State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Department of Administrative Services
KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management
DAVID G. BUXTON
Director

ADDENDUM NO. 1

Date: August 4, 2009

To: Short-Listed Contractors

From: Jim Russell – Project Manager

Reference: Northern Utah County Campus – Mountainland ATC
Utah College of Applied Technology – Lehi, Utah
DFCM Project No. 07039260

Subject: **Addendum No. 1**

Pages	Addendum Cover Sheet	1	page
	Revised Project Schedule	1	page
	Architect's Addendum	53	pages
	Total	55	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:** See attached Revised Project Schedule. Dates from last day to submit questions prior to final addendum through announcement of award have been revised.

1.2 **GENERAL ITEMS:** See attached Architect's Addendum.

STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

PROJECT SCHEDULE – REVISED
PER ADDENDUM NO. 1 DATED AUGUST 4, 2009

PROJECT NAME:	**NORTHERN UTAH COUNTY CAMPUS – MOUNTAINLAND ATC UTAH COLLEGE OF APPLIED TECHNOLOGY – LEHI, UTAH**			
DFCM PROJECT NO.	**07039260**			**CONSTRUCTION**
Event	**Day**	**Date**	**Time**	**Place**
Request for Proposals and Construction Documents Available	Thursday	June 18, 2009	4:00 PM	DFCM 4110 State Office Bldg SLC, UT and the DFCM web site *
Mandatory Pre-Proposal Site Meeting	Tuesday	June 30, 2009	11:00 AM	Project Site 2400 North Ashton Blvd. Lehi, UT
Last Day to Submit Questions prior to submittal of Statements of Qualifications	Friday	July 3, 2009	2:00 PM	Jim Russell E-mail: jimrussell@utah.gov Fax: 801-538-3267
Addendum Deadline	Tuesday	July 7, 2009	2:00 PM	DFCM web site *
Prime Contractors turn in References, Statements of Qualifications, Management Plans (including Schedule), and Termination/Debarment Certifications	Wednesday	July 15, 2009	2:00 PM	DFCM 4110 State Office Bldg SLC, UT
Short Listing by Selection Committee (if applicable)	Wednesday	July 22, 2009	4:00 PM	DFCM web site *
Last Date to Submit Questions for Final Addendum	**Wednesday**	**August 12, 2009**	**2:00 PM**	**Jim Russell E-mail: jimrussell@utah.gov Fax: 801-538-3267**
Final Addendum Deadline (exception for bid delays)	**Monday**	**August 17, 2009**	**4:00 PM**	**DFCM web site ***
Prime Contractors Turn In Cost Proposals and Cost Reduction Proposals	**Tuesday**	**August 25, 2009**	**12:00 NOON**	**DFCM 4110 State Office Bldg SLC, UT**
Subcontractor List Due	**Wednesday**	**August 26, 2009**	**12:00 NOON**	**DFCM 4110 State Office Bldg SLC, UT Fax 801-538-3677**
Interviews	**Wednesday**	**September 2, 2009**	**TBD**	**TBD**
Announcement	**Thursday**	**September 3, 2009**	**4:00 PM**	**DFCM web site ***
Substantial Completion Date	Tuesday	March 1, 2011		

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

HFSARCHITECTS
1484 South State Street
Salt Lake City, Utah 84115
801-596-0691 • Fax: 596-0693 • www.hfsa.com

Addendum No. 1

Project: Northern Utah County Building
Address: 1550 North Freedom Boulevard
City, State: Provo, Utah

Date: 04 August 2009
Project No.: DFCM 07039260 / HFSA 0813.01
Agency: Mountainland Applied Technology College

To all Bidders of Record:

This addendum forms a part of the contract documents and modifies the original specifications and drawings as noted below. Items of general information are included without reference to the plans and specifications. Revisions to the specifications are referenced by page number and paragraph heading on that page. Revisions to the drawings are reference by the drawing number. Unless otherwise stated, any changes herein offset only the specific drawings, words, or paragraphs mentioned, and the balance of the drawings and specifications remain in full force. Acknowledge receipt of this addendum in the space provided on the Bid form. Failure to do so will subject the Bidder to disqualification.

Item No.	Section or Sheet No.	Description
GENERAL ITEMS		
1-1	Clarification	This project will be applying for a LEED Silver certification. A list of the LEED credits which will be pursued will be issued by addendum (following this addendum).
SPECIFICATION ITEMS		
1-2	07145	Add the attached specification section RUBBERIZED ASPHALT WATERPROOFING, INSULATION AND PAVERS.
1-3	08710	Add attached HARDWARE SCHEDULE to the end of the section.
1-4	08910	Add the attached specification section METAL-FRAMED CURTAIN WALL.
1-5	09440-1	Sec. 1.03: Add the following: ***F. LEED submittal documentation of recycled content and location of manufacturer.***
1-6	09440-1	Sec. 1.04 A: Add the following: ***Installer shall be a member of NTMA.***
1-7	09440-2	Sec. 2.01 Resin Manufacturers: Add the following: ***1. General Polymers.*** ***2. Key Resin.*** ***3. Terrazz0 and Marble Supply.***
1-8	09440-2	Sec. 2.02 PLASTIC MATRIX TERRAZZO: Revise to subparagraphs to read: ***A. Floors: Epoxy matrix 3/8" thick, aggregate size 0-2.***

Item No.	Section or Sheet No.	Description
		1. Field and stair color: White epoxy, 75% white marble, 5% black glass, 10% mother of pear.
		2. Border and band color: Maroon epoxy, 70% marble, 5% black glass, 20% mother of pearl, 5% mirrored glass.
		3. Accent medallions: Black epoxy, 80% black glass, 15% mother of pearl, 5% mirrored glass.
1-9	09440-2	Sec. 2.04 A: Clarification: Aluminum dividers trips are acceptable.
1-10	09440-2	Sec. 2.04 Accessories: Add the following: ***F. Crack isolation membrane: Provide EpoFlex system or equivalent at all construction joints an all cracks.***
1-11	09440-3	Sec. 3.02: Clarification: Shot blast concrete surface to profile and clean concrete.
1-12	13916	Sec. 3.13 A-2: Clarification: All heads in finished areas are to be concealed and all heads in tile are to be centered.
1-13	15816	See the attached MECHANICAL ADDENDUM.
DRAWING ITEMS		
1-14	AE101B	Detail B4: See revised drawing for location of CONTROL JOINTS.
1-15	AE101C	Detail E3: See revised drawing for location of CONTROL JOINTS.
1-16	AE103A	Revise detail reference A1/AE313 between grids I-H and 4-4.2 to read A1/AE311.
1-17	AE103A	Revise detail reference A6/AE313 between grids I.2-I and 2-3 to read A1/AE311.
1-18	AE103A 01	Revise detail reference A1/AE313 between grids I-H and 4-4.2 to read A1/AE311.
1-19	AE103A 01	Revise detail reference A6/AE313 between grids I.2-I and 2-3 to read A1/AE311.
1-20	AE103A 01	See attached drawing for location on new fin wall.
1-21	AE201	Clarification: Precast concrete band above the natural stone base is continuous around the building.
1-22	AE502	Detail D5: See revised drawing of the RAISED FLOOR DETAIL.
1-23	AE502	Detail D4: See revised drawing of the CURTAIN WALL DETAIL.
1-24	AE502	Detail C1: See revised drawing of the SLIDING GLASS DOOR DETAIL.
1-25	AE503	Detail A2: See revised drawing of the SLIDING GLASS DOOR DETAIL.

Item No.	Section or Sheet No.	Description
1-26	AE702	Detail A1: See revised drawing of the SALON DESK SECTION @ CABINETS.
1-27	AE702	Detail C1: See revised drawing of the SALON DESK SECTION @ COUNTER.

PRIOR APPROVALS

1-28	Architectural	Sherwin Williams for paint.
1-29	Architectural	HanStone for engineered quartz.
1-30	Architectural	Flush-Metal for phenolic toilet compartments.
1-31	Architectural	Gemini, Inc. for dimensional letters and plaques.
1-32	Architectural	A.R.K. Ramos Signage Systems for dimensional letters and plaques.
1-33	Architectural	Acc-U-Sound AWP Panel for acoustical panels.
1-34	Architectural	AARCO Products Inc. for visual display boards.
1-35	Architectural	ASI Storage Solutions for metal lockers.
1-36	Architectural	Centrex for access doors.
1-37	Architectural	Insulation Solutions for under-slab vapor barrier.
1-38	Architectural	Newline for visual display boards.
1-39	Architectural	BASF Sonoguard for traffic membrane.
1-40	Architectural	GAF Materials Corporation for modified bitumen roofing.
1-41	Architectural	Sikalastic for traffic membrane.
1-42	Architectural	Metals Sales Manufacturing Corporation – ***CONDITIONAL PRIOR APPROVAL*** Only if seams are lenghtwise and medium bronze color meets SRI requirement for LEED credit.
1-43	Architectural	Sno-Gem, Sno-Barricade – ***CONDITIONAL PRIOR APPROVAL*** Only if stainless steel tube.
1-44	Mechanical	See the attached MECHANICAL ADDENDUM.
1-45	Electrical	See the attached ELECTRICAL ADDENDUM.

ATTACHMENTS

1-46	6 pages	Specification Section 07145 Rubberized Asphalt Waterproofing, Insulation and Pavers.

Item No.	Section or Sheet No.	Description
1-47	6 pages	Specification Section 08710 Door Hardware: Hardware Schedule.
1-48	5 pages	Specification Section 08910 Metal-Framed Curtain Wall.
1-49	9 pages	Architectural details.
1-50	2 pages	Structural Revisions Addendum #1.
1-51	12 pages	Division 15 Mechanical Addendum #1.
1-52	9 pages	Electrical Addendum 1.

END OF ADDENDUM NO. 1

SECTION 07145

RUBBERIZED ASPHALT WATERPROOFING, INSULATION AND PAVERS

PART I GENERAL

1.01 SECTION INCLUDES

A. Reinforced rubberized asphalt waterproofing.

B. Rigid extruded polystyrene insulation.

C. Adjustable height pedistals

D. Pre-Cast concrete pavers.

1.02 RELATED SECTIONS

A. DIVISION 3 - Concrete [Section 03300] - Roof Deck Surface/Substrate
   1. The coordination of this section is necessary to facilitate the successful installation of the waterproofing membrane.
   2. Cast In Place Concrete/Composite Deck
      a. Finish: Wood-float or wood-troweled equivalent finish. Steel troweled is not desirable.
      b. Concrete Hydration (Cure):
         1) Method of Cure: Water cure, wet coverings, paper sheets, plastic sheets or approved liquid curing compound (sodium silicate preferred). Contact Hydrotech for other alternatives.
         2) Duration of Cure/Dry:
            (a) Structural Weight Concrete: recommend 28 days, minimum 14 days, prior to application of the membrane
         3) Form release agents: contact Hydrotech

1.03 REFERENCES

A. American Society for Testing and Materials (ASTM).

B. Canadian Government Specification Board CGSB-37.50-M89, Standard for "Asphalt, Rubberized, Hot Applied, for Roofing and Waterproofing."

1.04 SYSTEM DESCRIPTION

A. Furnish and install a completed waterproofing assembly including surface conditioner, a monolithic, reinforced rubberized asphalt membrane, protection course, flashings, extruded polystyrene insulation, and pavers. To ensure total system compatibility all products must by purchased from a single-source manufacturer.

1.05 SUBMITTALS

A. Certification from an approved independent testing laboratory experienced in testing this type material, that the material meets the CGSB-37.50-M89 standard for rubberized asphalt membranes, including applicable ASTM procedures. Testing shall be done by Ortech International or other national testing laboratory acceptable to the engineer.

B. Certification showing full time quality control of production facilities and that each batch of material is tested to insure conformance with the manufacturer's published physical properties.

C. Evidence that extruded polystyrene insulation is free from CFC's.

D. Certification showing that all waterproofing components are being supplied and warranted by a single-source manufacturer.

E. The plant manufacturing this type material must have ISO9002 approval as evidenced by a notarized copy of the official certificate.

F. Product Data for each type of waterproofing specified, including manufacturer's printed instructions for evaluating, preparing, and treating the substrate, technical data, and tested physical and performance properties.

G. Shop Drawings showing locations and extent of waterproofing, paver layouts, and including details for substrate joints, cracks, sheet flashings, penetrations, special cut pavers, and other termination conditions.

H. Samples, 6-by-6-inch minimum size, of each waterproofing material required for Project.

I. Evidence that the roof membrane assembly is currently Class A listed with Underwriters Laboratories.

J. Evidence that the roof membrane assembly is currently listed as a Class 1 Roof Cover with Factory Mutual Research Corporation when required.

K. The plant manufacturing this type material shall have ISO 9001-2000 approval as evidenced by a copy of the official certificate.

1.06 QUALITY ASSURANCE

A. Refer to Section 1.05 SUBMITTALS. Include items A., B., C. & D.

B. The Waterproofing Contractor shall demonstrate qualifications to perform the work of this Section by submitting the following documentation:
   1. Certification or license by the membrane manufacturer as a locally based, authorized applicator of the product the installer intends to use, for a minimum of five (5) years.
   2. List of at least three (3) projects, satisfactorily completed within the past five (5) years, of similar scope and complexity to this project. Previous experience submittal shall correspond to specific membrane system proposed for use by applicator.
      a. Refer to Section 1.04 SYSTEM DESCRIPTION. Include single-source for all components from the manufacturer.
      b. The rubberized asphalt membrane product shall contain an inert clay filler to enable the product to be resistant to acids (fertilizers, building washes and acid rain).
      c. The rubberized asphalt membrane product shall contain a minimum of 25% reclaimed rubber.
      d. Membrane Manufacturer shall have available an in-house technical staff to assist the contractor, when necessary, in application of the products and final inspection of the assembly.
      e. Membrane Manufacturer Qualification: Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
         1) Membrane Manufacturer must show evidence that the specified rubberized asphalt has been manufactured by the same source for fifteen (15) years and successfully installed on a yearly basis for a minimum of fifteen (15) years on projects of similar scope and complexity.
         2) Membrane Manufacturer must not issue warranties for terms longer than they have been manufacturing their hot fluid rubberized asphalt membrane.
      f. Pre-Construction Conferences. The manufacturer will meet with the necessary parties at the jobsite to review and discuss project conditions as it relates to the integrity of the waterproofing assembly.

1.07 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in original unopened containers of packaging clearly labeled with manufacturer's name, brand name, instruction for use and all identifying numbers.

B. Materials shall be stored in a neat, safe manner, not to exceed the allowable structural capacity of the storage area.

C. Store materials in a clean, dry area protected from water and direct sunlight.

D. Store all adhesives at temperatures between 60°F and 80°F. If exposed to lower temperatures, restore materials to 60°F minimum temperature before using.

1.08 PROJECT CONDITIONS

A. Application of the membrane shall not commence nor proceed during inclement weather. All surfaces to receive the membrane shall be free of water, dew, frost, snow and ice.

B. Application of membrane shall not commence nor proceed when the ambient temperature is below 0°F.

1.09 WARRANTY

A. Upon completion of the work, the contractor must supply the owner with a single-source warranty of U.S. origin direct from the manufacturer.

B. Manufacturer's Warranty:
1. Total System Warranties; covers components of the waterproofing assembly, including membrane, flashing, insulation and pavers. Includes removal and replacement of the pedestal installed pavers when installed per the waterproofing manufacturer's requirements.
   a. Duration of Membrane/Flashing: 10-year
      1) (watertight condition)
         (a) Duration of Insulation: 10-year
            (1) (80% of original thermal value)
         (b) Duration of Pavers: 10-year
            (1) (crack, split or disintegrate due to freeze-thaw)

PART II PRODUCTS

2.01 GENERAL

A. Refer to Section 1.04, System Description. All components must be obtained as a single-source from the membrane manufacturer to ensure total system compatibility and integrity.
1. MATERIALS
   a. Membrane: American Hydrotech 6125
   b. Membrane shall be an environmental grade hot, fluid applied, rubberized asphalt membrane meeting the CGSB-37.50-M89 standard and other pertinent physical properties:

c.	PROPERTY	TEST METHOD	TYPICAL RESULT
d.	Flash point	ASTM D-92 CGSB-37.50-M89	502°F*
e.	Penetration	ASTM D-5329 CGSB-37.50-M89	98 mm @77°F
f.		187 mm @122°F	
g.	Flow	ASTM D-5329 CGSB-37.50-M89	1.0 mm @ 140°F
h.	Toughness	CGSB-37.50-M89	16.0 Joules
i.	Ratio of Toughness to Peak Load	CGSB-37.50-M89	0.069
j.	Water Vapor Permeability	ASTM E-96, PROCEDURE E	
k.		CGSB-37.50-M89	0.3 ng/Pa(s)M2
l.	Water Absorption	CGSB-37.50-M89	.11 gram weight
	gain		
m.	Low Temperature Flexibility (-25°C)	CGSB-37.50-M89	No delamination,
			adhesion
n.	loss, or cracking		

o. Surface Conditioner
   1) A surface conditioner for concrete surfaces.
      (a) - Surface Conditioner
p. Flashing/Reinforcing
   1) 60-mil thick, uncured neoprene flashing/ (heavy duty) reinforcing sheet.
   2) Spunbonded polyester fabric (standard duty) reinforcing sheet.
q. Protection Course
   1) A fiberglass reinforced rubberized asphalt sheet.
      (a) 85 mils
      (b) Insulation
      (c) An extruded polystyrene rigid board insulation meeting the following physical properties.
r. Insulation shall meet ASTM C-578, Type VI.
   1) Minimum compressive strength, ASTM D-1621, 60 psi.
   2) Maximum water absorption by volume per ASTM C-272, 0.1%.
   3) Water vapor permeance for 1" product per ASTM E-96, 1.0 perm (max.).
   4) Insulation shall have an R value of 5.0 F ft2 h/Btu/in of thickness when tested at 75°F mean temperature in accordance with ASTM C-518.
   5) Product shall be free of CFC's.
s. Topping Materials
   1) Pavers
      (a) Architectural Finish Pavers by Wasau Tile, Stoney Brook Style, 18' x18"
      (b) Paver Accessories
         (1) Adjustable Height pedestals as recommended by waterproofing manufacturer.

PART III EXECUTION

3.01 INSPECTION

A. The waterproofing contractor shall examine all surfaces to receive the waterproofing assembly to verify it is acceptable and proper for the application of the membrane.

B. The waterproofing contractor shall not proceed with the installation of the waterproofing membrane assembly until all deck defects have been corrected.

3.02 PREPARATION

A. All surfaces must be dry, smooth, free of depressions, voids, protrusions, clean and free of unapproved curing compounds, form release agents and other surface contaminants.
   1. Cast in-place concrete/Composite deck
      a. Poured in place concrete must be monolithic, smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.
      b. Substrate cleaning
         1) Thoroughly sweep the substrate which is to receive the waterproofing membrane.
         2) Substrate must also be blown clean using an air compressor to remove any remaining loose debris.
         3) Final check to determine if concrete has been properly cleaned is to apply a test patch of the rubberized asphalt membrane to the surface and check its adhesion.

3.03 INSTALLATION

A. Surface conditioner application (to concrete)
   1. Apply the surface conditioner to the concrete using a hand held sprayer evenly at a rate of 300 to 600 SF/gallon depending on surface texture. Surface conditioner should "tan" the surface, not blacken it.
   2. Allow sufficient time for the surface conditioner to thoroughly dry prior to the membrane application.

B. Membrane preparation
   1. The membrane shall be heated in double jacketed, oil bath or air jacketed melter with mechanical agitation, specifically designed for the preparation of a rubberized asphalt membrane.
   2. Heat membrane until membrane can be drawn-free flowing at a temperature range between 350°F and 400°F.

C. Detailing/Flashing
   1. All detailing and flashing shall be done in accordance with the manufacturer's standard guideline details.
   2. All detailing and flashing shall be completed before installing the membrane over the field of the substrate.

D. Membrane Application
   1. a. Apply the rubberized asphalt membrane at a rate to provide a continuous, monolithic coat of 90 mil minimum, into which is fully embedded a layer of the spunbonded polyester fabric reinforcing sheet, followed by another continuous monolithic coat of membrane at an average thickness of 125 mil. Total membrane thickness is to be 215 mils average, 180 mils minimum.
   2. b. For foundation wall application woven fiberglass, fabric reinforcing sheet may be used in lieu of spunbonded polyester.
   3. Overlap fabric reinforcing sheet 1-2 inches with membrane between sheets.

3.04 SEPARATION/PROTECTION LAYER INSTALLATION

A. Embed the protection sheet/rigid insulation board into the membrane while it is still hot to insure a good bond.

B. Overlap adjoining sheet edges (dry) a minimum of 2"-3" to insure complete coverage. Rigid insulation board materials are not to be overlapped.
   1. The completed membrane/protection assembly must be covered with subsequent topping materials as soon as possible, within 30 days of membrane installation.

3.05 WATER TEST

A. Water test by means of ponding water to a minimum depth of 6" for a period of 48 hours to check the integrity of the membrane installation.

B. If leaks should occur, the water must be drained completely and the membrane installation repaired.

3.06 DRAINAGE COURSE/INSULATION/FILTER FABRIC SHEET/PAVER PLACEMENT

A. General
   1. Contractor shall examine the deck area to be covered with subsequent topping materials in order to insure that all deck areas have received the membrane, the membrane is free of damage, it is properly protected, and all flashing has been properly installed, before placing the insulation.

B. It is recommended that the drainage course (if required), insulation, and other subsequent topping materials be installed as each section is completed.
   1. Insulation Placement
      a. Loose lay (horizontal applications) in a staggered manner and tightly butt together all insulation boards. The maximum acceptable opening between insulation boards is 3/8". Insulation must be installed within 3/4" of all projections, penetrations, etc.
         1) When multi-layer insulation applications are involved the bottom layer of insulation must be the thickest layer and must be a minimum of 2" thick. All layers shall be installed unadhered to each other and all joints in relation to underlying layers staggered.
            (a) For vertical, multi-layer applications, second layer of insulation board may be spot adhered to the protection layer with appropriate adhesive or additional rubberized asphalt membrane.

C. Architectural Finish Paver Placement
   1. Install architectural finish pavers on tabs or pedestals in accordance with manufacturer's recommendations and architectural layout.

3.07 JOB COMPLETION

A. Contractor and a representative of the membrane manufacturer shall inspect the waterproofing
   1. assembly and notify the contractor of any defects. All defects must be corrected.

B. Clean up all debris and equipment.

END OF SECTION

DOOR HARDWARE SCHEDULE- MATC

NO.	QTY.	ITEM	MFG	MODEL	STYLE/SIZE	FINISH
1	Outer Alum Door (pair w/HC operator)					
	2 Ea	Cont. Hinges	Roton	780-112HD	Continous	Med. Brnz.
	2 Ea	Exit Device	Von Duprin	98NL x 697NL		26D
	2 Ea	Stabilizer	Von Duprin			Med. Brnz.
	1 Ea	Closer	LCN	2030		Brnz
	1 Ea	Auto Operator	LCN	2610		Brnz
	1 Ea	Cont. Box & comp.	LCN	7982S	(Serves inner door also)	
	2 Ea	Wall Actuator	LCN	7910-956		
	1 Set	Tubing	LCN	9910-925		
	2 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Set	Weatherstrip	By Door Mfg.			
	1 Ea	Threshold	By Door Mfg.			
2	Outer Alum Door (pair)					
	2 Ea	Cont. Hinges	Roton	780-112HD	Continous	Med. Brnz.
	2 Ea	Exit Device	Von Duprin	98NL x 697NL		26D
	2 Ea	Stabilizer	Von Duprin			Med. Brnz.
	2 Ea	Closer	LCN	2030		Brnz
	2 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Set	Weatherstrip	By Door Mfg.			
	1 Ea	Threshold	By Door Mfg.			
3	Inner Alum. Doors (pair w/HC operator)					
	2 Ea	Cont. Hinges	Roton	780-112HD	Continous	Med. Brnz
	2 Ea	Dummy Exit	Von Duprin	350 x 697DT		26D
	1 Ea	Closer	LCN	2030		Brnz
	1 Ea	Auto Operator	LCN	2610		Brnz
	2 Ea	Wall Actuator	LCN	7910-956		
	1 Set	Tubing	LCN	9910-925		
	1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Set	Weatherstrip	By Door Mfg.			
	1 Ea	Threshold	By Door Mfg.			
4	Inner Alum. Doors (pair)					
	2 Ea	Cont. Hinges	Roton	780-112HD	Continous	Med. Brnz
	2 Ea	Dummy Exit	Von Duprin	350 x 697DT		26D
	2 Ea	Closer	LCN	2030		Brnz
	1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Set	Weatherstrip	By Door Mfg.			
	1 Ea	Threshold	By Door Mfg.			

5 Outer Alum Door (single)

1 Ea	Cont. Hinges	Roton	780-112HD	Cont	Med. Brnz.
1 Ea	Exit Device	Von Duprin	98NL x 697NL		26D
1 Ea	Closer	LCN	4040	Cush H	Brnz
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Weatherstrip	By Door Mfg.			
1 Ea	Threshold	By Door Mfg.			

6 Outer Alum Door Pair- Dining Rm.

2 Ea	Cont. Hinges	Roton	780-112HD	Continous	Med. Brnz.
2 Ea	Exit Device	Von Duprin	98NL x 697NL		26D
2 Ea	Stabilizer	Von Duprin			Med. Brnz.
2 Ea	Closer	LCN	4040	Cush- H	Brnz
2 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Weatherstrip	By Door Mfg.			
1 Ea	Threshold	By Door Mfg.			

7 Outer HM Doors (single @ enclosures)

1 Ea.	Cont. Hinges	Roton	780-112	Cont	Med. Brnz.
1 Ea.	Lockset	Schlage	D80PD	Rhodes	26D
1 Ea.	Closer	LCN	4040	Cush- H	Brnz.
1 Ea	Kickplate	Rockwood	K1050	8" x B4E x CSK	32D

8 Outer HM Doors (single @ dock)

1 Ea.	Cont. Hinges	Roton	780-112HD	Cont	Med. Brnz.
1 Ea.	Lockset	Schlage	D80PD	Rhodes	26D
1 Ea.	Closer	LCN	4040	Cush- H	Brnz.
1 Ea	Kickplate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Weather Strip	Hagar	870S		"X"
1 Ea.	Threshold	Hagar	626S		
1 Ea.	Sweeps	Hagar	750S		
1 Ea.	Astragal	Pemko	355SNS		

9 Outer HM Doors (double)

2 Ea.	Cont. Hinges	Roton	780-112	Cont	Med. Brnz.
1 Ea.	Lockset	Schlage	D80PD	Rhodes	26D
2 Ea.	Closer	LCN	4040	Cush- H	Brnz.
1 Ea	Kickplate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Manual Fl. Bolts	Glenn Johnson	FB6W		26D
1 Set	Weather Strip	Hagar	870S		"X"
1 Ea.	Threshold	Hagar	626S		
2 Ea.	Sweeps	Hagar	750S		
1 Ea.	Astragal	Pemko	355SNS		

10	Classroom					
	3 Ea	Hinges	Hager	AB700	4 ½ "x 4 "	26D
	1 Ea	Lockset	Schlage	D70PD	Rhodes	26D
	1 Ea	Closer	LCN	4040	H-Cush	AL
	1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Ea	Seal	National Guard	2525		
	1 Ea	Stop	Rockwood	403		26D
11	Office (non rated)					
	3 Ea	Hinges	Hager	AB700	4 ½ "x 4 "	26D
	1 Ea	Lockset	Schlage	D50PD	Rhodes	26D
	1 Ea	Stop	Rockwood	403		26D
12	Storage/Janitor/Elec./Mech					
	3 Ea	Hinges	Hager	AB700	4 ½" x 4 "	26D
	1 Ea	Lockset	Schlage	D96PD	Rhodes	26D
	1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Ea	Closer	LCN	4041	H-Cush	AL
	1 Ea	Seal	National Guard	2525		
	1 Ea	Stop	Rockwood	403		26D
13	Elevator Equip.					
	3 Ea	Hinges	Hager	AB700	4 ½" x 4"	26D
	1 Ea	Lockset	Schlage	D80PD	Rhodes	26D
	1 Ea	Kickplate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Ea	Closer	LCN	4041	Cush H	AL
	1 Ea	Weatherstrip	Hager	870S		"X"
	1 Ea	Door Bottom	Pemko	4301CRL		Cl. Anod.
	1 Ea	Threshold	Hager	626S		Mill
14	Mech Rm					
	6 Ea.	Hinges	Hager	AB700	4 ½" x 4"	26D
	1 Ea.	Lockset	Schlage	D80PD	Rhodes	26D
	2 Ea.	Closer	LCN	4040	Cush- H	AL
	1 Ea	Kickplate	Rockwood	K1050	8" x B4E x CSK	32D
	1 Set	Manual Fl. Bolts	Glenn Johnson	FB6W		26D
	1 Set	Weather Strip	Hagar	870S		"X"
	1 Ea.	Threshold	Hagar	626S		
	2 Ea.	Sweeps	Hagar	750S		
	1 Ea.	Astragal	Pemko	355SNS		
	1 Ea	Stop	Rockwood	403		26D

15 Public Restrooms

3 Ea	Hinges	Hager	AB700	4 ½" x 4"	26D
1 Ea	Push	Rockwood	No. 70		32D
1 Ea	Pull Plate	Rockwood	111 x 70	12" x 22"	32D
1 Ea	Auto Operator	LCN	2610		AL
1 Ea	Cont. Box & comp.	LCN	7982	(Serves a pair of rest rooms)	
2 Ea	Wall Actuator	LCN	7910-956		
1 Set	Tubing	LCN	9910-925		
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Seal	National Guard	2525		
1 Ea	Stop	Rockwood	403		26D

16 Single Restrooms

3 Ea	Hinges	Hager	AB700	4 ½" x 4"	26D
1 Ea	Lockset	Schlage	D44S		26D
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Seal	National Guard	2525		
1 Ea	Stop	Rockwood	403		26D

17 Exit Separation

6 Ea	Hinges	Hager	AB700	4 ½" x 4 "	26D
2 Ea	Exit Device	Von Duprin	9827L-BE-F-LBR	Rhodes	26D
2 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
2 Ea	Closer	LCN	4041	EDA	AL
1 Set	Seal	NG	2525		
1 Ea	Astragral	Pemko	29310CS		
2 Ea	Mag Holders	See Electrical			

18 Stairs

3 Ea	Hinges	Hager	AB700	4 ½" x 4 "	26D
1 Ea	Exit Device	Von Duprin	9827L-F	Rhodes	26D
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Ea	Closer	LCN	4041	EDA	AL
1 Set	Seal	NG	2525		
1 Ea	Mag Holders	See Electrical			

19 Server

3 Ea	Hinges	Hager	AB700	4 ½" x 4"	26D
1 Ea	Lockset	Locknetics*	CM5196-MGI-BP-LC-ATK	Rhodes	26D
1 Ea	Closer	LCN*	4041	Cush	AL
1 Ea	Kickplate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Smoke Seal	Natl. Guard	2525		

20 Extra wide Mech.

1 Ea	Cont. Hinge	Roton	780-112HD	Continuous	Cl. Anod
1 Ea	Lockset	Schlage	D96PD	Rhodes	26D
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Ea	Closer	LCN	4041	H-Cush	AL
1 Ea	Seal	National Guard	2525		
1 Ea	Stop	Rockwood	403		26D

21 Sliding glass doors

1 Ea	Cylinder	Schlage			

22 Classroom w/o closer

3 Ea	Hinges	Hager	AB700	4 ½ "x 4 "	26D
1 Ea	Lockset	Schlage	D70PD	Rhodes	26D
1 Ea	Seal	National Guard	2525		
1 Ea	Stop	Rockwood	403		26D

23 Locker rooms

3 Ea	Hinges	Hager	AB700	4 ½ "x 4 "	26D
1 Ea	Lockset	Schlage	D70PD	Rhodes	26D
1 Ea	Closer	LCN	4040	H-Cush	AL
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Ea	Seal	National Guard	2525		
1 Ea	Stop	Rockwood	403		26D

24 Kitchen

3 Ea	Hinges	Hager	AB700	4 ½" x 4"	26D
1 Ea	Push	Rockwood	No. 70		32D
1 Ea	Pull Plate	Rockwood	111 x 70	12" x 22"	32D
1 Set	Seal	National Guard	2525		
1 Ea	Stop	Rockwood	403		26D

25 Stairs

3 Ea	Hinges	Hager	AB700	4 ½" x 4 "	26D
1 Ea	Exit Device	Von Duprin	9827L-F	Rhodes	26D
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Ea	Closer	LCN	4041	EDA	AL
1 Set	Seal	NG	2525		

26 Outer Alum Door (single off deck)

1 Ea	Cont. Hinges	Roton	780-112HD	Cont	Med. Brnz.
1 Ea	Dummy Exit	Von Duprin	350 x 697DT		26D
1 Ea	Pull Plate	Rockwood	111 x 70	12" x 22"	32D
1 Ea	Closer	LCN	4040	Cush H	Brnz
1 Ea	Kick Plate	Rockwood	K1050	8" x B4E x CSK	32D
1 Set	Weatherstrip	By Door Mfg.			
1 Ea	Threshold	By Door Mfg.			

SECTION 08910

METAL-FRAMED CURTAIN WALL

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Aluminum-framed curtain wall, with vision glazing and glass infill panels.

B. Perimeter sealant.

1.02 RELATED REQUIREMENTS

A. Section 05120 - Structural Steel: Steel attachment members.

B. Section 05500 - Metal Fabrications: Steel attachment devices.

C. Section 08410 - Metal-Framed Storefronts: Entrance framing and doors.

D. Section 08800 - Glazing.

1.03 REFERENCE STANDARDS

A. AAMA CW-10 - Care and Handling of Architectural Aluminum From Shop to Site; American Architectural Manufacturers Association; 2004.

B. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; American Architectural Manufacturers Association; 1998.

C. ASCE 7 - Minimum Design Loads for Buildings and Other Structures; American Society of Civil Engineers; 2005.

D. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2007.

E. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2006.

F. ASTM E 283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004.

G. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2002.

H. ASTM E 331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of other components that comprise the exterior enclosure.

B. Preinstallation Meeting: Conduct a preinstallation meeting one week before starting work of this section; require attendance by all affected installers.

1.05 PERFORMANCE REQUIREMENTS

A. Design and size components to withstand the following load requirements without damage or permanent set:
   1. Design Wind Loads: Comply with requirements of ASCE 7.
   2. Member Deflection: Limit member deflection to flexure limit of glass in any direction, and maximum of 3/4 inch, with full recovery of glazing materials.

3. Measure performance by testing in accordance with ASTM E 330, using test loads equal to 1.5 times the design wind loads and 10 second duration of maximum pressure.

B. Seismic Loads: Design and size components to withstand seismic loads and sway displacement as calculated in accordance with International Building Code code.

C. Movement: Accommodate the following movement without damage to components or deterioration of seals:
   1. Movement of curtain wall relative to perimeter framing.
   2. Deflection of structural support framing, under permanent and dynamic loads.

D. Air Infiltration: Limit air infiltration through assembly to 0.06 cu ft/min/sq ft of wall area, measured at a reference differential pressure across assembly of 1.57 psf as measured in accordance with ASTM E 283.

E. Water Leakage: None, when measured in accordance with ASTM E 331 at a test pressure difference of 2.86 lbf/sq ft.

F. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.

G. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.

H. Design system to eliminate noises caused by wind and thermal movement, to prevent vibration harmonics, and to prevent "stack effect" in internal spaces.

1.06 SUBMITTALS

A. See Section 01300 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glazing and infill, internal drainage details.

C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related Work, expansion and contraction joint location and details, and field welding required.

D. Structural Glazing Adhesive: Submit product data and calculations showing compliance with performance requirements.

E. Warranty: Submit manufacturer warranty and ensure forms have been completed in DFCM's name and registered with manufacturer.

1.07 QUALITY ASSURANCE

A. Manufacturer and Installer: Company specializing in manufacturing aluminum glazing systems with minimum three years of documented experience.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Handle products of this section in accordance with AAMA CW-10.

B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

1.09 FIELD CONDITIONS

A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.

1.10 WARRANTY

A. See Section 01780 - Closeout Submittals, for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Kawneer Company, Inc.; Product 1600.

B. Other Acceptable Manufacturers:
   1. United States Aluminum Corp: www.usalum.com.
   2. Vistawall Architectural Products: www.vistawall.com.
   3. Substitutions: See Section 01600 - Product Requirements.

2.02 COMPONENTS

A. Aluminum-Framed Curtain Wall: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
   1. Outside glazed, with pressure plate and mullion cover, where indicated.
   2. Finish: Class I color anodized.
   3. Color: Medium bronze.

B. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.

2.03 MATERIALS

A. Extruded Aluminum: ASTM B 221 (ASTM B 221M).

B. Sheet Aluminum: ASTM B 209 (ASTM B 209M).

C. Structural Supporting Anchors: See Section 05120.

D. Fasteners: Stainless steel.

E. Exposed Flashings: 0.032 inch thick aluminum sheet; finish to match framing members- anodize after brake forming.

F. Concealed Flashings: 0.018 inch thick aluminum.

G. Brake Formed Closures and Trim: 0.060 inch thick aluminum up to 8" span, 0.090 for spans greater than 8"; anodized after brake forming.

H. Perimeter Sealant: Type Silicone specified in Section 07900.

I. Glazing: As specified in Section 08800.

J. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

K. Glazing Accessories: As specified in Section 08800.

2.04 FINISHES

A. Class I Color Anodized Finish: AAMA 611 AA-M12C22A42 Integrally colored anodic coating not less than 0.7 mils thick.

2.05 FABRICATION

A. Fabricate components with minimum clearances and shim spacing around perimeter of assembly, yet enabling installation and dynamic movement of perimeter seal.

B. Accurately fit and secure joints and corners. Make joints flush, hairline, and weatherproof.

C. Prepare components to receive anchor devices. Fabricate anchors.

D. Coat concealed metal surfaces that will be in contact with cementitious materials or dissimilar metals with bituminous paint.

E. Arrange fasteners and attachments to conceal from view.

F. Reinforce framing members for imposed loads.

G. Finishing: Apply factory finish to all surfaces that will be exposed in completed assemblies.
   1. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify dimensions, tolerances, and method of attachment with other work.

B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section.

C. Verify that anchorage devices have been properly installed and located.

3.02 INSTALLATION

A. Install wall system in accordance with manufacturer's instructions.

B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

C. Provide alignment attachments and shims to permanently fasten system to building structure.

D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

E. Provide thermal isolation where components penetrate or disrupt building insulation.

F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.

G. Coordinate attachment and seal of perimeter air and vapor barrier materials.

H. Pressure Plate Framing: Install glazing and infill panels in accordance with Section 08800, using exterior dry glazing method.

I. Install perimeter sealant in accordance with Section 07900.

J. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inches every 3 ft non-cumulative or 0.5 inches per 100 ft, whichever is less.

B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

C. Sealant Space Between Curtain Wall Mullions and Adjacent Construction: Maximum of 3/4 inch and minimum of 1/4 inch.

3.04 FIELD QUALITY CONTROL

A. See Section 01400 - Quality Requirements, for general requirements for testing and inspection.

B. Replace curtain wall components that have failed field testing and retest until performance is satisfactory.

3.05 CLEANING

A. Remove protective material from pre-finished aluminum surfaces.

B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

C. Remove excess sealant by method acceptable to sealant manufacturer.

3.06 PROTECTION

A. Protect installed products from damage during subsequent construction.

END OF SECTION

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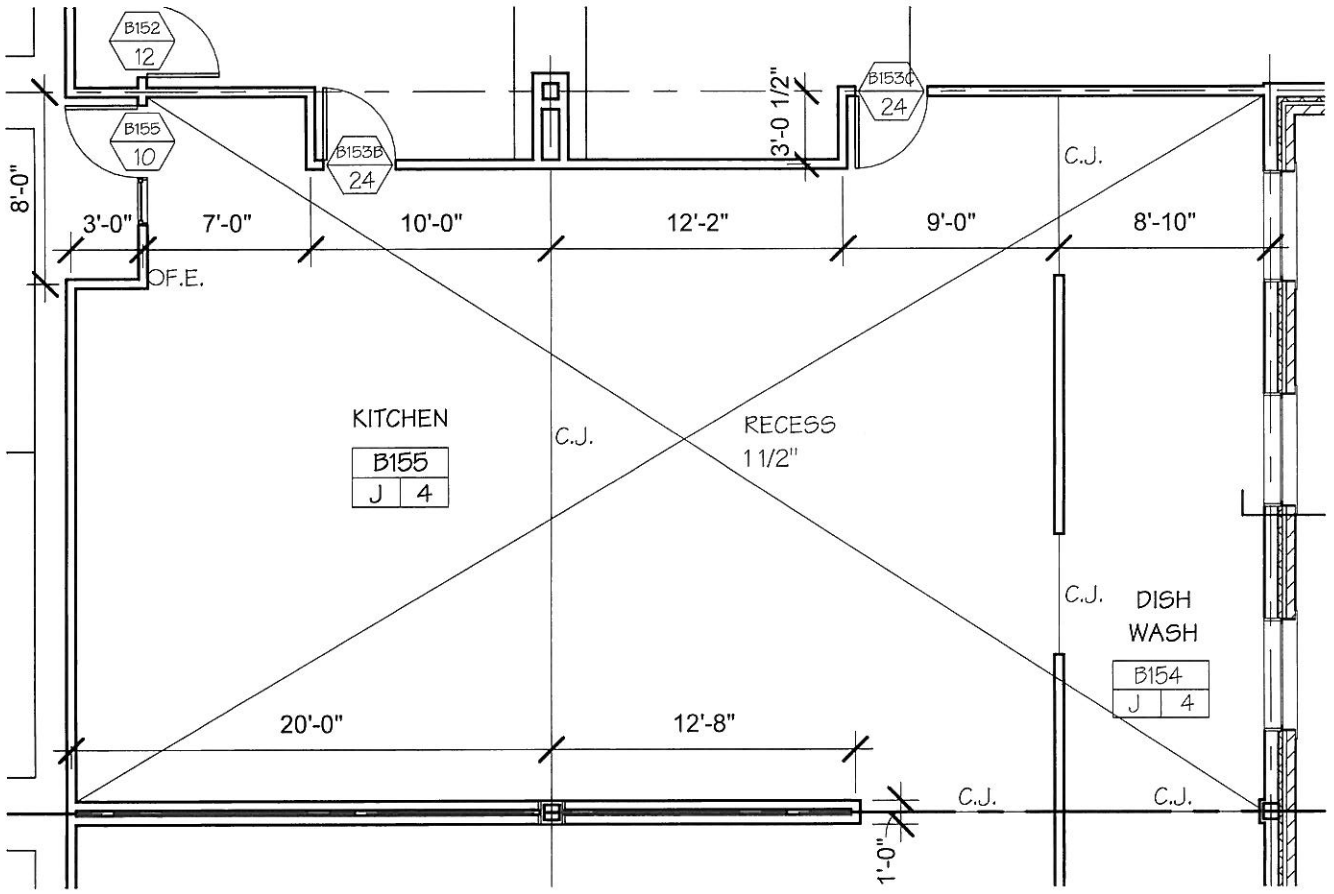

B4 CONTROL JOINTS

SCALE 1/8"=1'-0"

0 4' 8' 16'

N

AE101B

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PLANNING

ADD #1 CONTROL JOINTS
MATC NORTHERN UTAH COUNTY BUILDING

SCALE:	1/8" = 1'-0"
DATE:	Aug 4, 2009
CLIENT PROJ No	070392650
HFSA PROJ No	0813.01

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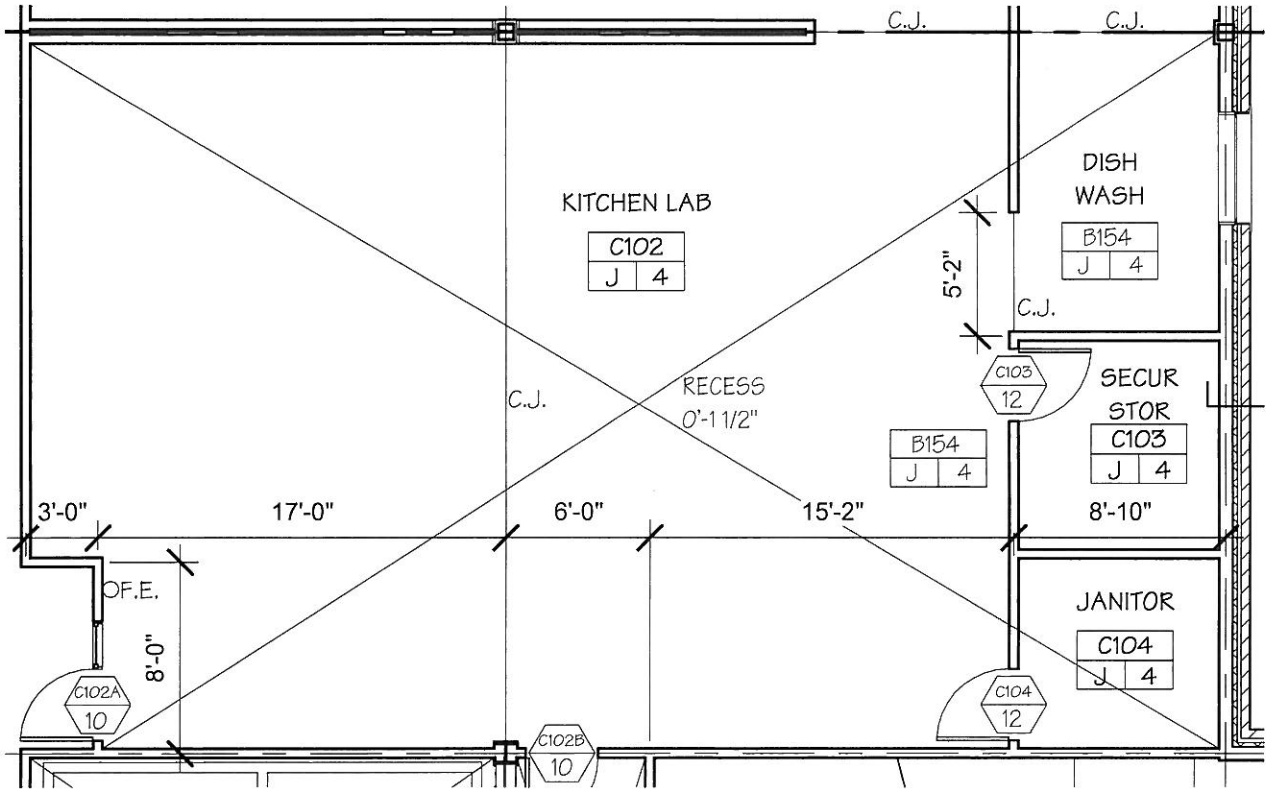

E3 CONTROL JOINTS

SCALE 1/8"=1'-0"

0 4' 8' 16'

N

AE101C

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ADD #1 CONTROL JOINTS

MATC NORTHERN UTAH COUNTY BUILDING

SCALE:	1/8" = 1'-0"
DATE:	Aug 4, 2009
CLIENT PROJ No	070392650
HFSA PROJ No	0813.01

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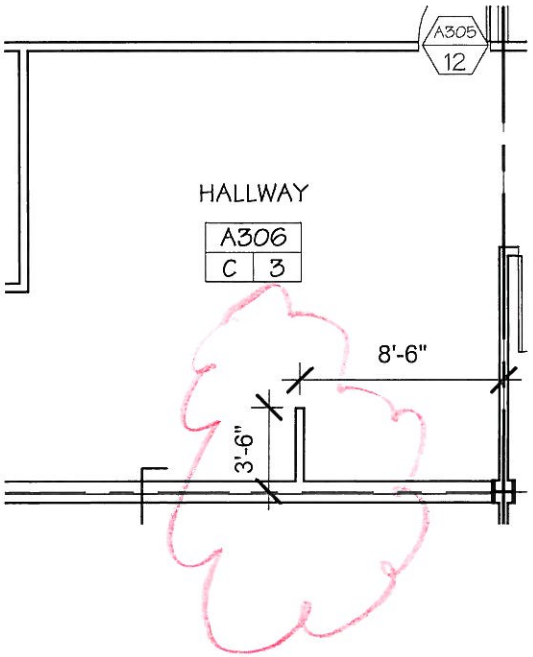

C5 FIN WALL

SCALE 1/8"=1'-0"

AE103A 01

N

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ADD#1 FIN WALL

MATC NORTHERN UTAH COUNTY BUILDING

SCALE:	1/8" = 1'-0"
DATE:	Aug 4, 2009
CLIENT PROJ No	070392650
HFSA PROJ No	0813.01

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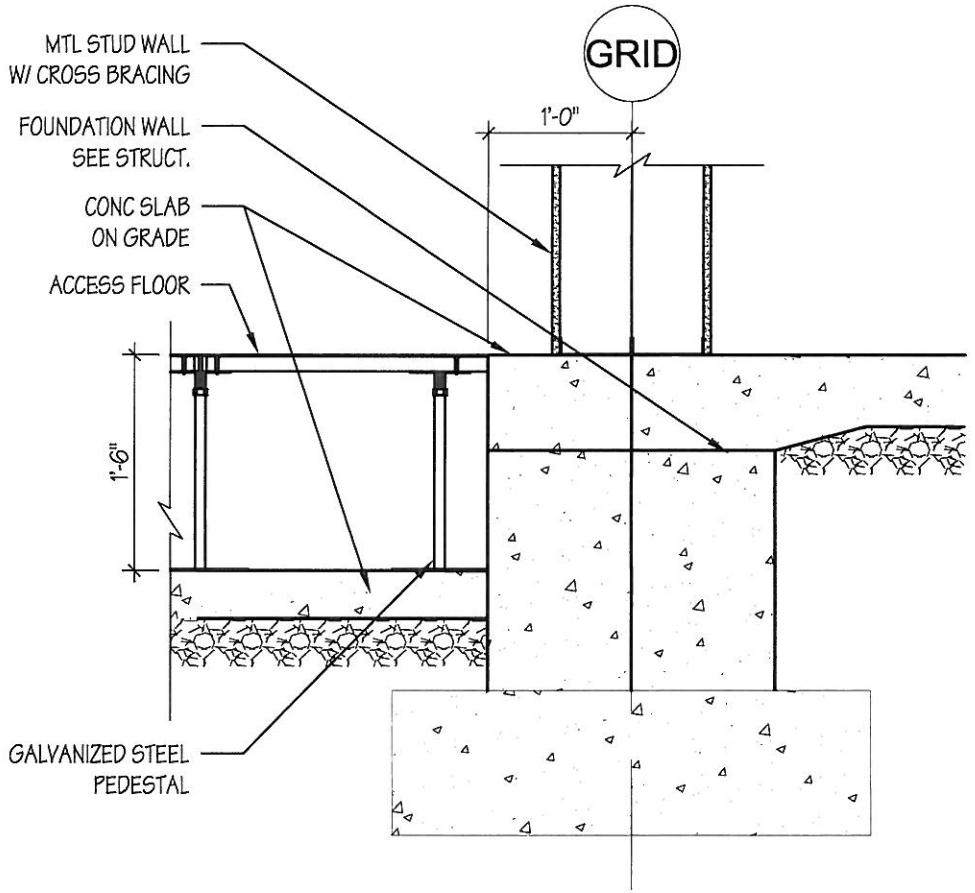

D5 RAISED FLOOR DETAIL

SCALE: 3/4" = 1'-0"

0 1' 2' 3'

AE502

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ADD #1 RAISED FLOOR DETAIL
MATC NORTHERN UTAH COUNTY BUILDING

SCALE 3/4" = 1'-0"
DATE Aug 4, 2009
CLIENT PROJ No 070392650
HFSA PROJ No 0813.01

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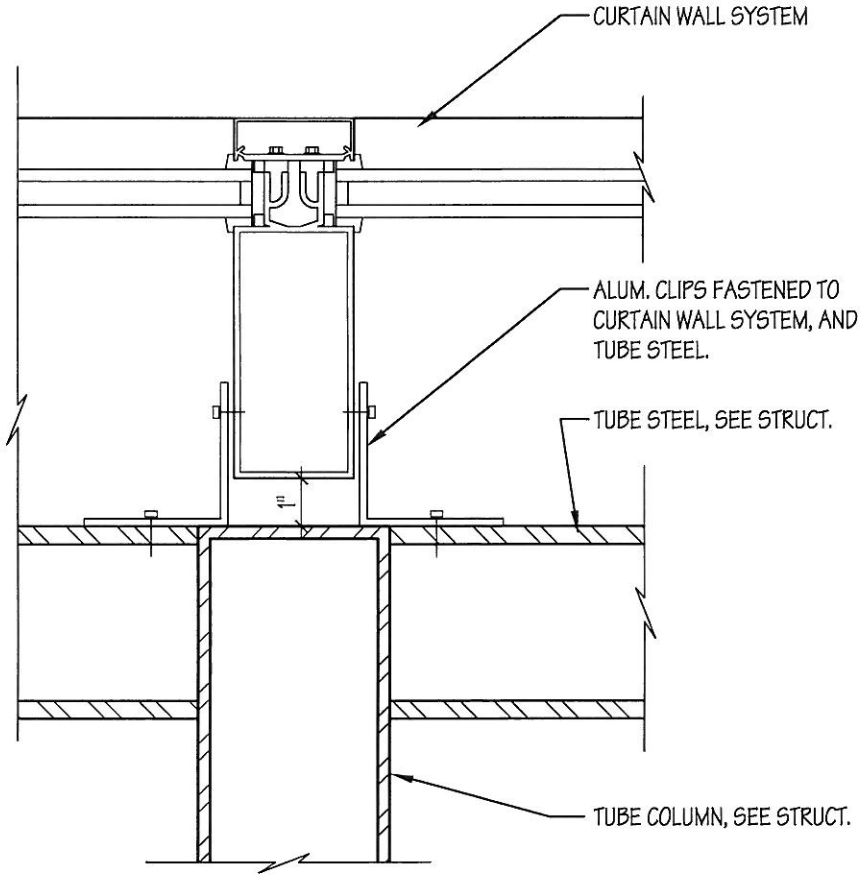

D4 CURTAIN WALL DETAIL

SCALE: 3" = 1'-0"

0 3' 6' 9'

AE502

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ADD #1 CURTAIN WALL DETAIL
MATC NORTHERN UTAH COUNTY BUILDING

SCALE 3" = 1'-0"
DATE: Aug 4, 2009
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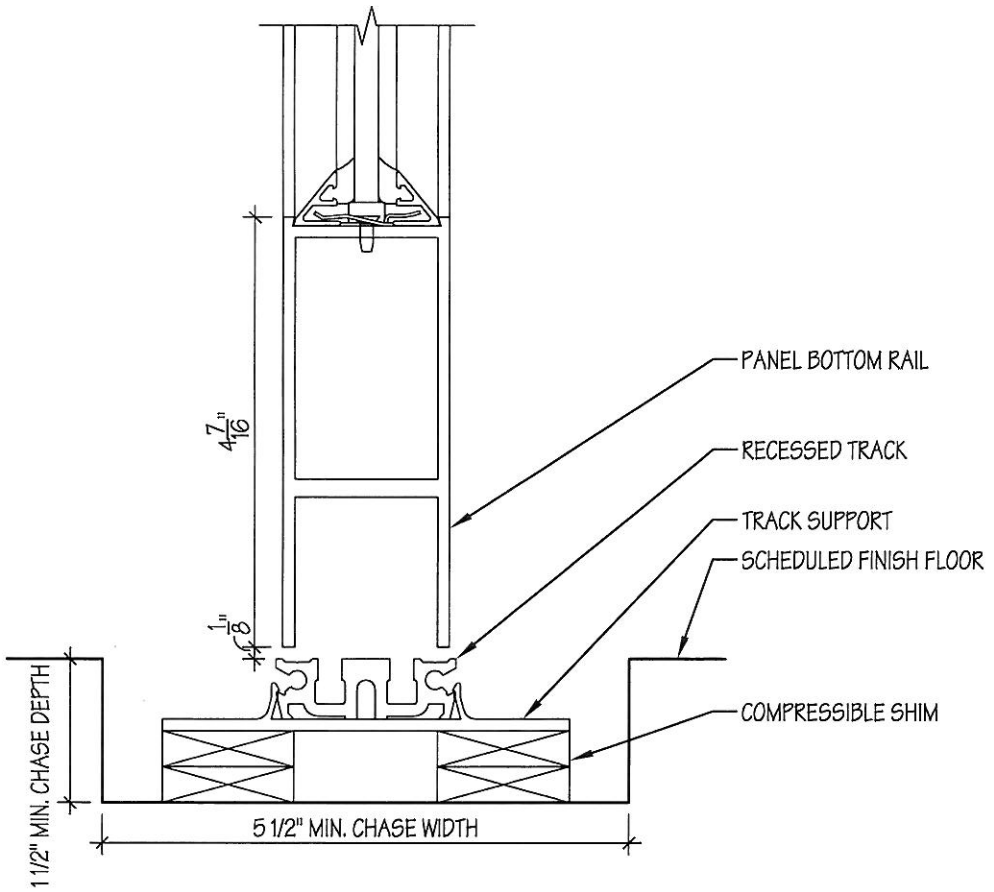

C1 SLIDING GLASS DOOR DETAIL

SCALE: 6" = 1'-0"

0 1' 2' 4'

AE502

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ADD #1 SLIDING GLASS DOOR DETAIL
MATC NORTHERN UTAH COUNTY BUILDING

SCALE 6" = 1'-0"
DATE Aug 4, 2009
CLIENT PROJ No 070392650
HFSA PROJ No 0813.01

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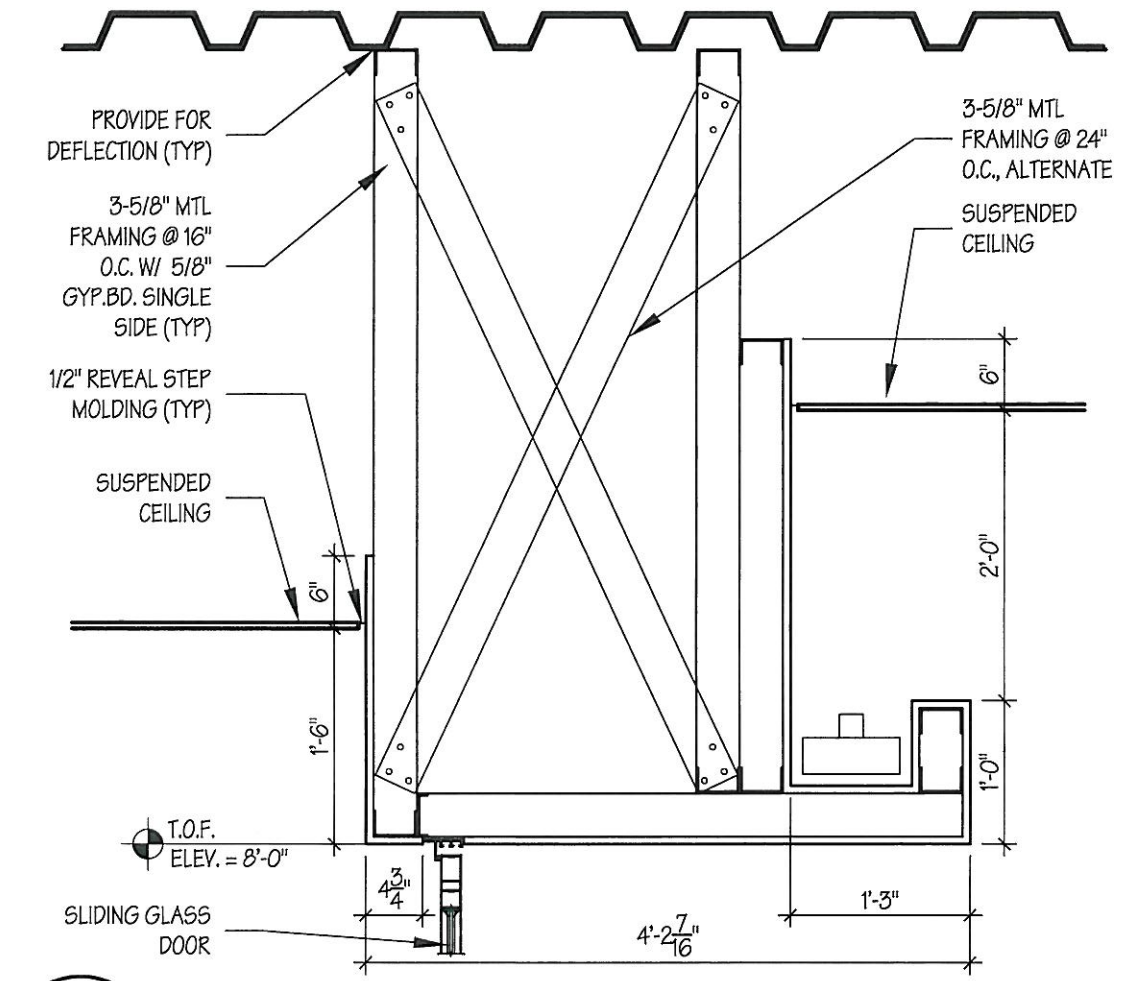

A2 SLIDING GLASS DOOR DETAIL

SCALE: 3/4" = 1'-0"

0 1' 2' 3'

AE503

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ADD #1 SLIDING GLASS DOOR DETAIL

MATC NORTHERN UTAH COUNTY BUILDING

SCALE: 3/4" = 1'-0"
DATE Aug 4, 2009
CLIENT PROJ No 07039260
HFSA PROJ No 0813.01

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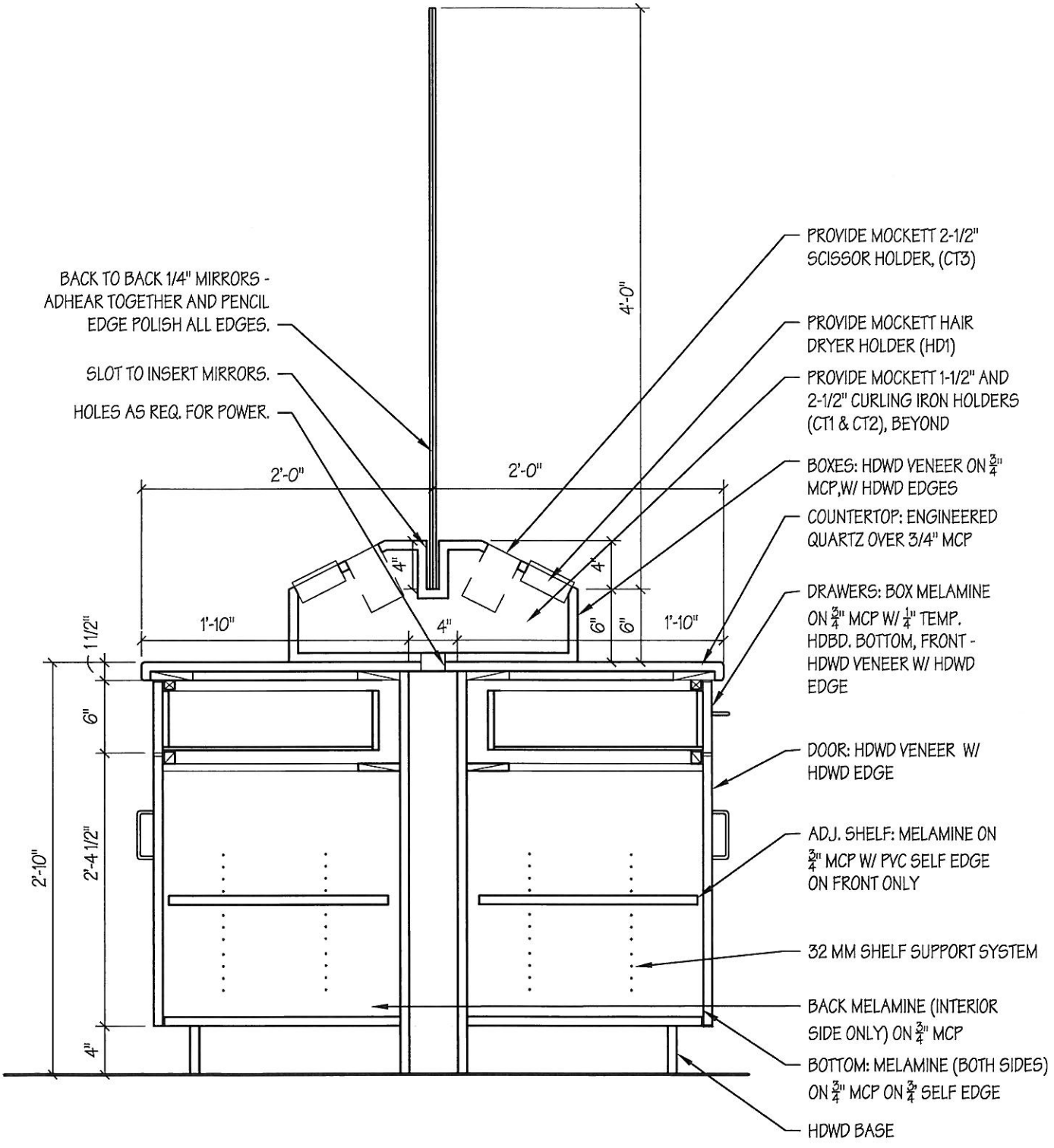

A1

SALON DESK SECTION @ CABINETS

SCALE: 1" = 1'-0"

0 6' 1' 2'

AE702

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ADD#1 SALON DESK SECTION

MATC NORTHERN UTAH COUNTY BUILDING

SCALE: 1" = 1'-0"
DATE: Aug 4, 2009
CLIENT PROJ No 070392650
HFSA PROJ No 0813.01

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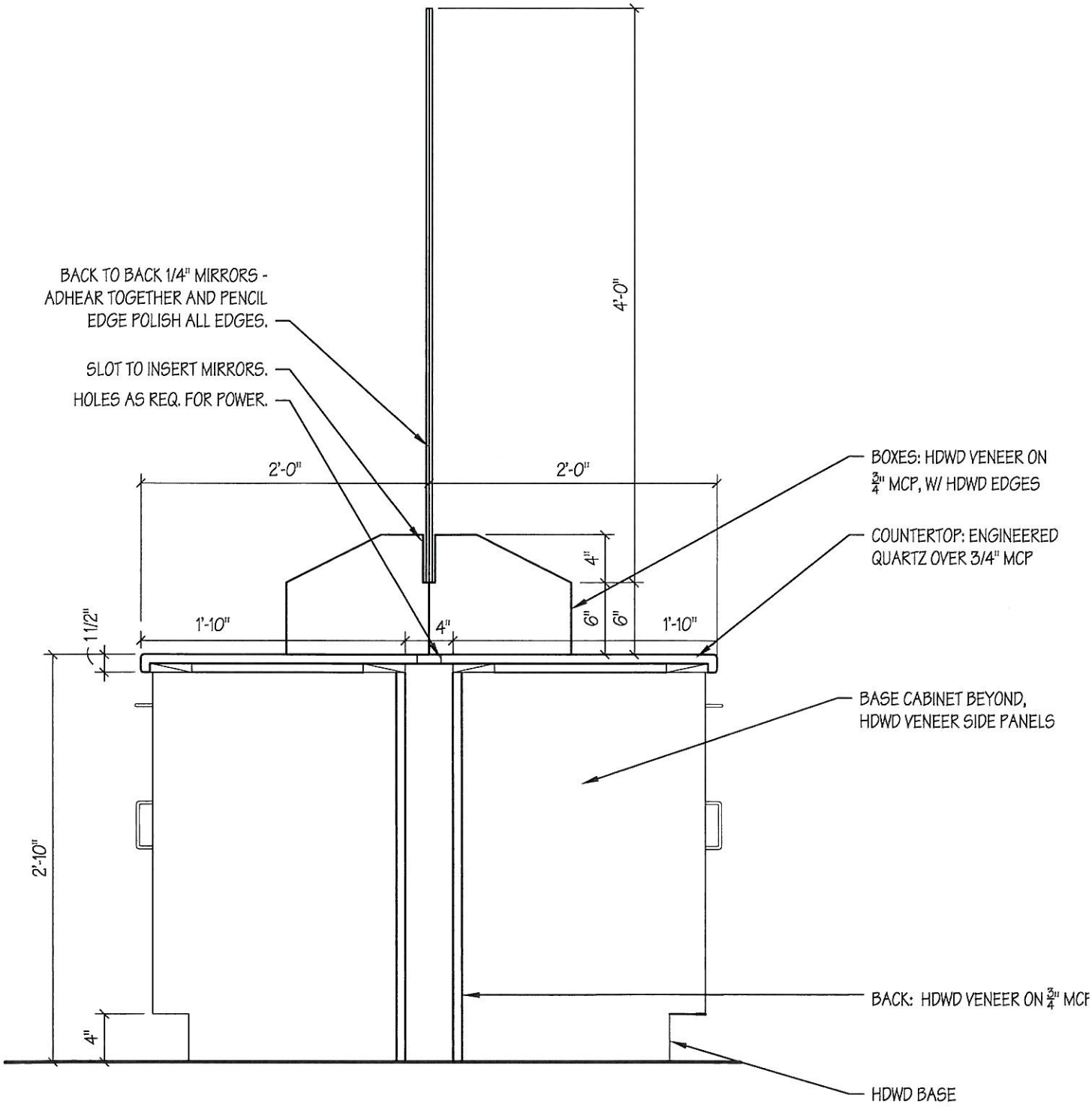

C1 SALON DESK SECTION @ COUNTER

SCALE: 1" = 1'-0"

0 6" 1' 2'

AE702

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PLANNING

ADD#1 SALON DESK SECTION

MATC NORTHERN UTAH COUNTY BUILDING

SCALE 1" = 1'-0"
DATE Aug 4, 2009
CLIENT PROJ No 070392650
HFSA PROJ No 0813.01

REAVELEY
ENGINEERS + ASSOCIATES
Consulting Structural Engineers

Mountainland Applied Technology Center

Structural Revisions
Addendum #1

August 4, 2009

Sheet SB101c

1. See Supplemental drawing ADD1-SSD-1 for revised mechanical enclosure.

Sheets SF101c, 102c & 103c

1. Revise steel column mark at Grid D-7 from SC-4 to SC-3.

Sheets SF102a & 103a

1. Revise steel column mark at Grid I.2-3 from SC-5 to SC-4.

Sheet SF102b

1. Revise four column marks around the radius near Grid A-2 from HSS12x4 to SC-8.

Sheet SF102b & 103b

1. Revise column mark at Grids F-4 & D-5 from SC-4 to SC-5.

P:801.486.3883
F:801.485.0911

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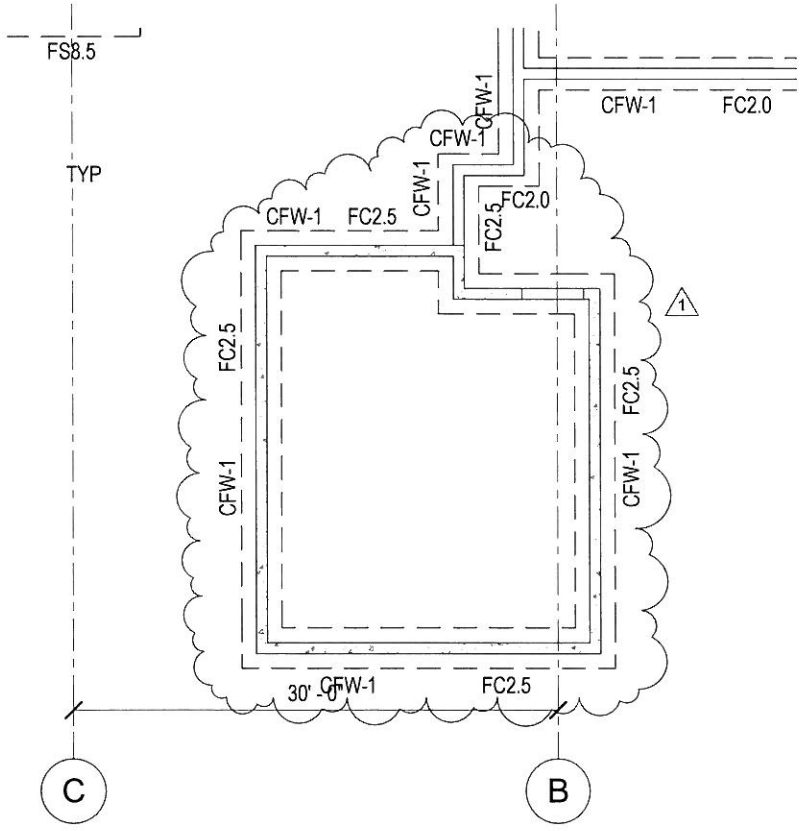

REF SHEET: SB101C

ADD1-SSD-01

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ADDENDUM #1

MATC NORTHERN UTAH COUNTY BUILDING

SCALE	1/8"=1'-0"
DATE	Aug 4, 2009
CLIENT PROJ No	070392650
HFSA PROJ No	0813.01

ADDENDUM #1

DATE: August 4, 2009

PROJECT NO: 8166

PROJECT: Mountainland Applied Technical College

DIVISION - 15

GENERAL

1. The water piping and backflow preventers shown in the Janitors Closet are ½".

DRAWINGS

SHEET - MH401

1. Relief air louvers on grid 4.2: remove the note calling out the louvers as 2'-6" X 5'-0" RELIEF AIR LOUVER (3) TYPICAL. Change the number of louvers called out in the 5'-0" X 5'-0" note to be 5 instead of 6. The correct note should read as follows: 5'-0" X 5'-0" RELIEF AIR LOUVER (5) TYPICAL.
2. Outside Air Cupola: Provide factory fabricated 8 sided louvers with cap per *architectural elevations*. 8 outside air louvers for cupola shall be 5'x 5'. Color: medium bronze anodized.
3. Provide low point in outside air duct below cupola for drainage. Provide drain connection at duct low point and slope piping down to floor sink near air handler coils.

SHEET - ME601

1. Water Cooled Chiller Schedule: Replace the York Chiller with a Carrier Chiller. See MSD-01 for new chiller schedule.
2. Air Handler Schedule: Change the length of the air handler from 49 inches to 518 inches.
3. Air Handler Schedule: Minimum number of fans for supply and return will be 8 each.
4. Air Handler Schedule: See drawing for location of column in mechanical room. Custom build for demounts to be at location of column.

SHEET - ME602

1. Fan Schedule:
   A. EF-11: Twin City 085C BCRD, Roof Area C, 400 CFM, 0.4" S.P., 8.5" Fan Wheel Diameter, ¼ HP, 0.05 BHP, Fan Speed 1260 RPM, 120/1/60.

SHEET - PP101A

1. Balance the hot water return line shown in Aesthetics A119 to 1 GPM.

SHEET - PP101B

1. Relocate the roof drain drops shown near grid 1 between grids B and C to Grid C.
2. Relocate the roof drain drops shown near grid A between grids 2 and 3 to Grid 3.
3. Balance the hot water return line shown in EMT Classroom B123 to 1 GPM.
4. Provide 4" waste riser in wall along grid C 12 south of grid 4.2 for future third floor toilet rooms.

SHEET - PP101B 01

1. Delete this drawing.

SHEET - PP102B
1. Relocate the roof drain drops shown near grid 1 between grids B and C to Grid C.
2. Relocate the roof drain drops shown near grid A between grids 2 and 3 to Grid 3.
3. Provide 4" waste riser in wall along grid C, 12 south of grid 4.2 for future third floor toilet rooms.

SHEET - PP102B 01
1. Delete this drawing.

SHEET - PP103B 01
1. Refer to drawing PP401 01 for alternate plumbing drawing.

SHEET - PP103B
1. Cap 4" waste riser in second floor ceiling space along grid C, 12 south of grid 4.2 for future third floor toilet rooms.

SHEET - PP401
1. Provide 1¼" gas line to each water heater.
2. Provide 2" gas line between the gas pressure regulator and the water heater branch piping.

SHEET - PP401 01
1. Delete drawings 1/PP401 01 and 2/PP401 01.
2. Drawing 3/ PP401 01 refers to the piping for the toilet rooms. See sheet PP401 for base bid piping for mechanical and boiler rooms.

SHEET - PP402
1. 2/ PP402: Provide 2" vent piping to serve the floor drains with branch piping over 6 feet in length. Connect to the vent piping at the toilet room.

SHEET - PE501
1. Modify 11/PE501 – Pre-Action Riser Detail. See attached PE501 PSD-01

SPECIFICATIONS

SECTION - 13916
1. Change Part 1.2 Summary Paragraph A.3 – "Pre-action systems - Single interlock preaction system, operated by fire detection system, and monitored by low air switch. System shall be rated for 175 psi maximum working pressure. Refer to drawings for areas of protection, and valve assembly locations. Detection by Division 16. Panels and Wiring of devices by this contractor – see Detail. Monitoring of this panel and alarm and or trouble conditions by Division 16.
2. Delete Part 1.2 Summary Paragraph A.4.

SECTION - 15515
1. Part 1.2 - Summary - H. The Boiler manufacturer shall supply as part of the boiler package a completely integrated boiler management system (equal to Aerco Model 168). Programmer to control all operation and energy input of the boiler plant. The boiler management system shall be comprised of a microprocessor based control utilizing MODBUS protocol to communicate with the boilers via the RS-485 port. The boiler management panel is to ship loose for mounting by this contractor and control wiring performed by temperature control contractor. Control contractor to supply 4-20 MA signal to BMS panel. Control contractor to wire between the BMS and boilers per manufacturers instructions

2. Part 2.1 – Manufacturers – A. Replace paragraph to read as follows; Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

    A. Aerco.
    B. Fulton.
    C. Vieseman

SECTION - 15816 Underground Ducts

1. See attached Specification Section 15816.

SECTION - 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.

Item	Manufacturer	Comments
Air Handlers	Haakon	Approved
Roof mounted exhaust fan (EF-1-8)	ACME	Approved
Inline centrifugal exhaust fan (EF-9-10)	ACME	Approved
Instrumentation and Control for HVAC	Johnson Controls (Installer)	Approved
Instrumentation and Control for HVAC	Utah Controls (Installer)	Approved
Cooling Tower	Delta Cooling Tower	Not Approved
Pumps	Patterson	Approved
Pump trim	Patterson	Approved
Expansion Tanks	Patterson	Approved
Air Separators	Patterson	Approved
Cooling Tower Filter System	Clearwater Separator	Approved
Heat Exchanger	Patterson	Approved
Y-Strainers	Titan Inc.	Approved
Flex Connectors	Flex Hose Inc.	Approved
Chimney & Stacks	Schebler Co.	Approved
Louvers & Vents	Leader Industries, Wonder Metals	Approved
Unit heaters	Sterling Co.	Approved
Cabinet Unit Heaters	Sterling Co.	Approved
Data Server Room Units	Data Aire Inc.	Approved
Manual Volume Dampers	Leader Industries, Air Rite	Approved
Fire/smoke Dampers	Leader Industries, C&S	Approved
Power Ventilators	Penn Barry	Approved
Grilles, Registers, Diffusers	Tuttle & Bailey	Approved
Faucets and shower valves	Speakman Co.	Approved
Heat Exchanger	AIC	Not Approved
Domestic Water Pumps	Armstrong	Approved
Flexible Connectors	Twin City Hose	Approved
Vibration Isolation and Seismic	Vibro-Acoustics	Approved
Condensing Boilers	Thermal Solutions	Not Approved
Fin Tube Radiation	Modine	Approved
Cabinet Unit Heaters	Modine	Approved
Ductless Split Systems	Sanyo	Approved
Fan Wall Type AHUs	Energy Labs	Approved
Instrumentation and Control for HVAC	Wasatch Control System	Not Approved
Air Handlers	York Custom	Not Approved
Registers, Grilles & Ceiling Diffusers	Carnes	Approved
VAV Reheat Boxes	Carnes	Approved
Boilers	Lochinvar	Not Approved
Heat Exchanger	Flo Fab	Not Approved
Cooling Tower	TowerTech	Approved
Expansion Tank	Flo Fab / Wheatley	Not Approved
Air Separators	Flo Fab / Wheatley	Not Approved
Domestic Pump	Flo Fab	Not Approved
Domestic Expansion Tanks	Flo Fab / Wheatley	Not Approved
Gas Regulators	Governor	Approved
Expansion Tanks	Flexcon	Approved
Air Separators	Wheatley / Spirotherm	Approved
Thermometers	Miljoco	Approved

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.

Item	Manufacturer	Comments
Pressure Gauges	Miljoco	Approved
Heat Exchangers	Cemline	Not Approved
Wye Strainers	IFC	Approved
Check Valves	IFC	Approved
Suction Diffusers	PACO / IFC	Approved
Triple Duty Valves	PACO / IFC	Approved
Faucets and shower valves	Zurn	Approved
Domestic water expansion tanks	Wessels	Approved
Water Softeners	Pacific	Not Approved
Gravity Hoods	Air-Rite Mfg., Pottorff	Approved
Louvers & Vents	Pottorff	Approved
Power Ventilators	Twin City	Approved
Breeching, Chimneys, Stacks	Metal Fab	Approved
Fire Sprinkler Contractor	Shilo	Approved
Louvers & Vents	Greenheck	Approved
Automatic Flow Control Valves	Nexus	Approved
Screw Chillers	McQuay	Approved
Refrigerant Monitors	Critical Environmental, Toxalert	Approved
Finned Tube Radiation	Beacon Morris, Sigma Corp	Approved
Unit Heaters	Beacon Morris	Approved
Cabinet Unit Heaters	Beacon Morris	Approved
Fan Wall Custom Air Handling Units	Temtrol, Governair	Approved
OSA Air Monitoring Device	Ebtron	Approved

SECTION 15816

UNDERGROUND DUCTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Thermoset FRP ducts and fittings. Ductwork is to be double walled with 1" interior duct liner, increase duct sizes to account for liner.

2. Ductwork is to have a minimum of 4" of concrete on the top to protect the duct from damage.

B. Related Sections:

1. Division 15 Section "Testing, Adjusting, and Balancing for HVAC" for testing, adjusting, and balancing requirements for nonmetal ducts.

1.3 PERFORMANCE REQUIREMENTS

A. Delegated Duct Design: Duct construction, including duct closure, reinforcements, and hangers and supports, shall comply with SMACNA's "Fibrous Glass Duct Construction Standards" and performance requirements and design criteria indicated.

1. Static-Pressure Classes:

a. Supply Ducts: 2-inch wg.

B. Airstream Surfaces: Surfaces in contact with the airstream shall comply with requirements in ASHRAE 62.1.

1.4 SUBMITTALS

A. Product Data: For each type of the following products:

1. Thermoset FRP duct materials.

B. Shop Drawings:

1. Fabrication, assembly, and installation, including plans, elevations, sections, components, and attachments to other work.

2. Duct layout indicating sizes and pressure classes.
3. Elevation of top of ducts.
4. Dimensions of main duct runs from building grid lines.
5. Fittings.
6. Reinforcement and spacing.
7. Seam and joint construction.
8. Penetrations through fire-rated and other partitions.
9. Equipment installation based on equipment being used on Project.
10. Hangers and supports, including methods for duct and building attachmentand vibration isolation.

C. Delegated-Design Submittal:

1. Duct materials and thicknesses.
2. Joint and seam construction and sealing.
3. Reinforcement details and spacing.
4. Design Calculations: Calculations including analysis data signed and sealed by the qualified professional engineer responsible for their preparation for selecting hangers and supports.

D. Coordination Drawings: Plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

1. Duct installation in congested spaces, indicating coordination with general construction, building components, and other building services. Indicate proposed changes to duct layout.
2. Suspended ceiling components.
3. Structural members to which duct will be attached.
4. Size and location of initial access modules for acoustical tile.
5. Penetrations of smoke barriers and fire-rated construction.

E. Field quality-control reports.

1.5 QUALITY ASSURANCE

A. ASHRAE Compliance: Applicable requirements in ASHRAE 62.1, Section 5 - "Systems and Equipment" and Section 7 - "Construction and System Start-Up."

B. NFPA Compliance:

1. NFPA 90A, "Installation of Air Conditioning and Ventilating Systems."
2. NFPA 90B, "Installation of Warm Air Heating and Air Conditioning Systems."

PART 2 - PRODUCTS

2.1 THERMOSET FRP DUCTS AND FITTINGS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. McGill AirFlow LLC.
2. Perry Fiberglass Products, Inc.
3. Spunstrand Inc.

B. Duct and Fittings:

1. Inner Liner: FSK liner rated by an NRTL to comply with UL 181, Class 1.
2. Round Duct(double wall): ASTM D 2996, Type I, Grade 2, Class E, filament-wound duct, minimum 0.125-inch wall thickness, with tapered bell and spigot ends for adhesive joints, or plain ends with couplings.
3. Round Fittings (double wall): Compression or spray-up/contact, molded of same material, pressure class, and joining method as duct.

C. Joining Materials: Roving and polyester resin.

D. Fabrication:

1. Fabricate joints, seams, transitions, reinforcement, elbows, branch connections, and access doors and panels according to SMACNA's "Thermoset FRP Duct Construction Manual," Chapter 7, "Requirements."
2. Fabricate 90-degree rectangular mitered elbows to include turning vanes, 90-degree round elbows with a minimum of three segments for 12 inches and smaller and a minimum of five segments for 14 inches and larger.

E. Drains: Formed drain pockets with a minimum of NPS 1 threaded pipe connections.

PART 3 - EXECUTION

3.1 DUCT INSTALLATION

A. Install ducts with fewest possible joints.

B. Unless otherwise indicated, install ducts vertically and horizontally, and parallel and perpendicular to building lines.

C. Install ducts close to walls, overhead construction, columns, and other structural and permanent enclosure elements of building.

D. Install ducts with a clearance of 1 inch, plus allowance for insulation thickness.

E. Where ducts pass through non-fire-rated interior partitions and exterior walls and are exposed to view, cover the opening between the partition and duct or duct insulation with sheet metal flanges.

F. Where ducts pass through fire-rated interior partitions and exterior walls, install fire dampers. Comply with requirements in Division 15 Section "Air Duct Accessories" for fire and smoke dampers.

G. Protect duct interiors from the moisture, construction debris and dust, and other foreign materials.

H. Install thermoset FRP ducts and fittings to comply with SMACNA's "Thermoset FRP Duct Construction Manual."

3.2 HANGER AND SUPPORT INSTALLATION

A. Install hangers and supports for thermoset FRP ducts and fittings to comply with SMACNA's "Thermoset FRP Duct Construction Manual," Chapter 7, "Requirements."

3.3 PAINTING

A. Paint interior of thermoset FRP ducts that are visible through registers and grilles and that do not have duct liner. Apply one coat of flat, black, latex paint over a compatible galvanized-steel primer. Paint materials and application requirements are specified in Division 09 painting Sections.

3.4 FIELD QUALITY CONTROL

A. Perform tests and inspections.

B. Leakage Tests:

1. Comply with SMACNA's "HVAC Air Duct Leakage Test Manual." Submit a test report for each test.
2. Test the following systems:

    a. Supply Ducts. Test all underground ductwork.

3. Disassemble, reassemble, and seal segments of systems to accommodate leakage testing and for compliance with test requirements.
4. Test for leaks before applying external insulation.
5. Conduct tests at static pressures equal to maximum design pressure of system or section being tested. If static-pressure classes are not indicated, test entire system at maximum system design pressure. Do not pressurize systems above maximum design operating pressure.
6. See Division 01 Section "Quality Requirements" for retesting and reinspecting requirements and Division 01 Section "Execution" for requirements for correcting the Work.

C. Duct system will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

3.5 DUCT CLEANING

A. Clean new duct system(s) before testing, adjusting, and balancing.

B. Use service openings for entry and inspection.

1. Create new openings and install access panels appropriate for duct static-pressure class if required for cleaning access. Provide insulated panels for insulated or lined duct. Patch duct as recommended by duct manufacturer. Comply with Division 15 Section "Air Duct Accessories" for access panels and doors.
2. Disconnect and reconnect flexible ducts as needed for cleaning and inspection.
3. Remove and reinstall ceiling to gain access during the cleaning process.

C. Particulate Collection and Odor Control:
1. When venting vacuuming system to outdoors, use filter to collect debris removed from HVAC system, and locate exhaust downwind and away from air intakes and other points of entry into building.

D. Clean the following components by removing surface contaminants and deposits:

1. Air outlets and inlets (registers, grilles, and diffusers).
2. Supply-air ducts, dampers, actuators, and turning vanes.

E. Mechanical Cleaning Methodology:

1. Use vacuum-collection devices that are operated continuously during cleaning. Connect vacuum device to downstream end of duct sections so areas being cleaned are under negative pressure.
2. Use mechanical agitation to dislodge debris adhered to interior duct surfaces without damaging integrity of ducts or duct accessories.
3. Clean coils and coil drain pans according to NADCA 1992. Keep drain pan operational. Rinse coils with clean water to remove latent residues and cleaning materials; comb and straighten fins.
4. Provide drainage and cleanup for wash-down procedures.
5. Antimicrobial Agents and Coatings: Apply EPA-registered antimicrobial agents if fungus is present. Apply antimicrobial agents according to manufacturer's written instructions after removal of surface deposits and debris.

3.6 START UP

A. Air Balance: Comply with requirements in Division 15 Section "Testing, Adjusting, and Balancing for HVAC."Division 15 Section "Testing, Adjusting, and Balancing."

3.7 DUCT SCHEDULE

A. Underground Ducts:

1. Thermoset FRP Round Ducts and Fittings:

a. Insulation Thickness: 1 inch.
b. Drain: Minimum NPS 1 PVC pipe with P-trap to air-gap drain.

END OF SECTION 15816

VAN BOERUM & FRANK ASSOCIATES INC.
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WATER-COOLED CHILLER SCHEDULE

							FLUID					ELECTRICAL						PHYSICAL	
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	REFRIG.	LOAD (TONS)	EFF. (%)	DESCRIPTION	FLOW RATE (GPM)	ENTERING/ LEAVING TEMP. (°F)	WORKING FLUID	HEAD LOSS (FT)	MAXIMUM KW	TOTAL MCA	MOCP	MAXIMUM KW/TON/ IPLV/ APLV/ EER	CHILLER AND CONTROL CIRCUIT VOLT/PH/HZ	LBS PER CIRCUIT CIRCUIT 1 / CIRCUIT 2	LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
CH-1	CARRIER 30HXC206	CHILLER ROOM	SCREW	R-134A	211.5	18/5.0	EVAPORATOR	408	56/44	WATER	16.9	146.5	263.2	350	0.692/0.510/18.0	460/3/60	220/135	152.54/36/74.22	1
							CONDENSER	615	73/83	WATER	14.2								

1

1 08/03/09 ADDENDUM #1

HFSArchitects
ARCHITECTURE
INTERIORS
PLANNING

ADD #1 MSD01
MATC NORTHERN UTAH COUNTY BUILDING

REF SHEET: ME601
SCALE: 1/8" = 1'-0"
DATE: Aug 4, 2009
CLIENT PROJ No 07039260
HFSA PROJ No 0813.01

1484 S. State Street Salt Lake City, UT 84115 Tel: 801-596-0691 Fax: 596-0693 www.hfsa.com

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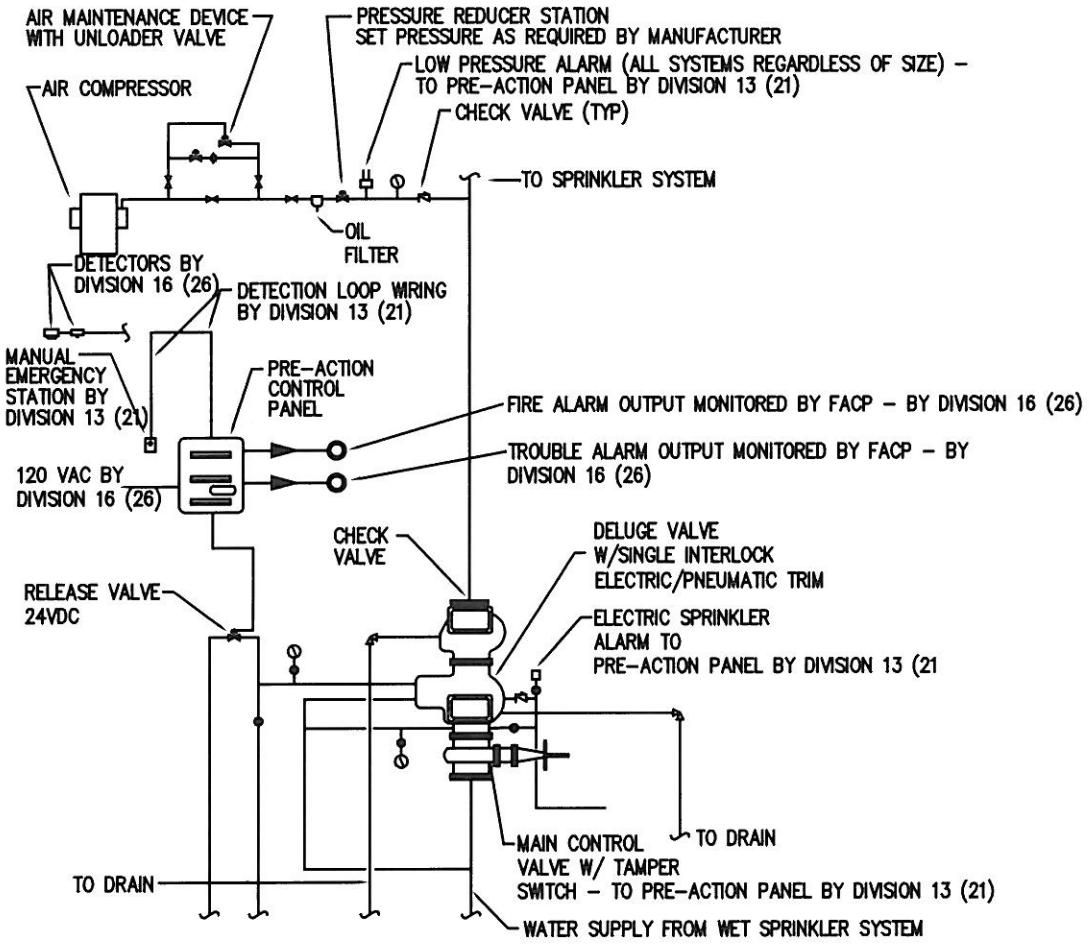

11 / PE501

SINGLE INTERLOCK PREACTION SYSTEM DETAIL – ADDRESSABLE DETECTION

NO SCALE

1 08/03/09 ADDENDUM #1

HFSArchitects
ARCHITECTURE
INTERIORS
PLANNING

ADD #1 PSD01
MATC NORTHERN UTAH COUNTY BUILDING

REF SHEET: PE501
SCALE: N/A
DATE: Aug 4, 2009
CLIENT PROJ No 07039260
HFSA PROJ No 0813.01

Mountainland ATC Northern Utah County

Electrical Addendum: 1 **Issue Date: 8/3/09**

Clarifications to the bidders:

CHANGES TO THE SPECIFICATIONS:

SECTION 16071

3.1.A.1.a

1. Revise 1.4-A.5 above to 1.4 above.

3.1.A.1.b

1. Revise 1.4-A.5 above to 1.4 above.

3..A.1.c

1. Revise 1.4-B above to 1.4 above.

3.1.A.1.d

1. Revise 1.4.b above to 1.4 above.

SECTION 16136

3.1.F.1

1. Remove reference to section 16145.

SECTION 16140

2.A.1.b

1. Revise manufacturer's numbers as follows:

	RECEPTACLE	SWITCHES			
MFGR		1-POLE	3-WAY	4-WAY	W-PILOT
Hubbell	HBL 2162	DS120	DS320	DS420	HBL 1221-PL
Bryant	93CR20	9901	9903	9904	1221-PL
Pass Seymour	26342	2621	2623	2624	20AC1-RPL
Leviton	26362	5621-2	5623-2	5624-2	
Cooper	6342	7621	7623	7624	1221-PL

SECTION 16180

2.1.B

1. Add Siemens Energy and Automation.

SECTION 16788

2.3.B

1. Revise DVD/VCR combination deck to JVC DR-MV150B.

CHANGES TO THE DRAWINGS:

SHEET EG001:

Fixture Schedule

1. Add fixture type 'AA' – Hydrel "4758-2/54T5HO-MVOLT-WMD-KM-PLPK-SCBA", 277 Volt with (2) FP54/835 lamps.
2. Add fixture type 'AB' – Gotham "AF1/32TRT6PRLDPCLMVOLT", 277 volt with (1) CFT32/835 lamp.

SHEET EG002

Equipment Schedule (Mechanical)

1. Revise circulation pump RCP-1 to DCP-1.
2. Revise return/relief fans RRLF-1.1 thru RRLF-1.15 from 5 HP to 3 HP and 4.8 FLA.
3. Add water softener WS-1: 5.0 FLA, 120 volt, ¾" conduit with 3 #12 wires, 20 amp breaker and note 11A.
4. Add water heater WH-3: 10.0 FLA, 120 volt, ¾" conduit with 3 #12 wires, 20 amp breaker and note 11A.
5. Add exhaust fan EF-11; 5HP 120 volt 9.8 FLA, ¾" conduit with 3 #12 wires, 20 amp and note 4A.

Relay Panel RP1

1. Revise relay 31 to feed monument sign on circuit 1HA-9, 230VA load and controlled by time clock.

SHEET ES101

Electrical Site Plan

1. Provide a type 'AA' light fixture on each side of monument sign. Circuit thru RP1-31 (1HA-9).

SHEET EL101B

Rotunda B151

1. Provide a type 'J' light fixture in Storage Room located under the stairs. Provide a wall type occupancy sensor for control of lights. Circuit to 1HA-8.

SHEET EL101C

Main Electrical C119

1. Provide a 3-way switch located adjacent to each door for control of lights in room.

SHEET EL103A ALI

Classroom A304

1. Provide (2) two type 'AB' light fixtures located along grid 3 in dormer. Space fixtures equally along east/west axis. Connect to fixtures in north half of room for control.

Classroom A312

1. Provide (2) two type 'AB' light fixtures located parallel to grid G in dormer. Space fixtures equally along north/south axis. Connect to fixtures in west half of room for control.

Classroom A313

1. Provide (2) type 'AB' light fixtures located parallel to grid G in dormer. Space fixtures equally along north/south axis. Connect to fixtures in west half of room for control.

SHEET EL103A

Storage B305

1. Fixtures and control indicated for alternate No. 1 (See Sheet EL103 ALI) shall be provided as part of base bid.

SHEET EL103B ALI

Storage B305

1. Fixture and control indicated shall be included in base bid.

Classroom B307

1. Provide (2) two type 'AB' light fixtures located parallel to grid 5 in dormer. Space fixtures equally along east/west axis connect to fixtures in south half of room for control.

SHEET EL103C ALI

Classroom C303

1. Provide (2) two type 'AB' light fixture located parallel to grid 7 in dormer. Space fixtures equally along east/west axis. Connect to fixtures in south half of room for control.

Classroom C304

1. Provide (2) two type 'AB' light fixtures located parallel to grid 7 in dormer. Space fixtures equally along east/west axis. Connect to fixtures in south half of room for control.

Classroom C307

1. Provide (2) two type 'AB' light fixtures located along grid C in dormer. Space fixtures equally along north/south axis. Connect to fixtures in east half of room for control.

SHEET EP101A

Cosmetology Classroom A108

1. Revise receptacles located on north wall above counter to GFCI receptacles.

Disp/Stor A122

1. Add duplex receptacle on west wall adjacent to special purpose outlet on circuit 1LA-32 for stacked washer/dryer.
2. Add special purpose outlet on west wall adjacent to duplex receptacle on circuit 1LA-34,36 for stacked washer/dryer.

SHEET EP101B

Rotunda B151

1. Provide duplex receptacles on south side of column at grids B and 2. Circuit to 1LE-1.
2. Add telecommunications outlet on south side of column at grids B and 2.
3. Add duplex receptacle in Storage Room under stair. Locate on south wall adjacent to door. Circuit to 1LD-20.

Bookstore B159

1. Delete multi-service floor box from south end of room.
2. Delete single-service floor box from south end of room located under bookstore counter.
3. Provide fourplex receptacle in south side of bookstore counter (See detail B1/AE701) below cash register. Circuit to 1LE-15.
4. Provide telecommunications outlet in south side of bookstore counter below cash register.
5. Provide fourplex receptacle in north side of bookstore counter below cash register. Circuit to 1LE-13.
6. Provide telecommunications outlet in north side of bookstore counter below cash register.

Vending B163

1. Provide GFCI duplex receptacle on south wall at 12'-0" west of grid C. Circuit to 1LE-31.
2. Provide telecommunications outlet on south wall at 15'-0" west of grid C.
3. Provide GFCI duplex receptacle on south wall at 17'-0" west of grid C. Circuit to 1LE-31.
4. Provide (2) two duct detectors and power connections on circuit ELL-12 to fire/smoke dampers located above the ceiling.

Hallway C101

1. Provide GFCI duplex receptacles on east wall at 9'-0" south of grid 4. Circuit to 1LE-35.
2. Provide telecommunications outlet on east wall at 11'-6" south of grid 4.

3. Provide GFCI duplex receptacle on east wall at 12'-6" south of grid 4. Circuit to 1LE-33.
4. Provide GFCI duplex receptacle on east wall at 16'-0" south of grid 4. Circuit to 1LE-33.

SHEET EP101C

Power Sheet Notes
1. Add note 13 to read: Provide #6 ground wire interconnecting raised floor pedestals to reference ground bus.

Workroom C131
1. Add sheet note 13 to room.
2. Provide fire alarm smoke detector. Smoke detector shall be programmed to be part of pre-action sprinkler system.
3. Provide fire alarm smoke detector mounted below raised floor. Smoke detector shall be programmed to be part of pre-action sprinkler system.

Main server C132
1. Add sheet note 13 to room.
2. Provide fire alarm smoke detector. Smoke detector shall be programmed to be part of pre-action sprinkler system.
3. Provide fire alarm smoke detector mounted below raised floor. Smoke detector shall be programmed to be part of pre-action sprinkler system.

SHEET EP102A

Vending A205
1. Add telecommunications outlet on south wall adjacent to receptacle.

Sterilization A207
1. Surface raceway located along south wall shall circuit to 2LB-32.

SHEET EP102B

Hallway B211
1. Equipment on circuit 2LF-77 is Cabinet Unit Heater CUH-4.

Conference Room B238
1. Provide duplex receptacle on west wall at 16'-0" south of grid 3. Circuit to 2LE-39.

Board Room B257
1. Provide duplex receptacle on west wall at 7'-6" south of grid 4. Circuit to 2LE-39.

SHEET EP102C

Vending C233
1. Provide telecommunications outlet on west wall adjacent to receptacle.

SHEET EP103A

Power Sheet Notes
1. Add note 1 to read: Provide Tyco Thermal GM-2XT-277 self regulating heating cable in gutters and downspouts. Cable shall loop up and down downspouts for 7'-0". Provide end caps at ends of runs. Provide downspout hangers at each downspout.

Roof
1. Provide heating cable in gutter and downspouts along roof edge (see Sheet AE120A) starting at grids 4 and F running to grid 2 and I. Connect to heat trace panel HT circuit A.

Sheet EP103A ALI

Power Sheet Notes

1. Add note 6 to read: Junction box mounted above ceiling for V.A.V. boxes. Division 15 contractor to furnish and install step down transformer and all low voltage wiring.

Hallway A306

1. Provide junction box with sheet note 6 above ceiling, circuit to ELS-38.
2. Provide GFCI duplex receptacle on south wall at 1'-6" west of grid F. Circuit to 3LB-35.
3. Provide GFCI duplex receptacle on south wall at 4'-0" west of grid F. Circuit to 3LB-33.
4. Provide telecommunications outlet on south wall at 5'-6" west of grid F.
5. Provide GFCI duplex receptacle on south wall at 7'-0" west of grid F. Circuit to 3Lb-33.

SHEET EP103B

Power Sheet Notes

1. Add note to read: Provide Tyco Thermal GM-2XT-277 self regulating heat cable in gutters and downspouts. Cables shall loop up and down downspouts for 7'-0". Provide end caps at end of runs. Provide downspout hangers at each downspout.

Roof

1. Provide heating cable in gutter and downspouts along roof edge (see Sheet AE120B) starting at grids 2 and D and running to grids 2 and I. Connect to heat trace panel HT circuit B.
2. Provide heating cable in gutter and downspouts along roof edge starting at grids 2 and D. and running to grids 4 and B. Connect to heat trace panel HT circuit C.
3. Provide heating cable in gutter and downspouts along roof edge starting at grids 4 and B running to grid 8 and B. Connect to heat trace panel HT circuit D.
4. Provide heating cable in gutter and downspouts along roof edge starting at grids 4 and F running to grids 8 and D. Connect to heat trace panel HT circuit E.

SHEET EP103B ALI

Power Sheet Notes

1. Add note 8 to read: Junction box above ceiling for V.A.V. boxes division 15 contractor to furnish and install step-down transformer and all low-voltage wiring.

Classroom B307

1. Provide junction box with note 8 above ceiling. Circuit to ELS-38.

SHEET EP103C

Power Sheet Notes

1. Add note 8 to read: Junction box above ceiling for V.A.V. boxes. Division 15 contractor to furnish and install step down transformer and all low-voltage wiring.

Classroom B307

1. Provide junction box with note 8 above ceiling. Circuit to ELS-38.

SHEET EP013C

Power Sheet Notes

1. Add note 5 to read: Provide Tyco Thermal GM-2XT-277 self regulating heating cable in gutters and downspouts. Cables shall loop up and down downspouts for 7'-0". Provide end caps at end of runs. Provide downspouts hangers at each downspout.

Roof

1. Provide heating cable in gutter and downspouts along roof edge starting at grids 8 and D running to grids 8 and B. Connect to heat trace panel HT circuit F.
2. Power connect to exhaust fan EF-11 located at grid 8 and 8'-0" west of grid A. Circuit to 3LA-31.

SHEET EP402

Air Handler Room B302
1. Relocate power feed for condensing unit CU-1 to west wall of Boiler Room B303 at grid 3.
2. Add heat trace panel HT on south wall adjacent to relay panel RP3.
3. Relocate power feed for air washer AW-1 from south side of air handler to north side.

Chiller C106
1. Provide power connection to pre-action control panel on circuit ELL-18.
2. Provide power connection to pre-action air compressor on circuit ELL-20.
3. Provide a fire alarm system control module and two (2) monitor modules for pre-action system.

SHEET EY101

Vending B163
1. Provide (2) duct detectors above ceiling for fire/smoke dampers. Tie duct detectors into initiating loop. Provide connection from relay to fire/smoke damper.

Chiller C106
1. Provide fire alarm system control module and two (2) monitor modules for control and monitoring of pre-action sprinkler system. Tie initiating loop.

IT Workroom C131
1. Provide (2) two fire alarm smoke detectors, 1 mounted below floor. Tie to initiating loop.

Main Server C132
1. Provide (2) two fire alarm smoke detectors, 1 mounted below floor. Tie to initiating loop.

SHEET ET101

Rotunda B151
1. Provide telecommunications outlet on south side of column at grids 2 and B. Route conduit underground to wall at grid C and extend to cable tray.

Bookstore B159
1. Delete telecommunications outlet in multi-service floor box.
2. Add telecommunications outlet in south side of bookstore counter. Route conduit underground to wall south of counter and extend to cable tray.
3. Add telecommunications outlet in north side of bookstore counter. Route conduit underground to wall south of counter and extend to cable tray.

Vending B163
1. Add telecommunications outlet in south wall. Extend conduit cable tray.

Hallway C101
1. Add telecommunications outlet in east wall at vending area. Extend conduit to cable tray.

SHEET ET102

Vending A205
1. Add telecommunications outlet in south wall. Extend conduit to cable tray.

Vending C233

1. Add telecommunications outlet in west wall. Extend conduit to cable tray.

SHEET ET103 ALI

Hallway A306
1. Add telecommunications outlet in south wall at vending area. Extend conduit to cable tray.

SHEET EX601

Sheet Keynotes
1. Add note 4 to read: "Provide Tyco Thermal snow melt panel SMPG1-277-2-6/1P(20)-1-100 for gutter and downspout heat tape control.

One-Line Diagram
1. Main Distribution Panel – Revise circuit 5 from a 150 A to a 100 A.
2. Revise feeder going to VFD for return/relief fans RRLF-11 from 34X to 32X.
3. Feed heat trace panel HT from panel 3HA with feeder 41.
4. Add heat trace panel HT below 3HA. Add sheet keynote 4.
5. ATS No. 1 shall be rated 30,000 AIC.
6. ATS No. 2 shall be rated 50,000 AIC.

SHEET EX602

Panel 1HA
1. Revise circuit 9 to a 20A/1P breaker to feed monument sign lighting.

Panel 1LA
2. Revise circuit 28 to a 30A/2P to feed dryer.
3. Revise circuit 32 to feed washer.
4. Revise circuit 34 to a 30A/2P breaker to feed dryer.

Panel 1LE
1. Revise circuits 31, 33, and 35 feed vending machines.

SHEET EX603

Panel 2LB
1. Revise circuit 11 to a 30A/2P breaker to feed dryer.
2. Revise circuit 32 to feed surface raceway.

Panel 2LE
1. Revise circuit 39 to feed refrigerators.

SHEET EX604

Panel 3HA
1. Revise circuit 38 to a 100A/3P breaker to feed panel HT.

Panel 3LA
1. Revise circuit 31 to feed exhaust fan EF-11.

Panel 3LB
1. Revise circuits 33, 35, and 37 to a 20A/1P breaker to feed vending machines.

Panel ELS
1. Revise circuit 38 to a 20A/1P breaker to V.A.V. boxes.

Panel EHL

1. Revise AIC rating from 32,000 to 30,000.

Panel ELL

1. Revise circuit 18 to feed pre-action control panel.
2. Revise circuit 20 to feed pre-action air compressor.

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.

TYPE	*SPECIFIED*	*APPROVED*			
A12	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A16	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A16D	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A20	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A20D	PEERLESS	CORELITEE	LEDALITE	FINELITE	LSI
A20D2	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A24	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A24D	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A24D2	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
A32	PEERLESS	CORELITE	LEDALITE	FINELITE	LSI
B	LITHONIA	METALUX	COLUMBIA	PMC	LSI
BF	LITHONIA	METALUX	COLUMBIA	PMC	LSI
C	GOTHAM	PORTFOLIO	PRESCOLITE	OMEGA	LITON
D	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
E	LITHONIA	FOCAL POINT	COLUMBIA	DAY-BRITE	LSI
F	LITHONIA	FOCAL POINT	COLUMBIA	DAY-BRITE	LSI
G	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
H	LITHONIA	FOCAL POINT	COLUMBIA	DAY-BRITE	LSI
J	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
K	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
L	CONTECH	HALO	PRESCOLITE	TIMES SQUARE	LITON
M	KENALL	FAIL-SAFE	GUTH	NEW STAR	LSI
N	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
OA	GARDCO	-	-	$1,950.00	-
OB	GARDCO	-	-	$2,765.00	-
OC	GARDCO	-	-	$1,909.00	-

OD	GARDCO	-	-	$2,698.00	-
P	ADVENT	VISA	WINONA	LAM	MANNING
Q	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
R	ADVENT	VISA	WINONA	LAM	MANNING
S	GOTHAM	PORTFOLIO	PRESCOLITE	OMEGA	JUNO
T	GOTHAM	PORTFOLIO	PRESCOLITE	OMEGA	JUNO
U	ADVENT	VISA	WINONA	LAM	MANNING
V	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
W	LITHONIA	METALUX	COLUMBIA	DAY-BRITE	LSI
X1	LITHONIA	ISOLITE	DUAL-LITE	McPHILBEN	EMERGI-LITE
X2	LITHONIA	ISOLITE	DUAL-LITE	McPHILBEN	EMERGI-LITE
Y	BASELITE	PREMIER	GUTH	DAY-BRITE	-
Z	LUCIFER	-	RADIANT	LEDLINC	BL LIGHTING

Sound and Intercom System
Dukane
Raulano

Fire Alarm System
Silent Knight

UPS System
Toshiba

Surge Protective Devices (SPD's)
Surge Suppression Incorporated

Lighting Control Equipment
Hubbell Building Automation
Leviton 2-Max Plus
Nexlight

Clock System
Sapling
American Time and Signal

END OF ELECTRICAL ADDENDUM