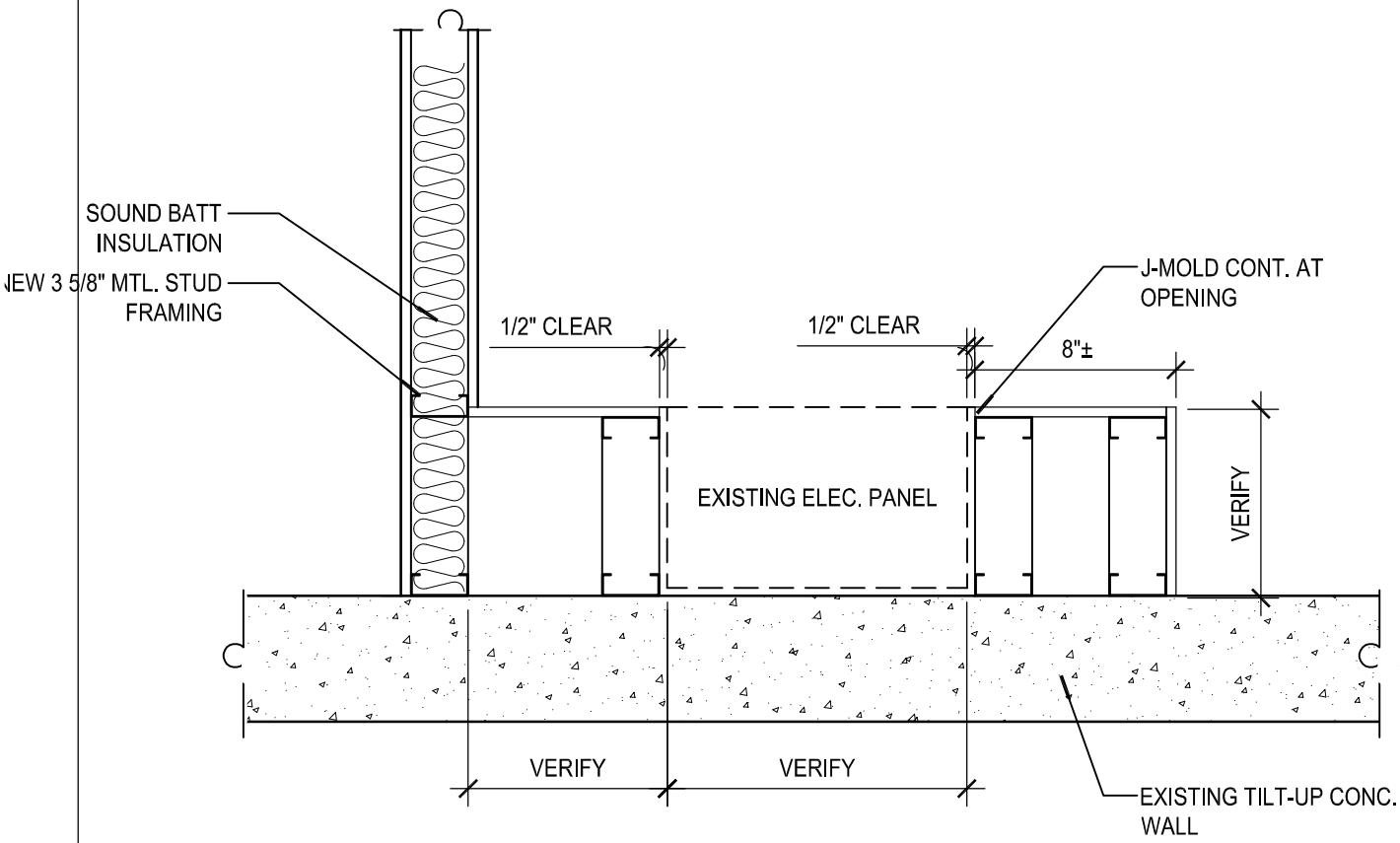
VETERINARY TECHNICIAN CLASSROOM AND LABORATORY

Revised: 8/17/2007



PLAN DETAIL @ EXISTING ELECTRICAL PANEL

Scale: 1" = 1'-0"

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Detail Number

ADD 005

VCBO Architecture

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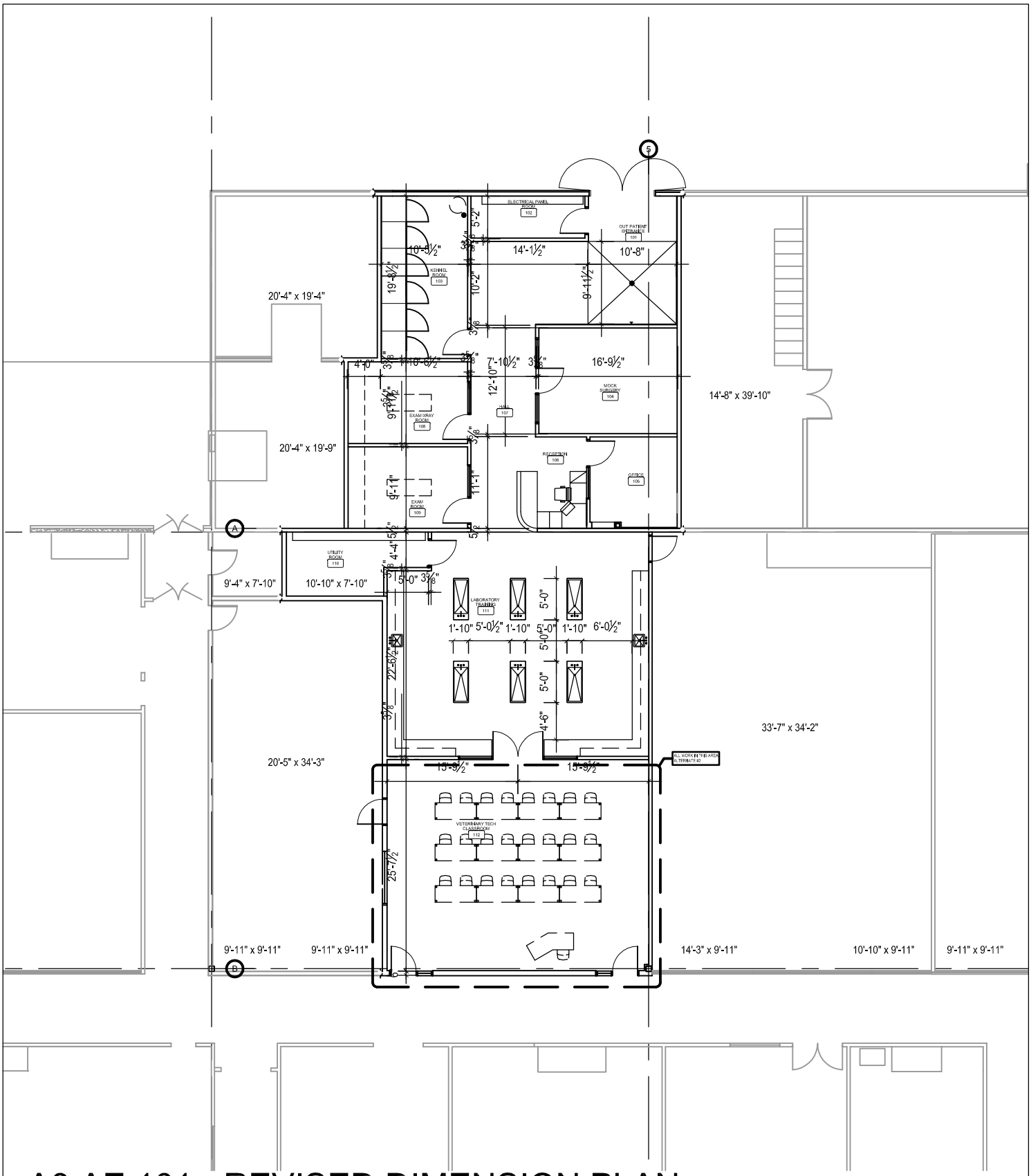
VETERINARY TECHNICIAN CLASSROOM AND LABORATORY

Issued: 07/18/07

Revised: 8/17/2007



A3 AE 101 - REVISED DIMENSION PLAN

Scale: 1/16" = 1'-0"

VCBO

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VETERINARY TECHNICIAN CLASSROOM AND LABORATORY

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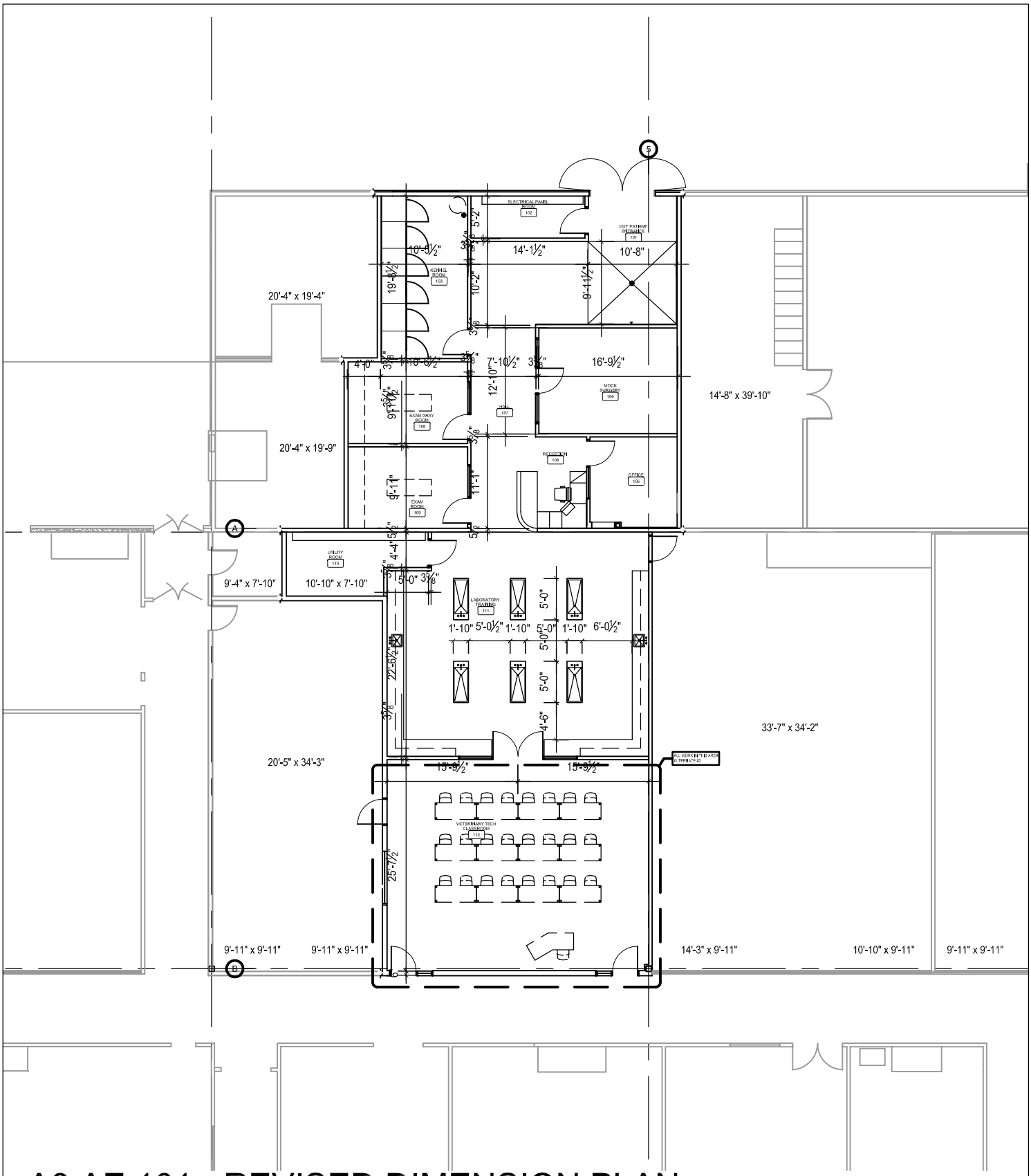
Detail Number

ADD 006



A3 AE 101 - REVISED DIMENSION PLAN

Scale: 1/16" = 1'-0"

VCBO

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VETERINARY TECHNICIAN CLASSROOM AND LABORATORY

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Detail Number

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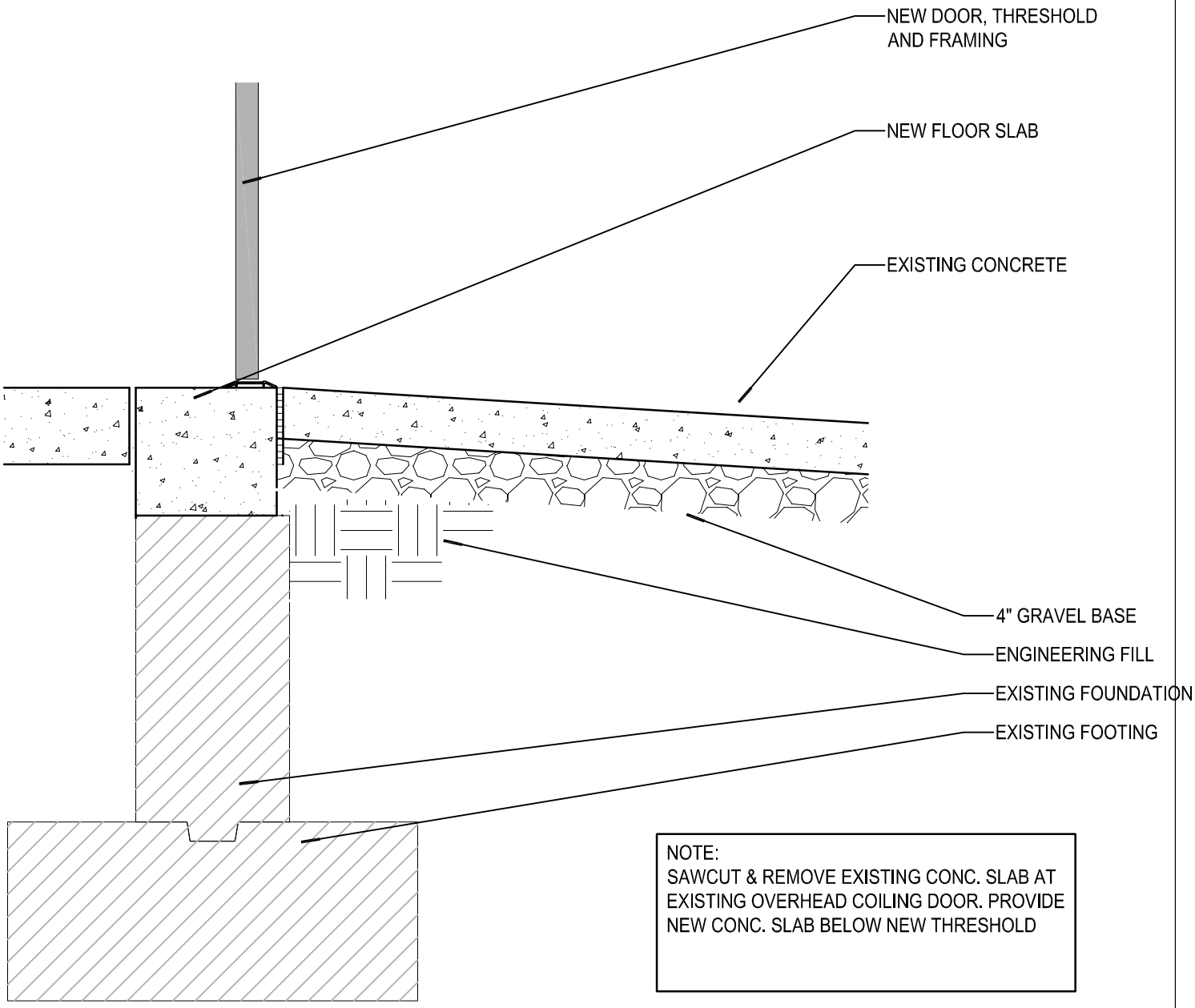

NOTE:
SAWCUT & REMOVE EXISTING CONC. SLAB AT EXISTING OVERHEAD COILING DOOR. PROVIDE NEW CONC. SLAB BELOW NEW THRESHOLD

A6 AS 001 - SILL @ DOOR 101

Scale: 1" = 1'-0"

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Detail Number
ADD 007

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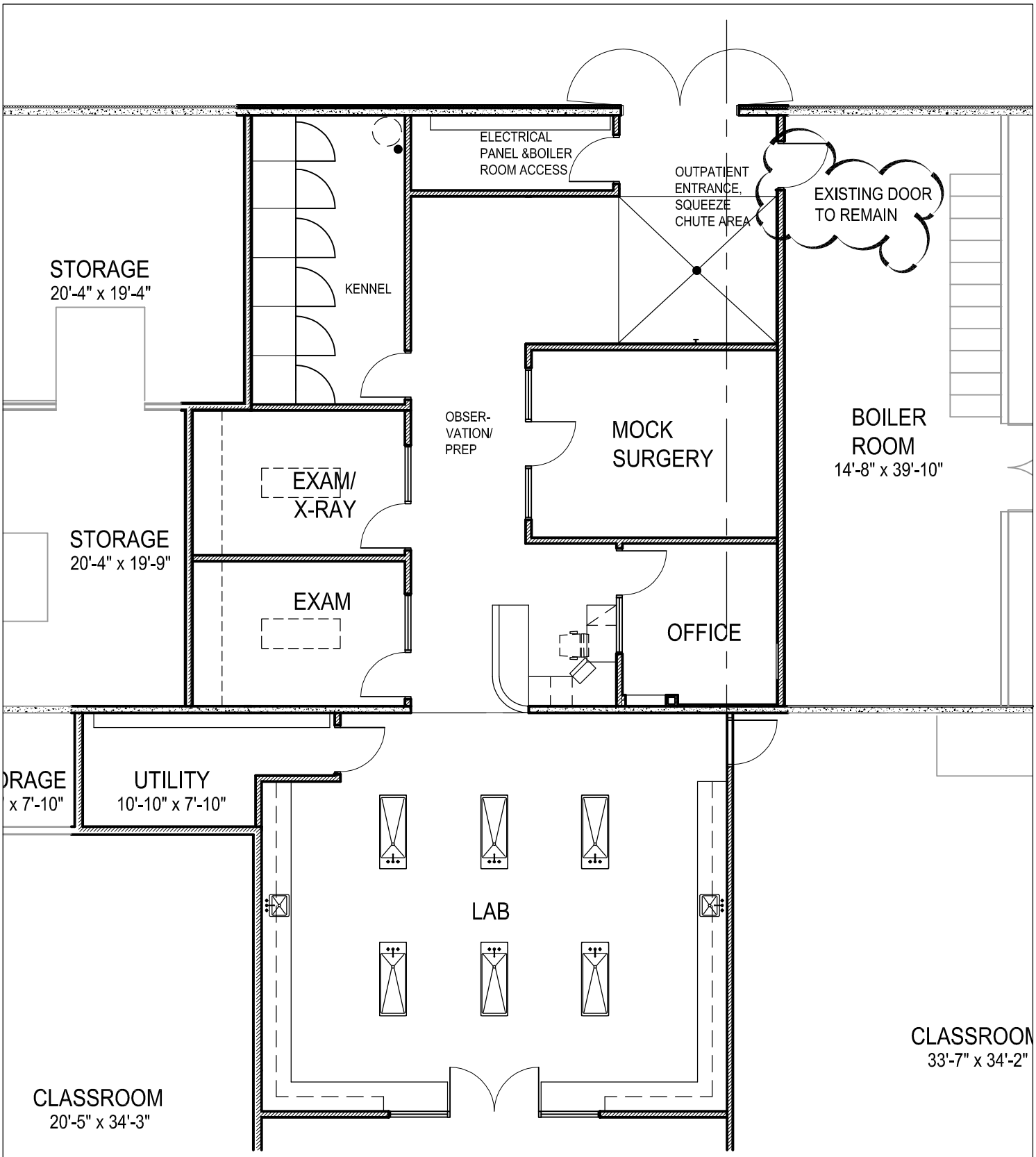
VETERINARY TECHNICIAN CLASSROOM AND LABORATORY



A3 AE 101 - REVISED PARTIAL FLOOR PLAN

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Detail Number

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SECTION 09111 NON-LOAD-BEARING STEEL FRAMING

August 17, 2007

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes **non-load-bearing** steel framing members for the following applications:
   1. **Interior framing systems** (e.g., supports for partition walls, framed soffits, furring, etc.).
   2. **Interior suspension systems** (e.g., supports for ceilings, suspended soffits, etc.).

B. Related Sections include the following:
   1. **Division 7** Section "**Building Insulation**" for insulation installed with Z-shaped furring members.
   2. **Division 7** Section "**Fire-Resistive Joint Systems**" for head-of-wall joint systems installed with non-load-bearing steel framing.
   3. **Division 9** Section "**Gypsum Board Shaft-Wall Assemblies**" for non-load-bearing metal shaft-wall framing, gypsum panels, and other components of shaft-wall assemblies.

1.3 SUBMITTALS

A. **Product Data**: For each type of product indicated.

1.4 QUALITY ASSURANCE

A. **Fire-Test-Response Characteristics**: For fire-resistance-rated assemblies that incorporate non-load-bearing steel framing, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.

B. **STC-Rated Assemblies**: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by an independent testing agency.

PART 2 - PRODUCTS

2.1 NON-LOAD-BEARING STEEL FRAMING, GENERAL

A. Framing Members, General: Comply with ASTM C 754 for conditions indicated.
   1. **Steel Sheet Components**: Comply with ASTM C 645 requirements for metal, unless otherwise indicated.
   2. **Protective Coating**: ASTM A 653/A 653M, G60 (Z180), hot-dip galvanized zinc coating, unless otherwise indicated.

2.2 SUSPENSION SYSTEM COMPONENTS

A. **Tie Wire**: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.0625-inch- (1.59-mm-) diameter wire, or double strand of 0.0475-inch- (1.21-mm-) diameter wire.

B. **Hanger Attachments to Concrete**:
1. Powder-Actuated Fasteners: Suitable for application indicated, fabricated from corrosion-resistant materials with clips or other devices for attaching hangers of type indicated, and capable of sustaining, without failure, a load equal to 10 times that imposed by construction as determined by testing according to ASTM E 1190 by an independent testing agency.

C. **Wire Hangers**: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.162-inch (4.12-mm) diameter.

D. **Flat Hangers**: Steel sheet, minimum 1 by 3/16 inch (25.4 by 4.76 mm) by length indicated.

E. **Carrying Channels**: Cold-rolled, commercial-steel sheet with a base-metal thickness of 16 gauge (0.0538 inch) (1.37 mm) and minimum 1/2-inch- (12.7-mm-) wide flanges.
1. Depth: Minimum 1-1/2 inches (38 mm).

F. **Furring Channels** (Furring Members):
1. **Hat-Shaped, Rigid Furring Channels**: ASTM C 645, 7/8 inch (22.2 mm) deep.
   a. Minimum Base Metal Thickness: Minimum 0.0312 inch (0.79 mm).
2. **Resilient Furring Channels**: 1/2-inch- (12.7-mm-) deep members designed to reduce sound transmission.
   a. Equal to: **RSIC-1** as manufactured by **PAC** International, Inc.

G. **Grid Suspension System for Ceilings**: ASTM C 645, direct-hung system composed of main beams and cross-furring members that interlock.
1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
   a. **Armstrong** World Industries, Inc.; Drywall Grid Systems.
   b. **Chicago Metallic** Corporation.
   c. **USG** Corporation; Drywall Suspension System.

2.3 STEEL FRAMING FOR FRAMED ASSEMBLIES

A. **Steel Studs and Runners**: ASTM C 645.
1. Minimum Base-Metal Thickness: Minimum **20 gauge** (0.0312 inch) (0.79 mm).

B. **Slip-Type Head Joints**:
1. **Deflection Track**: Steel sheet top runner manufactured to prevent cracking of finishes applied to interior partition framing resulting from deflection of structure above; in thickness not less than indicated for studs and in width to accommodate depth of studs.
   a. **Available Products**: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
      1) **Steel Network** Inc. (The); **VertiClip SLD**/**VertiTrack VTD** Series.
      2) **Dietrich** Metal Framing, **SLP-TRK** Slotted Track **(BDTK)**

C. **Flat Strap and Backing Plate**: Steel sheet for blocking and bracing in length and width indicated.
1. **Minimum Base-Metal Thickness**: Minimum 0.0312 inch (0.79 mm).

D. **Cold-Rolled Channel Bridging**: 16 gauge (0.0538-inch) (1.37-mm) bare-steel thickness, with minimum 1/2-inch- (12.7-mm-) wide flanges.
1. **Depth**: Minimum 1-1/2 inches (38.1 mm).
2. **Clip Angle**: Not less than 1-1/2 by 1-1/2 inches (38.1 by 38.1 mm), **14 gauge** (0.068-inch)- (1.73-mm-) thick, galvanized steel.

E. **Hat-Shaped, Rigid Furring Channels**: ASTM C 645.
   1. **Minimum Base Metal Thickness**: Minimum **20 Gauge** (0.0312 inch) (0.79 mm).
   2. **Depth**: 7/8 inch (22.2 mm).

F. **Resilient Furring Channels**: 1/2-inch- (12.7-mm-) deep, steel sheet members designed to reduce sound transmission.
   1. Equal to: RSIC-1 as manufactured by PAC International, Inc.

G. **Cold-Rolled Furring Channels**: 0.0538-inch (1.37-mm) bare-steel thickness, with minimum 1/2-inch- (12.7-mm-) wide flanges.
   1. **Depth**: Minimum 3/4 inch (19.1 mm).
   2. **Furring Brackets**: Adjustable, corrugated-edge type of steel sheet with minimum bare-steel thickness of 0.0312 inch (0.79 mm).
   3. **Tie Wire**: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.0625-inch- (1.59-mm-) diameter wire, or double strand of 0.0475-inch- (1.21-mm-) diameter wire.

H. **Z-Shaped Furring**: With slotted or nonslotted web, face flange of 1-1/4 inches (31.8 mm), wall attachment flange of 7/8 inch (22.2 mm), minimum bare-metal thickness of 0.0179 inch (0.45 mm), and depth required to fit insulation thickness indicated.

2.4 AUXILIARY MATERIALS

A. **General**: Provide auxiliary materials that comply with referenced installation standards.
   1. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

B. **Isolation Strip at Exterior Walls**: Provide the following:
   1. Foam Gasket: Adhesive-backed, closed-cell vinyl foam strips that allow fastener penetration without foam displacement, 1/8 inch (3.2 mm) thick, in width to suit steel stud size.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance.
   1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

A. **Installation Standard**: ASTM C 754.
   1. Gypsum Board Assemblies: Also comply with requirements in ASTM C 840 that apply to framing installation.

B. **Blocking:** Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, cabinets and casework, or similar construction.

C. **Bracing**: Install bracing at terminations in assemblies.

D. **Expansion Joints:** Do not bridge building control and expansion joints with non-load-bearing steel framing members. Frame both sides of joints independently.

3.3 INSTALLING SUSPENSION SYSTEMS

A. Install suspension system components in sizes and spacings indicated on Drawings, but not less than those required by referenced installation standards for assembly types and other assembly components indicated.

B. Isolate suspension systems from building structure where they abut or are penetrated by building structure to prevent transfer of loading imposed by structural movement.

C. Suspend hangers from building structure as follows:
   1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structural or suspension system.
      a. Splay hangers only where required to miss obstructions and offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
   2. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with locations of hangers required to support standard suspension system members, install supplemental suspension members and hangers in the form of trapezes or equivalent devices.
      a. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced installation standards.
   3. **Wire Hangers**: Secure by looping and wire tying, either directly to structures or to inserts, eye screws, or other devices and fasteners that are secure and appropriate for substrate, and in a manner that will not cause hangers to deteriorate or otherwise fail.
   4. **Flat Hangers**: Secure to structure, including intermediate framing members, by attaching to inserts, eye screws, or other devices and fasteners that are secure and appropriate for structure and hanger, and in a manner that will not cause hangers to deteriorate or otherwise fail.
   5. Do not attach hangers to steel roof deck.
   6. Do not attach hangers to permanent metal forms. Furnish cast-in-place hanger inserts that extend through forms.
   7. Do not attach hangers to rolled-in hanger tabs of composite steel floor deck.
   8. Do not connect or suspend steel framing from ducts, pipes, or conduit.

D. **Fire-Resistance-Rated Assemblies**: Wire tie furring channels to supports.

E. **Seismic Bracing**: Sway-brace suspension systems with hangers used for support.

F. **Grid Suspension Systems**: Attach perimeter wall track or angle where grid suspension systems meet vertical surfaces. Mechanically join main beam and cross-furring members to each other and butt-cut to fit into wall track.

G. **Installation Tolerances**: Install suspension systems that are level to within 1/8 inch in 12 feet (3 mm in 3.6 m) measured lengthwise on each member that will receive finishes and transversely between parallel members that will receive finishes.

3.4 INSTALLING FRAMED ASSEMBLIES

A. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.

B. Install studs so flanges within framing system point in same direction.

C. Install tracks (runners) at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated

to terminate at suspended ceilings. Continue framing around ducts penetrating partitions above ceiling.

1. **Slip-Type Head Joints**: Where framing extends to overhead structural supports, install to produce joints at tops of framing systems that prevent axial loading of finished assemblies.
2. **Door Openings**: Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.
   a. Install two studs at each jamb, unless otherwise indicated.
   b. Install cripple studs at head adjacent to each jamb stud, with a minimum 1/2-inch (12.7-mm) clearance from jamb stud to allow for installation of control joint in finished assembly.
   c. Extend jamb studs through suspended ceilings and attach to underside of overhead structure.
3. **Other Framed Openings**: Frame openings other than door openings the same as required for door openings, unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.
4. **Fire-Resistance-Rated Partitions**: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.
5. **Sound-Rated Partitions**: Install framing to comply with sound-rated assembly indicated.
6. **Curved Partitions**:
   a. Bend track to uniform curve and locate straight lengths so they are tangent to arcs.
   b. Begin and end each arc with a stud, and space intermediate studs equally along arcs. On straight lengths of not less than 2 studs at ends of arcs, place studs 6 inches (150 mm) o.c.

D. **Direct Furring**:
1. Attach to concrete or masonry with stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches (610 mm) o.c.

E. **Z-Furring Members**:
1. Erect insulation (specified in **Division 7** Section "**Building Insulation**") vertically and hold in place with Z-furring members spaced 24 inches (610 mm) o.c.
2. Except at exterior corners, securely attach narrow flanges of furring members to wall with concrete stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches (600 mm) o.c.
3. At exterior corners, attach wide flange of furring members to wall with short flange extending beyond corner; on adjacent wall surface, screw-attach short flange of furring channel to web of attached channel. At interior corners, space second member no more than 12 inches (300 mm) from corner and cut insulation to fit.

F. **Tackable Surface**:
1. Where tackable wall covering/surfacing is scheduled, provide back to back pairs of studs at 48” o.c., spaced symmetrically from the centerline of the wall.

END OF SECTION 09111

SECTION 09671 RESINOUS FLOORING

August 17, 2007

PART 1 - GENERAL

1.1 RELATED DOCUMENTS.

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
   1. General-use **epoxy-resin flooring**.

B. Related Sections include the following:
   1. **Division 3** Section "**Cast-in-Place Concrete**" for concrete substrates to receive resinous flooring.
   2. **Division 7** Section "**Joint Sealants**" for joint-sealant materials and installation of sealant materials at joints in resinous flooring systems.

1.3 SUBMITTALS

A. **Product Data**: For each type of product specified. Include manufacturer's technical data, installation instructions, and recommendations for each resinous flooring component required.

B. **Samples for Selection**: Manufacturer's color charts showing the full range of colors, textures, and patterns available for each resinous flooring system indicated.

C. **Product Schedule**: Use designations indicated in the Resinous Flooring Schedule and room designations indicated on Drawings in product schedule.

D. **Installer Certificates**: Signed by manufacturer certifying that installers comply with specified requirements.

E. **Maintenance Data**: For resinous flooring to include in the maintenance manuals specified in Division 1.

1.4 QUALITY ASSURANCE

A. **Installer Qualifications**: Engage an experienced installer (applicator) who has specialized in installing resinous flooring similar in material, design, and extent to that indicated for this Project and who is acceptable to resinous flooring manufacturer.
   1. Engage an installer who employs only persons trained and approved by resinous flooring manufacturer for installing resinous flooring systems specified.

B. **Source Limitations**: Obtain primary resinous flooring materials, including primers, resins, hardening agents, and sealing or finish coats, through one source from a single manufacturer. Provide secondary materials including patching and fill material, joint sealant, and repair materials of type and from source recommended by manufacturer of primary materials.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages and containers, with seals unbroken, bearing

manufacturer's labels indicating brand name and directions for storage and mixing with other components.

B. Store materials to comply with manufacturer's written instructions to prevent deterioration from moisture, heat, cold, direct sunlight, or other detrimental effects.

1.6 PROJECT CONDITIONS

A. **Environmental Limitations**: Comply with resinous flooring manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and other conditions affecting resinous flooring installation.

B. **Lighting**: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring installation.

C. **Close spaces to traffic** during resinous flooring application and for not less than 24 hours after application, unless manufacturer recommends a longer period.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. **Available Products**: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, those indicated in the Resinous Flooring Schedule at the end of Part 3.

2.2 MATERIALS

A. **Resinous Flooring**: Resinous floor surfacing system consisting of base coat including resin, hardener and colorants and top coat. Comply with requirements indicated in the Resinous Flooring Schedule.

B. **Patching and Fill Material**: Resinous product of or approved by resinous flooring manufacturer and recommended by manufacturer for application indicated.

C. **Joint Sealant**: Type recommended or produced by resinous flooring manufacturer for type of service and joint condition indicated.

PART 3 - EXECUTION

3.1 PREPARATION

A. **General:** Prepare and clean substrate according to resinous flooring manufacturer's written instructions for substrate indicated. Provide clean, dry, and neutral substrate for resinous flooring application.

B. **Concrete Substrates**: Provide sound concrete surfaces free of laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil, and other contaminates incompatible with resinous flooring.
   1. Comply with ASTM C 811 requirements, unless manufacturer's written instructions are more stringent.
   2. Repair damaged and deteriorated concrete according to resinous flooring manufacturer's written recommendations.

C. **Resinous Materials**: Mix components and prepare materials according to resinous flooring manufacturer's written instructions.

D. **Use patching and fill material** to fill holes and depressions in substrates according to manufacturer's written instructions.

E. **Treat control joints** and other nonmoving substrate cracks to prevent cracks from reflecting through resinous flooring according to manufacturer's written recommendations.

3.2 APPLICATION

A. **General:** Apply components of resinous flooring system according to manufacturer's written instructions to produce a uniform, monolithic wearing surface of thickness indicated.
   1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate and optimum intercoat adhesion.
   2. Cure resinous flooring components according to manufacturer's written instructions. Prevent contamination during application and curing processes.
   3. At substrate expansion and isolation joints, provide joint in resinous flooring to comply with resinous flooring manufacturer's written recommendations.
      a. Apply joint sealant to comply with manufacturer's written recommendations.

B. **Apply primer** over prepared substrate at manufacturer's recommended spreading rate.

C. **Apply self-leveling slurry base coat** in thickness indicated.
   1. Broadcast aggregates for slip resistence and, after resin is cured, remove excess aggregates to provide surface texture indicated.

D. **Apply sealing or top coat**, including grout coat, if any, of type recommended by resinous flooring manufacturer to produce finish indicated. Apply in number of coats and at spreading rates recommended in writing by manufacturer.

3.3 CLEANING AND PROTECTING

A. **Protect resinous flooring** from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by resinous flooring manufacturer.

B. **Clean resinous flooring** not more than 4 days before dates scheduled for inspections intended to establish date of Substantial Completion in each Project area. Use cleaning materials and procedures recommended in writing by resinous flooring manufacturer.

3.4 RESINOUS FLOORING SCHEDULE

A. **Resinous Flooring**: Where this designation is indicated, provide resinous flooring system complying with the following:
   1. **Products**: Available products include but are not limited to the following:
      a. **Concrete Coatings** Inc.
         1) Design standard: **Shield 50**.
      a. **General Polymers**.
      b. **Sonneborn**.
   2. **Color and Pattern**: As **selected by Architect** from manufacturer's full range of colors and patterns produced for resinous flooring complying with requirements indicated.
   3. **System Thickness**: Not Less Than the Following:
      a. **Base Coat**: 8-10 mils.
      b. **Top Coat**: 10 mils.

4. **Wearing Surface**: Antislip.
5. **Components**: Provide manufacturer's standard components complying with requirements, unless otherwise indicated. Provide the following optional components:
   a. Base Coat.
   b. Top coat.
6. **Physical Properties**: Provide resinous flooring system with the following minimum physical property requirements when tested according to standard test methods indicated:
   a. **Compressive Strength**: 11,000 psi per ASTM D 695.
   b. **Tensile Strength**: 8,000 psi per ASTM D 638.
   c. **Elongation at Break:** 14% per ASTM D 638.
   d. **Flexural Strength:** 10,000 PSI per ASTM D 790.
   e. **Flexural Modulus:** 400,000 PSI per ASTM D 790.
   f. **Shore D Hardness:** 82 per ASTM D 2240.
   g. **Adhesion:** 400 PSI per ASTM D 4541.
   h. **Impact Resistance:** Dec. 4.7.3 116 ft./lbs. Mil-D-3134 Passes.
   i. **Taber Abrasion:** 89 mg/1000 rev., cs17 per ASTM D 4060.
   j. **Water Resistance:** <2% per ASTM D 570.
   k. **MVT** (Moisture Vapor Transmission): 0.10 Per @ Mils per ASTM E 96.
   l. **Fungus & Bacteria Resistance:** No suppoet of grothe under TT-P-34 per Mil-F-52505

END OF SECTION 09671

PRIOR APPROVALS

THE FOLLOWING ITEMS, AS SUBMITTED, ARE CONSIDERED, IN GENERAL AND IN NAME ONLY, AS EQUAL TO THOSE ITEMS SPECIFIED. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR OR SUPPLIER OF THE RESPONSIBILITY OF CONFORMING TO THE DRAWINGS AND SPECIFICATIONS, NOR DOES IT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS FOR COORDINATION WITH OTHER TRADES. ALL DIMENSIONS SHALL BE CONFIRMED AND CORRELATED AT THE JOBSITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND THE SUITABILITY OF "EQUAL" PRODUCTS FOR THE SPECIFIED APPLICATION.

Description	**Manufacturer**
Roof exhaust fans	Carnes
Manual volume Dampers	Air-rite
Flexible Duct	Thermaflex
Hose bibb HB-1	Prier

ELECTRICAL

Approved Manufacturers

The following lighting manufacturers are approved to bid. Approval of the equipment from catalog information indicates that the brand name and general characteristics are acceptable to the Engineer. Any conflict arising from use of the substituted equipment shall be the responsibility of the Supplier who shall bear all costs required to make the equipment comply with the intent of plans and specifications.

Fixture Type	Approved Manufacturers
T-1	DAY-BRITE,Williams
T-2	DAY-BRITE, Williams
T-3	DAY-BRITE,Williams
EX-1	MCPHILBEN, Extronix