Downtown Omaha Residence Inn
APMA Project #09001
27 June 2012

106 South 15th Street

This addendum is issued by the Owner to all known bidders prior to receipt of Proposal. Bidders shall acknowledge receipt of this Addendum by so indicating on the Proposal Form. All information and instruction given herein shall become a part of the Contract Documents.

THIS ADDENDUM WILL REPLACE THE PREVIOUSLY FAXED ADDENDUM NUMBERED AS #1. PREVIOUSLY SENT FAX SHOULD BE ELIMINATED FROM THE DOCUMENTS.

This addendum contains the following information:

Addendum #1	(8 ½ x 11)	05 Sheets
Supplemental Drawing AD01 (A1-A4)	(8 ½ x 11)	04 Sheets
Supplemental Drawing AD02 (A1)	(8 ½ x 11)	01 Sheet
Supplemental Drawing SDS (001-003)	(8 ½ x 11)	03 Sheets
Supplemental Drawing M1.00a-M1.00b	(8 ½ x 11)	02 Sheets
Supplemental Drawing M1.04a	(8 ½ x 11)	01 Sheet
Supplemental Drawing M2.00a	(8 ½ x 11)	01 Sheet
Supplemental Drawing M2.01b	(8 ½ x 11)	01 Sheet
Supplemental Drawing M4.09a	(8 ½ x 11)	01 Sheet
Supplemental Drawing M7.03a-M7.03b	(8 ½ x 11)	02 Sheets
Supplemental Drawing E1.05a	(8 ½ x 11)	01 Sheet
Supplemental Drawing E5.05a	(8 ½ x 11)	01 Sheet
Telecommunications Drawings	(22 x 34)	08 Sheets
	Total	**31 Sheets**

If this addendum appears incomplete, notify the architect immediately.

GENERAL ITEMS

1. Add L-V drawings per attached full sized Sheets.
2. Add Allowance of $20,000 for exterior landscaping and soil preparation.

PROJECT MANUAL

MECHANICAL SPECIFICATIONS

1. Section 23 0993 SEQUENCE OF OPERATIN FOR HVAC CONTROLS
    a. Page 23 0993-6, Paragraph 1.6, Change title to read
        i. " **DOAU-2A and DOAU-2B ROOFTOP HEAT PUMPS WITH ENERGY RECOVERY UNITS**"
    b. Page 23 0773-7, Paragraph 1.7, Change title to read
        i. " **DOAU-1A AND DOAU-1B HEAT PUMPS WITH MODULAR HOT GAS REHEAT**"
    c. Page 23 0993-10, ADD
        i. " 1.11 CORRIDOR REHEAT COIL WITH SCR CONTROL
            1. Corridor wall mounted sensor (location to be determined in field) shall control corridor electric duct heating coil (EDH-1) using SCR

control provide by temperature control contractor. (typical floors 2-10)
2. Discharge air temperature shall be monitored through the DDC system
3. Zone temperature shall be monitored and adjusted through the DDC system
4. Show on graphics on DDC system

DRAWINGS

ARCHITECTURAL DRAWINGS

1. COVER SHEET
   a. Add Sheets D-V 6.0, D-V 7.0 and D-V 8.0 per attached L-V sheets.

2. SHEET L1.1
   b. V1/L1.0 – Add keyed note L60 per attached Supplemental Drawing. Keyed note #L60 to read "IN PLAZA AREA, REMOVE EXISTING DOCKS AND WEARING SLABS TO STRUCTURAL DECK. WATERPROOF ALL HORIZONTAL SURFACES AND VERTICAL SURFACES FROM NEW PLAZA DOWN TO BASEMENT LEVEL AT PERIMETER OF PLAZA. ALL NEW STOOPS TO BE SIZED TO MATCH PAVING PATTERN. SEE NOTES ON BASEMENT PLANS FOR ADDITIONAL INFORMATION."

3. SHEET D1.01
   a. V1/D1.01 – Revise keyed note #d26 to read "REMOVE EXISTING WOOD AND CONCRETE DOCKS, SLABS, DRAINS, AREAWAYS, ETC. IN THEIR ENTIRETY DOWN TO GRADE OR STRUCTURAL SLABS BELOW. REMOVE WEARING SLABS WHERE APPLICABLE TO ALLOW WATERPROOFING. SEE L1.1 AND BASEMENT PLANS FOR ADDITIONAL REQUIREMENTS."

4. SHEET G0.0.
   a. Add general note "9. EXTERIOR STONE, GRANITE AND BRICK TO BE TUCK POINTED / RE-GROUTED WHERE REQUIRED."

5. SHEET A1.1108
   a. G15/A1.1108 – Add keyed note #a23 to stair inside of unit. Keyed note #a23 to read "NEW STAIR WITH HANDRAIL / GUARDRAIL AT OPEN SIDES AND WOOD HANDRAIL AT WALL SIDES; SEE DETAILS ON A4.1"

6. SHEET A1.1200.1
   a. V1/A1.1200.1 – Revise existing plaster height to be 9'-7".
   b. V9/A1.1200.1 – Revise flooring and add flooring tags per attached Supplemental Drawing.
   c. V17/A1.1200.1 – Add keyed notes #a22 and a23 to stairs inside of suites per attached Supplemental Drawings.
   d. V17/A1.1200.1 – Add dimension (6'-9" min) at desk location per attached Supplemental Drawings.
   e. V17/A1.1200.1 – Remove dimension ("6'-6") at restroom exterior wall per attached Supplemental Drawings.

7. SHEET A1.1200.2
   a. M17/A1.1200.2 – add robe hook #270 per attached Supplemental Drawings.
   b. M20/A1.1200.2 – add towel bar #227 per attached Supplemental Drawings.

8. SHEET A2.1
   a. Revise Keyed Note #L21 to Read "NEW ALUMINUM DOORS AND CURTAIN WALL TO MATCH EXISTING. FOR TRANSOM ABOVE STONE DETAILING, CLEAN EXISTING CURTAIN WALL, REPLACE SEALANT AND PROVIDE NEW GLAZING TO MATCH NEW GLAZING BELOW."

9. SHEET A2.1 thru A2.4
   b. Add general note "9. EXTERIOR STONE, GRANITE AND BRICK TO BE TUCK POINTED / RE-GROUTED WHERE REQUIRED."

STRUCTURAL DRAWINGS

1. SHEET S0.00
   a. Detail 3/S0.00: Revise the detail as shown clouded in ***Supplemental Drawing SDS-001.***

2. SHEET S1.00
   a. Basement Plan: Revise the note "Existing Concrete Curbs" to read ***"Existing Concrete Curbs; ADD STEPS, SEE ARCH."***

3. SHEET S1.11
   a. Eleventh Floor Plan: Add the RTU framing as shown in ***Supplemental Drawing SDS-002.***
   b. Detail 3/S1.11: Added Detail as shown in ***Supplemental Drawing SDS-003.***

MECHANICAL DRAWINGS

1. SHEET M1.00 BASEMENT FLOOR PLAN - HVAC AND MISCELLANEOUS PIPING
   a. Mechanical RM 026
      i. HHP-1.5, Route ¾" condensate piping from heat pump down wall and spill into drain TD-1.
   b. Storage and Mechanical RM 042
      i. DOAU-1A and DOAU-1B, spill 1-1/4" condensate drain into floor drain between units.
   c. See Sketches M1.00a and M1.00b

2. SHEET M1.03 THIRD THROUGH TENTH FLOOR PLAN – HVAC AND MISCELLANEOUS PIPING
   a. Corridor Rm X50, Locate sensor for EDH-1 on west wall of corridor near elevator.

3. SHEET M1.04 TENTH FLOOR MEZZANINE AND ELEVENTH FLOOR PLAN – HVAC AND MISCELLANEOUS PIPING
   a. DOAU-2A and DOAU-2B
      i. Route HPLS/HPLR piping up inside DOAU-2A and DOAU-2B roof curb. Provide 2-1/2" hose kit, automatic flow control valve and strainer

identical to Water Source Heat Pumps. Reference section 23 8146 Water Source Heat Pumps subparagraph 2.4 Hose Kits for requirements.

b. See Sketch M1.04a

4. SHEET M2.00 BASEMENT FLOOR PLAN – PLUMBING
   a. Guest Fitness 044,
      i. Provide pounds to ounces natural gas regulator on ½" gas pipe serving fire place on first floor. Vent regulator to outside.
   b. See Sketch M2.00a

5. SHEET M2.01 FIRST FLOOR PLAN - PLUMBING
   a. See Sketch M2.01a

6. SHEET M4.09 WASTE AND VENT RISER DIAGRAM
   a. See Sketch M4.09a

7. SHEET M7.03 MECHANICAL SCHEDULES
   a. See Sketch M7.03a and M7.03b

ELECTRICAL DRAWINGS

2. SHEET E0.01 SITE UTILITY PLAN – ELECTRICAL
   a. Contact Burt Adams at 402-636-3333 with OPPD for Fixture "G" pricing and coordination.

3. SHEET E1.02 SECOND FLOOR PLAN - ELECTRICAL
   a. Add rough-in for wall mounted telephone on west side of guest corridor 24" north of column line 5. Install at 54" a.f.f.

4. SHEET E1.03 THIRD THRU NINTH TYPICAL FLOOR PLANS - ELECTRICAL
   a. Add rough-in for wall mounted telephone on west side of guest corridor 24" north of column line 5. Install at 54" a.f.f.

5. SHEET E1.04 TENTH FLOOR PLAN - ELECTRICAL
   a. Add rough-in for wall mounted telephone on west side of guest corridor 24" north of column line 5.

6. SHEET E1.05 ELEVENTH FLOOR PLAN - ELECTRICAL
   a. Add rough-in for wall mounted telephone on west side of guest corridor 24" north of column line 5. Install at 54" a.f.f.

7. SHEET E1.05 ELEVENTH FLOOR PLAN – ELECTRICAL
   a. Delete telecommunication conduits labeled with flag note 1 between gridlines 3-4. See attached sketch E1.05a.
   b. Relocate panel "E11", telecommunication boards and associated power per attached sketch sheet E1.05a.

8. SHEET E1.06 TWELFTH FLOOR PLAN - ELECTRICAL

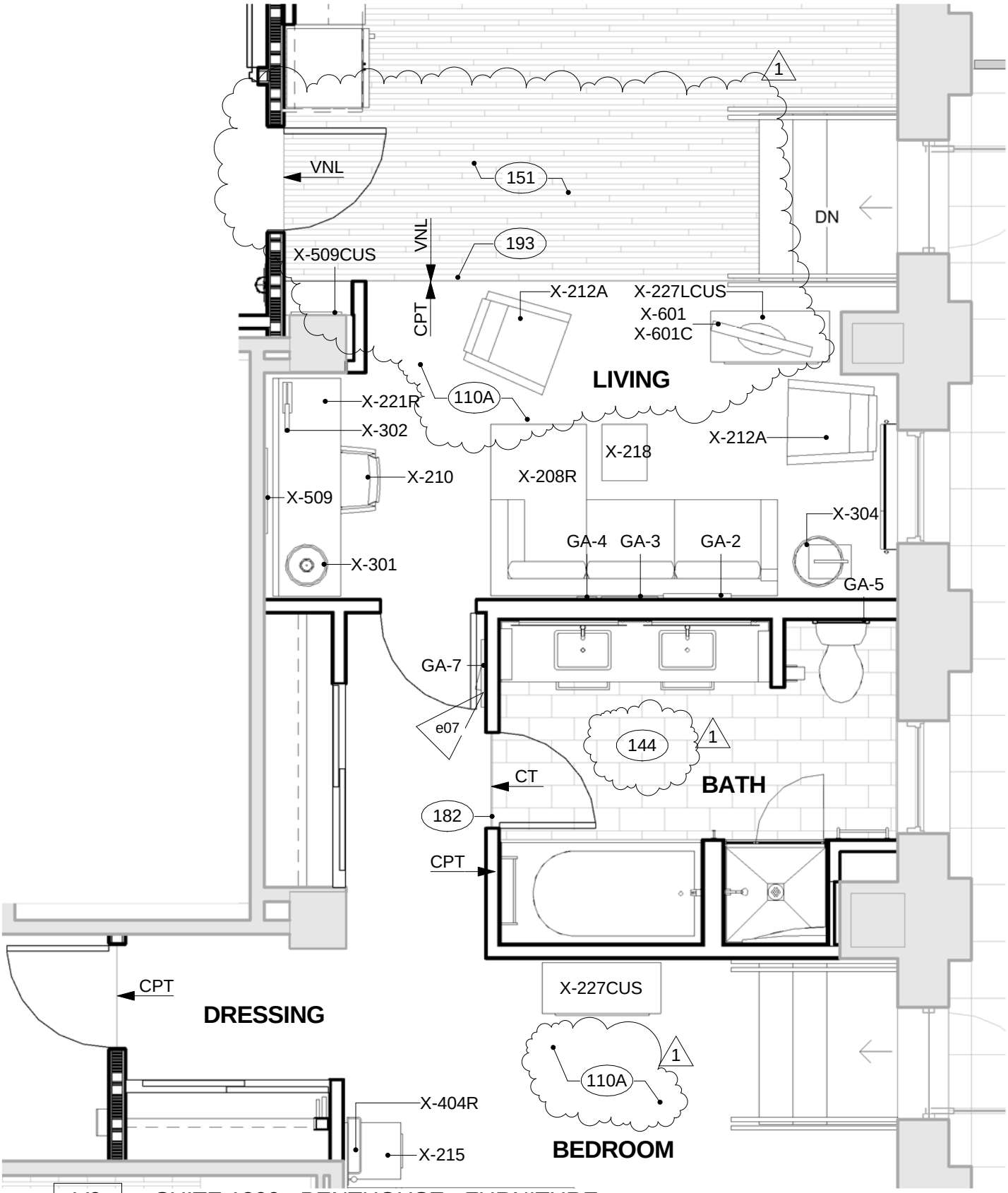
a. Add rough-in for wall mounted telephone on north side of guest corridor directly above receptacle. Install at 54" a.f.f.

9. SHEET E4.04 TELECOMMUNICATIONS PATHWAY RISE DIAGRAM – BASEMENT THRU FOURTH FLOORS
    a. Delete 1-4" conduit sleeve crossing section of gyp. board ceiling in front of main elevators on floors 2-4.

10. SHEET E4.05 TELECOMMUNICATIONS PATHWAY RISE DIAGRAM – FIFTH THRU NINTH FLOORS
    a. Delete 1-4" conduit sleeve crossing section of gyp. board ceiling in front of main elevators on floors 5-9.

11. SHEET E4.05 TELECOMMUNICATIONS PATHWAY RISE DIAGRAM – TENTH THRU MECH. LEVEL
    a. Delete 1-4" conduit sleeve crossing section of gyp. board ceiling in front of main elevators on floor 10.

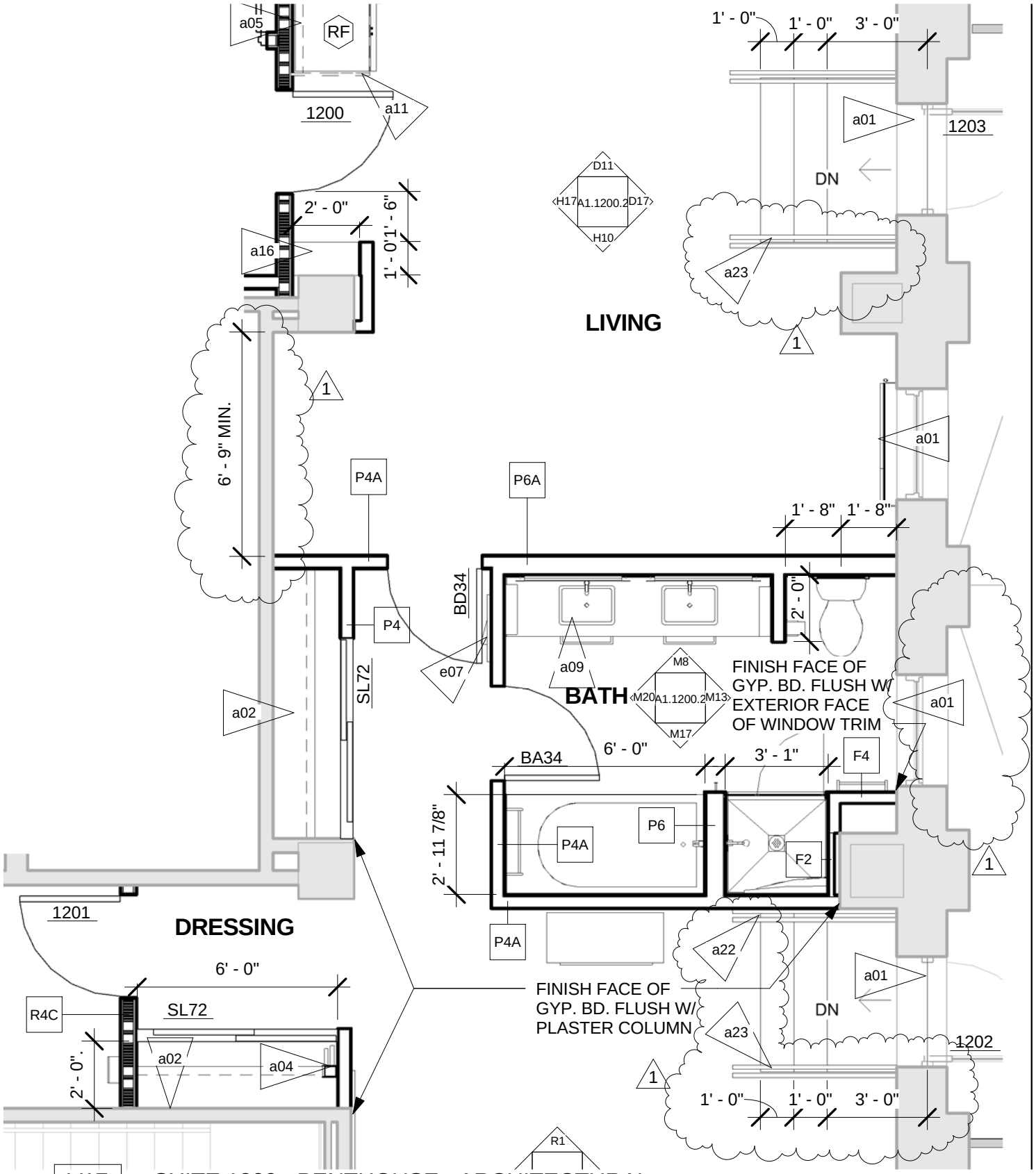
END OF ADDENDUM #1



V9 SUITE 1200 - PENTHOUSE - FURNITURE

A1.1200.1 1/4" = 1'-0"

SHEET REFERENCE: V9 / A1.1200.1	DWG NO.	ALLEY·POYNER MACCHIETTO ARCHITECTURE
PROJECT NAME: Downtown Omaha Residence Inn	**AD01**	1516 Cuming Street Omaha, NE 68102 Ph: 402.341.1544 Fx: 402.341.4735 alleypoyner.com
PROJECT NUMBER: 09001	**A1**	
DATE: 2012-06-22		
	ADDENDUM #1	



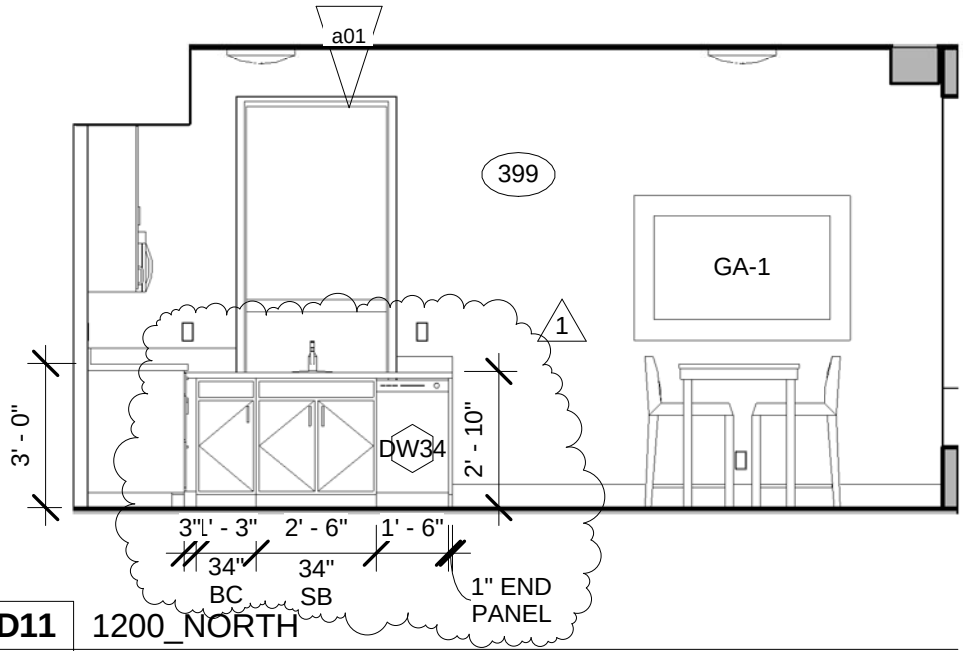
V17 SUITE 1200 - PENTHOUSE - ARCHITECTURAL

A1.1200.1 1/4" = 1'-0"

SHEET REFERENCE: V9 / A1.1200.1	DWG NO.
PROJECT NAME: Downtown Omaha Residence Inn	**AD01**
PROJECT NUMBER: 09001	**A2**
DATE: 2012-06-22	ADDENDUM #1

ALLEY·POYNER MACCHIETTO ARCHITECTURE
1516 Cuming Street
Omaha, NE 68102
Ph: 402.341.1544
Fx: 402.341.4735
alleypoyner.com

9 | 10 | 11 | 12 | 13 | 14 | 15 | 16



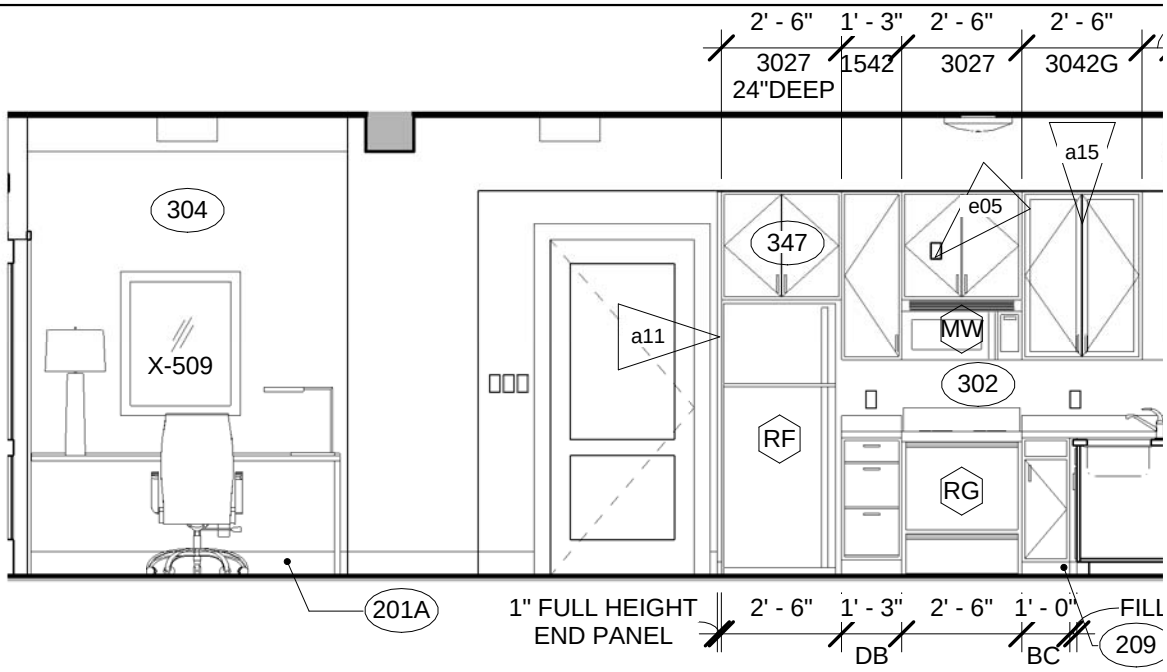
D11 1200_NORTH

A1.1200.2 1/4" = 1'-0"

SHEET REFERENCE: A1.1200.2	DWG NO.	ALLEY·POYNER MACCHIETTO ARCHITECTURE
PROJECT NAME: Downtown Omaha Residence Inn	**AD01**	1516 Cuming Street Omaha, NE 68102 Ph: 402.341.1544 Fx: 402.341.4735 alleypoyner.com
PROJECT NUMBER: 09001	**A3**	
DATE: 2012-06-22		
	ADDENDUM #1	

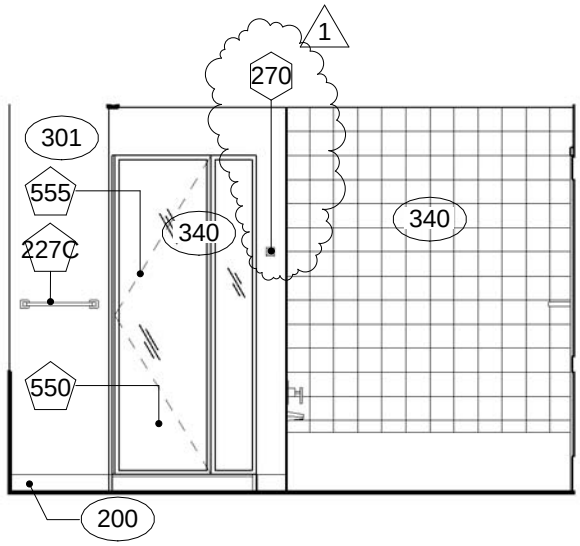
D17 1200_EAST

A1.1200.21/4" = 1'-0"



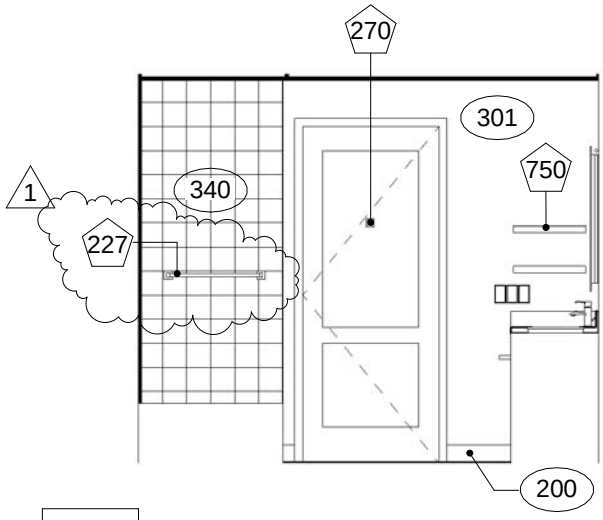
H17 1200_WEST

A1.1200.21/4" = 1'-0"



M17 1200 BATH SOUTH

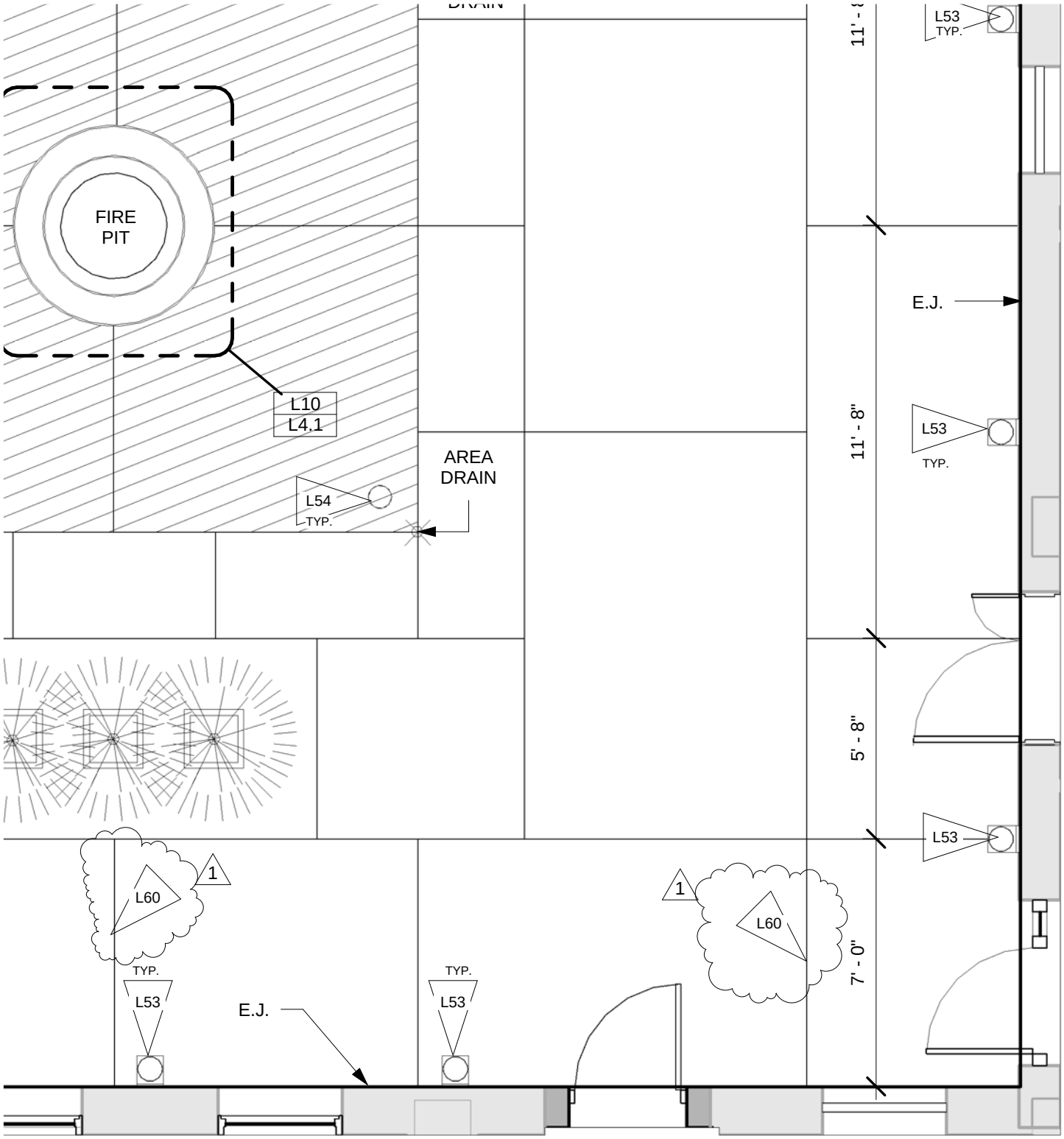
A1.1200.21/4" = 1'-0"



M20 1200 BATH WEST

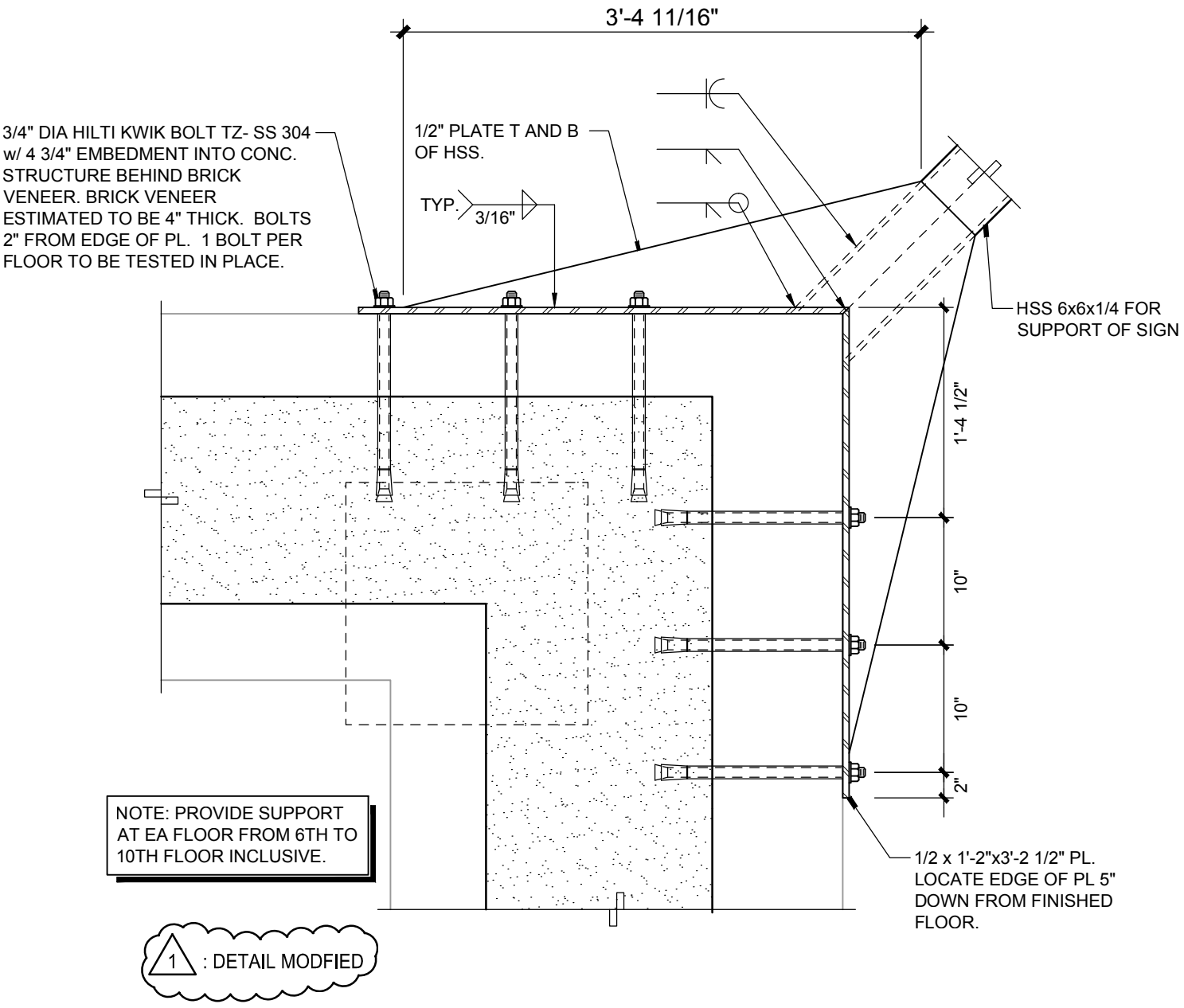
A1.1200.21/4" = 1'-0"

SHEET REFERENCE: A1.1200.2	DWG NO.	ALLEY·POYNER MACCHIETTO ARCHITECTURE
PROJECT NAME: Downtown Omaha Residence Inn	**AD01**	1516 Cuming Street Omaha, NE 68102 Ph: 402.341.1544 Fx: 402.341.4735 alleypoyner.com
PROJECT NUMBER: 09001	**A4**	
DATE: 2012-06-22		
	ADDENDUM #1	



V1	ENLARGED COURTYARD
L1.1	1/4" = 1'-0"

SHEET REFERENCE: L1.1	DWG NO.	ALLEY·POYNER MACCHIETTO ARCHITECTURE
PROJECT NAME: Downtown Omaha Residence Inn	**AD02**	1516 Cuming Street Omaha, NE 68102 Ph: 402.341.1544 Fx: 402.341.4735 alleypoyner.com
PROJECT NUMBER: 09001	**A1**	
DATE: 2012-06-22		
	ADDENDUM #1	



3 SIGN SUPPORT DETAIL

1" = 1'-0"

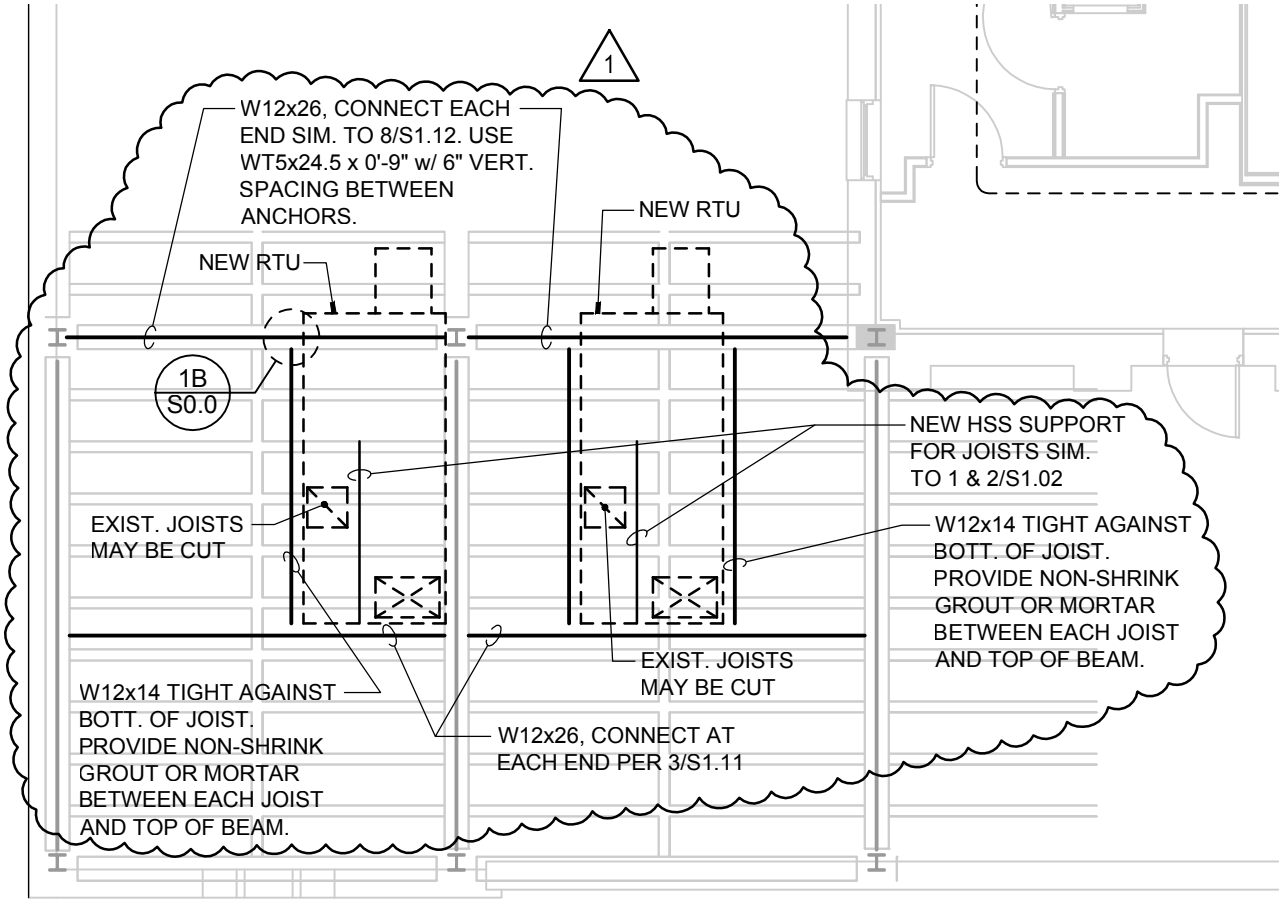
TD2 engineering & surveying
Job Number: 748-362
thompson, dreessen & dorner, inc.
10836 Old Mill Rd
Omaha, NE 68154
p.402.330.8860 www.td2co.com

Addendum:	Addendum #1
Date:	06-22-12
Drawn By:	DJS
Sheet:	S0.00

Downtown Omaha Residence Inn by Marriott

Structural Notes

SDS-001



TD2 engineering & surveying
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10836 Old Mill Rd
Omaha, NE 68154
p.402.330.8860 www.td2co.com

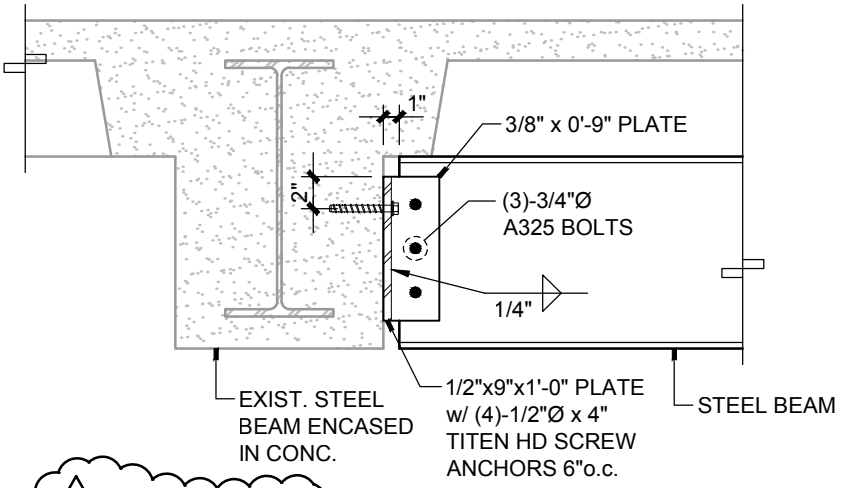
Job Number: 748-362

Addendum:	Addendum #1
Date:	06-22-12
Drawn By:	DJS
Sheet:	S1.11

Downtown Omaha Residence Inn by Marriott

11th & 12th Floor Plans

SDS-002



1 : DETAIL ADDED

3 SECTION

1" = 1'-0"

TD2 engineering & surveying

thompson, dreessen & dorner, inc.
10836 Old Mill Rd
Omaha, NE 68154
p.402.330.8860 www.td2co.com

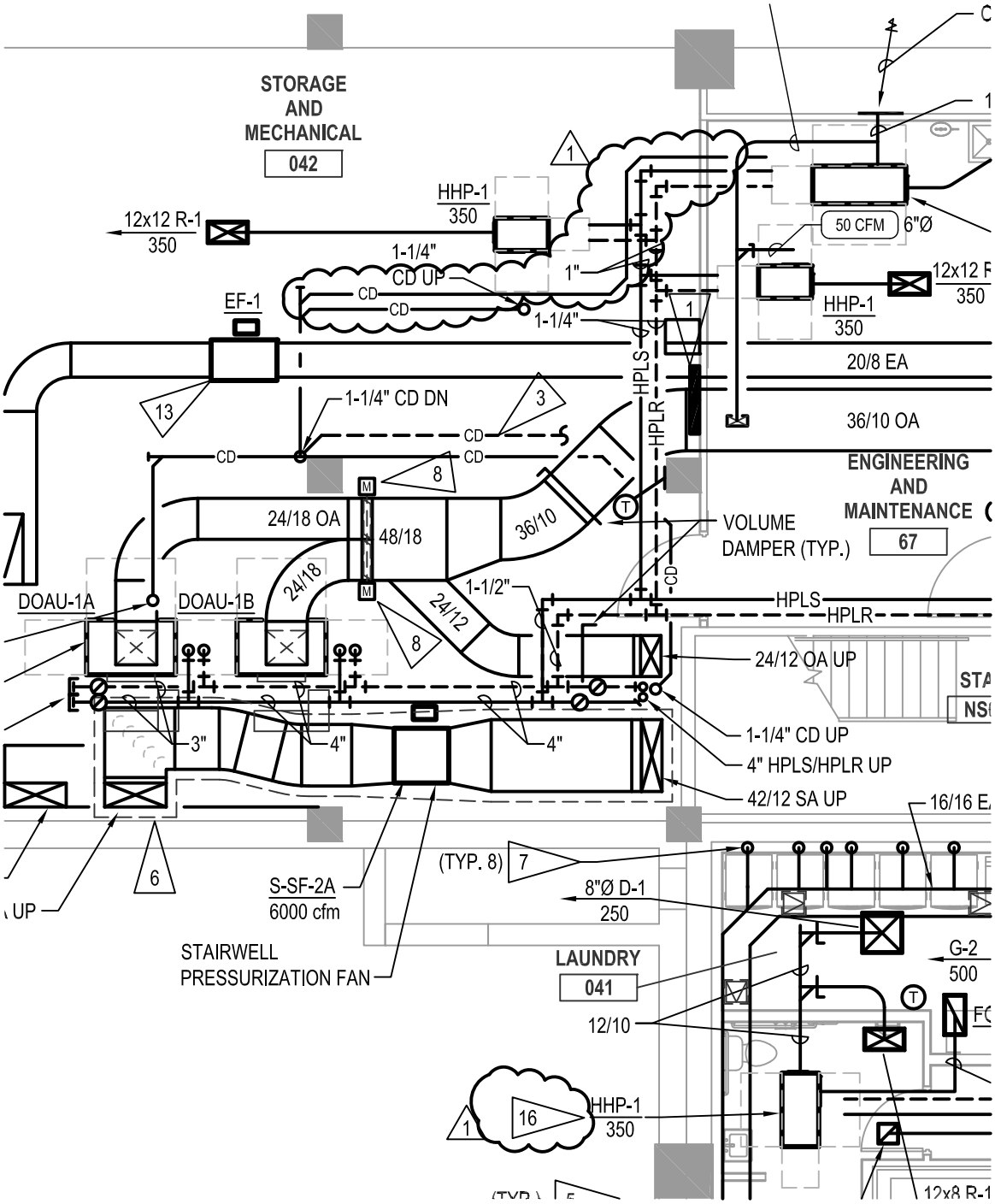
Job Number: 748-362

Addendum:	Addendum #1
Date:	06-22-12
Drawn By:	DJS
Sheet:	S1.11

Downtown Omaha Residence Inn by Marriott

11th & 12th Floor Plans

SDS-003



15	SIZE REFRIGERANT PIPING PER MANUFACTURERS RECOMMENDATIONS. CONNECT 3/4" COPPER CONDENSATE PIPE INTO CONDENSATE PIPING BELOW FLOOR
16	CONNECT 3/4" COPPER CONDENSATE PIPING INTO CONDENSATE MAIN BELOW FLOOR

1

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4940 North 118th Street
Omaha, NE 68164

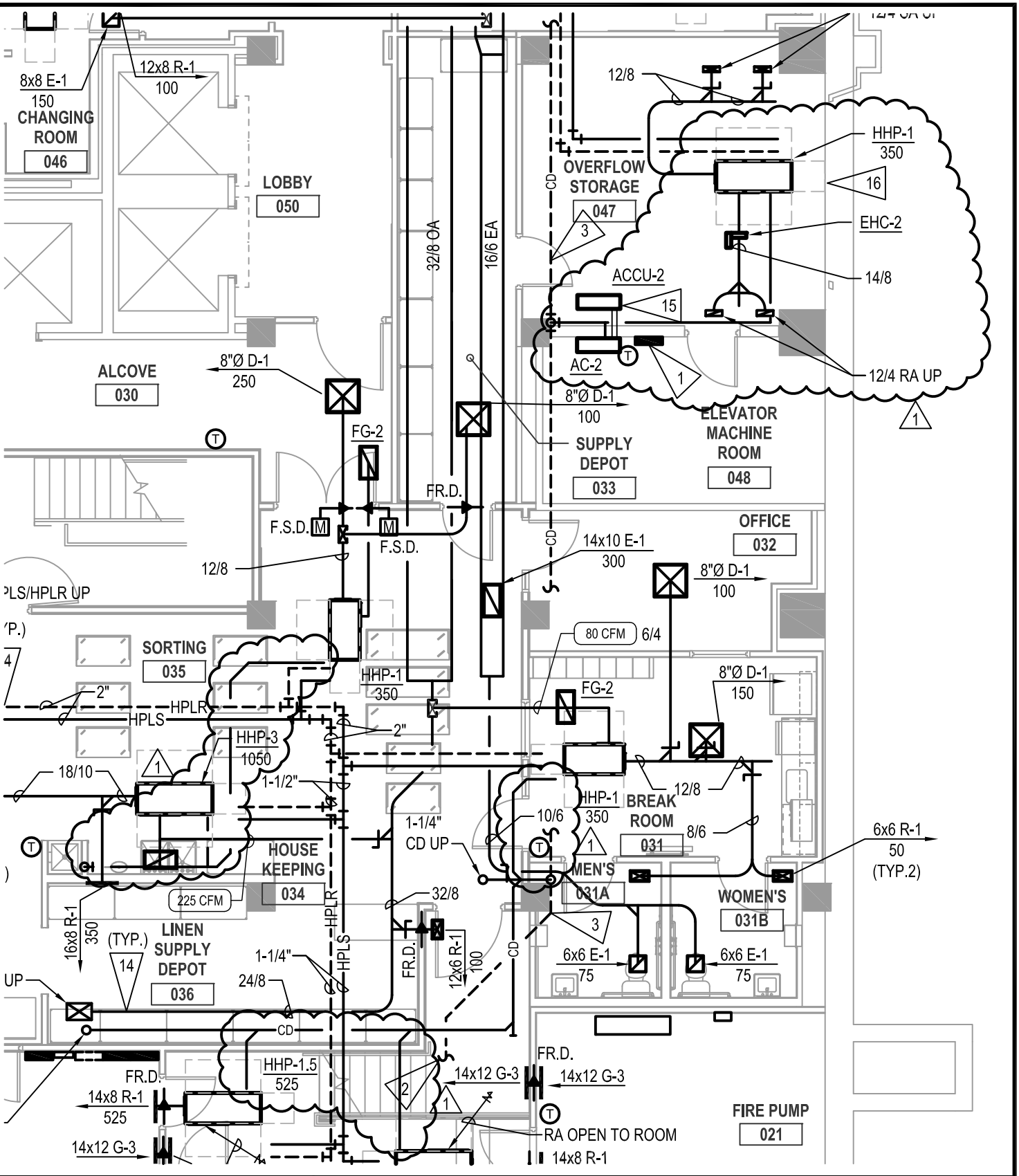
P: 402.491.4144

www.morrisseyengineering.com

Downtown Omaha Residence Inn by Marriott

project no.:	11290	drawing referenced:	M1.00
date:	06-22-2012	addendum no.:	1

sketch M1.00a



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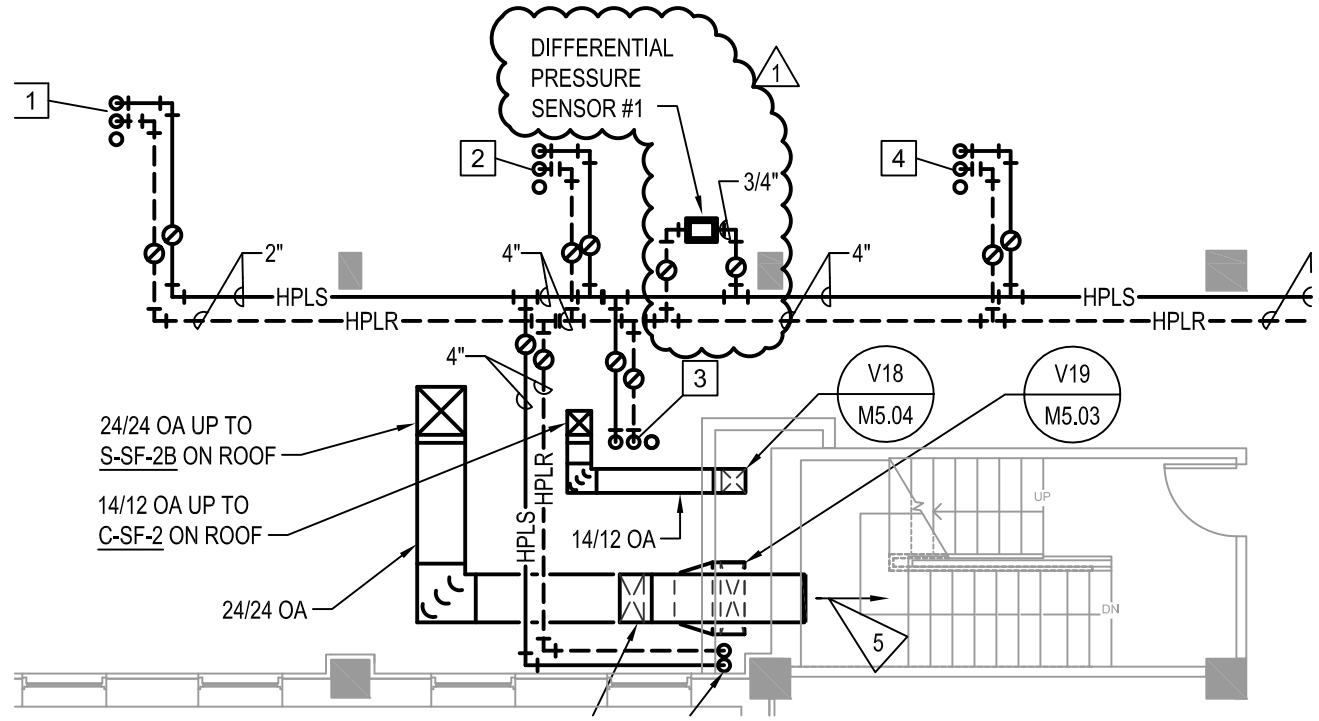
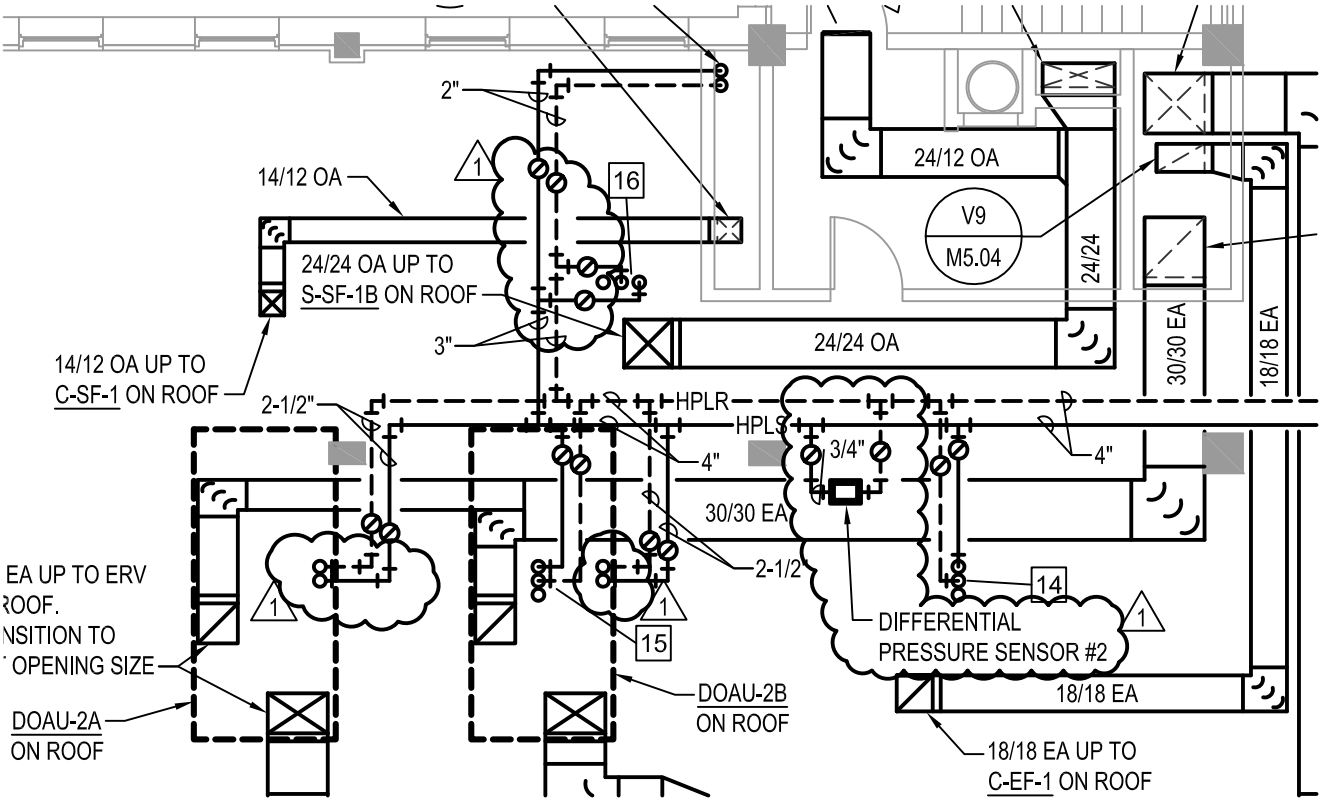
project no.:	11290	drawing referenced:	M1.00
date:	06-22-2012	addendum no.:	1

sketch M1.00b





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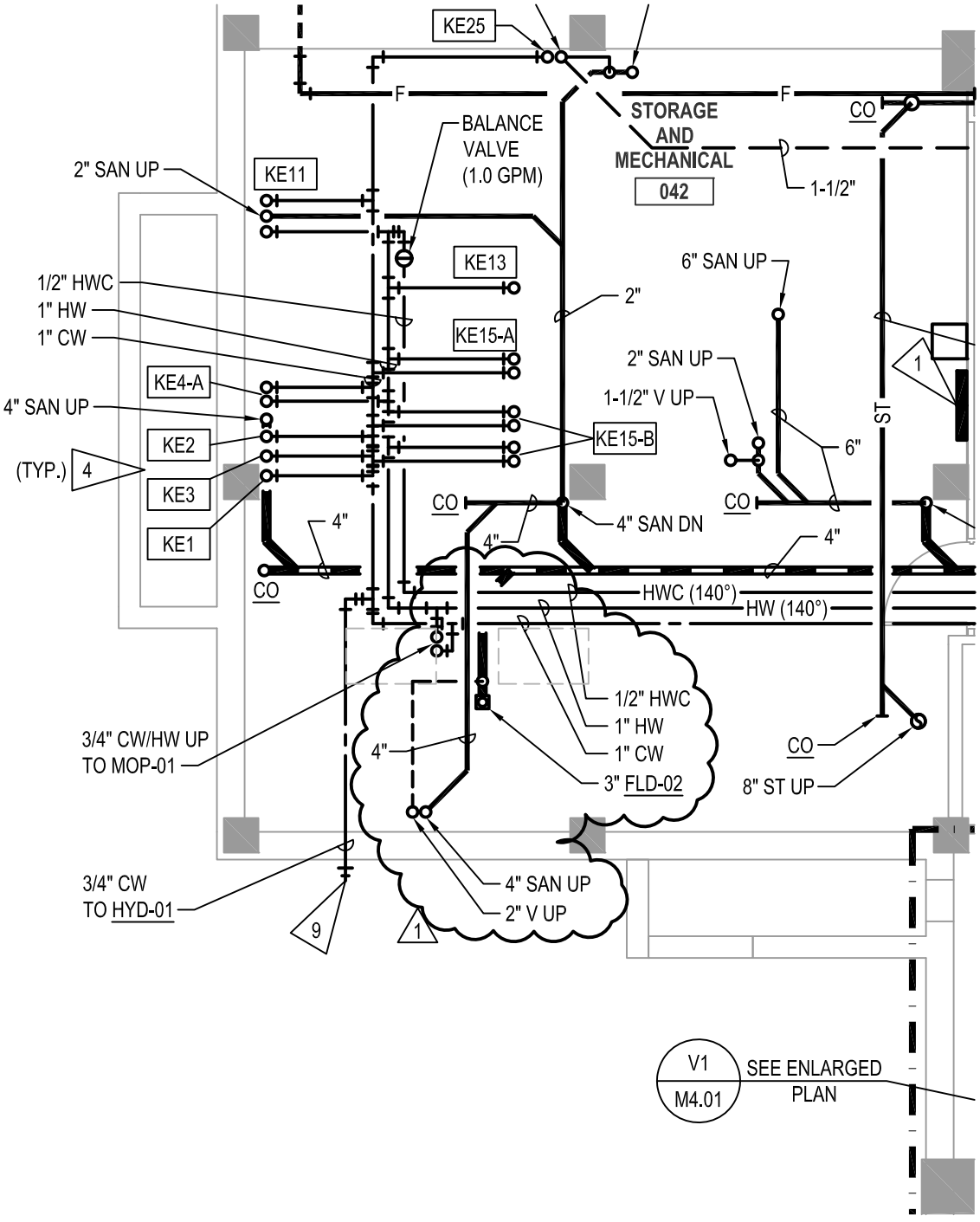
Downtown Omaha Residence Inn by Marriott

project no.:	11290	drawing referenced:	M1.04
date:	06-22-2012	addendum no.:	1

sketch M1.04a



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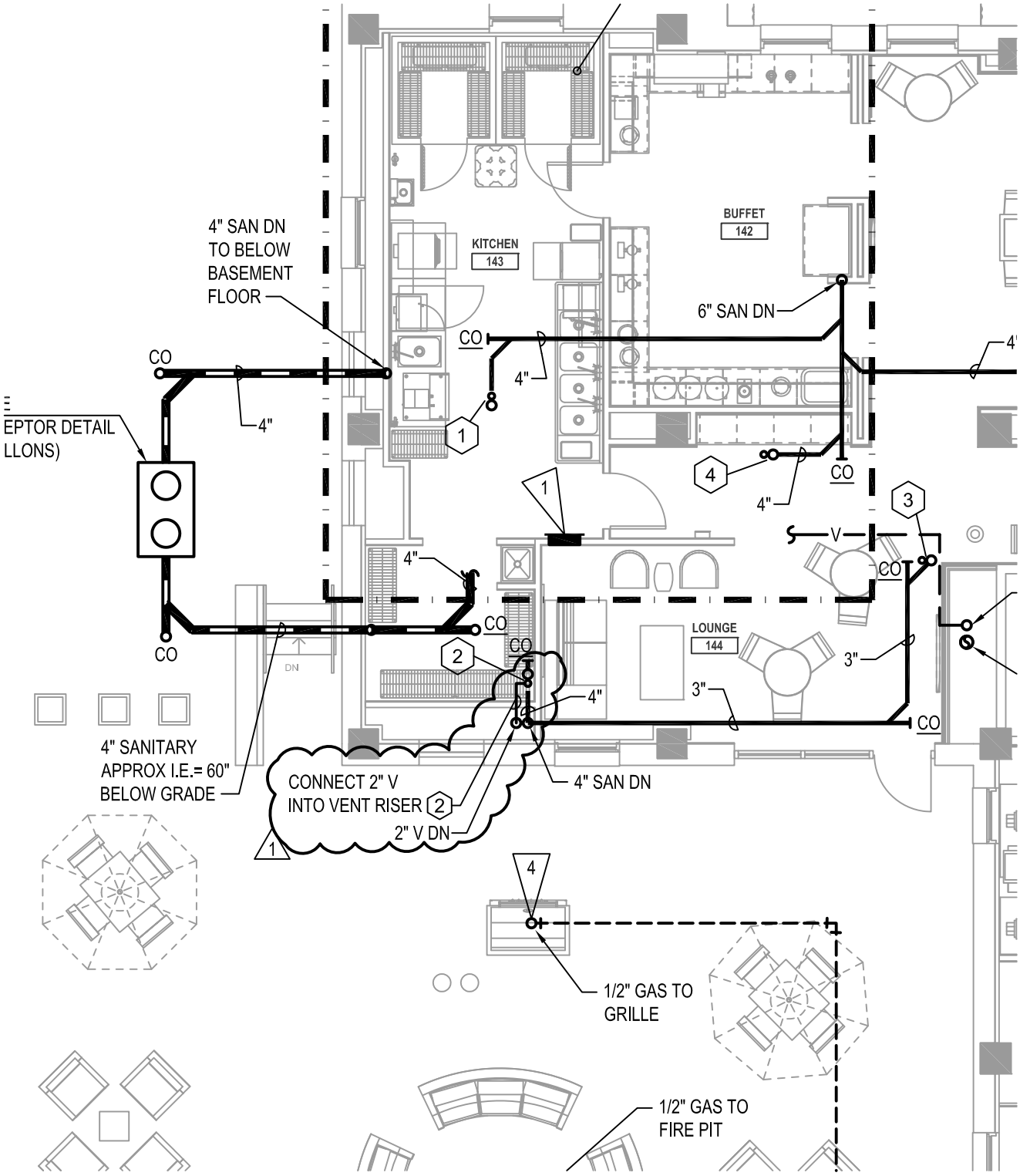
Downtown Omaha Residence Inn by Marriott

project no.:	11290	drawing referenced:	M2.00
date:	06-22-2012	addendum no.:	1

sketch M2.00a



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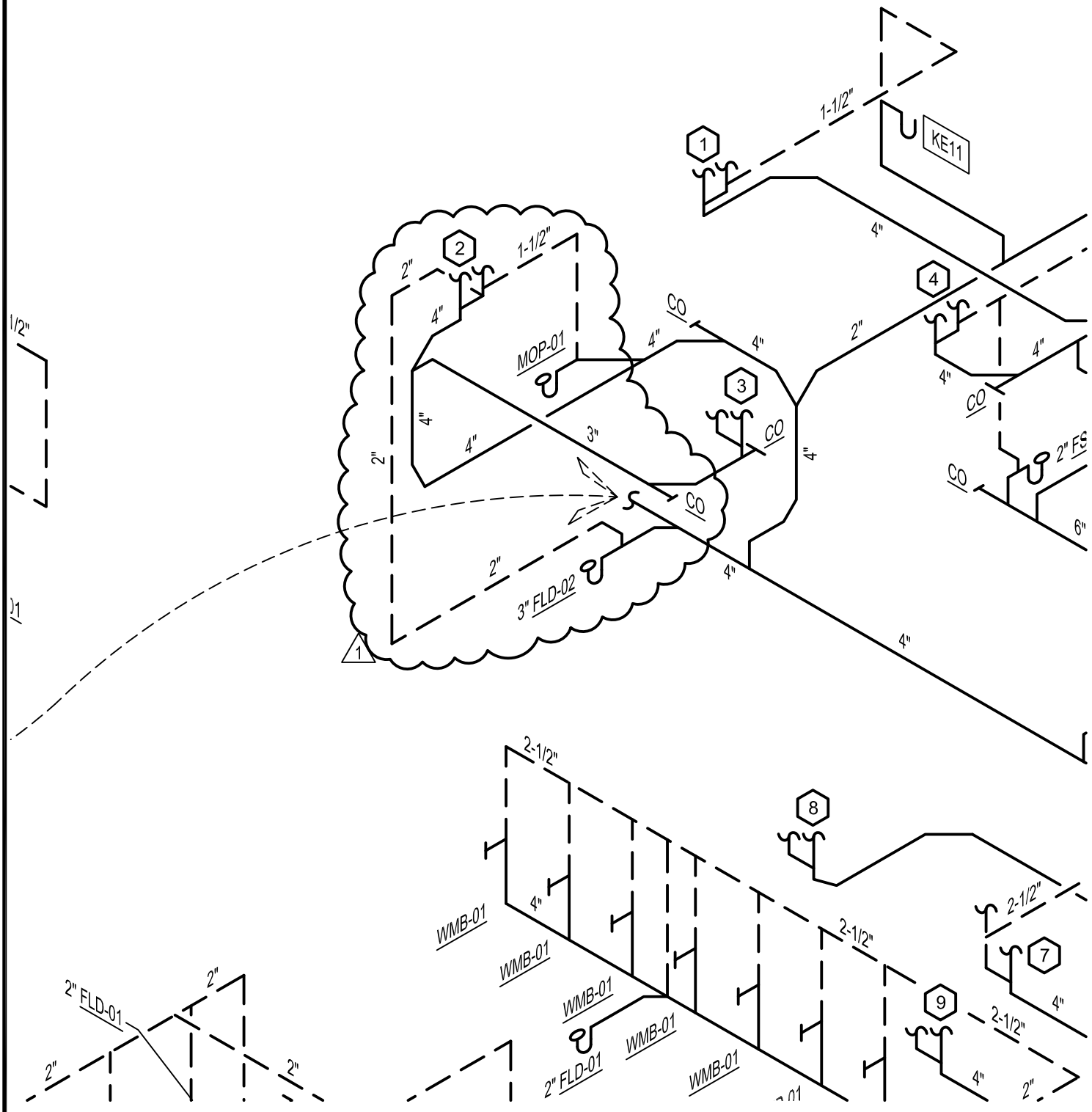
Downtown Omaha Residence Inn by Marriott

project no.:	11290	drawing referenced:	M2.01
date:	06-22-2012	addendum no.:	1

sketch M2.01a



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Downtown Omaha Residence Inn by Marriott

project no.: 11290	drawing referenced: M4.09		
date: 06-22-2012	addendum no.: 1	sketch	M4.09a

DUCTLESS SPLIT AIR CONDITIONER

GENERAL	PLAN TAG	AC-1 / ACCU-1	AC-2 / ACCU-2	
	MANUFACTURER (8)	CARRIER	CARRIER	
	MODEL NUMBER	(1)	(7)	
	SERVES	SEE PLANS	SEE PLANS	
	CONFIGURATION	WALL (1)	WALL (7)	
	MAXIMUM SIZE (LxWxH)(IN)	(2)	(8)	
	ACCESSORIES	(3)	(3)	
	REMARKS	(4) (5)	(4) (5)	
AIRFLOW	INSIDE AIRFLOW (CFM)	750 (MED)	235	
	FAN SPEED	3	3	
ELECTRICAL	VOLTS	208	208	
	PHASE	1	1	
	OVERCURRENT PROT. (INDOOR/OUTDOOR)	15/40	15/15	
	MINIMUM CIRCUIT AMP. (INDOOR/OUTDOOR)	0.55/23.8	-	
	REMARKS	(6)	(6)	
HEAT	MBH (KW)	-	-	
	STAGES	-	-	
	KW / STAGE	-	-	
	REMARKS	-	-	
COOLING	AMBIENT AIR DB (°F)	95	95	
	ENTERING AIR DB/WB (°F)	80/67	80/67	
	TOTAL CAPACITY (MBH)	36.0	12.0	
	SENSIBLE CAPACITY (MBH)	-	9.0	
	REFRIGERANT TYPE	R-410A	R-410A	
	MINIMUM SEER	13.0	13.0	
	REMARKS	(4)	(4)	

REMARKS

(1) MODEL NO:
INDOOR UNIT: 40QNC036
OUTDOOR UNIT: 38HDF036

(2) SIZE:
INDOOR UNIT: 58x14x10
OUTDOOR UNIT: 45x38x18

(3) PROVIDE MANUFACTURER'S WIRED WALL MOUNTED DIGITAL CONTROL THERMOSTAT.

(4) PROVIDE LOW AMBIENT ACCESSORIES (COOLING TO -20°F) AND WITH MANUFACTURER'S WASHABLE FILTERS.

(5) PROVIDE COMPRESSORS WITH 5-YEAR WARRANTY.

(6) POWER FOR INDOOR UNIT SHALL COME OFF OF OUTDOOR CONDENSING UNIT.

(7) MODEL NO:
INDOOR UNIT: 40QNC012
OUTDOOR UNIT: 38HDF012

(8) SIZE:
INDOOR UNIT: 31x10x8
OUTDOOR UNIT: 30x23x11

1

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Downtown Omaha Residence Inn by Marriott

project no.: 11290	drawing referenced: M7.03		
date: 06-22-2012	addendum no.: 1	sketch M7.03a	

HEATING COIL SCHEDULE

GENERAL	PLAN TAG	EDH-1	EDH-1A	EDH-1B	EDH-2
	MANUFACTURER	INDEECO	INDEECO	INDEECO	INDEECO
	MODEL NUMBER	-	-	-	-
	SERVES	CORRIDOR	DOAU-1A	DOAU-1B	CORRIDOR
	APPROXIMATE SIZE (LxW)(IN)	12x8	24x24	24x24	14x8
	TYPE	OPEN COIL	FINNED TUBULAR	FINNED TUBULAR	OPEN COIL
	MAX. FINS PER INCH	-	-	-	-
	REMARKS	(2)	(2)	(2)	(2)
AIR	AIRFLOW (CFM)	420	2,000	2,000	350
	MAX. FACE VELOCITY	630	500	500	420
	MAX. AIR PRESSURE DROP (IN. WG)	0.1	0.1	0.1	0.1
	ENTERING AIR TEMP (ºF)	60.0	-10.0	-10.0	60.0
	LEAVING AIR TEMP (ºF)	75.0	40.0	40.0	87.0
	TOTAL CAPACITY (MBH)	6.82	109.1	109.1	10.2
	REMARKS	-	-	-	-
ELECTRIC	VOLTAGE/PHASE	208 / 3	208 / 3	208 / 3	208 / 1
	CAPACITY (KW)	2.0	32	32	3.0
	NUMBER OF STAGES	SCR	SCR	SCR	STAGED
	KW PER STAGE	-	-	-	1.5 KW/STAGE
	REMARKS	(1)	(1)	(1)	-

1

REMARKS

(1) PROVIDE WITH:
- SCR CONTROL
- ELECTRIC HEATER CONTROLED BY TEMPERATURE CONTROL SYSTEM

(2) FLANGED HEATER

(3) PROVIDE WITH:
- PROTECTIVE SCREENS ON INLET AND OUTLET (3/8" WIRE MESH SCREEN)

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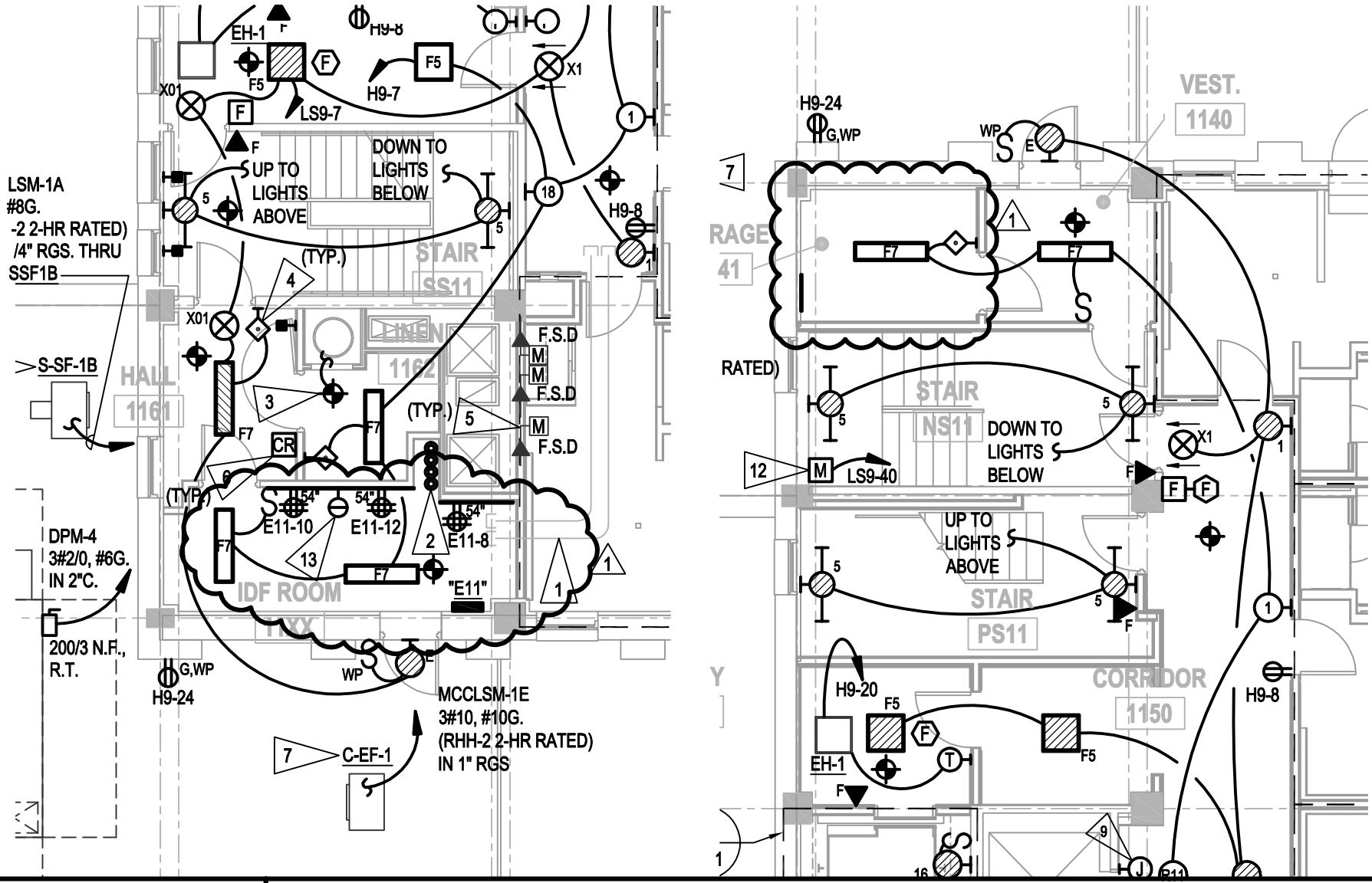
Downtown Omaha Residence Inn by Marriott

project no.: 11290	drawing referenced: M7.03		
date: 06-22-2012	addendum no.: 1	sketch	M7.03b



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DOWNTOWN OMAHA RESIDENCE INN
BY MARRIOTT
106 SOUTH 15TH STREET OMAHA, NE

project no.:	11290	drawing referenced:	E1.05
date:	6/22/2012	addendum no.:	1

sketch **E1.05a**

LIGHTING PANEL SCHEDULE

LIGHTING PANEL:	E11	VOLTAGE:	208/120V
RATING:	100A	PHASE:	3
MOUNTING:	SURFACE	WIRE:	4
TYPE:	MLO W/ GND. BAR	A.I.C. RATING:	SERIES

DESCRIPTION	O/C	CKT.		O/C	DESCRIPTION
SPARE	20/1	1	2	20/1	REC - 6TH FL IDF
SPARE	20/1	3	4	20/1	REC - 6TH FL IDF
SPARE	20/1	5	6	20/1	REC - 6TH FL IDF
SPARE	20/1	7	8	20/1	REC - IDF ROOM 1141
SPARE	20/1	9	10	20/1	REC - IDF ROOM 1141
SPARE	20/1	11	12	20/1	REC - IDF ROOM 1141
SPARE	20/1	13	14	30/1	REC - IDF ROOM 1141
SPARE	20/1	15	16		SPACE
SPARE	20/1	17	18		SPACE
SPARE	20/1	19	20		SPACE
SPACE		21	22		SPACE
SPACE		23	24		SPACE
SPACE		25	26		SPACE
SPACE		27	28		SPACE
SPACE		29	30		SPACE
SPACE		31	32		SPACE
SPACE		33	34		SPACE
SPACE		35	36		SPACE
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

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project no.:	11290	drawing referenced:	E5.05		
date:	6/22/2012	addendum no.:	1	sketch	E5.05a

TELECOMMUNICATIONS - LOW VOLTAGE SPECIFICATIONS

A. PROJECT DESCRIPTION:
1. THIS PROJECTS INVOLVES THE RENOVATION OF PROPERTY SPACE AT 106 S. 15TH ST, OMAHA, NEBRASKA INTO THE NEW OFB RESIDENCE INN HOTEL. THE SCOPE OF THESE DOCUMENTS ARE LIMITED TO THE LOW VOLTAGE TELECOMMUNICATIONS SYSTEM FOR VOICE/DATA/TV/HSIA/AUDIO/CCTV/INTERCOM AND THE POWER AND GROUNDING REQUIREMENTS ASSOCIATED WITH THAT SYSTEM.

B. PROJECT CLOSE-OUT REQUIREMENTS:
1. THE COMMUNICATIONS CONTRACTOR (C.C.) SHALL BE REQUIRED TO COMPLETELY TEST AND CERTIFY ALL CABLE AND FIBER TERMINATIONS AND MEET THE SPECIFIED SYSTEM PERFORMANCE SPECIFICATIONS FOR ALL CABLES INSTALLED ON THIS PROJECT.
2. UTP COPPER CAT.6 HORIZONTAL AND VERTICAL CABLE TESTING: CERTIFICATION OF THE UTP WIRING SYSTEM SHALL BE PERFORMED AND DOCUMENTED BY THE C.C. THE TESTS MUST BE THE MOST CURRENT STANDARD TIA/EIA 568-B, CATEGORY CAT.6 PERMANENT LINK TEST FOR 100 OHM UTP,4-PAIR CABLE. TEST PARAMETERS SHALL INCLUDE:PROPAGATION DELAY, DELAY SKEW, WIRE MAP, LENGTH, ATTENUATION, ACR, NEAR-END-CROSS-TALK (NEXT), FAR-END-CROSS-TALK (FEXT), INSERTION LOSS (IL), RETURN LOSS (RL), EQUAL LEVEL FAR END CROSS-TALK (ELFEXT).
3. TEST RESULT PRINTOUT: EACH CABLE TESTED SHALL BE DISPLAYED ON A SINGLE SHEET OF THE REPORT. THE FIRST PAGE OF THE REPORT SHALL BE A REPORT SUMMARY OF ALL TEST RESULTS INDICATING THE FOLLOWING: CABLE ID, TIME/DATE OF TEST, LONGEST PAIR LENGTH AND PASS/FAIL.
4. APPROVED UTP TEST EQUIPMENT: LEVEL 111-E TEST EQUIPMENT IS REQUIRED. FLUKE DTX-1200/1800 SERIES COPPER CATEGORY 6 AND FIBER OPTIC SCANNER. THE CONTRACTOR IS REQUIRED TO GET WRITTEN AUTHORIZATION TO USE TEST EQUIPMENT THAT IS NOT LISTED AS APPROVED. TEST RESULT SUBMITTALS: THE C.C. SHALL SUBMIT TO OWNER ONE (1) HARD COPY BOOK OF ALL UTP CABLE AND FIBER OPTIC TEST RESULTS/SUMMARY REPORT AND CD-ROM/FLASH DRIVE OF TEST DATA IN PDF FORMAT.
5. THE C.C. SHALL BE RESPONSIBLE FOR SUBMITTING A COMPLETE SET OF AS-BUILT DOCUMENTS AT THE COMPLETION OF THE PROJECT. DRAWINGS SHALL BE SUBMITTED IN HARDCOPY AND ELECTRONIC FORMATS. SUBMITTAL SHALL INCLUDE ALL DRAWINGS REVISED AS PER ACTUAL INSTALLATION FOR THE RISER AND STATION IDENTIFICATION PLANS. THE ELECTRONIC FORMAT SHALL BE SUBMITTED VIA CD-ROM/FLASH DRIVE OR EMAIL IN (.DWG) AUTOCAD VER 2010 AND PDF.
6. THE C.C. SHALL BE REQUIRED TO MOUNT ONE HALF SIZE PLOT OF THE "AS-BUILT," STATION TAGGING PLAN AND RISER DIAGRAM IN THE MDF/IDF ROOMS PER THE DETAILS PROVIDED.
7. WARRANTY: THE C.C. SHALL PROVIDE A WRITTEN, ONE YEAR GUARANTEE OF ALL WORK AND MATERIAL UPON PROJECT COMPLETION AND ACCEPTANCE. THE C.C. SHALL BE REQUIRED TO SUBMIT ANY VENDOR DOCUMENTATION REQUIRED FOR THE 15 YEAR PANDUIT/GENERAL OR EQUIVALENT CERTIFICATION.

C. GENERAL REQUIREMENTS:
1. ALL PRODUCTS AND MATERIALS SHALL BE NEW UNLESS NOTED OTHERWISE, AND SHALL BE CLEAN AND FREE OF DEFECTS, DAMAGE AND CORROSION. DISTRIBUTION FRAME LADDER RACKS, THEIR SUPPORTS, SPLICES AND FASTENERS SHALL BE SUPPLIED BY G.C.FROM RECYCLED EQUIPMENT FROM PREVIOUS BUILDING TENANT CURRENTLY HELD IN STORAGE. ADDITIONAL LADDER RACK MATERIAL IF NECESSARY SHALL BE SUPPLIED BY C.C.
2. ALL PRODUCTS AND MATERIALS SHALL BE LISTED AND LABELED BY U.L., C.S.A., E.T.L., OR ANOTHER CERTIFIED TESTING LABORATORY.
3. THE E.C. IS RESPONSIBLE FOR OBTAINING, AND PAYMENT OF ALL PERMITS, INSPECTIONS, TESTS, ETC., NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF ALL ELECTRICAL WORK REQUIRED AND OBTAINING CERTIFICATE OF OCCUPANCY .
4. THE C.C. SHALL PROVIDE A WRITTEN, ONE YEAR GUARANTEE OF ALL WORK AND MATERIAL UPON PROJECT COMPLETION AND ACCEPTANCE.
5. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL BUILDING STANDARDS, RULES AND REGULATIONS.
6. REFER TO ARCHITECTURAL PLANS AND DETAILS FOR;
A. ROOM NAMES AND NUMBERS.
B. MOUNTING HEIGHTS AND ORIENTATION OF ALL LOW VOLTAGE / ELECTRICAL DEVICES.
C. DIMENSIONS AND FINAL LOCATIONS OF FURNITURE AS RELATED TO LOW VOLTAGE / ELECTRICAL DEVICES.
D. DEVICE BACK-BOX AND FACEPLATE COLORS.
7. ALL WORK SHALL BE PERFORMED IN A NEAT AND WORKMAN LIKE MANNER. ALL CONDUIT, JUNCTION BOXES, HANGERS, SUPPORT CHANNELS, ETC. SHALL BE INSTALLED STRAIGHT AND/OR PERPENDICULAR TO BUILDING CONSTRUCTION. SPECIAL CARE SHALL BE TAKEN TO ALIGN HANGING DEVICES AT EXPOSED "OPEN" CEILINGS.
8. SHOP DRAWING SUBMITTAL.
THE C.C. SHALL PROVIDE A COMPLETE CUT SHEET SUBMITTAL PACKAGE OF ALL MATERIALS AND COMPONENTS FOR THIS PROJECT. INCLUDE SETS FOR SUBMITTALS FOR DISTRIBUTION AS REQUIRED.

D. CONTRACTOR QUALIFICATIONS:
THE C.C. MUST BE A CERTIFIED PANDUIT/GENERAL OR EQUIVALENT INSTALLER AND THE CONTRACTOR SHALL ALSO COMPLOY/RETAIN AT LEAST ONE BICSI CERTIFIED RCDD (REGISTERED COMMUNICATION DISTRIBUTION DESIGNER).

E.CABLE MANAGEMENT:
THE C.C. SHALL BE RESPONSIBLE FOR PROPERLY SUPPORTING AND MANAGING ALL EXPOSED AND ACCESSIBLE LOW VOLTAGE CABLING.

F. CABLE SUPPORT AND BUNDLES:
1. HOTEL GUEST, PUBLIC AND ADMIN-BACK OF HOUSE FLOORS:
THE C.C. SHALL BE RESPONSIBLE FOR PROPERLY SUPPORTING AND MANAGING ALL EXPOSED AND CONCEALED LOW VOLTAGE CABLING. THIS PROJECT DESIGN SHALL MEET THE FOLLOWING CRITERIA: THE HORIZONTAL CABLING SHALL BE ROUTED VIA OVERHEAD PATHS IN OPEN NON-PLENUM SPACE EXCEPT WHERE CONCEALED, WHERE THE E.C. WILL PROVIDE A CONDUIT RACEWAY SYSTEM. THE ACCESSIBLE OVERHEAD CABLING SHALL BE SUPPORTED VIA A CABLE RUNWAY/J-HOOK SYSTEM THAT IS SUPPORTED AT A MAXIMUM SPACING OF EVERY 5'-0". ALL EXPOSED CABLES SHALL BE NEATLY BUNDLED WITH VELCRO CABLE STRAPS AND/OR PLASTIC TY-WRAPS. CABLE BUNDLES SHALL BE BUNDLED AND SECURED TO THE HORIZONTAL AND VERTICAL CABLE MANAGEMENT SYSTEMS. USE OF PLASTIC TY-WRAPS SHALL ONLY BE PERMITTED IF THE TY-WRAP IS INSTALLED IN SUCH A WAY AS TO BE EASILY TWISTED AROUND BUNDLE BY HAND. OVER TIGHTENING OF THE TY-WRAPS SHALL NOT BE PERMITTED. CABLE BUNDLES IN THE DEMARC, MDF AND IDFS(2) SHALL BE SUPPORTED BY VELCRO STRAPS ONLY.
2. CABLE RUNWAY:
THE C.C. SHALL FURNISH AND INSTALL A COMPLETE CABLE RUNWAY SYSTEM IN THE DEMARC TELCO NET-POP, MDF, IDFS(2), MATV H.E. ROOMS.

G. ACCESSIBLE CABLE PLANT:
THE ELECTRICAL CONTRACTOR (E.C.) SHALL COORDINATE LOCATION AND NUMBER OF OF LOW VOLTAGE TEL-DATA-CATV-HSIA-AUDIO-OCTV OUTLETS WITH ARCHITECTURAL AND SUPPLEMENTAL DRAWINGS AND SHALL PROVIDE THE SAME. THE E.C. SHALL PROVIDE APPROPRIATE JUNCTION BOXES, CONDUITS AND SLEEVES TO PROVIDE A 100% ACCESSIBLE LOW VOLTAGE CABLE PLANT. THE E.C. SHALL REFER TO MARRIOTT PROTOTYPES, ARCHITECTURAL AND SUPPLEMENTAL DRAWINGS FOR ALL GUEST ROOM, PUBLIC, BOH AND ADMIN LOCATIONS AND QUANTITIES.

H. CONDUIT STUB-UP:
ALL CONDUIT PATHWAYS, CORES, PENETRATIONS, EMT/ENT CONDUITS, SLEEVES, BUSHINGS, JUNCTION BOXES INCLUDING IN-FLOOR AND IN-CEILING, PULL-BOXES, BACK-BOXES, DRYWALL RACEWAYS AND FIRE-STOPPING AT ALL PENETRATIONS AND WITHIN JUNCTION BOXES SHALL BE FURNISHED AND INSTALLED BY THE E.C. MINIMUM CONDUIT SIZE SHALL BE 3/4" EXCEPT WHERE NOTED. SINGLE GANG PLASTER RING TO BE USED ON ALL LOCATIONS EXCEPT WHERE NOTED. CONFIRM JUNCTION BOX MOUNTING ORIENTATION WITH ARCHITECT.

I. HORIZONTAL CONDUIT PATHWAY LENGTH LIMITS:
CAT.6 VOICE/DATA/HSIA CONDUIT PATHWAY MAXIMUM LENGTH REQUIREMENTS:
IT IS CRITICAL THAT THE GUEST ROOM AND BACKBONE VOICE/DATA HORIZONTAL CABLING LENGTHS DO NOT EXCEED 295-FEET FROM OUTLET TO PATCH PANEL. THE E.C. SHALL COORDINATE WITH THE C.C. TO VERIFY THAT THE CONDUIT RACEWAY IS RUN IN THE MOST DIRECT ROUTE FROM THE OUTLET TO THE TERMINATION DISTRIBUTION FRAMES, AND MEETS THE FOLLOWING PARAMETERS:
1. THE CONDUIT PATHWAY SYSTEM LENGTH SHALL NOT EXCEED 275-FEET FOR ADMIN AND BOH DATA-VOICE DEVICES AND WORKSTATIONS.
2. THERE ARE NO MORE THAN TWO 90-DEGREE BENDS IN ONE CONTINUOUS CONDUIT RACEWAY BETWEEN PULL POINTS.
3. THAT THE AREA FILL PERCENTAGE OF THE COMMUNICATION CABLES IN THE CONDUIT DOES NOT EXCEED 40%.
4. ALL OPEN EMT CONDUIT ENDS ARE PROVIDED WITH A PLASTIC BUSHING OR PLASTIC SLEEVE.

IF A COMPLETED CONDUIT SYSTEM RESULTS IN CAT.6 COMMUNICATION CABLE MEASUREMENT EXCEEDING 295-FEET, THE FOLLOWING CORRECTIVE MEASURES WILL BE THE RESPONSIBILITY OF THE ELECTRICAL AND COMMUNICATIONS CONTRACTORS. THE E.C. WILL BE LIABLE FOR ALL ADDED COSTS (INCLUDING PREMIUM TIME) ASSOCIATED WITH RE-WORKING OF A CONDUIT SYSTEM TO MAKE THE COMMUNICATION CABLING SYSTEM LENGTH COMPLIANT. THE C.C. SHALL BE LIABLE FOR ALL ADDED COSTS (INCLUDING PREMIUM TIME) ASSOCIATED WITH RE-WORKING OF ALL EFFECTED CABLING, RE-TERMINATION AND RE-TESTING TO MAKE THE COMMUNICATION CABLING SYSTEM TIA-568 COMPLIANT. IT IS THE C.C. AND E.C.'S RESPONSIBILITIES TO IDENTIFY ANY LOCATIONS WHERE IT IS NOT PHYSICALLY POSSIBLE TO MEET THESE REQUIREMENTS PRIOR TO INSTALLATION.

J. CONNECTIVITY REQUIREMENTS.
DATA-VOICE-HSIA OUTLETS:
CAT.6 DATA -VOICE- HSIA CABLES ARE TO BE INDIVIDUAL AND HOME RUN TO ASSOCIATED DISTRIBUTION FRAMES. SPLIT PAIR AND/OR SPLICING IS NOT PERMITTED. .
DATA OUTLETS (RJ-45 CAT-6 KEYSTONE) ARE BLUE OR ORANGE. FINAL TBD.
VOICE OUTLETS (RJ-45 CAT-6 KEYSTONE) ARE WHITE OR IVORY TO MATCH ELECTRICAL COMPONENTS. FINAL TBD. OUTLETS SHALL BE PROVIDED WITH 4-PAIR, CATEGORY-6 UTP CABLES.
CABLING/PIN-OUT: ALL DATA/VOICE/HSIA STATIONS TO BE TERMINATED USING 568B PIN-OUT CONFIGURATION.
DATA-HSIA 4-PAIR CAT 6 UTP TIA-568B JACKET COLOR: BLUE
VOICE- 4-PAIR CAT 6 UTP TIA-568B JACKET COLOR: WHITE
MATV-CATV RG-6 COAXIAL CABLES TO BE INSTALLED BY C.C. AND TERMINATED AT THE DEVICE END ONLY. FINAL TERMINATIONS AT HEAD-END AND INTERMEDIATE DISTRIBUTION FRAMES TO BE PERFORMED BY MATV-CATV CONTRACTOR.
MATV-CATV RG-11 AND/OR HARDLINE .5 COAXIAL CABLES ARE TO BE INSTALLED BY C.C. AND TERMINATED BY MATV-CATV PROVIDER. THIS INCLUDES CABLES TO ROOF-TOP SATELLITE LOCATIONS.
HSIA IN-CEILING WIRELESS ACCESS POINT CABLES TO BE TERMINATED RJ-45 CAT.6 KEYSTONE (BLUE OR ORANGE-TBD), HOUSED IN SINGLE PORT SURFACE MOUNT ENCLOSURE (BISCUIT), COILED WITH APPROXIMATELY 20' ADDITIONAL CABLE AND LEFT IN ACCESSIBLE CEILING AREA. JACKET COLOR BLUE.
INTERCOM CABLES WILL BE CONNECTED TO MASTER AND REMOTE AIPHONE STATIONS SUPPLIED BY C.C.

K. STATION IDENTIFICATION:
ADMIN, PUBLIC AND BOH FACEPLATES, UNLESS REQUESTED OTHERWISE:
THE OUTLET IDENTIFICATION SCHEME WILL INCLUDE: "MDF-IDF DATA OR VOICE STATION NUMBER". EXAMPLE: M-D01 AND/OR MV-01, GUEST ROOM CABLES TO BE IDENTIFIED BY ROOM NUMBER AT DISTRIBUTION FRAME SIDE ONLY AT PATCH PANEL AND/OR 110 BLOCKS.
FOR DATA, EXAMPLE DATA GUEST ROOM 202 = D202, GUEST ROOM VOICE IDENTIFIED BY ROOM NUMBER AND LOCATION SUB-SET: DESK-A, BED1-B, BED2-C. EXAMPLE VOICE CABLE AT BED1 AT ROOM 202 = V202B HSIA CABLES TO BE LABELED WITH ROOM NUMBER OF CLOSEST PROXIMITY ROOM OR GUESTROOM FLOORS 2-12 AND BY ROOM NUMBERS OF ON FLOORS BASEMENT AND 1ST FLOORS, ALL TERMINATIONS PERFORMED UNDER THIS PROJECT SHALL BE CLEARLY IDENTIFIED AT BOTH ENDS WITH PERMANENT IDENTIFICATION INK OR LABEL TYPE WRITTEN SELF-ADHERING LABEL WORK AREA FACE-PLATE TAGS MUST MATCH THE PATCH PANEL TAGS IDENTICALLY. INCLUDE INDIVIDUAL PORT LABELS AT ALL FACE PLATES AT EACH INDIVIDUAL PORT EXCEPT WITHIN GUEST ROOMS WHERE NO VISIBLE LABELING IS TO BE DONE. ALL CABLES SHALL HAVE PERMANENT IDENTIFICATION INK OR LABEL LOCATED ON THE CABLE JACKET WITHIN 6" OF EACH TERMINATION.

L. LOW VOLTAGE HORIZONTAL TRANSMISSION MEDIA:
PER ARCHITECT SUBMISSION, NO ABOVE CEILING AIR-PLENUM SPACE IS EVIDENT IN THIS PROJECT. AS SUCH, RISER RATED CMR CABLE WILL BE USED.
DATA-HSIA: CATEGORY-6 UNSHIELDED TWISTED PAIRS, 4-PAIR, 23 AWG – CMR RISER-BLUE.
VOICE: CATEGORY-6 UNSHIELDED TWISTED PAIRS, 4-PAIR, 23 AWG – CMR RISER-WHITE.
MATV-CATV: RG6 DUAL OR QUAD SHIELD CCSC CMR RISER COAXIAL CABLE-WHITE.
FINAL SHIELD REQUIREMENTS TBD BY MATV PROVIDER.
MATV-CATV: RG11 DUAL OR QUAD SHIELD CCSC CMR RISER COAXIAL CABLE-BLACK OR .5 HARDLINE COAXIAL CABLE BLACK. FINAL SHIELD AND TYPE REQUIREMENTS TBD BY MATV-CATV PROVIDER.
CCTV SHALL BE CATEGORY 6 UTP OR SIAMESE CMR RATED. FINAL TBD. COLOR NOT SIGNIFICANT.
AUDIO CABLES SHALL BE 18/2 STRANDED CMR, COLOR NOT SIGNIFICANT.
INTERCOM CABLE SHALL BE 20/X CMR AS REQUIRED BY LOCATION. COLOR NOT SIGNIFICANT.
ALL AUDIO/PA FEEDS TERMINATE IN AUDIO RACK, 1ST FLOOR MDF.
ALL DIGITAL VIDEO SIGNAGE FEEDS TERMINATE IN 1ST FLOOR MDF.
ALL CCTV VIDEO SURV. CAMERAS MOUNTING HEIGHT T.B.D. CCTV FEEDS TERMINATE IN VIDEO CABINET AT 1ST FLOOR REGISTRATION AREA.
ALL INTERCOM CABLE FEEDS TERMINATE IN 1ST FLOOR MDF.

M. VERTICAL BACKBONE TRANSMISSION MEDIA:
DEMARC-MDF, MDF-IDFS(2):
FIBER: 6-STRAND MULTI MODE 50 MICRON 10G ARMORED RISER RATED BACKBONE CABLE TO BULK-HEAD/FIBER PATCH PANEL TERMINATED LC. C.C. TO SUPPLY 1-2 METER, 50 MICRON, LC-LC DUPLEX FIBER PATCH CORDS AS REQUIRED.
VOICE: COPPER 25,50,100 PAIR RISER RATED CATEGORY 3 BACKBONE CABLE AS REQUIRED.
DATA: COPPER UTP CAT. 6 CMR.
T1: COPPER UTP CAT.6 CMR OR 24 PAIR T1 RATED BACKBONE CABLE.
MATV-CATV: RG11 DUAL OR QUAD SHIELD CCSC CMR RISER COAXIAL CABLE-BLACK OR .5 HARDLINE COAXIAL CABLE BLACK. FINAL SHIELD AND TYPE REQUIREMENTS TBD BY MATV-CATV PROVIDER.

N. DATA ACTIVATION JUMPERS AND PATCH CORDS:
1. DATA: THE OWNER OR THEIR ASSIGNS SHALL FURNISH & INSTALL ALL DATA ACTIVATION JUMPERS OR CABLES BETWEEN THE STATION PATCH PANEL AND THE LAN SWITCHES AND WIRELESS ACCESS POINTS.
2. FIBER CROSS CONNECTIONS: THE C.C WILL PROVIDE FIBER PATCH CABLES AS REQUIRED UNLESS OTHERWISE NOTIFIED BY OWNER.

O. VOICE ACTIVATION JUMPERS:
1. VOICE CROSS CONNECTIONS AT THE MDF/IDF ROOMS:
C.C. SHALL CROSS CONNECT ALL PHONE STATIONS TO THE MDF AND IDFS 110 BLOCKS TO COUPLE ALL TELEPHONE EXTENSIONS TO PBX LOCATED IN MDF. C.C. WILL CROSS CONNECT POTS LINES TO ELEVATOR AND FIRE CONTROL ROOMS AS REQUIRED. THE PBX VENDOR SHALL CROSS CONNECT ALL PHONE STATIONS TO THE 110 BLOCKS WHICH LINK THE PHONE PATCH PANELS TO THE PBX WALL FIELD.
2. THE PBX CONTRACTOR SHALL PROVIDE ALL PBX-TELEPHONE PATCH CABLES AT THE PBX SIDE AND THE DEVICE END.

P. SUMMARY OF OWNER PROVIDED DATA-TELECOMMUNICATION OR LOW VOLTAGE ITEMS:
A. ALL RACK MOUNTED ELECTRONICS, ETHERNET LAN SWITCHES, ROUTERS, DATA PATCH CABLES, ETC.
B. PBX EQUIPMENT, VOICE MAIL SERVER AND VOICE MAIL TERMINAL.
C. PROPERTY MANAGEMENT SYSTEM (PMS).
D. PHONE HANDSETS SHALL BE FURNISHED AND INSTALLED BY PHONE SWITCH VENDOR OR OTHERS.
E. ELECTRONIC KEY SYSTEM. DOOR CARD SWIPES.
F. CCTV EQUIPMENT.
G. HSIA WIRELESS ACCESS POINTS.
H. POS EQUIPMENT.

Q. VOICE LINE CORDS AT THE WORKSTATIONS:
FURNISHED AND INSTALLED BY OTHERS.

SCOPE SUMMARY

SCOPE DELINEATION SUMMARY:
THE LOW VOLTAGE DATA-VOICE "D-V" DOCUMENTS IDENTIFY COMPONENTS RELATED TO THE COMMUNICATION CONTRACTOR (C.C.), THE ELECTRICAL CONTRACTOR (E.C.) AND THE GENERAL CONTRACTOR (G.C.). THE FOLLOWING LIST SUMMARIZES THE DELINEATION OF SCOPE RESPONSIBILITY WITHIN THESE DOCUMENTS.

1. COMMUNICATION CONTRACTOR (C.C.):
A. THE STRUCTURED LOW VOLTAGE CABLE PLANT SYSTEM VOICE/DATA/TV/HSIA/ AUDIO/CCTV/INTERCOM).
B. LOW VOLTAGE HORIZONTAL CABLE PLANT.
C. MDF/IDF EQUIPMENT ROOM RACKING AND ASSOCIATED CABLE MANAGEMENT COMPONENTS.
D. ALL VOICE AND DATA COMMUNICATIONS SYSTEMS TERMINATIONS EXCEPT AS NOTED IN TELECOMMUNICATION SPECIFICATIONS, TESTING, LABELING AND DATA CABLING SYSTEM CERTIFICATIONS.
E. FIRESTOPPING OF THE INTERIOR OF THE RISER SLEEVES THROUGH FIRE RATED WALL AND FLOORS.
F. ALL STATION AND JACK PANEL STATION ID LABELING AS SPECIFIED.

2. ELECTRICAL CONTRACTOR (E.C.):
A. THE E.C. SHALL FURNISH AND INSTALL ALL BRANCH POWER IN ACCORDANCE WITH THESE DOCUMENTS AND THE MEP CONSULTANT'S REQUIREMENTS.
B. THE E.C. SHALL FURNISH AND INSTALL ALL LOW VOLTAGE CONDUIT PER THE LAYOUT ON THESE DRAWINGS.
D. THE TELECOMMUNICATIONS GROUNDING RISER, TMGB AND TGB GROUND BUSSES AND BRANCH TELECOMMUNICATION GROUNDING WITHIN THE DISTRIBUTION FRAMES, HEAD-END AND DEMARC TELCO NETPOP.
E. THE E.C. SHALL INCLUDE THE INSTALLATION OF PLASTIC BUSHING AT THE ENDS OF ALL CONDUIT ENDS THAT ARE USED FOR VOICE AND DATA SYSTEMS.
F. THE E.C. SHALL FURNISH AND INSTALL 200 POUND TENSILE RATED NYLON PULL STRING IN ALL VOICE/DATA AND AV CONDUITS SYSTEMS IDENTIFIED ON THESE DRAWINGS.
G. FIRESTOP OF CONDUIT PENETRATIONS THROUGH FIRE RATED WALL AND FLOORS AND IN-JUNCTION BOX FIRESTOP CAUSED BY THE LOW VOLTAGE RACEWAYS FOR THIS PROJECT.
H. THE E.C. SHALL INCLUDE THE LABOR, MATERIAL AND TOOLS NEEDS TO X-RAY OR SCAN ALL PROPOSED CORE AND SAW-CUTTING LOCATIONS IF NECESSARY.

3. GENERAL CONTRACTOR (G.C.):
A. FURNISH AND INSTALL THE FIRE TREATED PLYWOOD BACKBOARDS AND STAND-OFFS AS IDENTIFIED ON ON THE D-V DETAILS.
B. PROVIDE SECURE STORAGE AREA(S) FOR MATERIALS, TOOLS AND EQUIPMENT AS NECESSARY TO INSTALL LOW VOLTAGE CABLE PLANT.
C. TO PROVIDE AND COORDINATE MECHANICAL CONTRACTOR TO INSTALL ENVIRONMENTAL HVAC EQUIPMENT IN DISTRIBUTION FRAMES AS REQUIRED AND DESCRIBED IN D-V DETAILS.

LOW VOLTAGE DRAWING LIST

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFC	ABOVE FINISHED CEILING
BOH	BACK OF HOUSE
C/B	CIRCUIT BREAKER
CATV	COMMUNITY-CABLE ACCESS TV
CCTV	CLOSED CIRCUIT TV
C.C.	COMMUNICATIONS CONTRACTOR
DEMARC	TELCO POINT OF DEMARCATION
E.C.	ELECTRICAL CONTRACTOR
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NON-METALLIC TUBING
F&I	FURNISH AND INSTALL
G.C.	GENERAL CONTRACTOR
HSIA	HIGH SPEED INTERNET ACCESS
IDF	INTERMEDIATE DISTRIBUTION FRAME
LEC	LOCAL EXCHANGE CARRIER
MATV	MASTER ANTENNA TV (SATELLITE)
MC	MECHANICAL CONTRACTOR
MDF	MAIN DISTRIBUTION FRAME
NETPOP	NETWORK POINT OF PRESENCE
PMS	PROPERTY MANAGEMENT SYSTEM
POE	POWER OVER ETHERNET
POS	POINT OF SALE
TBD	TO BE DETERMINED
TGB	TELECOM GROUNDING BUS
TMGB	TELECOM MAIN GROUNDING BUS
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
WAP	WIRELESS ACCESS POINT

LOW VOLTAGE KEYED NOTES

1. INTERCOM MASTER
1a. INTERCOM REMOTE
2. INTERCOM POWER, 24 VAC IN CEILING
3. POTS LINES-ELEVATOR(S)
4. POTS LINES-FIRE ALARM
5. CARD READER
6. IN-CEILING POWER AND J-BOX FOR PROJECTOR
7. EMPLOYEE TIME CLOCK
8. JACK-PACK MULTI MEDIA CONNECTOR
9. DIGITAL SIGNAGE-MONITOR
10. ATM / KIOSK
11. NETWORK PRINTER
12. LOW VOLTAGE SLEEVES CEILING / FLOOR
13. POS TERMINAL
14. POS PRINTER

LOW VOLTAGE LEGEND

- TV - 1 PORT - WALL MOUNTED, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- VOICE - PHONE 1 PORT - WALL MOUNTED, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- DATA - 1 PORT - WALL MOUNTED SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- COMBINATION DATA-PHONE 2 PORT, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- DUAL COMBINATION DATA-PHONE 4 PORT, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- TRI-COMBINATION DATA-PHONE 6 PORT, SINGLE GANG, BACK-BOX AND 1" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- W WALL PHONE, 1 PORT, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- WIRELESS ACCESS POINT, IN CEILING, POE. NO BACK-BOX, C.C. TO TERMINATE IN CEILING, BISCUIT.
- SPEAKER, AUDIO VENDOR TO TERMINATE IN CEILING. NO BACK-BOX
- VOULME CONTROL, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- JUNCTION BOX - SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- JUNCTION BOX, 4" W/ 2" CONDUIT FEED. DOUBLE GANG, BACK-BOX AND 2" CONDUIT STUB BY E.C., HEIGHT AS DEFINED.
- DUPLEX RECEPTACLE WALL MOUNTED. NEMA 5-20R, SINGLE GANG, HEIGHT AND ORIENTATION TBD.
- DOUBLE DUPLEX (QUAD) RECEPTACLE WALL MOUNT. NEMA 5-20R. DOUBLE GANG. HEIGHT TBD.
- IGR ISOLATED GROUND CIRCUIT AND RECEPTACLE. WALL MOUNT, NEMA 5-20IGR, ORANGE. HEIGHT AND ORIENTATION TBD.
- CEILING HATCH, 12" X 12" W/ 1 ½" FLANGE, USED TO ALLOW ACCESS TO W.A.P. IF APPLICABLE.
- VIDEO SURVEILLANCE CAMERA, 1 PORT, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- A/V IN-FLOOR FLUSH POKE THROUGH OR FLUSH FLOOR BOX, COMBINATION POWER RECEPTACLES AND 2 PORT DATA-VOICE. E.C. TO PROVIDE.
- INTERCOM 1 PORT, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- CARD READER 1 PORT, SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. HEIGHT AND ORIENTATION TBD.
- CCTV MONITOR, 1 PORT LOW VOLTAGE SINGLE GANG, BACK-BOX AND ¾" CONDUIT STUB BY E.C. AND DUPLEX POWER RECEPTACLE. HEIGHT AND ORIENTATION TBD.

For:
First OFB
10275 W. Higgins Rd.
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847-299-9040

By:
A-Tech Computer Service, Inc.
296 Willams Pl.
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847-428-9199
www.a-techinc.com

OFB RESIDENCE INN
OMAHA, NEBRASKA

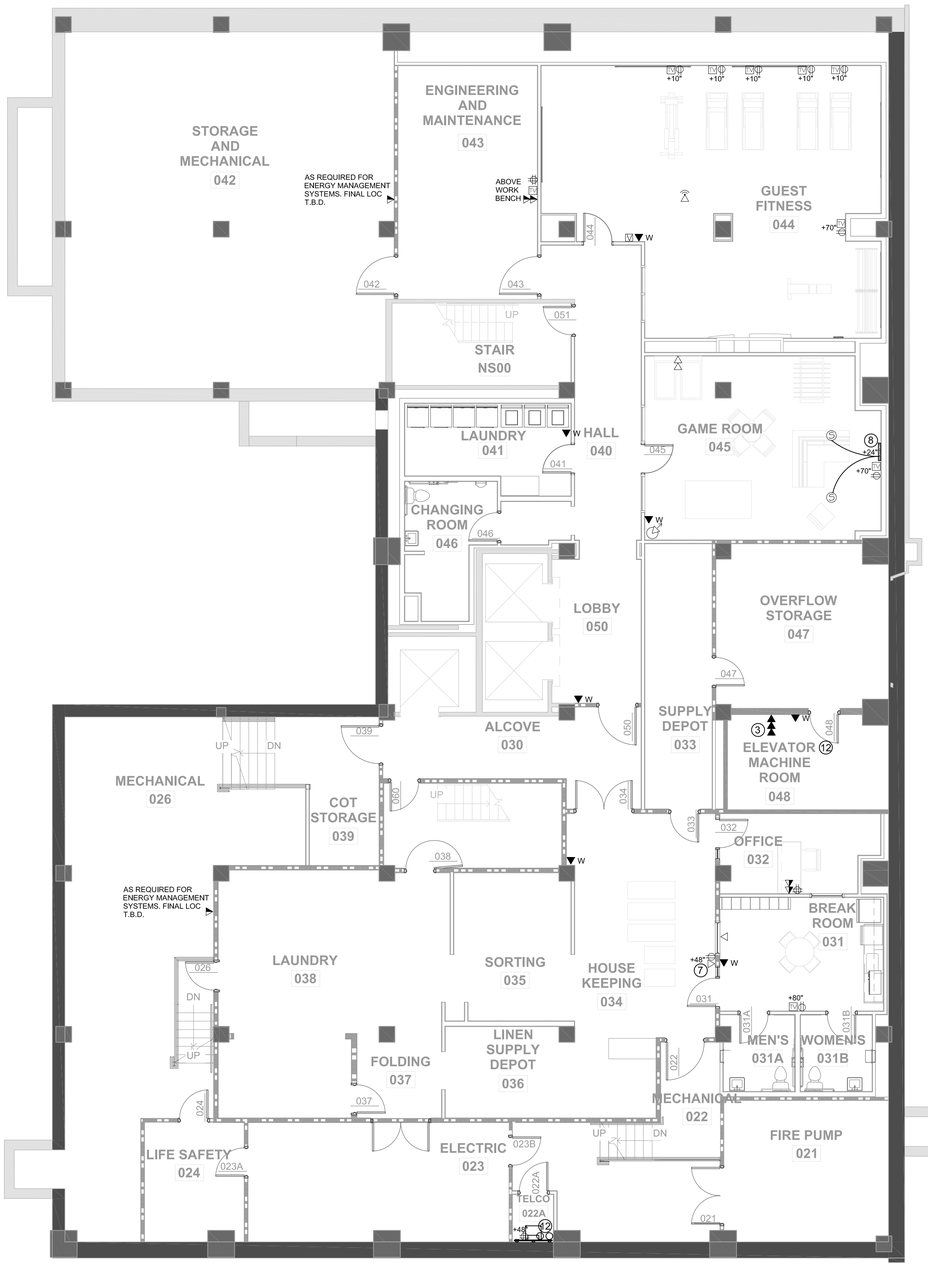
SHEET AUTHOR
A-T
CHECKED BY
A-T
SCALE
N/A
JOB NUMBER
031912-FHG-OMA2

ISSUE DATE
6-12-12
ISSUE TITLE
ISSUED FOR CONSTRUCTION

REVISION SCHEDULE
6-19-12

SHEET NAME
COVER SET
LOW VOLTAGE

SHEET NUMBER
D-V 1.0



BASEMENT

SCALE: 1/8" = 1'

N

LOW VOLTAGE LEGEND

- TV
- VOICE - PHONE
- DATA
- COMBINATION DATA-PHONE
- DUAL COMB. DATA-PHONE
- TRI-COMB. DATA-PHONE REQUIRES 1" CONDUIT FEED
- W — WALL PHONE, HEIGHT PER ADA COMPLIANCE
- WIRELESS ACCESS POINT (P.O.E.) IN CEILING (TYPICAL)
- SPEAKER
- VOLUME CONTROL
- JUNCTION BOX SINGLE GANG 1900
- JB — JUNCTION BOX, 4" W/ 2" CONDUIT FEED, DOUBLE GANG.
- DUPLEX RECEPTACLE 5-20R
- QUAD RECEPTACLE 5-20R
- IGR — ISOLATED GROUND CIRCUIT & RECEPTACLE 5-20IGR
- CEILING HATCH
- VIDEO SURVEILLANCE CAMERA
- IN-FLOOR LOW VOLTAGE AND 120 VAC POWER
- INTERCOM
- CR — CARD READER
- CCTV MONITOR

LOW VOLTAGE KEYED NOTES

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1a. INTERCOM REMOTE
2. INTERCOM POWER, 24 VAC IN CEILING
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4. POTS LINES-FIRE ALARM
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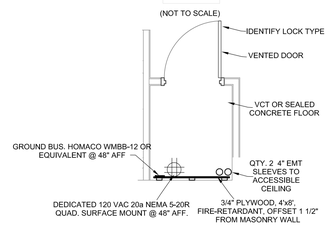
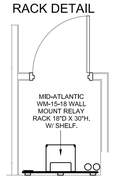
8. JACK-PACK MULTI MEDIA CONNECTOR
9. DIGITAL SIGNAGE-MONITOR
10. ATM / KIOSK
11. NETWORK PRINTER
12. LOW VOLTAGE SLEEVES CEILING / FLOOR
13. POS TERMINAL
14. POS PRINTER

TELCO 022A

(NOT TO SCALE)



RACK DETAIL



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OFB RESIDENCE INN
OMAHA, NEBRASKA

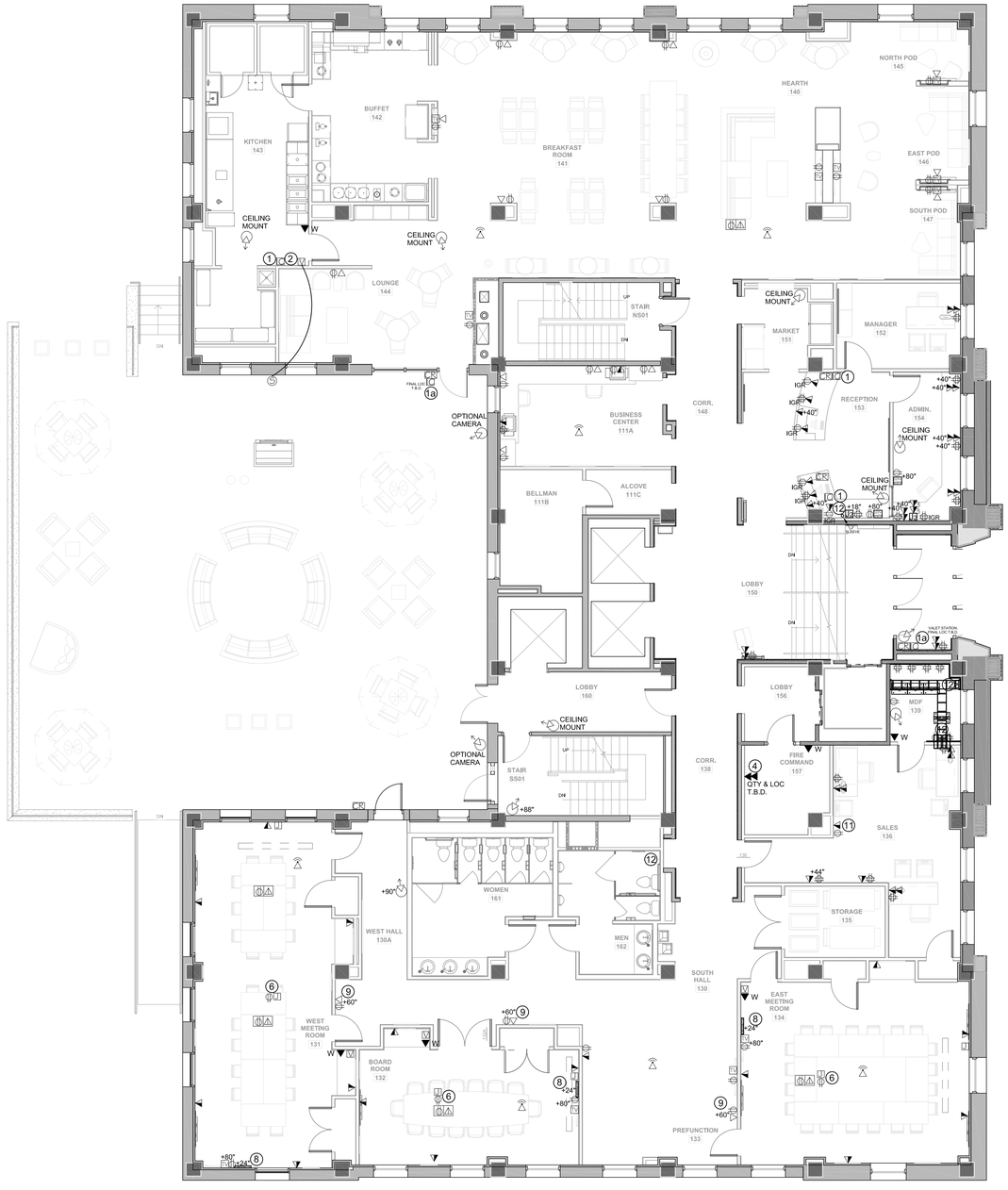
SHEET AUTHOR: A-T
CHECKED BY: A-T
SCALE: 1/8 = 1'
JOB NUMBER: 031912-FHG-OMA2

ISSUE DATE: 6-12-12
ISSUE TITLE: ISSUED FOR CONSTRUCTION

REVISION SCHEDULE: 6-19-12

SHEET NAME: BASEMENT LOW VOLTAGE PLAN

SHEET NUMBER: **D-V 2.0**



1ST FLOOR

SCALE: 1/8" = 1'

LOW VOLTAGE LEGEND

- TV — TV
- ▼ — VOICE - PHONE
- ▽ — DATA
- ▼▽ — COMBINATION DATA-PHONE
- ▼▽2 — DUAL COMB. DATA-PHONE
- ▼▽3 — TRI-COMB. DATA-PHONE REQUIRES 1" CONDUIT FEED
- ▼W — WALL PHONE. HEIGHT PER ADA COMPLIANCE
- WIRELESS ACCESS POINT (P.O.E.) IN CEILING (TYPICAL)
- S — SPEAKER
- V — VOLUME CONTROL
- J — JUNCTION BOX SINGLE GANG 1900
- J2 — JUNCTION BOX, 4" W/ 2" CONDUIT FEED, DOUBLE GANG.
- DUPLEX RECEPTACLE 5-20R
- QUAD RECEPTACLE 5-20R
- IGR — ISOLATED GROUND CIRCUIT & RECEPTACLE 5-20IGR
- H — CEILING HATCH
- VIDEO SURVEILLANCE CAMERA
- IN-FLOOR LOW VOLTAGE AND 120 VAC POWER
- IC — INTERCOM
- CR — CARD READER
- CCTV MONITOR

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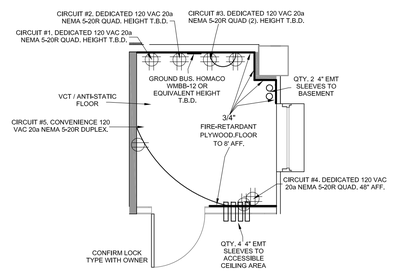
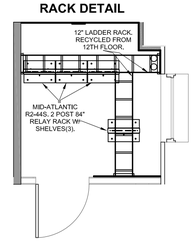
9. DIGITAL SIGNAGE-MONITOR
10. ATM / KIOSK
11. NETWORK PRINTER
12. LOW VOLTAGE SLEEVES CEILING / FLOOR
13. POS TERMINAL
14. POS PRINTER

1ST FLOOR MDF 139

ELECTRONIC EQUIPMENT APPROXIMATELY 16,472 BTU/HR AT BUILDING OPENING.



RACK DETAIL



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CHECKED BY: A-T
SCALE: 1/8 = 1'
JOB NUMBER: 031912-FHG-OMA2

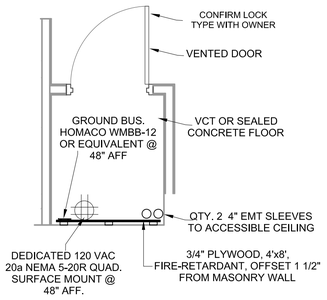
ISSUE DATE: 6-12-12
ISSUE TITLE: ISSUED FOR CONSTRUCTION

REVISION SCHEDULE: 6-19-12

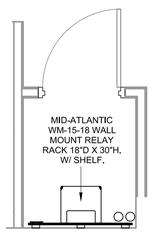
SHEET NAME: 1ST FLOOR LOW VOLTAGE PLAN

SHEET NUMBER: **D-V 3.0**

BASEMENT TELCO DEMARC
022A

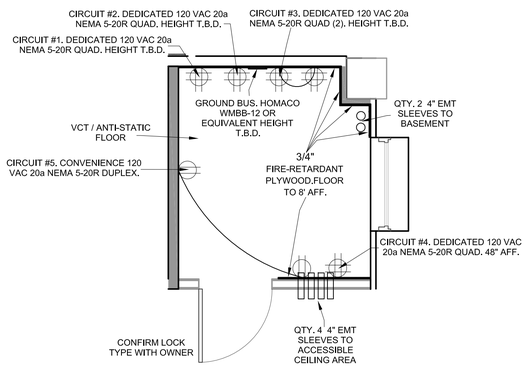


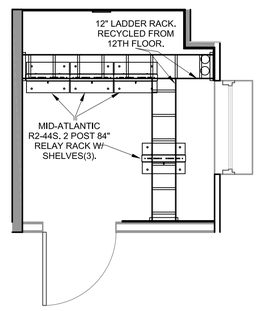
COMMUNICATION CONTRACTOR (C.C.) TO FURNISH AND INSTALL MID-ATLANTIC (OR EQUIVALENT) FLOOR AND WALL RELAY RACKS AND VERTICAL AND HORIZONTAL CABLE MANAGEMENT SYSTEMS. 12" LADDER RACK AND ASSOCIATED HARDWARE TO BE RE-USED FROM RECYCLED RACK SYSTEM FROM EXISTING 12TH FLOOR TELECOM ROOM. EQUIPMENT IS BEING HELD IN STORAGE BY G.C. UNTIL INSTALLATION. SUPPLY ADDITIONAL WALL MOUNT BRACKETS, TEE AND BUTT SPLICE KITS, FASTENERS, GROUND POINTS AND HARDWARE AS REQUIRED.



1ST FLOOR MDF
139

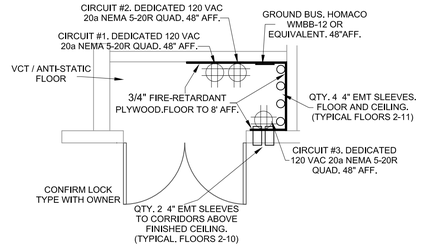
ELECTRONIC EQUIPMENT APPROXIMATELY 18,472 BTU/HR AT BUILDING OPENING.

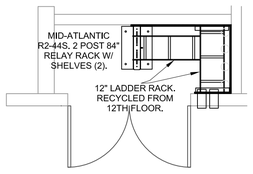




6TH FLOOR IDF
663

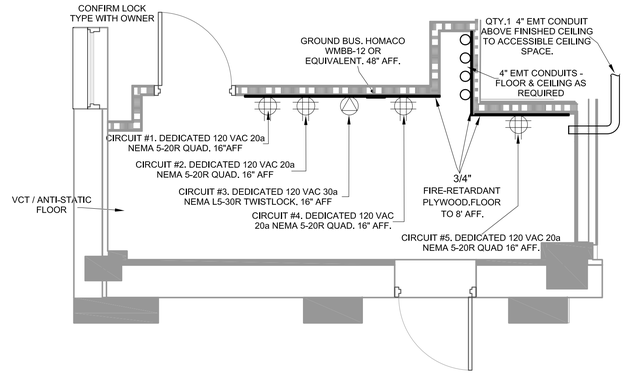
ELECTRONIC EQUIPMENT APPROXIMATELY 13,744 BTU/HR AT BUILDING OPENING.

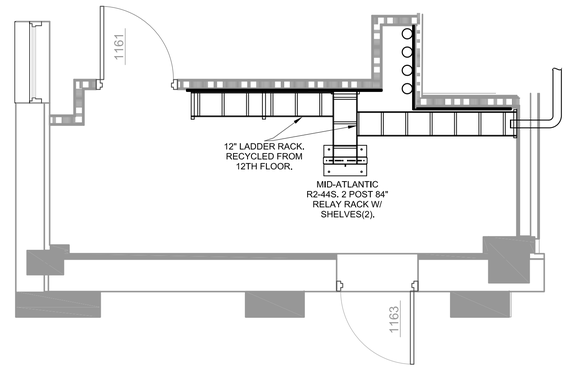




11TH FLOOR MATV HEAD END-DATA IDF
1163

ELECTRONIC EQUIPMENT APPROXIMATELY 21,651 BTU/HR AT BUILDING OPENING.





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OFB RESIDENCE INN
OMAHA, NEBRASKA

SHEET AUTHOR: A-T
CHECKED BY: A-T
SCALE: N/A
JOB NUMBER: 031912-FHG-OMA2

ISSUE DATE: 6-3-12
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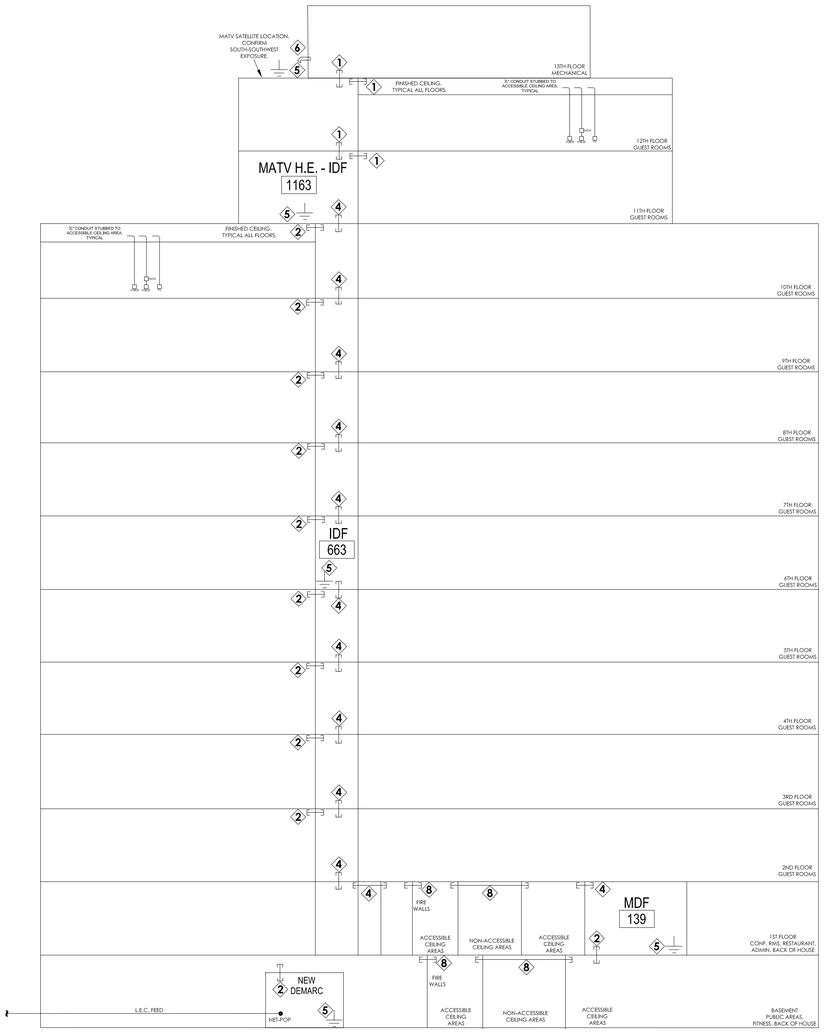
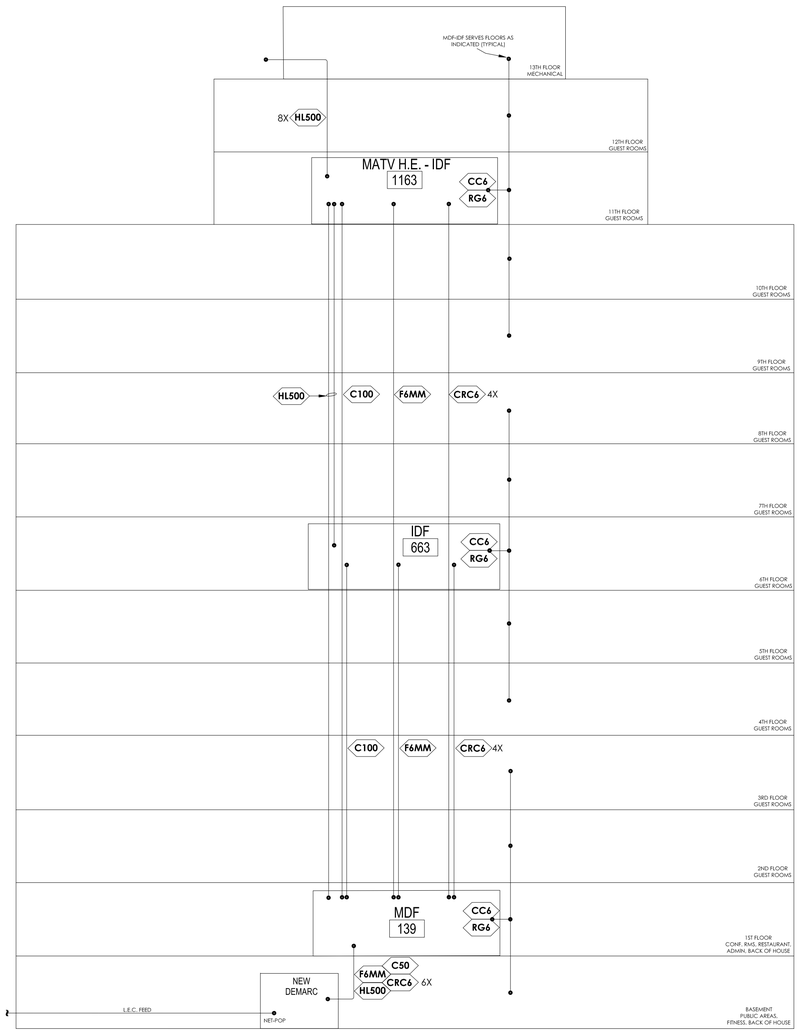
REVISION SCHEDULE: 6-19-12

SHEET NAME: LOW VOLTAGE DISTRIBUTION FRAME DETAIL

SHEET NUMBER: **D-V 4.0**



1 CONDUIT / SLEEVE SCHEMATIC RISER
SCALE: NONE



2 DATA-VOICE-VIDEO SCHEMATIC RISER
SCALE: NONE

CONDUIT / SLEEVE KEYED NOTES

1. (1) 4" EMT CONDUIT SLEEVE TOTAL
2. (2) 4" EMT CONDUIT SLEEVES TOTAL
3. (3) 4" EMT CONDUIT SLEEVES TOTAL
4. (4) 4" EMT CONDUIT SLEEVES TOTAL
5. GROUND POINT TO BLDG. SVC. GROUND ELECTRODE
6. (1) 3" EMT CONDUIT SLEEVE W/ WEATHERHEAD
7. (1) 2" EMT CONDUIT SLEEVE
8. EMT CONDUIT SLEEVES AS REQUIRED. E.C. TO CONFIRM SIZE AND LOCATION.

CABLE LEGEND

- C100 MULTIPAIR RISER COPPER BACKBONE CABLE
- C50 MULTIPAIR RISER COPPER BACKBONE CABLE
- CRC6 CATEGORY 6 RISER COPPER BACKBONE
- HL500 HARD LINE .5 / RG-11 (T.B.D.)
- F6MM 6 STRAND MULTI-MODE 50u FIBER OPTIC CABLE
- CC6 CATEGORY 6 HORIZ COPPER
- RG6 RG6 DUAL/QUAD CATV HORIZ COAX

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ISSUE DATE: 6-12-12
ISSUE TITLE: ISSUED FOR CONSTRUCTION

REVISION SCHEDULE
6-19-12

SHEET NAME
RISER-CONDUIT SCHEDULE LOW VOLTAGE

SHEET NUMBER
D-V 5.0

TYPICAL GUEST ROOM FLOORS 2-10

SCALE: 1/8" = 1'

N

LOW VOLTAGE LEGEND

- TV — TV
- VOICE - PHONE
- DATA
- COMBINATION DATA-PHONE
- DUAL COMB. DATA-PHONE
- TRI-COMB. DATA-PHONE REQUIRES 1" CONDUIT FEED
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- SPEAKER
- V — VOLUME CONTROL
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- DUPLEX RECEPTACLE 5-20R
- QUAD RECEPTACLE 5-20R
- IGR — ISOLATED GROUND CIRCUIT & RECEPTACLE 5-20IGR
- H — CEILING HATCH
- VIDEO SURVEILLANCE CAMERA
- LV/A — IN-FLOOR LOW VOLTAGE AND 120 VAC POWER
- IC — INTERCOM
- CR — CARD READER
- CCTV — CCTV MONITOR

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1. INTERCOM MASTER
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4. POTS LINES-FIRE ALARM
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7. EMPLOYEE TIME CLOCK
8. JACK-PACK MULTI MEDIA CONNECTOR
9. DIGITAL SIGNAGE-MONITOR
10. ATM / KIOSK
11. NETWORK PRINTER
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13. POS TERMINAL
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SHEET AUTHOR: A-T
CHECKED BY: A-T
SCALE: 1/8 = 1'
JOB NUMBER: 031912-FHG-OMA2

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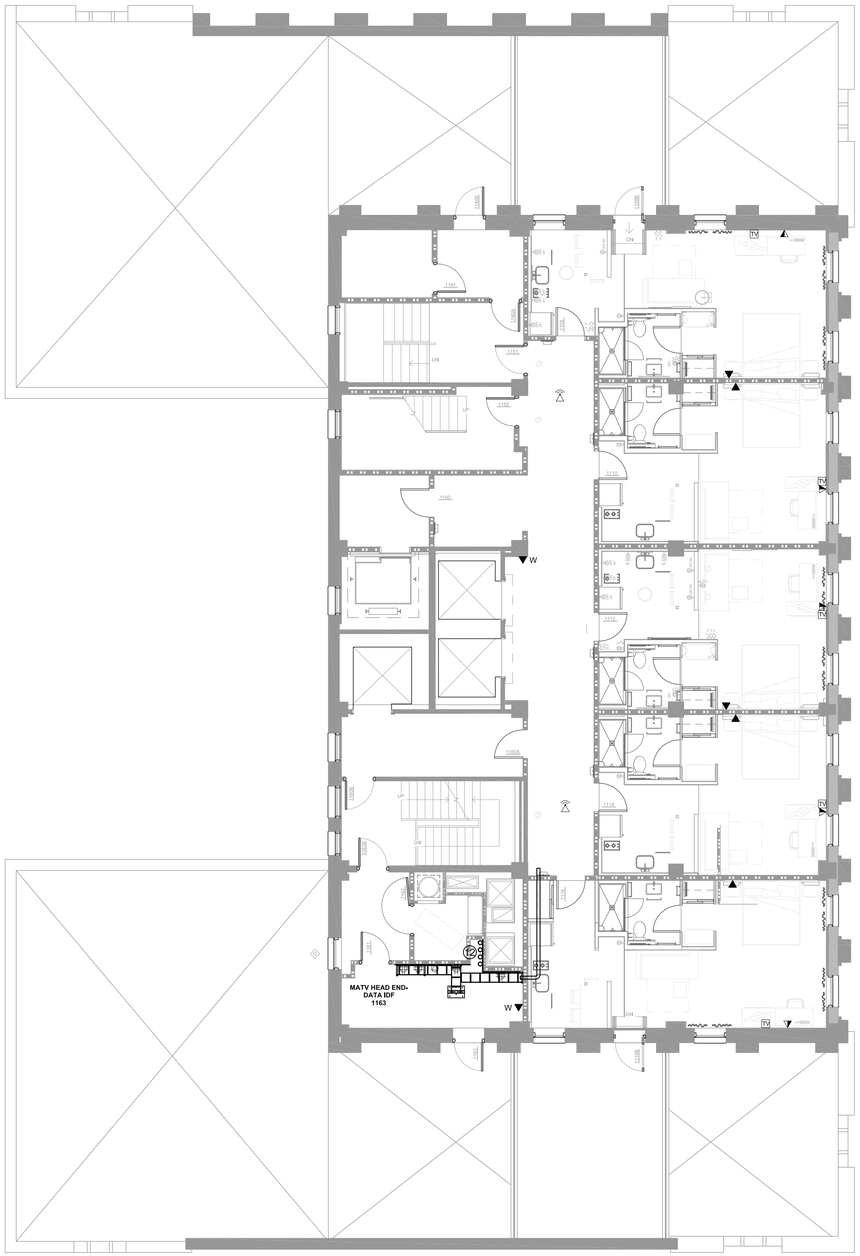
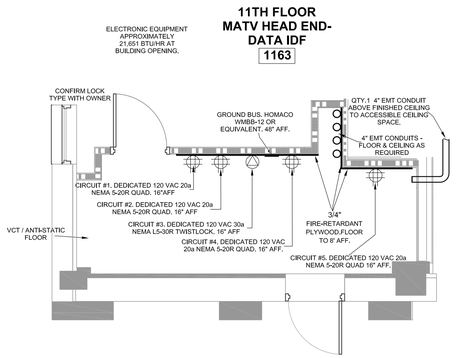
SHEET NAME: TYPICAL GUEST ROOM FLOORS 2-10 LOW VOLTAGE PLAN

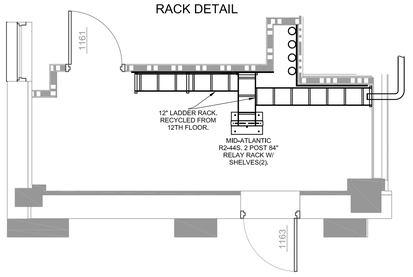
SHEET NUMBER: **D-V 6.0**



11TH FLOOR

SCALE: 1/8" = 1'





LOW VOLTAGE LEGEND

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- ▼ — VOICE - PHONE
- ▽ — DATA
- ▼Y — COMBINATION DATA-PHONE
- ▼2 — DUAL COMB. DATA-PHONE
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- ▼W — WALL PHONE, HEIGHT PER ADA COMPLIANCE
- WIRELESS ACCESS POINT (P.O.E.) IN CEILING (TYPICAL)
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- CCTV MONITOR

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CHECKED BY: A-T
SCALE: 1/8 = 1'
JOB NUMBER: 031912-FHG-OMA2

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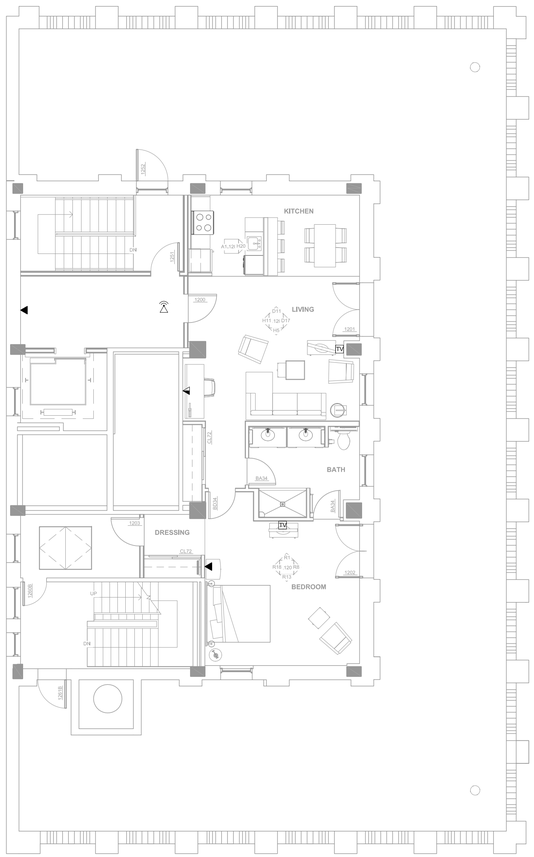
SHEET NAME: 11TH FLOOR LOW VOLTAGE PLAN

SHEET NUMBER: **D-V 7.0**



12TH FLOOR

SCALE: 1/8" = 1'

N

LOW VOLTAGE LEGEND

- TV — TV
- ▼ — VOICE - PHONE
- ▽ — DATA
- ▼Y — COMBINATION DATA-PHONE
- ▼2 — DUAL COMB. DATA-PHONE
- ▼3 — TRI-COMB. DATA-PHONE REQUIRES 1" CONDUIT FEED
- ▼W — WALL PHONE, HEIGHT PER ADA COMPLIANCE
- WIRELESS ACCESS POINT (P.O.E.) IN CEILING (TYPICAL)
- S — SPEAKER
- V — VOLUME CONTROL
- J — JUNCTION BOX SINGLE GANG 1900
- J2 — JUNCTION BOX, 4" W/ 2" CONDUIT FEED, DOUBLE GANG.
- DUPLEX RECEPTACLE 5-20R
- QUAD RECEPTACLE 5-20R
- IGR — ISOLATED GROUND CIRCUIT & RECEPTACLE 5-20IGR
- H — CEILING HATCH
- VIDEO SURVEILLANCE CAMERA
- IN-FLOOR LOW VOLTAGE AND 120 VAC POWER
- IC — INTERCOM
- CR — CARD READER
- CCTV MONITOR

LOW VOLTAGE KEYED NOTES

1. INTERCOM MASTER
1a. INTERCOM REMOTE
2. INTERCOM POWER, 24 VAC IN CEILING
3. POTS LINES-ELEVATOR(S)
4. POTS LINES-FIRE ALARM
5. CARD READER
6. IN-CEILING POWER AND J-BOX FOR PROJECTOR
7. EMPLOYEE TIME CLOCK
8. JACK-PACK MULTI MEDIA CONNECTOR
9. DIGITAL SIGNAGE-MONITOR
10. ATM / KIOSK
11. NETWORK PRINTER
12. LOW VOLTAGE SLEEVES CEILING / FLOOR
13. POS TERMINAL
14. POS PRINTER

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OFB RESIDENCE INN
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SCALE: 1/8 = 1'
JOB NUMBER: 031912-FHG-OMA2

ISSUE DATE: 6-12-12
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REVISION SCHEDULE
6-19-12

SHEET NAME
12TH FLOOR LOW VOLTAGE PLAN

SHEET NUMBER
D-V 8.0