



State of Utah

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Department of Administrative Services

KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON
Director

ADDENDUM #2

Date: August 20, 2008

To: Contractors

From: Mike Ambre, Project Manager, DFCM

Reference: Losee Center Remodel
Utah Valley University – Orem, Utah
DFCM Project No. 07196790

Subject: **Addendum No. 2**

Pages	Addendum	1 page
	<u>Architects Addendum</u>	<u>42 pages</u>
	Total	43 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.*

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

- 1.1 **SCHEDULE CHANGES** – There are no changes to the project schedule.
- 1.2 **GENERAL** – Axis Architects, please see attached addenda.

Utah!
Where ideas connect

ADDENDUM - 2

Project: UVU Losee Center Remodel
DFCM Project Number: 07196790
Axis Project Number: 0719
To: Mike Ambre
From: Axis Architects
Date: August 20, 2008

Please make the following revisions to the construction documents:

General:

Materials purchased for this project shall be tax exempt.

The hallway area that was previously indicated as available to the Contractor is no longer available. The Contractor shall provide their own job trailer and coordinate with UVU Facilities for a location for this and for other staging areas. Space will be provided in the exterior area east of Level 4.

Specifications:

- 08 45 13 Remove Specification Section 08 45 13 from the Specifications and and from the Specification Index.
- 08 71 00: Add the attached Door Hardware Sets With Marks to the end of this section.
- 09 68 13 -Make the following changes to this Specification Section:
- 09 68 13, 1.2, B – Eliminate this paragraph.
 - 09 68 13, 1.2, C – Eliminate this paragraph.
 - 09 68 13, 1.3, E. – Eliminate this paragraph and items 1 and 2 within it.
 - 09 68 13, 2.1 – Eliminate this paragraph and replace it with the following: Carpet Tile for this project shall be purchased by the Owner and installed by the Contractor.
 - 09 68 13, 2.2 – Eliminate this paragraph and replace it with the following: Carpet Tile for this project shall be purchased by the Owner and installed by the Contractor.
 - 09 68 13, 2.3 – After **Installation Accessories** eliminate the words in parenthesis **(By State Carpet Contract)**.
 - 09 68 13, 3.1 – After **Examination** eliminate the words in parenthesis **(By State Carpet Contract)**.
 - 09 68 13, 3.3 – After **Installation** eliminate the words in parenthesis **(By State Carpet Contract)**.
 - 09 68 13, 3.4, A – Eliminate the words in parenthesis “(By State Carpet Contract)”.

Submitted Questions with answers:

1. What are the Distance Education Classrooms' dates of operation and what holidays apply. **Answer:** The hours of operation for the Distance Education Classrooms shall be as outlined in the Drawings. A UVU Fall 2008 Calendar is attached indicating UVU scheduled holidays. Any other possible exceptions shall be coordinated with UVU Facilities during construction.
2. Is there a current warranty on the roof, and if so who is the

- roofing company with the warranty? **Answer:** It is believed the roof is still under warranty. The warranty would be held by U.T.R. – contact Andy Seppi.
3. Please clarify the following: A1/AE603 – shows existing I-Beam, Structural (2/SE301) shows new tube steel? **Answer:** Some beams are existing while some will be new. See Structural for new beams. Stair stringers are existing to remain. The bridge is new. At most floor edges, the beams are concrete to remain. See keynotes on plans indicating existing guardrail supports to be cut off at 4" a.f.f. at existing concrete beams. Where existing elevators and elevator landings are to be removed, there will be new guardrails and new connections to existing beams.
4. Please clarify the contract limit lines on the 1st, 2nd, and 3rd floors specifically with regard to finishes, protection and cleaning issues. **Answer:** Finishes not scheduled to be new for this project shall be protected as necessary during construction. Any finishes damaged during construction shall be repaired or replaced by the Contractor.
5. The specifications list a Fiberglass-Sandwich-Panel Assembly - where is this to be used on the building? **Answer:** This is to be removed – see below.
6. Is the project tax exempt? **Answer:** Yes – the project is tax exempt; for materials only. Materials purchased for the project shall be tax exempt.
7. Please provide sections and details for the millwork elevations on sheet AE503. **Answer:** See the attached revised sheet AE503.

Drawings:

- GI101: - Modify the Code Analysis as shown on the attached Drawing ADD 2.01
- Relocate and modify 'Deferred Submittals' and add 'UL Assemblies' as shown on the attached Drawings ADD 2.02 & ADD 2.03.
- AD102: - Add to Notes Demo:
6. Salvage all 12" wide V.G. Fir when removing light fixtures at grid lines or at the 10' level of walls. Re-install as indicated or salvage for owner. Coordinate with Sheets AE112, AE113, AE114A and AE114B.
- AD103 -Add 'Notes Demo' from AD102, including the note 6 added above.
- AD104A -Add 'Notes Demo' from AD102, including the note 6 added above.
- AD104B - Add to Notes Demo:
6. Salvage all 12" wide V.G. Fir when removing light fixtures at grid lines or at the 10' level of walls. Re-install as indicated or salvage for owner. Coordinate with Sheets AE112, AE113, AE114A and AE114B.
- AE102 - Add a note with a leader line to the new elevator shaft at approximately Grids 5.3 and H.1 that reads:
Provide a 2 hour shaft enclosure at elevator in accordance with UL Design No. V449 (3 layers of gypsum board at inside, metal studs and 1 layer of gypsum board at outside). See Specifications for Through-Penetration Firestop Systems.
- Add note – Open To Below – at Detail C1/AE102 in the triangular area around the stair between Grids G.9 & H.0 and 5.1 & 5.3.
- To Finish Legend add note: 7 – See Sheet GI101 for Symbol Legend explaining the purpose and reading of Symbols on Drawings.
- At Wall Type Legend modify the symbol for existing columns, change the filled square to an outline. All columns on this floor are existing concrete columns, except for new Tube Steel Columns at the new elevator shaft.
-At Wall Type Legend add the note:
Provide Stainless Steel Corner Guards (80 total for the project) to be located by the Architect. Each to be 16 gauge, 4' high, with both legs of the angle to be 3" wide. Adhere to wall.
- At Door 215 provide for an automatic door closer and smoke seal.
- At Office 101 provide 1 hour rated gypsum board walls, and a 20 minute rated door with corresponding upgrades to door hardware. See Specifications for Through-Penetration Firestopping.
- At existing closet below first floor stair provide 1 hour rated gypsum board walls.

- AE103
- Add a note with a leader line to the new elevator shaft at approximately Grids 5.3 and H.1 that reads:
Provide a 2 hour shaft enclosure at elevator in accordance with UL Design No. V449 (3 layers of gypsum board at inside, metal studs and 1 layer of gypsum board at outside). See Specifications for Through-Penetration Firestop Systems.
 - Add Keynote 3A with a leader line to approximately Grid H.2 and between Grids 5.4 & 5.5.
 - Between existing stair and new elevator, change Keynote 2 to 5A.
 - Add a note indicating that "Gypsum board walls to either side (and above) Door 303E shall be of 1 hour rated construction. See Specifications for Through-Penetration Firestop Systems."
 - Clarification – Door 303E is in a 1-Hour rated wall and only requires a 20 minute rating.
 - Add note – Open To Below – at Detail C1/AE103 between Grids H.0 & H.1 and 5.1 & 5.3 and in the adjacent area around the stair.
 - To Finish Legend add note: 7 – See Sheet GI101 for Symbol Legend explaining the purpose and reading of Symbols on Drawings.
 - At Wall Type Legend modify the symbol for existing columns, change the filled square to an outline. All columns on this floor are existing concrete columns, except for new Tube Steel Columns at the new elevator shaft.
 - At Wall Type Legend add the note:
Provide Stainless Steel Corner Guards (80 total for the project) to be located by the Architect. Each to be 16 gauge, 4' high, with both legs of the angle to be 3" wide. Adhere to wall.
- AE104A
- To Finish Legend add note: 7 – See Sheet GI101 for Symbol Legend explaining the purpose and reading of Symbols on Drawings.
 - At Wall Type Legend add a new column type "New Concrete Column – See Structural"; also add a symbol with this column that is an outline only. All columns on this floor are existing concrete columns, except for new Tube Steel Columns at the new elevator shaft and one new concrete column at Grids 5.4 and H.9.
 - Add a dimension reading "1'-0" MIN." from the latch side of Door 407G to the Hallway wall of Office 407H. This door must have an unobstructed width of 12" from the latch side of the door per ICC/ANSI A117.1-2003, Section 404.2.3.
 - At Wall Type Legend add the note:
Provide Stainless Steel Corner Guards (80 total for the project) to be located by the Architect. Each to be 16 gauge, 4' high, with both legs of the angle to be 3" wide. Adhere to wall.
 - Add Note: Provide fire extinguishers in semi-recessed cabinets in framed walls (5 total for this floor) to be located by Architect.
- AE104B
- Add a note with a leader line to the new elevator shaft at approximately Grids 5.3 and H.1 that reads:
Provide a 2 hour shaft enclosure at elevator in accordance with UL Design No. V449 (3 layers of gypsum board at inside, metal studs and 1 layer of gypsum board at outside). See Specifications for Through-Penetration Firestop Systems.
 - To Finish Legend add note: 7 – See Sheet GI101 for Symbol Legend explaining the purpose and reading of Symbols on Drawings.
 - At Wall Type Legend add a new column type "New Concrete Column – See Structural"; also add a symbol with this column that is an outline only. All columns on this floor are existing concrete columns, except for new Tube Steel Columns at the new elevator shaft and one new concrete column at Grids 5.4 and H.9.
 - Between existing stair and new elevator bridge, change Keynote 2 to 5A.
 - At Wall Type Legend add the note:
Provide Stainless Steel Corner Guards (80 total for the project) to be located by the Architect. Each to be 16 gauge, 4' high, with both legs of the angle to be 3" wide. Adhere to wall.

-Add Note: Provide fire extinguishers in semi-recessed cabinets in framed walls (5 total for this floor) to be located by Architect.

- AE112
- Add "Notes – Ceiling" with the notes:
 - 1- See Mechanical Drawings for existing ductwork and piping locations.
 - 2 – See Mechanical Drawings for ductwork changes.
 - 3 – See Electrical Drawings for electrical changes.
 - 4 – Re-install salvaged 12" wide V.G. Fir at Grid Lines where ceilings are exposed. These are suspended by wires (see Ceiling Specifications) from beams at grid lines. Typical of (20) 28'-8" long sections in total project (V.G. Fir on 2 sides of lights).
 - At Storage 215 provide a suspended gypsum board ceiling.
 - At Office 101 provide a suspended gypsum board ceiling with a 1 hour fire rating with (2) layers of gypsum board. See Specifications for Through-Penetration Firestopping.
 - At the closet below the first floor stairway, provide (2) layers of gypsum board at the underside of the stairway within the closet.
- AE113
- Add "Notes – Ceiling" with the notes:
 - 1- See Mechanical Drawings for existing ductwork and piping locations.
 - 2 – See Mechanical Drawings for ductwork changes.
 - 3 – See Electrical Drawings for electrical changes.
 - 4 – Re-install salvaged 12" wide V.G. Fir at Grid Lines where ceilings are exposed. These are suspended by wires (see Ceiling Specifications) from beams at grid lines. Typical of (20) 28'-8" long sections in total project (V.G. Fir on 2 sides of lights).
- AE114A
- Add "Notes – Ceiling" with the notes:
 - 1- See Mechanical Drawings for existing ductwork and piping locations.
 - 2 – See Mechanical Drawings for ductwork changes.
 - 3 – See Electrical Drawings for electrical changes.
 - 4 – Re-install salvaged 12" wide V.G. Fir at Grid Lines where ceilings are exposed. These are suspended by wires (see Ceiling Specifications) from beams at grid lines. Typical of (20) 28'-8" long sections in total project (V.G. Fir on 2 sides of lights).
- AE114B
- Add the following notes to "Notes Ceiling".
 - 2 – See Mechanical Drawings for ductwork changes.
 - 3 – See Electrical Drawings for electrical changes.
 - 4 – Re-install salvaged 12" wide V.G. Fir at Grid Lines where ceilings are exposed. These are suspended by wires (see Ceiling Specifications) from beams at grid lines. Typical of (20) 28'-8" long sections in total project (V.G. Fir on 2 sides of lights).
- AE301
- Add a note with a leader line to the new elevator shaft shown on Detail B1/AE301 from the second floor level up that reads:

Provide a 2 hour shaft enclosure at elevator in accordance with UL Design No. V449 (3 layers of gypsum board at inside, metal studs and 1 layer of gypsum board at outside). See Specifications for Through-Penetration Firestop Systems.
- AE401
- Change the scale indicated for Details A2, A3, A4, A5 and A6 to be 3"=1'-0".
 - Remove Detail Markers D4 and D6.
- AE502
- Add revised portion of Detail1A/AE502 as shown on the attached ADD 2.04.
- AE503:
- Remove the previously issued Drawing AE503 and replace it with the attached revised Drawing AE503.
- AE601
- Detail E1/AE601 – change reference to Detail CL-02 to read E2/AE601.
 - Add Detail B5/AE601 as shown on the attached ADD 2.05.
 - Add Detail C6/AE601 as shown on the attached ADD 2.06.
 - Remove Detail Markers C5.

- Change the scale of Detail B3/AE601 to 1:1 or Full Scale.
- Change the scale of Details B2, C2, and E2/AE601 to 6"=1'-0".
- Change the scale of Details A1, A2, and C3/AE601 to 3"=1'-0".
- Change the scale of Detail A6/AE601 to 1 1/2"=1'-0".

- AE602
- Replace the previously issued Detail D6/AE602 with the revised Detail D6AE602 as shown on the attached Drawing ADD 2.07. This revision increases the text size and indicates Fire Treated Blocking where wood blocking occurs
 - Replace the previously issued Detail D3 & D4/AE602 with the revised Details 2AE602 as shown on the attached Drawing ADD 2.08.
 - Change the scale of Details D1, D2, B3, and B4/AE602 to 1 1/2"=1'-0".
 - Change the scale of Detail A4/AE602 to 1:1 or Full Scale.
- AE603
- Change the title of Detail D6/AE603 to Head @ G.F.R.C.
 - Change the scale of Details D2, C1, C2 and C3/AE603 to 1 1/2"=1'-0"
- AE604
- Add Details E2 and E3/AE604 as shown on the attached ADD 2.09.
 - Change the scale of Details A2, B1, B2, C1, C2 and E1/AE604 to 6"=1'-0".
 - Change the scale of Details A3, A4, A5, and A6/AE604 to 3"=1'-0".
 - Change the scale of Details B6, C5, C6, D4, D5 and D6/AE604 to 1 1/2"=1'-0".
- AE801
- Detail E1/AE801 Door Types – Change Door Type A to Type W (Solid Core Wood Door). Change Door Type B to Type G (Solid Core Wood Door w/ Glass Lite).
 - Room Signage. Room Signage shall be per Specifications with the following additional information: At each door that has a Door Symbol (See GI101 for Symbol Key) there shall be an 8" x 8" square sign with a black frame (color to be selected from manufacturer's range). Typical signage at each door shall consist of a 5"x8" removeable (modular) plackard that shall be left blank, and a 3" x 8" modular plackard that shall receive the room number and corresponding Braille. Coordinate with UVU for room numbers for each sign.
- AE802
- Change the Detail Callout on the left edge of Frameless Glass System G7 to read E2/AE604.
 - Add a Detail Callout "C1/AE604 – Sim." To the right edge of Frameless Glass System G7.

Structural: See the attached Structural Addendum

Mechanical: See the attached Mechanical Addendum

Drawing M102A, Detail A1 – provide 1 hour fire dampers wherever ducts penetrate the 1 hour enclosure to this office. See Specifications for Through-Penetration Firestopping.

Electrical: See the attached Electrical Addendum

Attachments:

- UVU Academic Calendar Fall 2008 – Spring 2009
- ADD 2.01
- ADD 2.02
- ADD 2.03
- ADD 2.04
- ADD 2.05
- ADD 2.06
- ADD 2.07 (print full size at 11x17)
- ADD 2.08 (print full size at 11x17)
- ADD 2.09 (print full size at 11x17)

Door Hardware Sets With Marks
Structural Addendum
Mechanical Addendum
Electrical Addendum
Drawing Sheet AE503 (print full size at 30x42)

Note: This addendum shall be part of the construction documents. Items in this addendum apply to all drawing 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.

End of Addendum

UTAH VALLEY UNIVERSITY
LOSEE CENTER REMODEL

Addendum #2
August 20, 2008

Sheet SE102

1. See revised Entry Roof Framing Plan.

ADDENDUM

DATE: 08-18-2008
PROJECT NO: 07414
PROJECT: UVU Losee Center Remodel

DIVISION – 15

SHEET - MD102B

1. Refer to attached sheet SD-01/MD102B, add keynote 15: "REMOVE EXISTING UNDERFLOOR SUPPLY DUCT AS INDICATED."

SHEET - M102B

1. Refer to attached sheet SD-01/M102B, add keynote 17: "NEW MECHANICAL SUPPLY AIR TUNNEL. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS. PROVIDE BELL MOUTH TRANSITIONS FOR ALL DUCTS CONNECTING TO NEW TUNNEL."

PRIOR APPROVALS

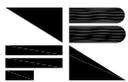
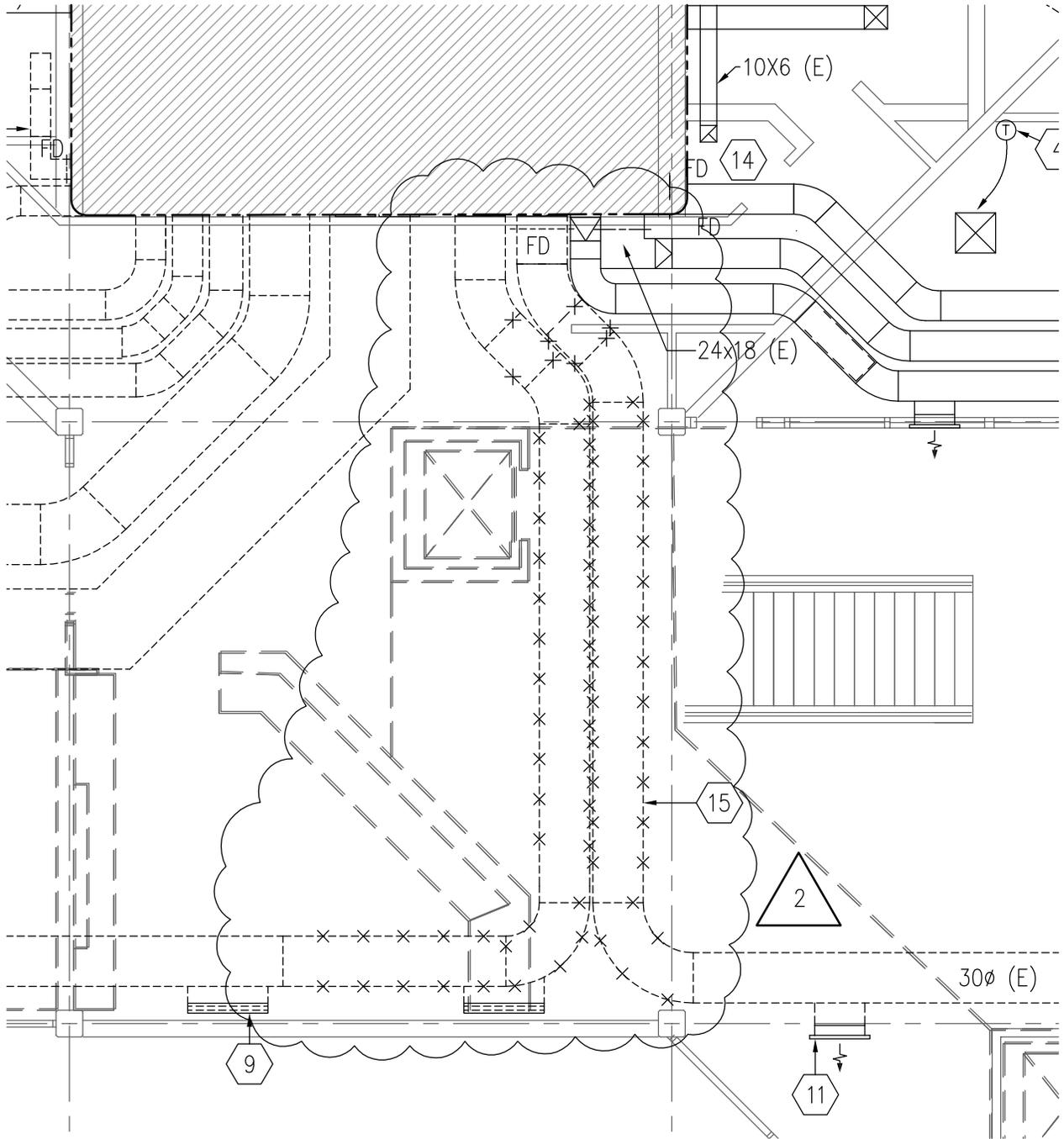
The following manufacturers, trade names and products are allowed to bid on a name brand only basis with the provision that they completely satisfy all and every requirement of the drawings, specifications and all addenda shall conform to the design, quality and standards specified, established and required for the complete and satisfactory installation and performance of the building and all its respective parts.

<u>Item</u>	<u>Manufacturer</u>	<u>Comments</u>
Registers, Grilles & Diffusers	Carnes	Approved
Motorized Control Dampers	Cesco	Approved
Vibration & Seismic Control	VibroAcoustics	Approved
Fan Coil Units	Enviro-tec	Approved

August 18, 2008

Page 2 of 2

Document2



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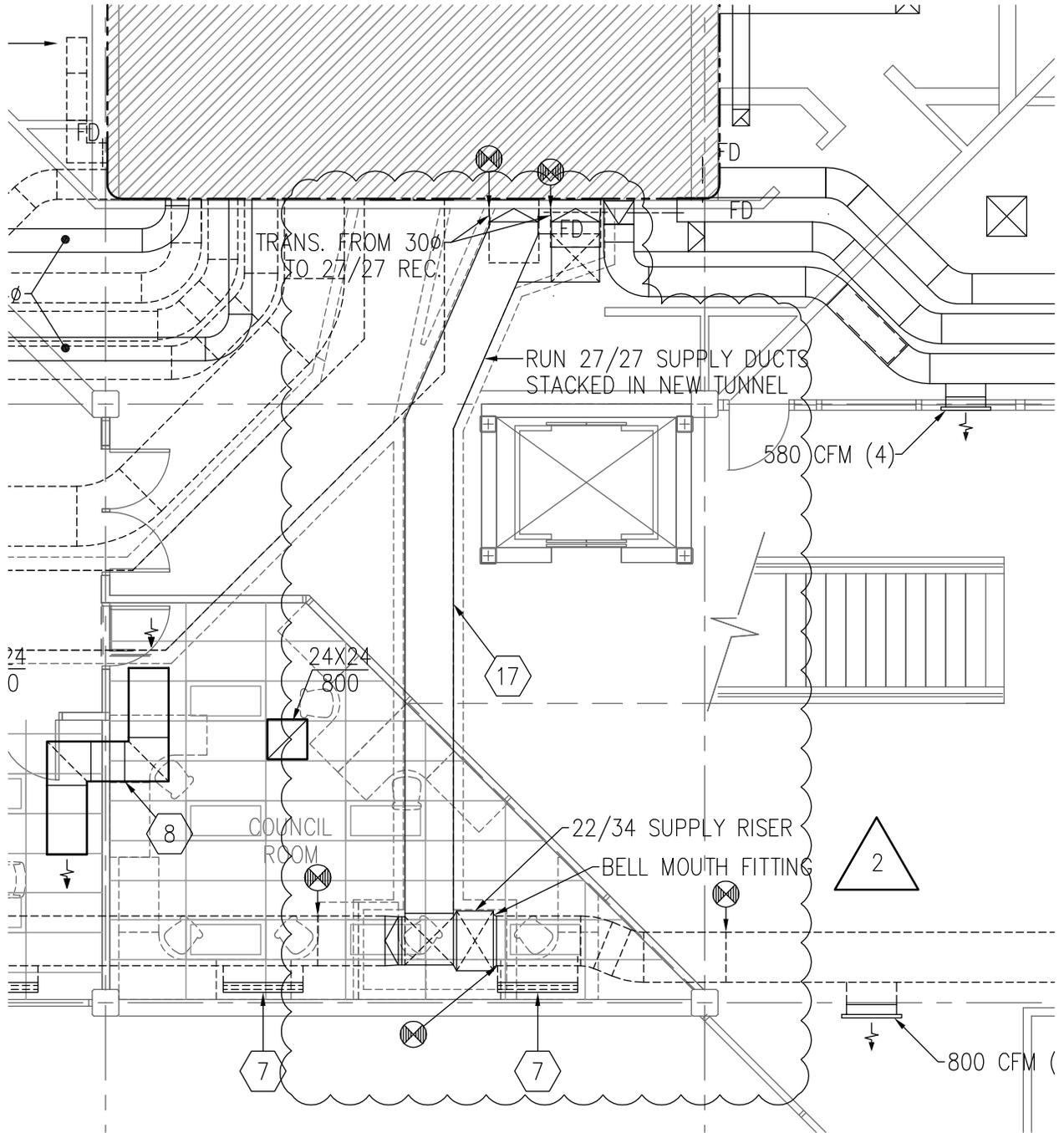
UVU LOSEE CENTER REMODEL

VBFA PROJECT #: 0XXXX
CHECKED BY: DESIGNER
DRAWN BY: DRAFTER
CURRENT/ID DATE: DATE
SHEET CONTENTS

SHEET DESCRIPTION

-

**SD-01
MD-102B**



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UVU LOSEE CENTER REMODEL

VBFA PROJECT #: 07414
CHECKED BY: SWH
DRAWN BY: SWH
CURRENT BID DATE: 31 JULY 2008
SHEET CONTENTS

SHEET DESCRIPTION

**SD-01
M102B**

Memorandum

To: Boyd Viehweg
Axis Architects

From: Elaine Fawson

Date: August 19, 2008

Re: UVSC Losee Center

Please include the following items in an addendum:

PRIOR APPROVAL OF MANUFACTURERS OF ELECTRICAL EQUIPMENT

The following items, trade names, products and manufacturers are approved for bidding. Approval does not relieve the bidder from satisfying the intent of the requirements of drawings, specifications and addenda in every respect. Failure to conform to the design quality and standards specified, established and required may result in later disapproval. If equipment must be disapproved after bidding, supplier shall supply specified equipment at no extra cost to the Owner.

Items are listed generally and specific model number, etc. shall be as submitted. Items submitted but not approved, either did not satisfy the requirements, or showed insufficient data, or arrived after the 8 day deadline established for submittals.

LIGHTING:

Type A – Daybrite, Lightolier, Columbia, Metalux
Type B – Daybrite, Lightolier, Columbia, Metalux
Type C – Daybrite, Exceline, Guth, Lumark, Rig A Lite
Type D2 - Pinnacle
Type DM - Pinnacle
Type E2, E2E – Daybrite, Lightolier, Columbia, Metalux
Type E3 – Daybrite, Lightolier, Columbia, Metalux
Type EM – Bodine, Lightolier, Dualite, Iota
Type G- XAL, Alera, Mark
Type X1, X2 – Lithonia, Mcphilben, Lightolier, Dualite

SPECIFICATIONS:

1. See attached Specifications Section 271500 Telephone/Data Systems.
2. See attached Specifications Section 160536 Raceway Systems.
3. Specifications Section 260519: Provide minimum #10 neutrals for all branch circuits.
4. Specifications Section 262923 – Variable Frequency Drives: For motors 10 hp and larger, provide a minimum power quality performance of 12% current THD and 3% voltage THD measured at the VFD input terminals. This shall be accomplished by using

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Harmonic filters or a minimum of 12 pulse drive that will comply with the power quality performance requirements. For motors less than 10 hp provide AC Line Reactors with a minimum of 3% impedance. Provide output filtering if the motor is located more than 50 feet from the drive.

DRAWINGS:

Sheet EG000:

1. Fixture Schedule: Add fixture type X1 – LED diecast single face exit light, white face, green letters, emergency nicad battery. Lithonia LES W 1G 120 ELN
2. Fixture Schedule: Add fixture type X2 – LED diecast double face exit light, white face, green letters, emergency nicad battery. Lithonia LES W 2G 120 ELN.
3. Fixture Schedule: Add fixture type G: 8' linear recessed fluorescent frameless, opal lens: XAL Minimal 100 98407 with (2) 54w T5HO lamps.

Sheet EL101:

1. Add a type X1 exit light at the center of corridor at grids G.9 between grids 5.1 and 5.2. Connect to existing corridor lighting circuit. Extend a hot conductor ahead of the switch to the exit light.

Sheet EL104A:

1. Circuit emergency lights to a 20 amp 1 pole circuit breaker in existing Panel E previously feeding emergency lights in this area.
2. Add fixture type X1 exit lights at the following locations. Circuit to emergency lighting circuited noted in note 1 above.
 - a. At grid H8 between grids 5.6A and 5.5.
 - b. At grid H7 approximately 13' north of grid 5.7.
 - c. At grid H7 approximately 13' south of grid 5.7.
 - d. Approximately 7' north of grid 5.8 in hall between offices 405P and 405C.
 - e. Approximately 4' north of grid 5.8 in hall between offices 405Q and 405E.
 - f. In north end of hall approximately 3' east of grid H.4A and 11' north of grid 5.8.
 - g. At grid 5.5 approximately 4' east of grid H.4A.
 - h. At east and west doors from Hosting Room 408C. (Delete existing exit from Room 408C to patio.
 - i. At south end of hallway outside Offices 409M and 409J. Circuit adjacent emergency light in same per note 1 above.
 - j. At east end of hallway outside Computer Specialist 408A.
 - k. At south end of PSS 408 at entry to corridor between offices 408A and 408G.
 - l. At south end of PSS 408 at entry to corridor between offices 409C and 409Q.
3. Exit light shown 3' south of grid 5.3 between grids H.5 and H.6 shall be a type X2 double face exit.

Sheet EL104B:

1. Circuit emergency lights to a 20 amp 1 pole circuit breaker in existing Panel E previously feeding emergency lights in this area.
2. Add fixture type X1 exit lights at the following locations. Circuit to emergency lighting circuit noted in note 1 above.
 - a. North door exiting CACC 402.
 - b. East door exiting CACC 402.near grids 5.7 and H.4.
 - c. On west wall of corridor at intersection of north and east corridors north of grid 5.8.
 - d. On east wall of corridor west of existing restrooms.

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- e. At north end of corridor near Conference Room 404C.
- f. At west wall on grid H.2 between grids 5.6 and 5.5.
- g. At north side of CACC 402 at entry into corridor between Offices 402G and 402K.
- 3. Add fixture type X2 exit light at the following location. Circuit to emergency lighting circuit noted in note 1 above.
 - a. At grid H.2 approximately 8' south of grid 5.6A.
- 4. Add (2) type F4 fixtures to complete rows of fixtures between grids 5.6a and 5.5 between grids H.2 and H.3.

Sheet EP101:

- 1. Add a telephone/data outlet on the east wall of room 100. Terminate telephone/data outlets in this area on new patch panels and 110 blocks in IDF 211A.

Sheet EP102:

- 1. Add a telephone/data outlet on the north wall of Office 210.
- 2. Add a telephone/data outlet on the south wall of Office 208.
- 3. Add new patch panels and 100 pair 110 blocks in Existing IDF 211A as required for new telephone/data outlets in remodeled area.

Sheet EP103:

- 1. Add a telephone/data outlet on the east wall of Office 312J.
- 2. Add a telephone/data outlet on the west wall of Office 312H.
- 3. Add a telephone/data outlet on the east wall of Office 312G.
- 4. Add a telephone/data outlet on the south wall of Office 312F.
- 5. Add note 11 in Office 312K.
- 6. Change the west data outlet in Copy 312A to a telephone/data outlet.
- 7. Add a telephone/data outlet on the east wall of Office 308.
- 8. Add a telephone/data outlet on the east wall of Office 308A.
- 9. Add a telephone/data outlet on the east wall of Office 307.
- 10. Add a telephone/data outlet on the east wall of Office 307A.
- 11. Add a telephone/data outlet on the west wall of Office 305.
- 12. Add a telephone/data outlet on the north wall of Office 305A.
- 13. Add a telephone/data outlet on the east wall of Office 304.
- 14. Add a telephone/data outlet on the north wall of Office 304A.
- 15. Add a telephone/data outlet on the east wall of Office 303A.
- 16. Add a telephone/data outlet on the south wall of Office 303B.
- 17. Add patch panels, new 7' floor mounted IDF rack, and 110 blocks at southeast angled wall of Studio 306A. Provide a duplex outlet and dedicated 20 amp circuit to panel 33F.
- 18. Relocate connection to existing relocated fin tube radiator in Office 312 J.

Sheet EP104A:

- 1. Add a telephone/data outlet on west wall of Office 406B.
- 2. Add a telephone/data outlet on northwest wall of Office 405N.
- 3. Add a telephone/data outlet on southeast wall of Office 405M.
- 4. Add a telephone/data outlet on northwest wall of Office 405K.
- 5. Add a telephone/data outlet on southeast wall of Office 405J.
- 6. Add a telephone/data outlet on southwest wall of Office 405H.
- 7. Add a telephone/data outlet on northeast wall of Office 405G.
- 8. Delete (2) telephone/data outlets in IDF Room 405F.
- 9. Add smoke detector in IDF Room 405F.
- 10. Add treated plywood telephone boards on all walls of IDF Room 405F 8' high.

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11. Add new 7' IDF floor rack. Provide a duplex outlet and a dedicated 20 amp circuit to panel 48H, circuit #16.
12. Add a telephone/data outlet on east wall of Office 405E.
13. Add a telephone/data outlet on north wall of Office 405D.
14. Add a telephone/data outlet on south wall of Office 404D.
15. Add a telephone/data outlet on north wall of Office 405C.
16. Add a telephone/data outlet on north wall of Office 404C.
17. Add a telephone/data outlet on north wall of Office 405B.
18. Add a telephone/data outlet on south wall of Office 404B.
19. Add a telephone/data outlet on north wall of Office 405A.
20. Add a telephone/data outlet on north wall of Office 404A.
21. Add a telephone/data outlet on north wall of Office 405P.
22. Add a telephone/data outlet on east wall of Office 407A.
23. Add a telephone/data outlet on west wall of Office 407B.
24. Add a telephone/data outlet on west wall of Office 407D.
25. Add a telephone/data outlet on southeast wall of Office 407E.
26. Add a telephone/data outlet on northwest wall of Office 407F.
27. Add a telephone/data outlet on southwest wall of Office 407H.
28. Add a telephone/data outlet on northeast wall of Office 407J.
29. Add a telephone/data outlet on east wall of Office 407M.
30. Add a telephone/data outlet on west wall of Office 407N.
31. Add a telephone/data outlet on east wall of Office 407P.
32. Add a telephone/data outlet on west wall of Office 410.
33. Add a telephone/data outlet on west wall of Office 410A.
34. Add a telephone/data outlet on north wall of Office 409A.
35. Add a telephone/data outlet on north wall of Office 409B.
36. Add a telephone/data outlet on north wall of Office 409C.
37. Add a telephone/data outlet on north wall of Office 409D.
38. Add a telephone/data outlet on north wall of Office 408F.
39. Add a telephone/data outlet on east wall of Office 409Q.
40. Add a telephone/data outlet on east wall of Office 409P.
41. Add a telephone/data outlet on west wall of Office 409G.
42. Add a telephone/data outlet on west wall of Office 409H.
43. Add a telephone/data outlet on east wall of Office 409K.
44. Add a telephone/data outlet on east wall of Office 409M.
45. Add a telephone/data outlet on east wall of Office 409J.
46. Add a telephone/data outlet on east wall of Office 409F.
47. Add a telephone/data outlet on east wall of Office 408B.
48. Add a telephone/data outlet on south wall of Office 408A.
49. Add a single data outlet flush in the ceiling at the following locations for future wireless access points: Use purple Cat 6 cable. Office 405C, Meeting Room 407K, Office 409P, in hallway near grid H.6, between grids 5.5 and 5.6, and Computer Specialist 408A.
50. Add cable tray per specifications 260536 at the following locations: Coordinate with existing ductwork, sprinkler piping, etc.
 - a. Connect to existing cable tray at approximately grids 5.4 and 8' east of grid H.7 and run new cable tray to the north to approximately 15' north of grid 5.8, turn cable tray west and run to west existing cable tray located approximately 6' south of IDF Room 405F.
 - b. Connect to existing cable tray at approximately grids 5.4 and run new cable tray approximately 44' south through corridor located approximately 14' west of grid H.6. Turn cable tray and run 30' to the west and run 12' west of grid H.2.
51. Replace existing starter/disconnect for existing 50 hp fan in SF-5 located in mechanical room at grids 6.0 and H.5, and provide new VFD per equipment schedule. Extend existing conductors as required.

Sheet EP104B:

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1. Add a telephone/data outlet on west wall of Office 403A.
2. Add a telephone/data outlet on east wall of Office 403D.
3. Add a telephone/data outlet on east wall of Office 403E.
4. Add a telephone/data outlet on south wall of Office 403G.
5. Add a telephone/data outlet on north wall of Office 403H.
6. Add a telephone/data outlet on northwest wall of Office 403J.
7. Add a telephone/data outlet on northwest wall of Office 403K.
8. Add a telephone/data outlet on north wall of Office 402H.
9. Add a telephone/data outlet on north wall of Office 402G.
10. Add a telephone/data outlet on north wall of Office 402F.
11. Add a telephone/data outlet on north wall of Office 402E.
12. Add a telephone/data outlet on north wall of Office 402D.
13. Add a telephone/data outlet on north wall of Office 402C.
14. Add a telephone/data outlet on north wall of Office 402B.
15. Add a telephone/data outlet on north wall of Office 402A.
16. Add a telephone/data outlet on west wall of Office 402J.
17. Add a telephone/data outlet on west wall of Office 402K.
18. Add a telephone/data outlet on east wall of Office 403B.
19. Add a telephone/data outlet on east wall of Office 402M.
20. Add a telephone/data outlet on south wall of Office 402N.
21. Add a telephone/data outlet on north wall of Office 402P.
22. Add a telephone/data outlet on north wall of Office 402Q.
23. Add a telephone/data outlet on west wall of Office 410C.
24. Add a telephone/data outlet on west wall of Office 410D.
25. Add a telephone/data outlet on east wall of Office 410E.
26. Add a telephone/data outlet on west wall of Office 410M.
27. Add a telephone/data outlet on west wall of Office 410K.
28. Add a telephone/data outlet on east wall of Office 410F.
29. Add a telephone/data outlet on east wall of Office 410H.
30. Add a single data outlet flush in the ceiling at the following locations for future wireless access points: Use purple Cat 6 cable. Office 402A, at grid 5.4 between grids H.2 and H.3.
31. Add cable tray per specifications 260536 at the following locations: Coordinate with existing ductwork, sprinkler piping, etc.
 - a. Connect to existing cable tray at approximately grids 5.6A and run new cable tray to the north 3' north of grid 5.8 along the corridor between Offices 402G and 402K. Turn cable tray to the east and run to existing cable tray location approximately 6' east of grid H.4A. Turn the cable tray west and run approximately 12' west of grid H.2.
32. Add sheet note 2: Wire roll down door per manufacturer's written instructions. Provide fire alarm control module and connect to existing fire alarm system. Add note 2 to the (2) roll down doors on grid 5.6 and (1) roll down door at grid 5.3. Provide control wiring to raise/lower switches per manufacturer's instructions.

Sheet EX101:

1. Change conduit/conductor symbol for Panel 33G, Panel 48D, EHH, EH, 48H from 41 to 51 (double neutrals).
2. Change conduit/conductor symbol for Panel 48A from 44X to 54X (double neutrals).

Sheet EX102:

1. Provide 200% neutral bus in all new panelboards.
2. Provide new neutral bus in existing main panel as required to connect new 200% neutrals from branch panels.

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SECTION 260536

RACEWAY SYSTEMS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.
- B. This section is a Division-26 Basic Materials and Methods section, and is part of each Division-26 Section making reference to electrical raceways specified herein.

1.2 DESCRIPTION OF WORK:

- A. Extent of raceways is indicated by drawings and schedules.
- B. Types of raceways in this section include the following:
 - 1. Cable tray systems

1.3 QUALITY ASSURANCE:

- A. STANDARDS:
 - 1. Comply with applicable portions of NEMA standards pertaining to raceways. Comply with applicable portions of UL safety standards pertaining to electrical raceway systems; and provide products and components which have been UL-listed and labeled. Comply with NEC requirements as applicable to construction and installation of raceway systems.

1.4 SUBMITTALS:

- A. PRODUCT DATA:
 - 1. Submit manufacturer's data including specifications, installation instructions and general recommendations, for each type of raceway as follows:
 - a. Cable Tray Systems
- B. SHOP DRAWINGS:
 - 1. Submit dimensioned drawings of raceway systems showing layout of raceways and fittings, spatial relationships to associated equipment, and adjoining raceways, for each type of raceway as follows:
 - a. Cable Tray Systems

PART 2 - PRODUCTS

2.1 MANUFACTURED RACEWAY SYSTEMS:

- A. GENERAL:
 - 1. Provide electrical raceways of types, grades, sizes, weights [wall thicknesses], and number of channels, for each service indicated. Provide complete assembly of raceway including, but not necessarily limited to, couplings, offsets, elbows,

expansion joints, adapters, holddown straps, end caps, and other components and accessories as needed for complete system.

B. CABLE TRAY SYSTEMS:

1. Provide UL-listed tray systems of sizes, types and capacities indicated, and meeting all requirements of NEMA VE-1. Trays to be provided include but are not necessarily limited to the following:

<u>Type</u>	<u>Width</u>	<u>Depth</u>	<u>Rung Spacing</u>	<u>NEMA Class</u>
Ladder	12"	4"	12"	12A

2. Provide radius as required, and in no case smaller than required to comply with minimum radius requirement of cable manufacturer.
3. Provide all fittings including elbows, intersections, expansion joints, transition fittings, reducers, barrier strips, conduit-to-tray clamps, hangers, supports, retaining clips, etc. Bond each expansion joint in tray system by means of 1/0 copper jumper (with crimped lug connectors) at each joint. Provide cantilever, single-rod or trapeze support systems as indicated. Provide all rod or trapeze supported tray systems with rigid unistrut support to structure; laterally at intervals not to exceed 25 feet on center, and longitudinally at intervals not to exceed 50 feet on center.
4. Provide tray with hot-dip (after fabrication) galvanized corrosion-resistant finish. Grind all rough edges, drip concentrations, etc, to smooth finish. Apply cold zinc spray to all field cut surfaces.
5. **MANUFACTURER:**
 - a. Subject to compliance with requirements, provide cable tray systems of one of the following:
 - i. B-Line Systems
 - ii. P/W Industries
 - iii. Globe Metal Products, U.S.Gypsum Co.
 - iv. T.J. Cope, Inc.
 - v. Square D Company
 - vi. Chalfant

PART 3 - EXECUTION

3.1 INSTALLATION OF ELECTRICAL RACEWAYS:

- A. Install electrical raceways where indicated; in accordance with manufacturer's written instructions, applicable requirements of NEC and NECA "Standard of Installation", and complying with recognized industry practices.
- B. Coordinate with other work including metal and concrete deck work, as necessary to interface installation of electrical raceways and components.
- C. Seal joints of underfloor ducts with sealing compound or tape prior to placing concrete.
- D. Level and square raceway runs, and install at proper elevations/heights.

3.2 ADJUSTING AND CLEANING:

- A. Upon completion of installation of raceways, inspect interiors of raceways; remove burrs, dirt and construction debris.

END OF SECTION 260536

SECTION 271500

TELEPHONE/DATA SYSTEM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.
- B. Division-26 Basic Materials and Methods sections apply to work specified in this section.

1.2 DESCRIPTION OF WORK:

- A. The extent of telephone/data system work is indicated by drawings and is hereby defined to include, but not be limited to cable, raceway, outlet boxes, device plates, backboard, cabinets, grounding and miscellaneous items required for complete system.
- B. Provide complete cable and outlet system as indicated on the drawings and described herein. Work includes cable, jacks, terminal blocks, wire management, labeling, transient voltage surge suppression, patch cords, and all terminations.
- C. Refer to other Division-26 sections for requirements for raceways, boxes and fittings, wiring devices (plates), and supporting devices, and other sections, as applicable.
- D. Provide system testing as described herein.

1.3 QUALITY ASSURANCE:

- A. Comply with applicable portions of NEC as to type products used and installation of components. Provide products and materials which have been UL-listed and labeled. Comply with NEMA standards for low loss extended frequency cable and EIA/TIA TSB-36. Comply with EIA/TIA 568-A, EIA/TIA 569 and manufacturer's recommendations. Comply with EIA/TIA testing standards for horizontal cabling.

1.4 SUBMITTALS:

- A. Submit manufacturers data and installation details for all devices, plates, cable, terminal blocks, patch cords, TVSS, wire management, labels and similar equipment.

1.5 CONTRACTOR QUALIFICATIONS AND TRAINING

- A. The contractor shall be fully conversant and capable in the cabling of low voltage applications such as, but not limited to data, voice and imaging network systems. The Contractor shall at a minimum possess the following qualifications:
 - 1. Possess those licenses/permits required to perform telecommunications installations in the specified jurisdiction.
 - 2. Personnel trained and certified in fiber optic cabling, splicing, termination and testing techniques. Personnel must have experience using a light meter and OTDR.
 - 3. Personnel trained in the installation of pathways and support for housing horizontal and backbone cabling.
 - 4. Personnel knowledgeable in local, state, province and national codes, and regulations. All work shall comply with the latest revision of the codes or regulations. When conflict exists between local or national codes or regulations, the most stringent codes or regulations shall be followed.

5. Be in business a minimum of five (5) years.
 6. Be Siemons and Commscope certified. Be CI rated from Siemons Corp.
- 1.6 APPROVED INSTALLERS:
- A. Americom Technology (Stan Lawrence 892-0519 fax 892-0585).
 - B. Cache Valley Electric (Tim Hadden 908-4190 fax 908 7041
 - C. Federal Communications Group
 - D. Niels Fugal (Matt Pierce 785-3153 fax 796-5081).

PART 2 - PRODUCTS

2.1 GENERAL:

- A. Provide 4" square outlet box at each outlet location with double gang plaster or tile ring and 1" conduit to cable tray or IDF.

2.2 INTERMEDIATE DISTRIBUTION FACILITY

- A. Electronics will be furnished and installed by Information Systems Department.
- B. Provide 19" rack, patch panels, rack mounting kits for switch and hubs, wire management components, and patch cables.
- C. Provide adequate and appropriate installation of patch panels and wire management into new rack.

2.3 PATCH CORDS:

- A. Provide factory assembled patch cords meeting or exceeding all criteria specified in the horizontal cabling standard subsection above. Provide
 1. 10' CAT 6 patch cable for each outlet connection.
 2. 3' CAT 6 patch cable for each IDF hub connection.
 3. 3' CAT 6 patch cable for hub/switch connection.

2.4 VOICE/DATA OUTLETS:

1. Provide modular voice/data outlets. Provide double gang faceplate kits to allow up to four data or voice jacks as required. Provide faceplate kits for wall outlets in colors and materials that match power wiring device plates. Provide faceplate kits that allow labeling schemes described herein.
2. Provide information outlets for 24-AWG copper cable as follows:
 - a. 8-position/ 8 conductor modular insulation displacement.
 - b. Provide Siemons CT jacks with 2 of the ports having Siemons Cat 3 phone connections (#CT-U3-U3-01.), and 2 of the ports having Siemons 568b Cat 6 angled data connections (#CT-C6-C6-02). Data jacks shall be installed at bottom of faceplate.

2.5 VOICE AND DATA CABLING

1. Provide (2) 4-pair, 100 unshielded twisted pair (UTP) CAT 6 plenum Data Cables (white) Mohawk AdvanceNet or General GenSpeed 6500, and (1) Cat 5 plenum Voice Cable (blue), for each location called for. Terminate data cables on patch panel and voice cables on 110 blocks.
2. All UTP and fiber optic cables shall conform to ANSI/TIA/EIA-568-A Commercial Building Telecommunications Cabling Standard (latest amendment and including

all applicable addenda)

B. ACCEPTABLE MANUFACTURERS:

1. Subject to compliance with requirements. Provide products of one of the following:
 - a. Mohawk
 - b. Siemon
 - c. General

2.6 LABELING:

A. Provide labeling hardware for providing circuit identification and patch cords or cross connect wire used for creating circuit connection at the cross connects.

B. Labeling

1. Cables

- a. Horizontal and backbone cables shall be labeled at each end. The cable or its label shall be marked with its identifier.

2. Faceplates

- a. A unique identifier shall be marked on each faceplate to identify it as connecting hardware.
- b. Each port in the faceplate shall be labeled with its identifier.

3. Racks, Panels, Blocks

- a. A unique identifier shall be marked on each piece of connecting hardware to identify it as connecting hardware.
- b. Each port on the connecting hardware shall be labeled with its identifier.

2.7 COPPER TERMINATION BLOCKS AND PATCH PANELS:

A. Provide termination blocks and patch panels, that facilitate cross-connection using either cross- connect wire or patch cords.

B. Provide termination blocks for voice, and patch panels for data as required for all building telecommunications needs.

1. 110-Type Wiring Blocks: The blocks shall:

- a. The connecting hardware block shall support the appropriate Category 5 applications and facilitate cross-connection and/or inter-connection using either cross-connect wire or patch cords. Appropriately, the cross-connect hardware shall be 110-type.
- b. be made of flame-retardant thermoplastic, with the base consisting of horizontal index strips for terminating up to 25-pairs of conductors.
- c. be available in 25-, 50-, 75-, 100-, 200- and 300- pair sizes.
- d. have detachable stand-off legs available for the 50- and 100-pair bases, while non-detachable stand-off legs are to be available for 200- and 300-pair bases.
- e. contain access openings for rear to front cable routing to the point of termination.
- f. have termination strips on the base to be notched and divided into 5-pair

- increments.
- g. have clear label holders with the appropriate colored inserts available for the wiring blocks. The insert labels provided with the product shall contain vertical lines spaced on the basis of circuit size (2-, 3-, 4- or 5-pair) and shall not interfere with running, tracing or removing jumper wire/patch cords. Label holders must be capable of mounting in the under portion of the wiring block.
- h. have bases available in 19 inch panels and high density frame configurations for rack or wall mounting with cable management hardware.
- i. have connecting blocks used for either the termination of cross-connect (jumper) wire or patch cords. The connecting blocks shall be available in 2-, 3-, 4- and 5-pair sizes. All connecting blocks shall have color-coded tip and ring designation markers and be of single piece construction.
- j. have connecting blocks with a minimum of 200 re-terminations without signal degradation below standards compliance limit.
- k. support wire sizes: Solid 22-26 AWG (0.64 mm - 0.40 mm), and 7-strand wires.
- l. have optional configurations of 110 blocks and bases available including category 5e modular jack panels and category 5e disconnect series.
- m. be made by an ISO 9001 Certified Manufacturer.

2. Copper Termination Patch Panels [UTP/ScTP] Siemons Cat 6 48 port patch panel (#HD648).

- a. The termination panels shall support the appropriate Category 6 or higher applications and facilitate cross-connection and inter-connection using modular patch cords. The panels shall be sized to fit an EIA standard, 19 inch relay rack, or be capable of mounting to a wall.
- b. Modular Patch Panel The panel shall have:
- c. Be made of black anodized aluminum in 16-, 24-, 28-, 32-, 48-, 64- and 96- port configurations.
- d. have cutouts to fit the variety of information outlets used at the work area, supporting UTP, SC and ST fiber adapters, as well as coaxial applications.
- e. have cutouts which allow terminated jacks to pass through the panel for easy rearrangement.
- f. be available in two sizes for each port quantity to allow for custom administration of the network.
- g. have changeable ports which are removed from the front of the panel to allow custom configuration or modification to the panel.
- h. have port identification numbers provide on both the front and rear of the panel.
- i. have mounting slots compatible with ANSI/EIA-310.
- j. allows the modular insert to accept 110-style patch plugs as a means of termination.
- k. be made by an ISO 9001 Certified Manufacturer.

C. LABELING:

- 1. Provide labels appropriate for termination blocks supplied.

D. WIRING MANAGEMENT:

- 1. Provide wiring spindles and channels as necessary to allow neat bundling of all

wire and cable. Provide wiring channel (horizontal) above and/or below each termination block. Provide wiring channels by same manufacturer of termination block. Provide nylon or Velcro type ties for all cables at telephone backboard not run in conduit or channels.

2. SURGE SUPPRESSION: Provide line surge suppressors at main telephone board for all incoming phone lines. Provide ground connection to telephone board ground system.

E. RACKS

1. Provide standard floor distribution frame for rack mounted installations in the telecommunications room/closets. Provide Siemons full size rack (#RS207S, steel racks..
2. Provide full height vertical cable management system (#RSCNL).
3. Provide 1U horizontal wire management (WM143-5) above the highest patch panel and below the lowest patch panel.
4. Provide 2U horizontal wire management (WM144-5) between each patch panel.
5. Provide an XPC (BK350) or larger UPS uninterruptible power supply for each rack.
6. Provide a Siemons power strip (RSP04) on each rack.
7. Racks shall be grounded and bonded to TIA/EIA standards.

PART 3 - EXECUTION

3.1 INSTALLATION OF TELEPHONE/DATA SYSTEM:

- A. GENERAL: Install raceway and cable system and specified equipment as indicated to comply with NEC and recognized industry practices.
- B. Prior to placing any cable pathways or cable, the contractor shall survey the site to determine job conditions will not impose any obstructions that would interfere with the safe and satisfactory placement of the cables. The arrangements to remove any obstructions with the Project Manager need to be determined at that time.
- C. Provide NEC sized pullboxes for any run greater than 90 meters or with more than two ninety degree bends. Maintain a distance of at least 12 inches from all power conduits and cables, and 6 inches from all fluorescent lighting fixtures. Do not install power feeders 100 amps or greater above or within 5 feet of telecommunications backboard. Do not install telecommunications conduits above power panels or switchboards.
- D. Cable Routing
 1. All horizontal cables, regardless of media type, shall not exceed 90 m (295 ft) from the telecommunications outlets in the work area to the horizontal cross connect.
 2. The combined length of jumpers, or patch cords and equipment cables in the telecommunications room/closet and the work area should not exceed 10m (33 ft) .
 3. Horizontal pathways shall be installed or selected such that the minimum bend

radius of horizontal cables is kept within manufacturer specifications both during and after installation.

4. For voice or data applications, 4-pair UTP or fiber optic cables shall be run using a star topology from the telecommunications room/closet serving that floor to every individual information outlet.
5. The Contractor shall observe the bending radius and pulling strength requirements of the 4-pair UTP/ScTP and fiber optic cable during handling and installation.
6. Each run of UTP/ScTP cable between horizontal portion of the cross-connect in the telecommunication closet and the information outlet shall not contain splices.
7. In a false ceiling environment, a minimum of 3 inches (75 mm) shall be observed between the cable supports and the false ceiling.
8. Continuous conduit runs installed by the contractor should not exceed 30.5 m (100 ft) or contain more than two (2) 90 degree bends without utilizing appropriately sized pull boxes.
9. All horizontal pathways shall be designed, installed and grounded to meet applicable local and national building and electrical codes.

E. **CABLES AND TERMINATIONS:** Install additional cables as indicated on the drawings. Do not exceed manufacturers recommendations for maximum allowable pulling tension, side wall pressure or minimum bending radius. Use pulling compound as recommended by manufacturer.

1. Provide a service loop in each J-box in the communications system.
2. Install all cable in plenum spaces with rigid fittings every five feet on center. Homerun all cable to nearest termination board.
3. Coordinate with EIA/TIA 569 tables 4.4-1 and 4.4-2 for conduit and splice box sizing.
4. Terminate cable at each jack location and at terminal board. Follow industry guidelines and manufacturers recommendations and procedures as required. All termination hardware shall be rated to Category 6 specifications as required.
5. Label and identify each outlet and cable for data circuits. Label at outlet end and at termination board with matching designations.

3.2 TERMINAL BLOCKS:

- A. Arrange all terminal blocks in a manner that allows natural wiring progression and minimizes crossing of wires.

3.3 PATCH CORDS:

- A. Provide patch cords and cross connect cables as necessary for a complete operational telephone and data network system. Consult with owner to determine any special needs such as dedicated phone lines. Coordinate with owner and installer of phone and data network equipment to ensure that patch cords and cross connects are installed in the correct positions for system to function properly.

3.4 TESTING:

- A. Test all equipment and each outlet, horizontal cable, termination block, patch cords, etc. to verify compliance with requirements. Testing shall consist of attenuation and NEXT across all splices and devices installed in the field and shall meet latest requirements of EIA/TIA. All cables shall be tested and certified by the installer to run at minimum speeds as set by cable manufacturer. Reterminate any cable or connection found to be defective.

No defective pairs will be accepted.

- B. Correct any malfunctions.
- C. Each cable must be documented and recorded in a data base and supplied to UVSC in a computer software format that is compatible with wiring documentation software program known as CRIMP. Mohawk Cat 3 (#M56061B) and Mohawk Cat 6 Advance/Net/White can be substituted with permission from UVSC>
- D. Include test report in O & M manuals.

3.5 WARRANTY:

- A. Provide a 5 year extended product warranty for all cable. Include replacement material for any defective product.
- B. Provide an installation warranty by communications subcontractor complying with Division 260500.

3.6 OPERATING AND MAINTENANCE MANUALS:

- A. Operating and maintenance manuals shall be submitted prior to testing of the system. A total of (4) manuals shall be delivered to the Owner. Manuals shall include all service, installation, and programming information.

3.7 RECORD DRAWINGS:

- A. Provide a complete set of autocad "as built" drawings showing wiring, specific interconnections between all equipment and internal wiring of equipment.

3.8 GROUNDING:

- A. All grounding / earthing and bonding shall be done to applicable codes and regulations.

END OF SECTION 271500

This calendar was approved by the Board of Trustees on 3/8/07. At the time this calendar was proposed and approved, the dates for the Fall 2008 UEA Convention were not yet set. UVSC usually coordinates its Fall Break with these convention dates...if the convention is held during the first part of October. On 11/30/07 the Fall Break Holiday dates were changed from 10/9/08 - 10/10/08 to 10/16/08 - 10/17/08 to match recently published UEA convention dates. Provo, Alpine and Nebo school districts will also be holding their Fall Breaks to include the UEA convention dates. On 5/30/08 some Weekend classes dates were clarified to include Fridays for those weekend classes that meet on Fridays. For questions on any academic calendar email Tara Yates at yatesta@uvsc.edu.

ACADEMIC CALENDAR FALL 2008 - SPRING 2009

(Rev 5/30/08)

FALL SEMESTER 2008 (Approved)

Faculty Return	Wednesday, August 20
Classes Begin	Wednesday, August 27 (Weekend classes begin Fri. - Sat., Aug. 29, 30)
Labor Day Holiday	Monday, September 1
Fall Break Holidays (Students)*	Thurs.-Fri., Oct. 16, 17 (Weekend classes holiday Fri. - Sat., Oct. 17, 18)
Fall Break Holiday (Faculty)**	Friday, October 17
First Block Classes End	Monday, October 20
Second Block Classes Begin	Tuesday, October 21
Thanksgiving Holidays (Students)*	Wed - Fri, Nov. 26, 27, 28 (Weekend class holiday Fri.- Sat, Nov. 28, 29)
Thanksgiving Holidays (Faculty)**	Thursday - Friday, November 27, 28
Classes End	Thursday, December 11 (Weekend classes held Fri. - Sat., Dec. 12, 13)
Study Day	Friday, December 12 (faculty contract day)
Final Exams	Mon-Thurs., Dec 15, 16, 17, 18 (Weekend finals Fri. - Sat., Dec. 19, 20)
Fall Semester Ends	Thursday, December 18
Grading Day	Friday, December 19 (faculty contract day)

SPRING SEMESTER 2009 (Approved)

Faculty Return	Monday, January 5
Classes Begin	Wednesday, January 7 (Weekend classes begin Fri. - Sat., Jan. 9 - 10)
Martin Luther King Jr. Day Holiday	Monday, January 19
Presidents' Day Holiday*	Monday, February 16
First Block Classes End	Friday, February 27
Second Block Classes Begin	Saturday, February 28
Spring Break Holidays (Students)*	Wed. - Fri., Mar. 18 - 20 (Weekend classes holiday Fri - Sat, Mar. 20 - 21)
Spring Break Holidays (Faculty)**	Thursday - Friday, March 19 - 20
Classes End	Thursday, April 23
Study Day	Friday, April 24 (faculty contract day)
Final Exams	Mon-Thurs, April 27, 28, 29, 30 (Weekend finals Fri. - Sat., Apr. 24 - 25)
Spring Semester Ends	Thursday, April 30
Commencement	Friday, May 1
Grading Day	Friday, May 1 (faculty contract day)

*For holidays marked with single asterisk above – there will be NO ACCESS to UVSC computing resources as follows: Fall Break = Friday at 5 pm - Sunday, Thanksgiving Holiday = Wednesday 5 pm - Sunday, Presidents' Day Holiday = Friday at 5 pm - Monday, and Spring Break = Thursday at 5 pm - Sunday. For questions about this no access contact Ray Walker at walkerra@uvsc.edu.

**For Contract Faculty: October 16, November 26, and March 18 are designated as Faculty Flex Days. The three days listed are counted in the number of faculty contract days but the faculty have the ability to take off those days if they choose. If they do take off some or all of those days, they must work an equivalent amount during other times not designated as part of their contract days or they must use personal leave days. Flex days will be noted in the academic calendar each year to keep it clear which days are eligible for faculty to claim as flex days.

HW SET: 01

DOOR NUMBER:

206	207	207A	208	209	210
213	214	302B	302C	303A	303AA
303B	303BB	304	304A	305	305A
306A	306C	307A	307B	308	308A
308D	309	309F	312B	312C	312D
312E	312F	312G	312H	312J	312K
401N	402A	402B	402C	402D	402E
402F	402G	402H	402J	402K	402M
402N	402P	402Q	403A	403B	403C
403D	403E	403G	403H	403J	403K
404A	404B	404C	404D	404G	405A
405B	405C	405D	405E	405G	405H
405J	405K	405M	405N	405P	405Q
405R	406A	406B	407A	407B	407C
407D	407E	407F	407G	407H	407J
407K	407M	407N	407P	408A	408B
408C	408E	408F	408G	409A	409B
409C	409D	409E	409G	409H	409J
409K	409L	409M	409P	409Q	409R
410	410A	410B	410C	410D	410E
410F	410H	410J	410K	410M	

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	612	IVE
1	EA	ENTRANCE LOCK	10-28-10G05 LL	612	SAR
1	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
1	EA	WALL STOP	WS401CCV	612	IVE
3	EA	SILENCER	SR64	GRY	IVE

HW SET: 02

DOOR NUMBER:

205	205B	306D
-----	------	------

EACH TO HAVE:

6	EA	HINGE	5BB1 4.5 X 4.5 NRP	639	IVE
2	EA	MANUAL FLUSH BOLT	FB458	612	IVE
1	EA	DUST PROOF STRIKE	DP2	612	IVE
1	EA	ENTRANCE LOCK	10-28-10G05 LL	612	SAR
1	EA	SURFACE CLOSER	4041 EDA MC (ACTIVE LEAF)	691	LCN
2	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
2	EA	WALL STOP	WS401CCV	612	IVE
2	EA	SILENCER	SR64	GRY	IVE

HW SET: 03

DOOR NUMBER:

302A	303	306	312	400B	402
402R	403	406	408	409	

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5 NRP	639	IVE
1	EA	ENTRANCE LOCK	10-28-10G05 LL	612	SAR
1	EA	SURFACE CLOSER	4041 EDA MC / 4041 RW/PA MC	691	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
1	EA	WALL STOP	WS401CCV	612	IVE
3	EA	SILENCER	SR64	GRY	IVE

HW SET: 04

DOOR NUMBER:

215 403F

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5 NRP	639	IVE
1	EA	STOREROOM LOCK	10-28-10G04 LL (2-3/4 LATCH, ANSI STRIKE)	612	SAR
1	EA	SURFACE CLOSER	4041 RW/PA MC	691	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
1	EA	WALL STOP	WS401CCV	612	IVE
1	SET	SEALS	5020B	BRN	NGP

HW SET: 05

DOOR NUMBER:

100 100A 211A 306B 404F 404L
405F

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5 NRP	639	IVE
1	EA	STOREROOM LOCK	10-28-10G04 LL (2-3/4 LATCH, ANSI STRIKE)	612	SAR
1	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
1	EA	WALL STOP	WS401CCV	612	IVE
3	EA	SILENCER	SR64	GRY	IVE

HW SET: 06

DOOR NUMBER:

404E

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5 NRP	639	IVE
1	EA	STOREROOM LOCK	10-28-10G04 LL (2-3/4 LATCH, ANSI STRIKE)	612	SAR
1	EA	SURFACE CLOSER	4041 RW/PA MC	691	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
1	EA	WALL STOP	WS401CCV	612	IVE
3	EA	SILENCER	SR64	GRY	IVE

HW SET: 07

DOOR NUMBER:

303E

EACH TO HAVE:

2	EA	CONTINUOUS HINGE	112HD	612	IVE
1	EA	FIRE EXIT DEVICE	12-19-43-8710 X TB	612	SAR
1	EA	FIRE EXIT DEVICE	12-19-43-GL-8943 ETL X TB	612	SAR
1	EA	RIM CYLINDER	34	20D	SAR
1	SET	ASTRAGAL	9605A	DKB	NGP
2	EA	SURFACE CLOSER	4041 EDA MC	691	LCN
2	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
2	EA	MAGNETIC HOLD-OPEN	SEM 7850	AL	LCN
1	SET	SEALS	5020B	BRN	NGP

HW SET: 08

DOOR NUMBER:

404H

EACH TO HAVE:

1	EA	CONTINUOUS HINGE	112HD	612	IVE
1	EA	EXIT DEVICE	16-19-43-GL-8804 X TB	612	SAR
1	EA	RIM CYLINDER	34	20D	SAR
1	EA	MTSE CYL, SGT CAM	41	20D	SAR
1	EA	OFFSET DOOR PULL	8190-0	313	IVE
1	EA	SURFACE CLOSER	4041 EDA MC	691	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	612	IVE
1	EA	WALL STOP	WS401CCV	612	IVE
1	SET	SEALS	700SA	DKB	NGP
1	EA	DOOR SWEEP	601A	DKB	NGP
1	EA	THRESHOLD	425HD	DKB	NGP

HW SET: A

DOOR NUMBER:

400C

EACH TO HAVE:

2	EA	CONTINUOUS HINGE	112HD	313	IVE
1	EA	REMOV. MULLION	L980A	313	SAR
1	EA	EXIT DEVICE	16-19-43-GL-8804 X TB	613	SAR
1	EA	EXIT DEVICE	16-19-43-GL-8810 X TB	613	SAR
1	EA	RIM CYLINDER	34	20D	SAR
4	EA	MTSE CYL, SGT CAM	41	20D	SAR
2	EA	OFFSET DOOR PULL	8190-0	313	IVE
1	EA	SURFACE CLOSER	4041 EDA X 18 MC	695	LCN
1	EA	AUTO-EQUALIZER	4642 REG FC	695	LCN
2	EA	OVERHEAD STOP	100S-ADJ	613	GLY
1	EA	KEYSWITCH	653-04	630	SCE
1	EA	ACTUATOR, JAMB MOUNT	8310-818		LCN
1	EA	ACTUATOR	8310-853 (BOLLARD POST)		LCN

1	EA	BOLLARD POST	8310-866		LCN
1			THRESHOLD AND PERIMETER SEAL BY DOOR MFG		B/O

EXIT DEVICES MUST BE MECHANICALLY DOGGED BY CYLINDER FOR AUTO OPERATOR TO FUNCTION. EXTERIOR ACTUATOR TURNED OFF/ON BY KEYSWITCH. OPERATOR FUNCTIONS INDEPENDANTLY FROM INTERIOR OPERATOR. COORDINATE LOCATION OF BOLLARD POST, ACTUATORS AND KEYSWITCH WITH ARCHITECT.

HW SET: B
DOOR NUMBER:
400D

EACH TO HAVE:

2	EA	CONTINUOUS HINGE	112HD	313	IVE
2	EA	PULL/PUSHBAR	9190-0	313	IVE
1	EA	SURFACE CLOSER	4041 EDA X 18 MC	695	LCN
1	EA	AUTO-EQUALIZER	4631 REG	695	LCN
2	EA	OVERHEAD STOP	100S-ADJ	613	GLY
2	EA	ACTUATOR, JAMB MOUNT	8310-818		LCN
1			PERIMETER SEAL BY DOOR MFG		B/O

OPERATOR FUNCTIONS INDEPENDANTLY FROM EXTERIOR OPERATOR. COORDINATE LOCATION OF ACTUATORS WITH ARCHITECT.

HW SET: C
DOOR NUMBER:
302 400M

EACH TO HAVE:

2	EA	CONTINUOUS HINGE	112HD	313	IVE
1	EA	REMOV. MULLION	L980A	313	SAR
1	EA	EXIT DEVICE	16-19-43-GL-8804 X TB	613	SAR
1	EA	EXIT DEVICE	16-19-43-GL-8810 X TB	613	SAR
1	EA	RIM CYLINDER	34	20D	SAR
4	EA	MTSE CYL, SGT CAM	41	20D	SAR
2	EA	OFFSET DOOR PULL	8190-0	313	IVE
2	EA	SURFACE CLOSER	4041 EDA X 18 MC	695	LCN
2	EA	OVERHEAD STOP	100S-ADJ	613	GLY
1			THRESHOLD AND PERIMETER SEAL BY DOOR MFG		B/O

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	<u>2006</u>	National Electrical Code	<u>2005</u>
International Mechanical Code	<u>2006</u>	Uniform Code for	
International Fuel Gas Code	<u>2006</u>	Building Conservation	
International Plumbing Code	<u>2006</u>	ADA Accessibility	
International Fire Code	<u>2006</u>	Guidelines	ICC/ANSI 117.1 2003
International Energy Conservation Code	<u>2006</u>		

A. Occupancy and Group: B: OFFICES AND EDUCATION > 12TH GRADE

Change in Use: Yes _____ No Mixed Occupancy: Yes _____ No

Special Use and Occupancy (e.g. High Rise, Covered Mall): COVERED MALL BUILDING OLD BLDG. IS A LIBRARY-GROUP B AND CLASSROOMS GROUP B (NOT REMODELED), THE NEW PROGRAM IS OFFICES. THE USE REMAINS AS "B".

B. Seismic Design Category: D Design Wind Speed: 90 mph

C. Type of Construction (circle one):

I/A
 I/B
 II/A
 II/B
 III/A
 III/B
 IV/HT
 V/A
 V/B

2

MODIFIED PORTION OF GI101

ADD 2.01

DFCM PROJECT # 0719

UL ASSEMBLIES

All Roofing material manufacturers are required to meet or exceed the manufacturing UL assembly # as outlined in the Underwriters Laboratories, Inc. Roofing Materials and Systems Directory Book

Carlisle Syntec Incorporated
1285 Ritner Hwy PO Box 7000
Carlisle, PA 17013

UL R8103 EPDM, 60 Mil

Firestone Building Products Co.
1st FL 310 E 96th St.
Indianapolis, IN 46240

UL R9516 EPDM, 60 Mil

Please note: All Other manufacturers will be reviewed for approval prior to bid. All UL manufacturer assembly criteria must be provided to the architect or owner for review and approval prior to bidding.

MODIFIED PORTION OF G1101

ADD 2.02

96790

2

DEFERRRED SUBMITTALS

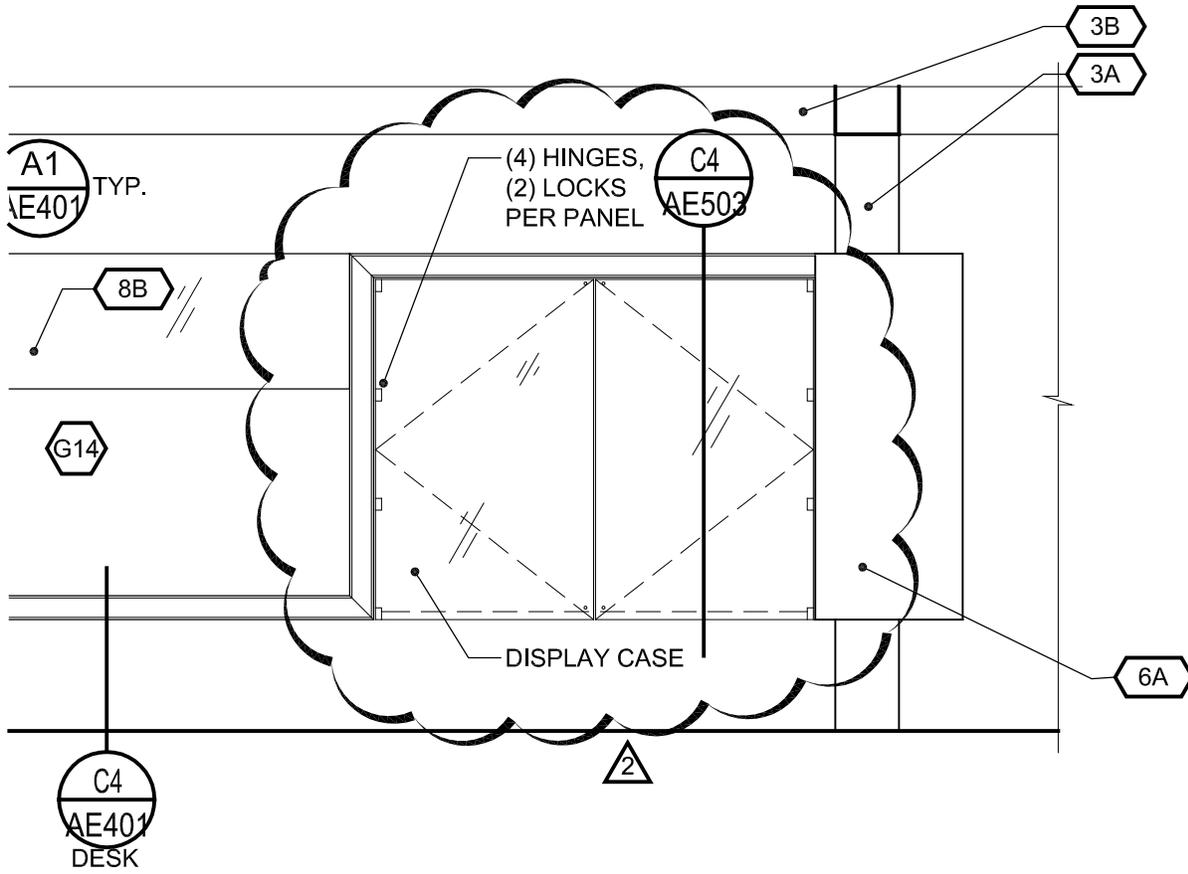
- FIRE SPRINKLER SYSTEMS
ANTICIPATED DATE: OCT. 30, 2008
- SHORING/EXCAVATION
ANTICIPATED DATE: SEPT. 30, 2008
- FIRE ALARM
ANTICIPATED DATE: OCT 30, 2008
- SEISMIC BRACING FOR THEATER / MECH. EQUIPMENT
ANTICIPATED DATE: OCT 30, 2008

MODIFIED PORTION OF G1101

ADD 2.03

B

A



MODIFIED PORTION OF AE502	ADD 2.04
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NOTES TYPICAL FOR TOP OF SHROUD

16 GA PERFORATED ALUMINUM SHROUD

1/4" x 4" ALUMINUM PLATE, RADIUS TO MECHANICAL DUCT TREE, MILL FINISH, FASTEN TO DUCTS

1 1/2" x 1 1/2" ALUMINUM SQUARE SECTION, RADIUS, WELDED TO ALUMINUM PLATE

TAP AND DIE FOR (4) EVENLY SPACED STAINLESS STEEL 'SOCKET HEAD BUTTON SCREWS', PER PANEL

EXISTING VERTICAL DUCT

CONCRETE FLOOR

9'-0"

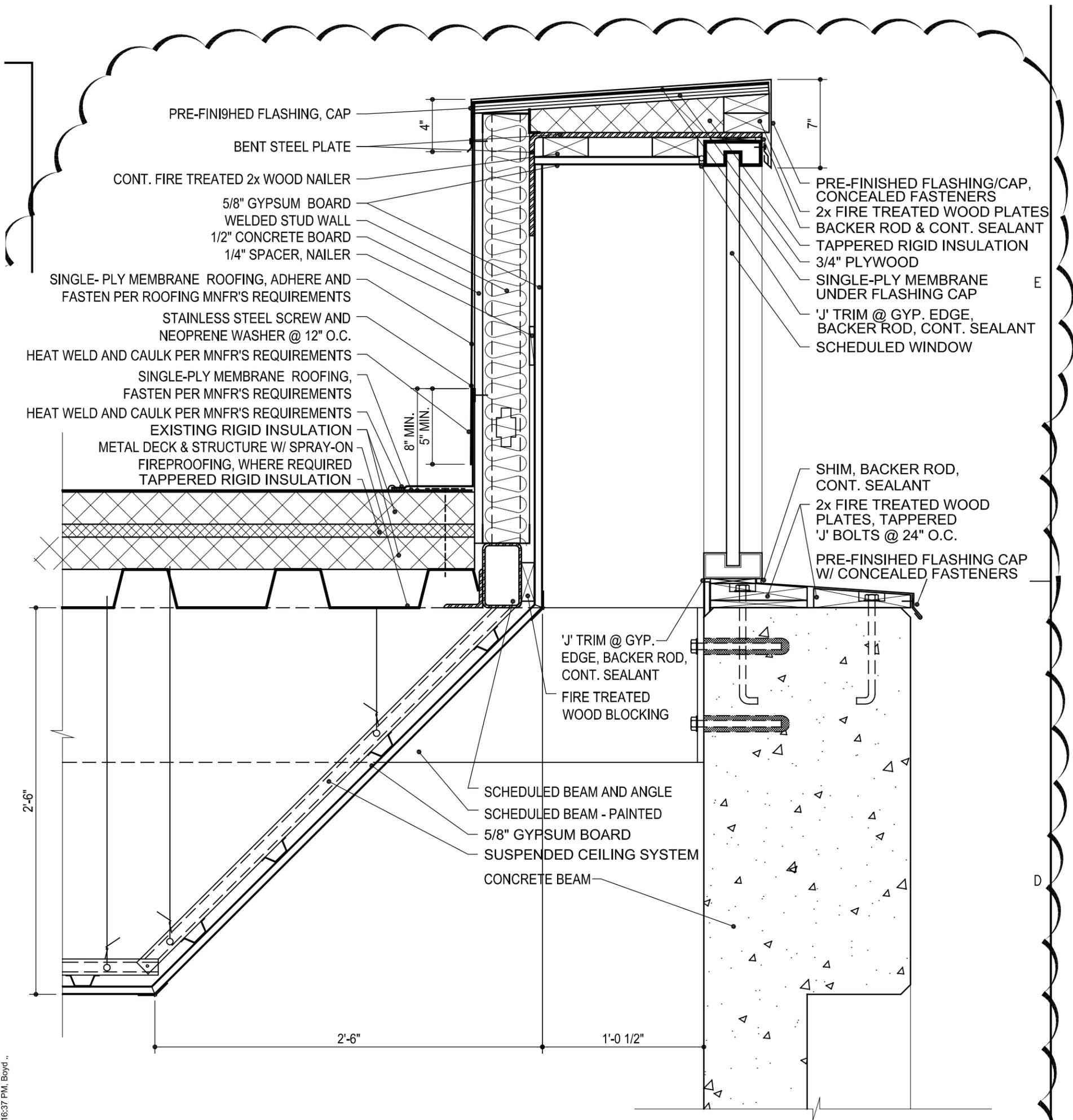
6"

B6

SHROUD DETAIL

SCALE: 3" = 1'-0"

H.9

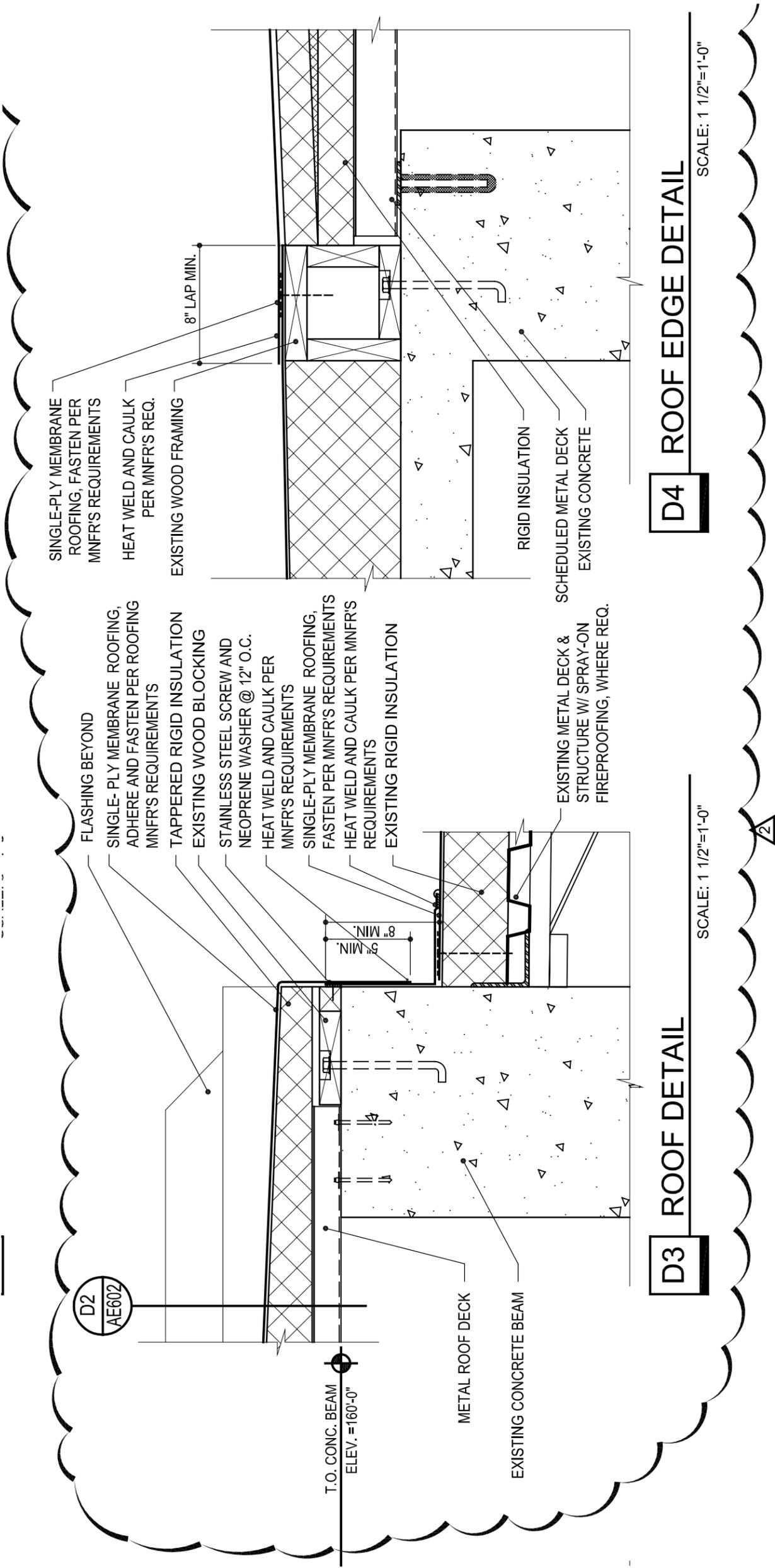


D6 CLERESTORY DETAIL

1 1/2"=1'-0"

SCALE: 1 1/2"=1'-0"

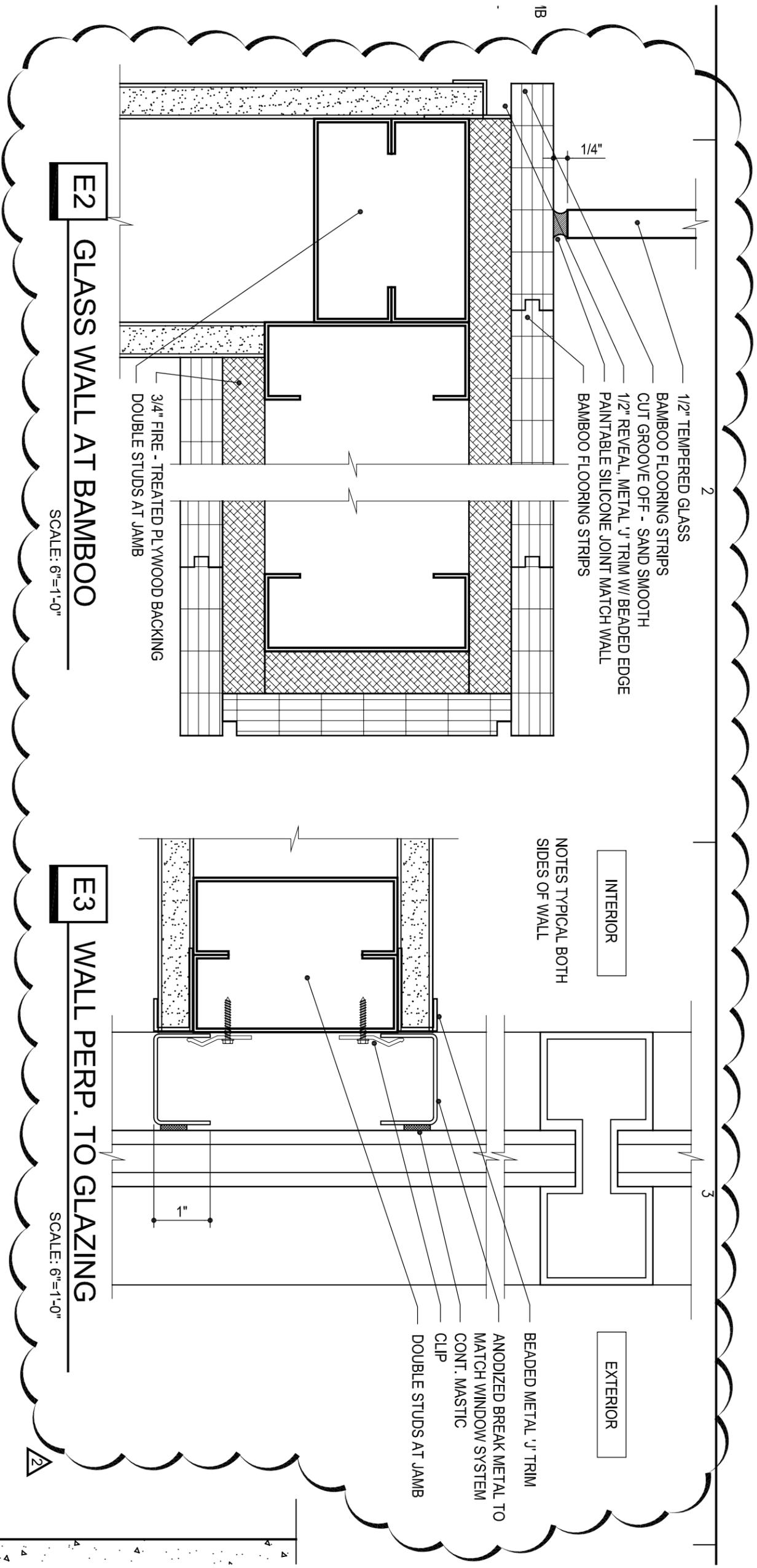
MODIFIED PORTION OF AE602 ADD 2.07



MODIFIED PORTION OF AE602 ADD 2.08

LASHING

MODIFIED PORTION OF AE604
ADD 2.09



E2 GLASS WALL AT BAMBOO
SCALE: 6"=1'-0"

E3 WALL PERP. TO GLAZING
SCALE: 6"=1'-0"



