

426 E. Main Street ~ Lancaster, Ohio 43130

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August 30, 2018

ADDENDUM #2 Chestnut Street Records Center Building and Site Remodeling 138 West Chestnut Street Lancaster, Ohio 43130

In accordance with the Construction Documents for the above named Project, this ADDENDUM #2, consisting of page 1- 2 and the following PDF attachments:

- 1. Pre Bid Conference meeting minutes.
- 2. Cover Sheet
- 3. Sheet A1.1.
- 4. Sheet A2.2 Floor Plan.
- 5. Sheet A3.1 Exterior Elevations.
- 6. Sheet H-1 HVAC Floor Plan.
- 7. Sheet H-4 HVAC Schedules
- 8. Sheet H-5 HVAC Mechanical Specifications
- 9. Sheet H-6 HVAC BAS

are hereby made a part of the Construction Documents as if written therein.

INFORMATION TO BIDDERS

- Item 1. a. Dynamix Energy is the Owner's HVAC building automation system controls provider. Contact Brian Bowers (614-736-2100) or Todd Mace (614-443-1178) with questions you may have.
- Item 2. b. See attached August 23, 2018 Pre Bid Conference meeting minutes.

CHANGES AND CLARIFICATIONS TO THE DRAWINGS

Item 1. SHEET A2.2 FLOOR PLAN AND SHEET A3.1 EXTERIOR ELEVATIONS

a. Eliminate one of the EIFS 'medallions' from the west exterior wall at room 121, and add two new windows to this exterior wall in room 121 as illustrated on the attached revised construction document sheets A2.2 and A3.1.

Item 2. SHEET A0.2 SITE PLANS

a. Add temporary construction fence as required to provide barrier between the construction site and the public.

Item 3. SHEET A2.5 PLAN DETAILS

a. All Trifab 451 T windows and storefront are to be center glazed as specified on sheet GN.3, Article 0808.D. (Details on sheet A2.5 incorrectly illustrate outside glazed.)

August 30, 2018 ADDENDUM #2 Chestnut Street Records Center Building and Site Remodeling Page 2 of 2

Item 4. SHEET GN.1 GENERAL NOTES

a. On sheet GN.1, revise Article 0008.a to say "At least **one** week prior to the onset of construction...."

Item 5. SHEETS A1.1 DEMOLITION PLAN AND A2.2 FLOOR PLAN

a. When door and frame 108b are demo'd, enlarge existing masonry opening 6" to the east and replace existing lintel per lintel schedule for new 42" wide door as shown on revised plans. Revise door 108b size to '3668' on the door and hardware schedule on sheet a2.2.

Item 6. **COVER SHEET**

a. Add Sheet H-6 'HVAC – BAS' to the drawing index.

Item 7. SHEET E5 ELECTRICAL SPECIFICATONS

a. Article 16705 – Monitoring System (Addressable) – paragraph D: Add 'Autocall' as an acceptable manufacturer for the sprinkler monitoring system.

Item 8. SHEET H-1 HVAC FLOOR PLAN

- a. Add gravity damper controlled bypass ducts for RTU-4 and RTU-5.
- b. Add coded notes for bypass duct and dehumidifier drain piping.
- c. Remove references to Dynamix Software and change descriptions to 'BAS'.

Item 9. SHEET H-4 HVAC SCHEDULES

a. Add stainless steel heat exchanger to RTU-4. Add notes for control systems interface with BAS.

Item 10. SHEET H-5 HVAC SPECIFICATIONS

- a. Add Section 15935 for BAS Controls and Installation
- b. Remove references to Dynamix Software and change descriptions to BAS.

Item 11. SHEET H-6 HVAC-BAS

a. Floor plan illustrating BAS control system wiring.

- End of Addendum #2 – See attachments as listed on page one



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August 23, 2018

ARCHITECT'S MEETING NOTES PRE BID CONFERENCE CHESTNUT STREET RECORDS CENTER

- 1. Sign in all contact info
 - a. Legibly this is what I'll use to send out the addendum
- 2. Project Overview
 - a. Review Floor Plan
 - b. Careful coordination of all above ceiling work.
 - i. Existing sprinkler mains staying in place
 - 1. (unless you want to move them)

3. Addendum Items –

- a. get to me in writing by email or fax
 - i. No phone calls, no conversations here... I am not responsible to remember verbal
 - ii. I'll email addendum to everyone who signed in to Pre Bid Conference
- 4. Form of Proposal included in Owner's Invitation To Bid
- 5. Bids due next Friday (8-31-18) at 2:00 in Commissioner's office third floor of Courthouse.
 a. This date was revised by Revised Addendum #1, dated 8-27-18.
- 6. Public bid opening
- 7. Pre Construction Submittals
 - a. The due date for these items was incorrectly stated during the meeting. They actually are due no less than one week prior to the onset of construction, as clarified in Addendum #2.
 - b. Site Utilization Plan
 - i. Job trailer
 - ii. Parking
 - iii. Deliveries
 - iv. Equipment
 - v. Crane
 - c. Project Schedule
 - i. Delivery of Materials
 - ii. Shop drawing submittals
 - iii. Job Progress meeting dates
 - iv. Start and finish dates of all facets of the work (roken out by trade, rough-in, finish, etc)
 - v. Substantial Completion date
 - vi. Punch list completion

August 23, 2018 PRE BID CONFERENCE CHESTNUT STREET RECORDS CENTER

Page 2 of 3

- d. Schedule of values AIA 6703
 - i. Detailed labor and materials
 - ii. Break each trade down by CSI divisions
- e. Resumes of proposed in-house PM and on-site superintendant

8. Project Timeline - these dates have been revised by Revised Addendum #1, dated 8-27-18.

- a. Award Contract Tuesday September 11
- b. Notice to proceed Tuesday September 18. (one week from award)
 - i. Successful bidder needs to hop on:
 - 1. contract
 - 2. site utilization plan
 - 3. schedule of values
 - 4. project schedule
- c. Owner Occupancy March 2, 2019 (23 weeks from notice to proceed)
- d. Hop on it and get most of exterior work down before winter
- e. Empty building -- nice inside job for winter

9. Job Progress meetings – every two weeks, on site

- a. GC runs meeting
- b. GC takes meeting minutes
- c. GC distributes meeting minutes within two days of meeting
- d. GC distributes proposed progress meeting agenda two days prior to meeting date
- e. See specs for further info re meetings
- 10. GC superintendant to be on site every minute that any work is being done.
 - a. Each major trade to have their supervisor on site any time their work is being done.
 - b. Superintendant and supervisors need to be fluent in English.
- 11. Pay requests to the Architect same time every month
 - a. Submit with current and honest updated schedule of values.
- 12. Change Order Requests (Bulletins) with sufficient back up to the Architect
 - a. Submit these for approval
 - b. Then submit Change Order before the contemplated work is begun –
 i. don't start the work until Owner gives written approval of the change order.
 - c. Don't wait til you're done with that portion of the project and then submit the change order I won't approve it under those circumstances.

13. Site Utilization

- a. Public parking in NW corner of parking lot
 - i. Need construction fence to separate
 - ii. All site entry will be thru east parking lot driveway or via alleys.
- b. Keep streets and alley free of mud and debris
- c. Pick up trash on site and in the building every day.
- d. Site utilization
 - i. Porta Potties
 - ii. Job Trailer
 - iii. Construction dumpster
 - iv. Deliveries

August 23, 2018 PRE BID CONFERENCE CHESTNUT STREET RECORDS CENTER

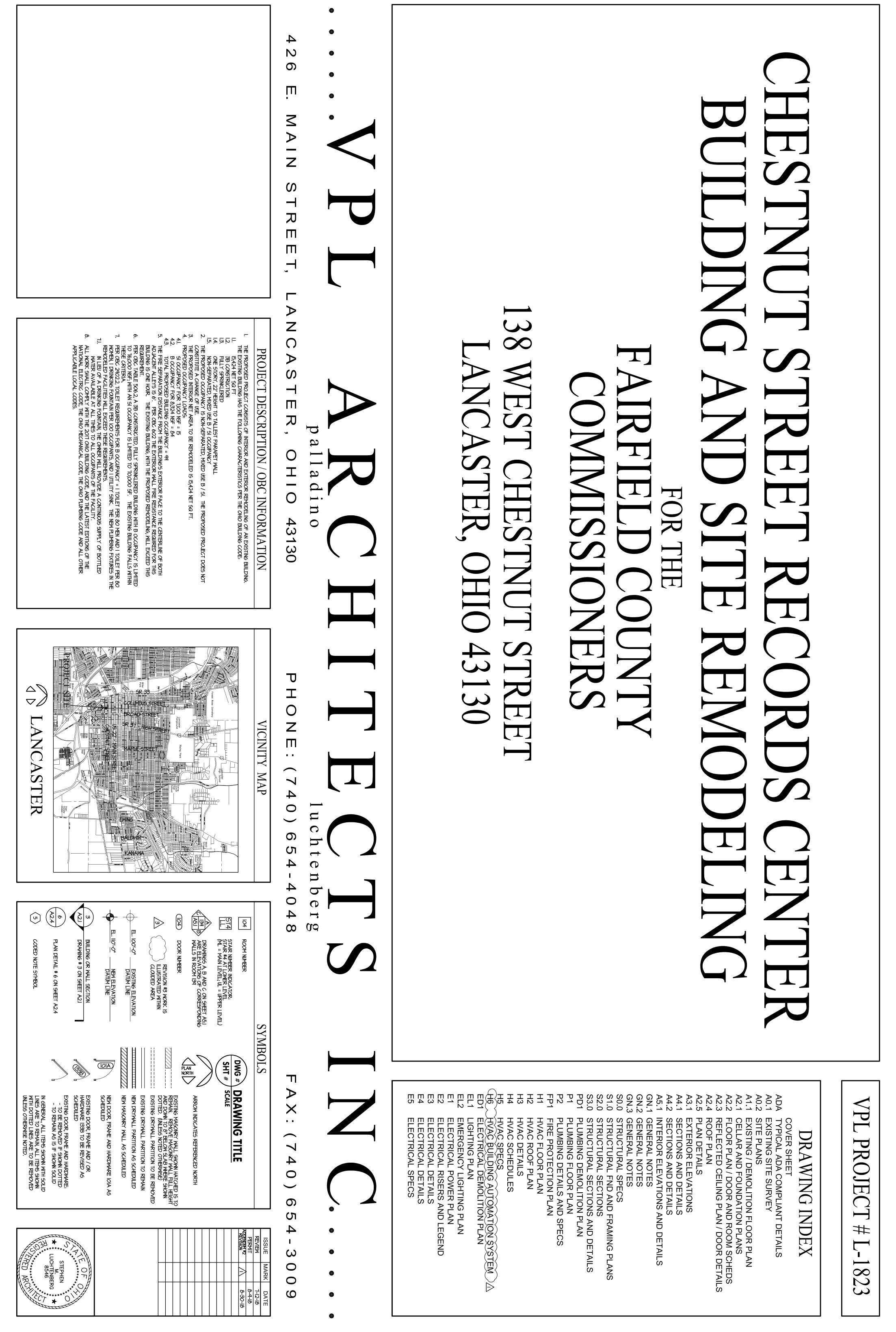
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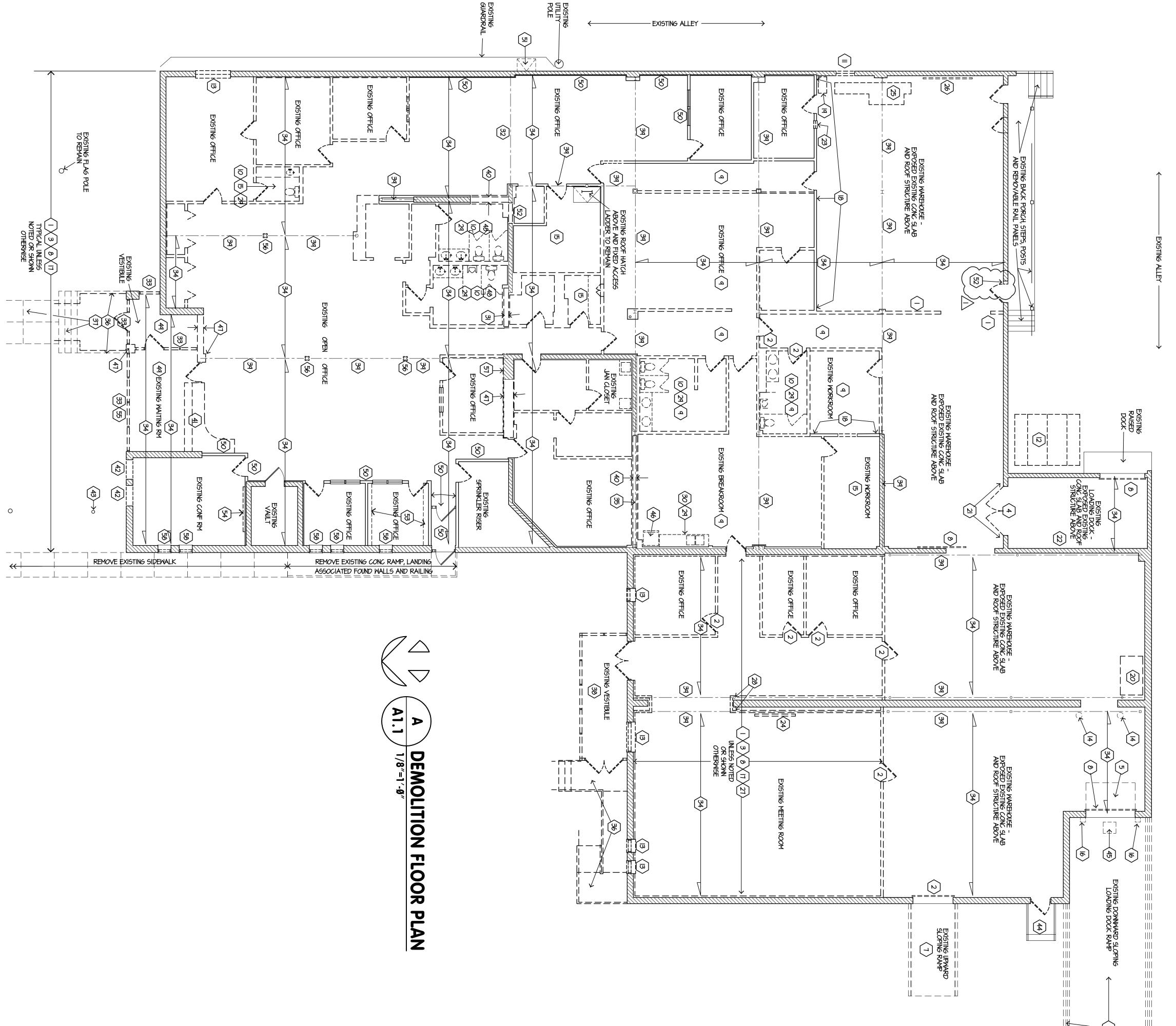
- v. Equipment and material storage
- vi. Employee parking all on site none in the street

14. Golden Rule – When in doubt, check it out. It's better to ask permission than forgiveness!

15. Building Tour

a. Interior / Roof / Exterior







- Yove Existing Drywall Partition Where Shown Dotted. Yove and Salvage Existing Door (Shown Dotted), Frame (or Track) Yhardware. Turn over to owner. Yove Existing Carpet and Vinyl Base in this Room (Inless Noted Herwise). Remove all traces of Flooring Adhesive From Existing

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- 3<u>2</u> .. 6 Steel lintel at 10'-1" aff with existing non-load bearing masonry Bove to remain.
- *¹*¹²
- ŝ ABOVE TO REMAIN. ABOVE EXISTING VESIBULE STRUCTURE, FOUNDATIONS, STOREFRONT, SLAB, AND ROME.
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- <u>4</u>; <u>6</u>;
- AT STREET, SIDEWALK ADJACENT TO STREET IS TO REMAIN.
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- 5 Shown with dotted lines are existing to be removed and of off site, unless otherwise noted. Doors shown dotted door, door frame and hardware are all to be removed,
- TED OT oted otherwise. Ms Shown with Solid Lines are existing to remain, with "L Modifications as noted on this plan or elsewhere in these "
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- WHERE A PORTION OF A WALL IS SHOWN TO BE DEMO'D (DOTTED) AND A PORTION IS SHOWN TO REMAIN (SOLID), REFER TO FLOOR PLAN ON SHEET A2.2 TO DETERMINE EXTENT OF WALL THAT IS TO REMAIN.
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 CONTRACTOR IS TO SALVAGE ALL EXISTING WALL MOUNTED FIRE EXTINGUISHERS AND BRACKETS WITHIN THE BUILDING (FE'S ARE NOT SHOWN ON DEMO PLAN) AND SHALL TURN THEM OVER TO THE OWNER. CONTRACTOR IS TO REINSTALL FOUR OF THE EXISTING FUNCTIONAL IO# ABC FIRE EXTINGUISHERS AND BRACKETS AT NEW LOCATIONS SHOWN ON FLOOR PLAN.
 SEE EXTERIOR ELEVATIONS, ROOF PLAN AND PLUMBING, HVAC, ELECTRICAL AND SPRINKLER ENGINEERING DRAWINGS FOR ADDITIONAL DEMOLITION WORK NOT SHOWN ON THIS DRAWINGS.
 NO ORIGINAL CONSTRUCTION DRAWINGS FOR THIS BUILDING MERE AVAILABLE FOR THIS PROJECT. ALL DRAWINGS IN THIS SET THAT ILLUSTRATE EXISTING CONDITIONAL WERE CONTRACTOR IN THIS SET THAT ILLUSTRATE EXISTING
- MERCE SUCTION DRAWINGS FOR THIS BUILDING WERE AVAILABLE ALL DRAWINGS IN THIS SET THAT ILLUSTRATE EXISTING INSTRUCTED FROM FIELD OBSERVATIONS AND ITRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL ING CONDITIONS PRIOR TO DEMOLITION AND TO NOTIFY
- Responsible to field verify all Ions prior to demolition and to notify Conditions that are contrary to this Romised due to demolition that is
- CTOR IS RESPONSIBLE FOR ALL SHORING MEANS AND METHODS THAT NEEDED DURING DEMOLITION. CTOR TO DISPOSE OF ALL PORTABLE FURNISHINGS REMAINING IN

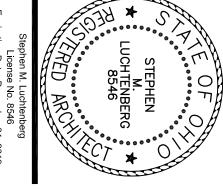


for the FAIRFIELD COUNTY COMMISSIONERS 138 W. Chestnut St. Lancaster, OH 43130

426 EAST MAIN STREET LANCASTER, OHIO 43130 phone: (740) 654-4048 facsimile: (740) 654-3009 All drawings are and : of VPL Architects, I used, duplicated, or written consent : ... snall be the property s, inc., and may not be ar altered without the t of the Architect

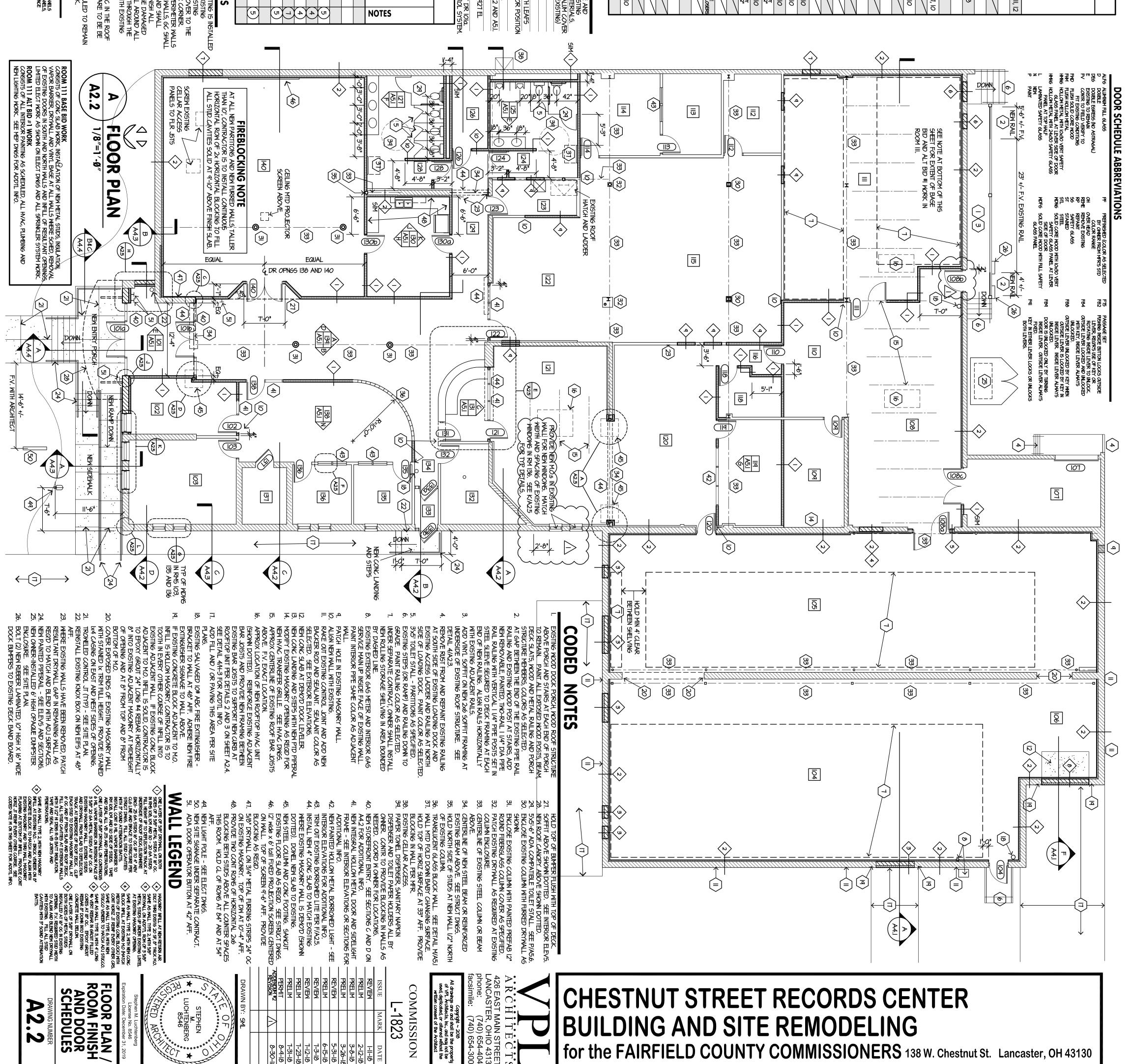
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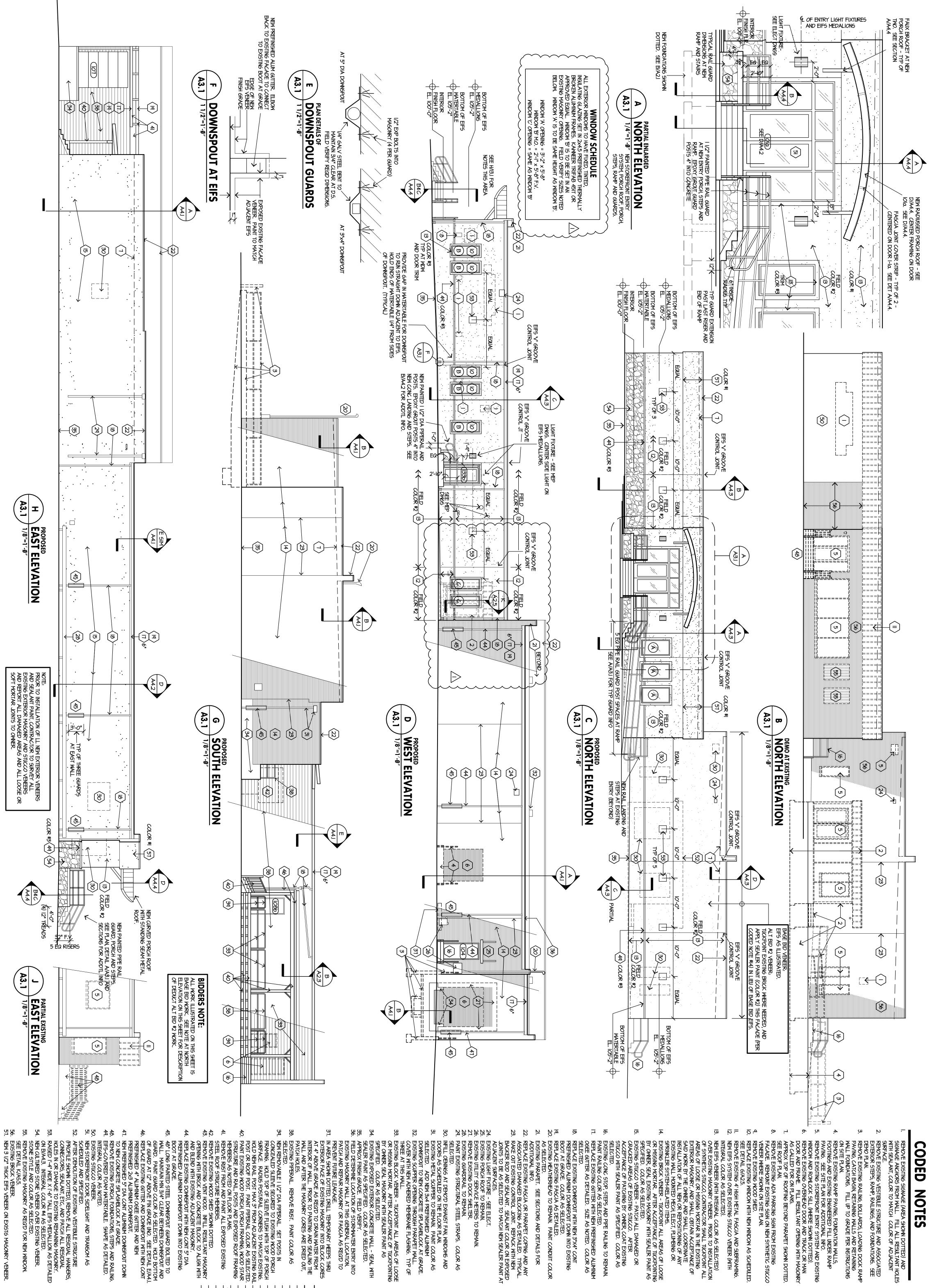


426 EAST MAIN STREET LANCASTER, OHIO 43130 phone: (740) 654-4048 facsimile: (740) 654-3009 phone: A'R COMMISSION CHESTNUT STEPHEN M. UUCHTENBERG 8546 С Н L-1823 RED ARCHITEC BUI D TEC and may not be ered without the the Architect 2-12-18 3-8-18 \cap ⊢. Number

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for the FAIRFIELD COUNTY COMMISSIONERS 138 W. Chestnut St. Lancaster, OH 43130

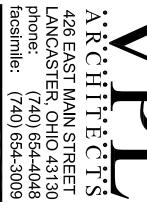


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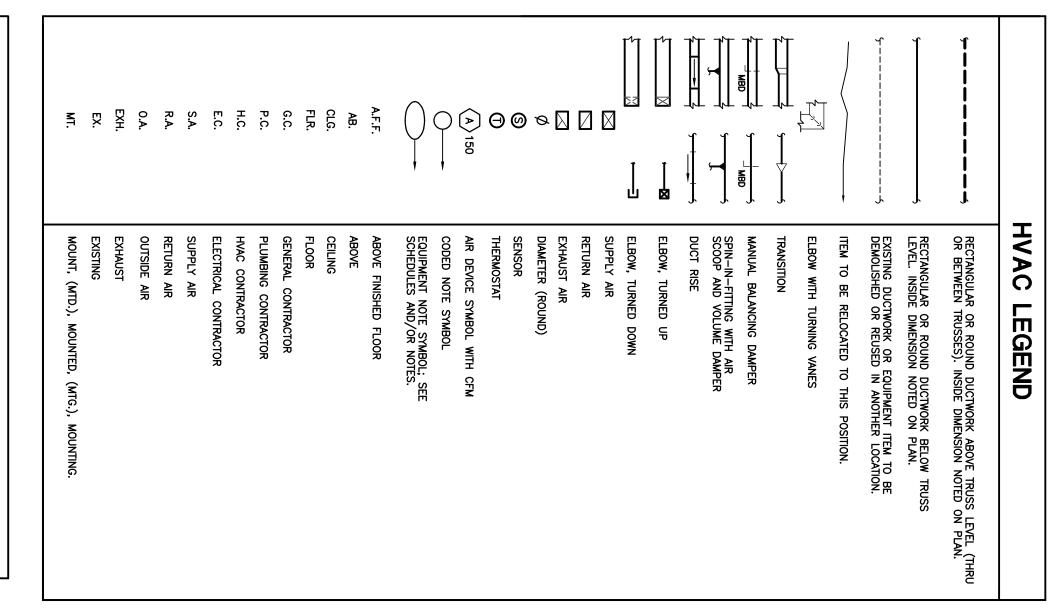
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EXTERIOR ELEVATIONS



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18" ROUND	AS REQUIRED BY FIELD CODITIONS (PARTICULARLY THRU WEBS OF GIRDERS, JOISTS OR ATTIC TRUSSES), THE HVAC CONTRACTOR SHALL HAVE THE OPTION OF USING EQUIVALENT DUCT SIZES IN LIEU OF SIZES SHOWN ON PLAN.

14" ROUND 26x7, 22x8,	<u>12"ROUND</u> 24x6, 18x7,	<u>10" ROUND</u> 20x5, 16x6,	<u>8" ROUND</u> 16x4, 12x5,	12x3, 8x4, 6x5
- 18x10	- 16x8,	- 12x7,	- 10x6	6x5
, 14×1	14x9,	10x8,		
2	12x10	6×6		
<u>26"ROUND</u> 46x14, 38x16, 34x18,	24" ROUND 46x12, 36x14, 32x16,	<u>22"ROUND</u> 36x12, 30x14, 26x16,	<u>20" ROUND</u> 38x10, 30x12, 26x14,	<u>30x10, 24x12, 20x14, 18x16</u>
30x20,	28x18,	24×18,	22x16,	18x16
26x22,	24×20,	20×20	20×18	
24x24	22×22			
		2x10		

HVAC GENERAL NOTES

<u>16" ROUND</u> 30x8, 24x10, 18x12, 16x14

- DUCT LAYOUTS ARE SCHEMATIC. FIELD COORDINATE ALL DUCT RUNS (PRIOR DUCT FABRICATION). EXTRAS WILL NOT BE AWARDED FOR DUCT REVISIONS CAUSED BY LACK OF COORDINATION. Ъ
- PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE CODES, RULES, AND REGULATIONS OF LOCAL, STATE AND FEDERAL AUTHORITIES OF JURISDICTION.

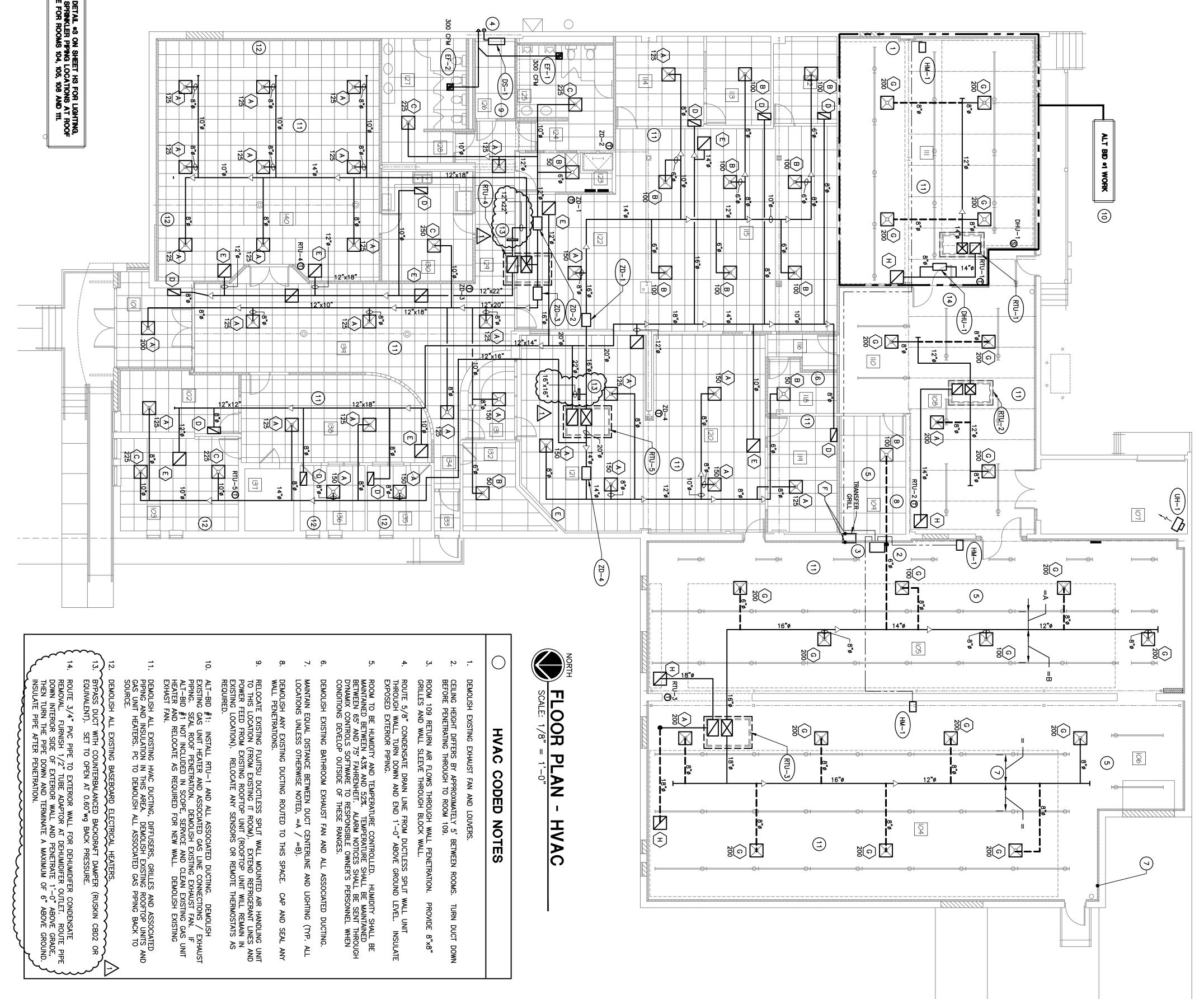
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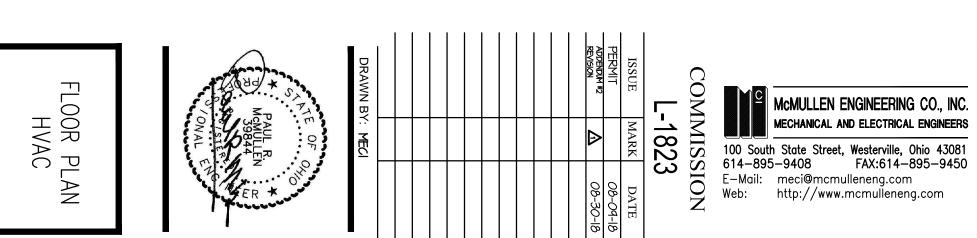
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- ALL DUCTWORK AND PIPING IN THE SOUTHERN HALF OF THE BUILDING (STORAGE VAULTS / WORKING ROOMS) SHALL BE EXPOSED UNLESS NOTED OTHERWISE. DUCTWORK AND PIPING IN THE NORTHERN HALF OF THE BUILDING WILL BE ABOVE THE LAY-IN CEILING. PROVIDE ALL EQUIPMENT NECESSARY FOR HANGING DIFFUSERS AND GRILLES.
- 'n Þ. SUPPLY AND RETURN AIR DUCTING SHALL BE INSULATED WITH 1" THICK RIGID DUCT-BOARD. ALL FITTINGS AND ELBOWS SHALL BE INSULATED SHEET METAL
- יי. verify exact location of rooftop equipment prior to installation. Coordinate penetrations with roofing contractor. Route all ducting between trusses or joists where possible. Verify existing conditions prior to bid and start of work. Coordinate and schedule all work with other trades and architect.
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- ۔ ALL THERMOSTAT LOCATIONS TO BE FIELD VERIFIED AND COORDINATED WITH ARCHITECT. ALL DUCT SIZES ARE INSIDE DIMENSIONS.
- ŗ. <u>.</u> COORDINATE ALL EQUIPMENT AND DUCT RUNS WITH STRUCTURE, LIGHTS, CEILING, CONDUIT, PIPING, AND OTHER EQUIPMENT.
- ≤. ALL ROUND BRANCH DUCT TAKE-OFFS SHALL BE MADE WITH BELL-MOUTH FITTINGS WITH ADJUSTABLE VOLUME DAMPER. COORDINATE EXACT LOCATION OF ALL AIR DEVICES WITH LIGHTING PLAN AND REFLECTED CEILING PLAN.
- ŗ FLEXIBLE DUCTWORK SHALL BE USED ONLY AT CONNECTION TO LAY-IN AIR DEVICES. (5'-0" MAX. LENGTH). FLEXIBLE DUCTWORK SHALL NOT BE USED AT LOCATIONS THAT PENETRATE THROUGH FIRE BARRIERS.
- <u>.</u> ANY CHANGES RESULTING FROM APPROVED EQUALS SHALL BE BORNE BY THE CONTRACTOR (INCLUDING TIME DELAYS) AND ALL WORK TO COORDINATE THE SUBSTITUTION WITH OTHER PORTIONS OF THE WORK.
- .P õ FIELD COORDINATE MOUNTING HEIGHTS OF ALL EQUIPMENT WITH THE ARCHITECT. RTU UNITS TO BE CONTROLLED ACCESS BSA.

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CHESTNUT STREET RECORDS CENTER BUILDING AND SITE REMODELING

for the FAIRFIELD COUNTY COMMISSIONERS 138 W. Chestnut St. Lancaster, OH 43130

TUO	, SIDE /	ASHRAE	QUIREN 2010)	NENTS			AIR	SYSTEMS	SW						
SPACE VENTILATION CLASSIFICATION	FLOOR AREA (SQ.FT.)	OCCUPANCY (PEOPLE/SQ.FT.)	OCCUPANCY (NO. OF PEOPLE)	SIDE AIR AREA /SQ.FT)	VENTILATION RATE BY OCCUPANCY (CFM/PERSON)	OUTSIDE AIR VENTILATION (CFM)	System plan Designation	SUPPLY AIR (CFM)	OUTSIDE AIR INTAKE (CFM)						
STORAGE	2441	I	I	0.12	I	293									
STORAGE	1941	I	1	0.12	I	233	RTU-3	2600	560						
STORAGE	195	I	I	0.12	I	24									
					TOTAL	550									
OFFICE	980	5/1000	5	0.06	თ	84	RTU-2	800	90						
					TOTAL	84									
STORAGE	1111	I	1	0.12	I	134	RTU-1	800	140						
					TOTAL	134									
OFFICE	129	5/1000	-	0.06	თ	13									
OFFICE	136	5/1000	<u> </u>	0.06	თ	14									
OFFICE	186	5/1000	1	0.06	5	17									
OFFICE	1383	5/1000	7	0.06	თ	118									
CORRIDOR	48	I	I	0.06	I	3									
STORAGE	76	Ι	I	0.06	I	თ									
OFFICE	191	5/1000	_1	0.06	б	17									
OFFICE	1101	5/1000	6	0.06	5	96	RTU-5	3100	500						
RECEPTION	376	30/1000	12	0.06	5	83									
OFFICE	100	5/1000	1	0.06	5	11									
OFFICE	101	5/1000	1	0.06	5	11									
STORAGE	72	Ι	I	0.06	I	5									
CONFERENCE	260	50/1000	13	0.06	5	81									
OFFICE	170	5/1000	1	0.06	5	16									
					TOTAL	490									
RESTROOM	225	I	I	I	I	280 (1)									
RESTROOM	238	I	I	I	I	280 (1)									
BREAK ROOM	237	30/1000	8	.06	5	55									
LOBBY	1063	30/1000	32	0.06	7.5	304	RTU-4	2900	1.3.30						
STORAGE	133	Ι	I	0.06	I	8									
ENTRYWAY	155	I	I	0.06	I	10									
CONFERENCE	1238	50/1000	62	0.06	5	385									
					TOTAL	1322									
– 70 CFM PER URINAL	/ TOILET														
	PUPP SPACE VENTILATION STORAGE STORAGE STORAGE STORAGE STORAGE OFFICE OFFICE OFFICE OFFICE OFFICE OFFICE OFFICE OFFICE CONFERENCE OFFICE CONFERENCE ENTRYWAY CONFERENCE	FLOOR AREA PLOOR AREA (So.FT.) 1111 1100 1238 1238 1238 1238	FLOOR AREA OCCUPANCY (SO.FI.) 1941 - 1941 - 1941 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 129 5/1000 1383 5/1000 1383 5/1000 1385 5/1000 1101 5/1000 1101 5/1000 1101 5/1000 1101 5/1000 1101 5/1000 100 5/1000 101 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 1000 5/1000	FLOOR AREA OCCUPANCY (SO.FI.) 1941 - 1941 - 1941 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 129 5/1000 1383 5/1000 1383 5/1000 1385 5/1000 1101 5/1000 1101 5/1000 1101 5/1000 1101 5/1000 1101 5/1000 100 5/1000 101 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 100 5/1000 1000 5/1000	ITSIDE AIR REUPIRE VIEWER Incorr AREA Cocup-ANCY (REUPI/SOF.) COCUP-ANCY (REUPI/SOF.) COCUP-ANCY (REUPI/SOF.) COCUP-ANCY (REUPI/SOF.) COLUBANCY (REUPI/SOF.) COLUBANCY (REUPI/SOF	IPSIC SUPPORE SUPPO	Income realization of the colligion of	INDEX AIR ARE ZOOD INTER ZOOD <th <="" colspan="6" td="" th<=""><td>INDEE ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU COUPPACE TO TOUSE AT VENTION ANT TO TOUSE AT VENTION ANT TOUL ANT TOUS AT VENTION ANT TOUL ANT</td></th>	<td>INDEE ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU COUPPACE TO TOUSE AT VENTION ANT TO TOUSE AT VENTION ANT TOUL ANT TOUS AT VENTION ANT TOUL ANT</td>						INDEE ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU ASPACE ZOU COUPPACE TO TOUSE AT VENTION ANT TO TOUSE AT VENTION ANT TOUL ANT TOUS AT VENTION ANT TOUL ANT

					T	AN SC	FAN SCHEDU	Ē			
	SYMBOL	MODEL #	CFM	ESP	ΗP	RPM	DRIVE	ELECTRICAL	WALL OR ROOF OPNG.	אדעם	
	EFF-1) BROAN #L300	150	0.25"	1/6	I	DIRECT	120/1/60	1	TOILET	
	EF-2) BROAN #L300	110	0.25"	1/6	I	DIRECT	120/1/60	-	TOILET	
	1)	DISCONNECT SWITCH		4)	WIRED BY	WIRED BY E.C. TO BE OFF/ON	OFF/ON				
	2)	MOUNT ON CEILING		5)	PAINTABLE	PAINTABLE WALL CAP					
	3)	WIRED BY E.C. TO RUN CONTINUOUSLY	DUSLY	6)	BIRDSCREEN	ËN					
1											

	DEH	DEHUMIDIFIER SCHEDULE	Ē	SC	HED	OLE
2	CARRIER	WATER REMOVAL	_	ELECTRICAL	ŕ	
		(PINTS / DAY) V./¢	V./¢	MCA	MOCP	
DHU-	DEHXXCDA1070	70	120/1	6.3	15	1 THROUGH 5 1
(1	UNIT MOUNTED AS 8" BYPASS LINE ON RETURN AIR DUCT. MAX CFM - 120. SUPPORT FROM CEILING - APPROX 67 LBS.	NE ON RETURN SUPPORT FROM		5 } ≁	HUMIDITY :	HUMIDITY SHALL BE MAINTAINED BETWEEN 43% AND 52%. HUMIDIFIER TO COMMUNICATE WITH BAS CONTROL SYSTEM VIA COMMUNICATION RS485 INTERFACE
2)	ROUTE 3/4" DRAIN LINE TO NEAREST FLOOR DRAIN	REST FLOOR DRA	.z	E	{	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
3)	MODEL 76 DEHUMIDIFIER CONTROL PANEL MOUNTED ON WALL AT 48" O.F.F.	IL PANEL MOUNT	8			

	INTEGRAL	INTEGRAL	DAMPER	
	1, 2, 3, 5, 6	1, 2, 3, 5, 6	NOTES	

									S
NOTES:	H	G	$\langle F \rangle$	E		¢	В	$\textcircled{\textbf{A}}$	SYMBOL
1.) PROVI 2.) 4–WA	24"X2	24"X2	12"X1	24"X2	12"X2	24"X2	24"X2	24"X2	FACE

			Ģ	AS FIRE	GAS FIRED ROOI	FTOF	FTOP A/C UNIT SCHEDULE	LIND	SC	HEDU	Π							
)]	APPROX.	NET COOLI	NET COOLING CAPACITY	HEATING	HEATING CAPACITY				, ,			7		>	NOTTO	
	MODEL #	CF M	EXT. S.P.	TOTAL MBH	SENSIBLE MBH	INPUT	OUTPUT	A.F.U.E.	BHP	ELECIRICAL M.C.A. MUCT	.⊂. .≻.			5		CFM	NOTES	
RTU-1	PCG4A240502X1 (2 TON)	800	0.5"	24.4	17.3	49.4	40.0	81%	0.33	208/1	14.4	20	14.0	I	I	67	1,4,5,6,7,8,10	
RTU-2	PCG4A240502X1 (2 TON)	008	0.5	24.4	17.3	49.4	40.0	81%	0.33	-	14.4	20	14.0	I	I	81	1,4,5,6,7,10	
RTU-3	J06ZRS12R2B2BAA1A1 (6 TON)	2600	0.5"	76.0	56.4	120.0	96.0	80%	2.0	208/3	41.4	50.0	1	11.2	13.0	246	1-8,10	_
RTU-4	JO7ZHN18D2B2BAA1A1 (7.5 TON)	2900	0.5"	94.0	69.0	180	144.0	80%	3.0	208/3	42.4	50.0	1	11.5	12.7	1142	{ 1,2,4,5,6,7,9,10	
RTU-5	JO7ZHN18D2B2BAA1A1 (7.5 TON)	3100	0.5"	94.0	69.0	180	144.0	80%	3.0	208/3	42.4	50.0	1	11.5	12.7	533	کرر1,2,4,5,6,7,10 ک	\triangleright
1)	FURNISH 14" FLAT ROOF CURB FOR INSTALLATION BY G.C.	INSTALLATIC	N BY G.C.		7)	FACTORY I	FACTORY INSTALLED DISCONNECT	SCONNECT										
2)	FURNISH & INSTALL ECONOMIZER WITH GRAVITY RELIEF.	H GRAVITY	RELIEF.		8)	HUMIDITY	HUMIDITY SHALL BE MAINTAINED BETWEEN 43% AND 52%. TEMPERATURE SHALL BE MAINTAINED	INTAINED E	BETWEEN 4	13% AND 52%	EN	DE SENT THEOLICH BAS CONTEOL	RE SHA			-8		
3)	humidifying / Dehumidifying					SYSTEM TO	SYSTEM TO RESPONSIBLE PERSONNEL WHEN CONDITIONS DEVELOP OUTSIDE OF THESE RANGES.	LE PERSON	UNEL WHE				TSIDE O	F THESE		Ϋ́		
4)	TWO SETS OF FILTERS, AND VERTICAL FLUE EXTENSION	FLUE EXT	ENSION															

	4.) FR 4- FR 4-	<u>.S.</u> 1.) PR	24'	24'	12'	24'	12'	24'	24'	24	(0 T)	
SURFACE MOUNTING	 2.) 4-WAY AIR PATTERN 3.) FRAME AND BORDER PLENUM BOX. 4.) FRAME AND BORDER 	OVIDE NECK-	24"X24"	24"X24"	12"X12"	24"X24"	12"X24"	24"X24"	24"X24"	24"X24"	FACE SIZE	
	SUITABLE	PROVIDE NECK-MOUNTED VOLUME DAMPER	22"X22"	ø"8	10"X10"	22"X22"	22"X22"	10"ø	6"ø	ø"8	NECK SIZE	
	FOR DIFFUSER FOR GYP. BD. OR	AMPER	350-R	OMNI	350-R	350-R	350-R	OMNI	OMNI	OMNI	TITUS MODEL NO.	AIR DEVICE SCHEDULE
	7.) FRAME CEILIN		AS NOTED	CFM	ICE SC							
	FRAME AND BORDER SUITABLE FOR LAY-IN CEILING MOUNTING	SUPPORT INDEPENDENT OF CEIL	EXPOSED	EXPOSED	SURFACE WALL	LAY—IN	LAY—IN	LAY—IN	LAY-IN	LAY—IN	MOUNTING	HEDULE
	BLE FOR LAY-IN	CEILING TILE	ALUMINUM	MATERIAL								
			STANDARD OFF-WHITE	FINISH								
			3,6	1,2,3	4	5,6,7	5,6,7	1,2,5,7	1,2,5,7	1,2,5,7	NOTES	

9) 10) STEEL INTERFACE FOR BAS CONTROL HEAT EX - SYSTEM

BACnet MS/TP

6) 5)

CONTROLS COMPATIBLE WITH DYNAMIX SOFTWARE FOR REMOTE UNIT OPERATION CONTROL. DIGITAL LARGE NUMERAL THERMOSTAT EQUAL TO HONEYWELL #T-8775-C WITH SWITCHING SUBBASE.

COOLING CAPACITIES BASED ON 85db/65wb OUTDOOR AIR, 78db/67wb RETURN AIR, 78db/50

RH INDOOR HEATING CAPACITIES BASED on O OUTDOOR AIR,

	Н	HUMIDIFIER SCHEDULE		SC C	Ē	ILE
	NORTEC / DRAABE	WATER USAGE	_	ELECTRICAL	ÄL	
SYMBOL	MODEL #	(LB)	٧./¢	MCA	MOCP	NOTES
HM-1	TURBOFOG NEOFOG1	8 MAX	208/3	σ	15	1 THROUGH 6 A
1) 2 F WITI HIGI	2 FOGGING UNITS (3 WITH ALT BID#1), CONTROLLED WITH INDIV. HUMSPOT UNITS, 1 HUMCENTER NEAR HIGHPUR ON EAST WALL OF ROOM 105.	ID#1), CONTROL IUMCENTER NEAR M 105.		4)	HUMSPOTS ONE HUMS (ROOM 10-	HUMSPOTS – 24V DC, 1.5W (W/ BACKLIGHTING) ONE HUMSPOT LOCATED IN EACH HUMIDIFIER ZONE (ROOM 104, ROOM 105, ROOM 111).
2) HU	HUMIDITY SHALL BE MAINTAINED BETWEEN 43% AND 52%. 5)	3ETWEEN 43% AN	ND 52%.		NEOFOG U	NEOFOG UNITS MOUNTED AT 1'-O" BELOW BAR
3) HIG	HIGHPUR HIGH PRESSURE SYSTEM – WALL MOUNTED.	A - WALL MOUN	TED.		HUMCENTE	HUMCENTER TO INTERFACE WITH BAS CONTROL SYSTEM USING EXTERNAL CONVERTER

PERMIT Addendum #2 Revision

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08-09-08-30-

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<u>NOTES:</u> 1.) 2.) 3.)		ZD-4	ZD-3	(ZD-2)	ZD-1	SYMBOL			
Transition duct as required at damper connections. 24v. control. Controlled by individual thermostats with modulating control and linked to the bas control system.		MARD-14	MARD-16	MARD-12	MARD-16	HONEYWELL MODEL #	ZONE DAMPER SCHEDULE		
at damper connec Rmostats with mod Ol system.		150-950	200-1300	100-650	200-1300	CFM RANGE	PER SCH	,	
TIONS. JULATING CONTROL		1,2,3	1,2,3	1,2,3	1,2,3	NOTES	HEDULE		

DRAWN

5

CHESTNUT STREET RECORDS CENTER **BUILDING AND SITE REMODELING**

for the FAIRFIELD COUNTY COMMISSIONERS 138 W. Chestnut St. Lancaster, OH 43130



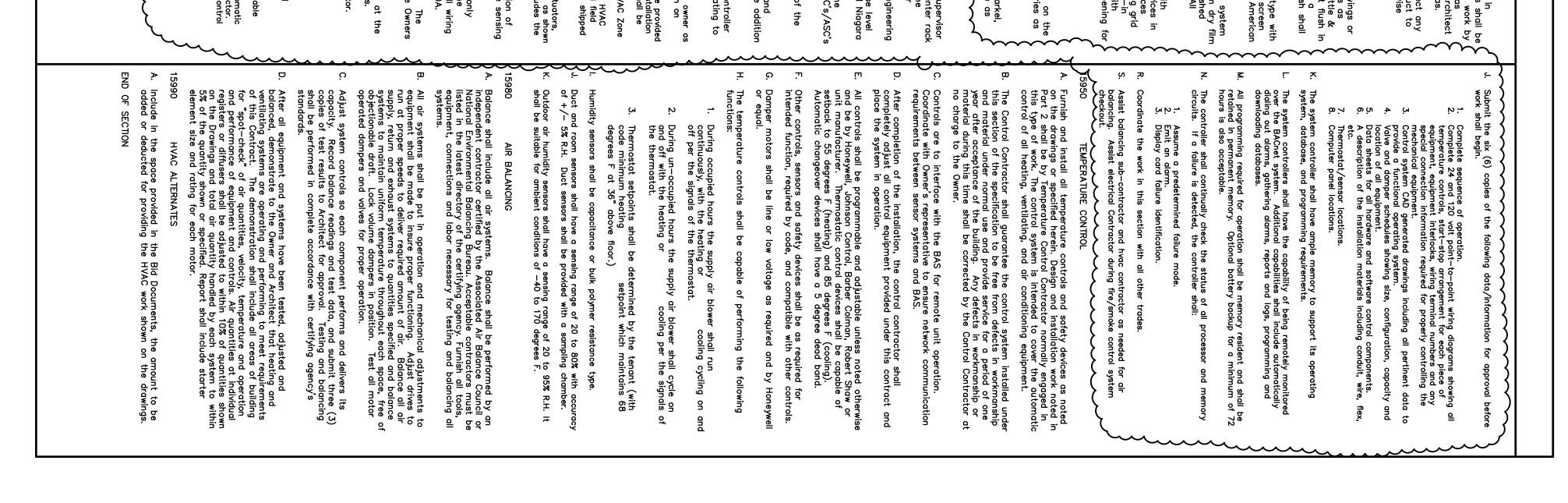
SCHEDULES HVAC
SCHEDULES HVAC

 BOE HAC EXCLUSIONS AND HAC EXCLUSION	Ģ	: . .	Ň	ק	Ģ		O	ž	Ĕ	ŗ			<u>.</u>	Ļ.	÷	Ŧ	ច្		. п	'n		C	Β	.₽	15
intervence of the second and an anti- second and an anti- second and an anti- intervence of the second and an anti- second	. Electrical Contractor to provide condu indicated on Electrical Drawings and i wiring required for equipment shall to Contractor. All wiring to be installed with latest edition of National Electric Electrical Division of these Specificatic Electrical Contractor approved wiring o furnished. This Contractor will be res	Protect surface, equipment, and mate damage from water, dirt, welding and etc. Repair or replace as directed any construction operations. All materials be elevated and protectively covered. to weather or construction conditions necessary, sensitive equipment shall b Damaged equipment or materials mus replaced by this Contractor, to the so no additional cost to the Owner.	. Upon completion of work, all material Contract shall be thoroughly cleaned and other foreign matter. Prepare fc specified. Clean galvanized ductwork acid. Finish painting of piping and en Contract is included under Division 9 shall spot prime factory finished equip damaged with zinc chromate primer. original color.	. Cutting of reinforced concrete and pr unless approved by Structural Enginee approved, shall be by the General Cor	f concre sleeves and Seneral (required ut holes thall be required	. Contractor may submit substitutes of on the "Substitution Sheet" included in substitutes will not form basis of awa after selection of lowest bidder furnis	. Whenever the Contractor furnishes equ Design Base Manufacturer specified, h coordination of all modifications requi for the work of all other Trades affec	. Locate existing utilities prior to begin existing utilities where necessary to p uncharted or incorrectly charted pipin during work operations, notify the Arc directions. Cooperate with utility com services and facilities in operation.	. Comply with applicable Section of Divi and handling procedures and requirem	After placing systems in operation, th Owner's personnel on operation and n systems. Provide a minimum of (8) equipment and explanation of function manuals for record and clarity, coordi instructions so that each is understou control system, including panel, Speci	description of systems, operating instr lubrication instructions, servicing instr and parts lists, including sources of s diagrams, wiring diagrams, routine au name, address and telephone number names of personnel to be contacted	page: Inte of Project, Address, Date of Contractor, Name of Architect, Na Index of manual contents/A tabbed s with a list of all equipment furnished suppliers' names and addresses and a drawing. Also provide the following in drawing. Also provide the following in	completion of work, deliver these drav . Submit two (2) bound copies of oper 8-1/2" X 11" in three ring hard back	a record set of prints sh addendum and change orc l documents. Drawings sha l documents. Drawings and used for any purpose other st the job site and curr at the job site and curr	six (6) copies of shop dro under Division 1, and as	. Guarantee all work executed under th defective workmanship and/or materic within a period of one (1) year after correct them and repair any damage additional cost.	. If a conflict occurs between the Draw Contractor shall immediately call it tc who will determine which interpretation	verified in the field. It is not intende necessary offsets, and it shall be the the installation in such a manner as obstructions, preserve headroom and clear. Significant deviations from Dra Architect. The Architect reserves the to the time of roughing—in without a	All equipment shall be certified, listed performed by Licensed Contractors as Contractors shall be certified by appr Drawings are schematic and show app	tests. Submit Certificates of Inspection the work. . Material and equipment installed unde	Federal, Federal ed per permi	ns whether specific Local and State bu	Mechanical work. . Furnish all materials, labor, tools, trai appurtenances to complete in every o items of work colled for bergin or sh	. Refer to Instructions to Bidders, Gene Conditions, and the Sections of Division specific requirements, responsibilities	5010 BASIC HVAC REQUIREMENT
	uit and wiring for devices as in Specifications. Any additional o be the responsibility of this d in metal conduit and to comply ic Code, NFPA 70, and with the ions, Division 16. Furnish to the diagrams required for equipment sponsible for the successful	g construction from patters paint dropp damaged during nent stored outside and equipment sen and equipment sen tored inside. Wher n a heated area. tely be repaired or of the Architect ar	equipmer rt, sticker ish paintii posed ar nent insta pt as not t which h t which h	recast structural concrete prohibited er. Cutting and drilling, when ontractor.	other new work, by coordir the General Contractor of red and deliver sleeves and tallation. Perform cutting new work in existing , brick, tiles etc., when ng shall match adjacent ng shall match adjacent by tradesmen skilled in t	f his choice, without prior approval, in the Bid Schedule. Such vard and may be considered only shing "Base Design" as specified.	quipment or material other than the he is responsible for the cost and uired not only for his work, but also acted.	 Reroute o stallation of v er utilities be mediately for maintaining 	vision 1 for product delivery, storage ments.		- < T - * 0	Engineer. Second pa for each specification that section together of each approved sho of each applicable:	o Àrchitect. nd maintenanc 's. Format as	ing exact location of all work. items, and any deviations made be clean and undamaged, and shall than recording deviations from s of concealed work. Maintain for weekly inspection. Upon	ngs, product data and samples as .ed in these specifications.	his Contract to be free from ials. Should any defects develop final acceptance has been made, that resulted from same at no	wings and Specifications, the to the attention of the Architect, on shall take precedence.	led that drawings indicate all e work of this Contractor to make to conform to structure, avoid keep openings and passageways wings must be approved by the e right to make minor changes up additional cost.	d and labeled by UL. Work must be required by Local and State Codes. proving agencies for all work required.	on and approval upon completion of er this Contract shall be new,	cable utility company lirements. fees, inspections and tests. chedule necessary inspections	novide complete and not. Life Safety Code, Na	5'0	eral Conditions, Supplementary ilon 1: General Requirements for and methods relating to the	Z

rawings), gas or electric heating rawings), gas or electric heating l safety controls. Unit shall be gle packaged unit and be completely ved by Underwriters Laboratory. n ducted supply and return. Unit galvanized steel, treated with garvanized steel, be equipped with a acrylic enamel, be equipped with and an electric compartment hinged eners. Evaporator coil drain pan to ed with drain connection to spill on	s, trap and drop to within 2" of runs for positive drainage. TING AND COOLING UNITS runits as detailed on the drawings ftop units shall be York combination ne, Carrier, McQuay, or Lennox. See pplication and furnished complete	nsation drain piping system from each D polyvinyl chloride (PVC) tubing. Iarger — Type DWV light wall hard Ibing. solder drainage fittings. ANSI B sinage fittings.	rmed fiberglass round duct liner stic", U.L. listed, meeting NFPA 90A .ch, K-0.23, flame spread rating less as than 50. Liner shall be factory attenuated glass fibers. d closed cell, flexible elastomeric F) furnished in 3/4" thick sheet or I to Armstrong "Armaflex". R-8 .) All seams and butt joints shall be th 2 coats of a vinyl-lacquered	<pre>< facing. h FSK facing. pound density, 1" thick fiberglass F.) with FSK vapor barrier, e one of the following: iss". iss".</pre>	ing eturn ducts insulation, jacket, and adhesive) fire I under procedure ASTM E-84, NFPA Flame spread: 25, Smoke developed: the requirements of OBC, Mechanical I-1-1999. I-1-1999. Irap insulation, 1-1/2" thick, 3/4 inum foil facing. R-5 minimum.	SULATION ils, and accessories necessary for the ion. Insulate the following heating	sheet metal sleeves for all wall and The General Contractor shall eves through concrete joists, beam rs except where specifically indicated tructural Engineer. annular space of 1/2" between the eves shall be cut flush with each ges are use. In rated firewalls, fire fill annular space around pipe with in Section 15135. In sleeves through th insulating material, seal and make und rectangular ducts through walls	awings. Drawings not signed and returned. of equipment, piping, and insulation pare required drawings at sufficient struction, physical dimensions and struction, shall not relieve the racy of shop drawings or of full gs.	ngs for review of the following , but not limited to the following: densing Units	emolition for the HVAC work with the all visit the site prior to their Bid to extent of this demolition. Schedule ms with Architect and General tween drawings and actual conditions ontractor and be disposed of by him. done with care so as not to affect tching. The removal of equipment ping roughins, electrical connections,
 F. Flexible ducts shall comply with NFPA requirements, Pamphlet 90A and shall be Class 1, UL listed with flame spread rating of 25 or less and smoke developed rating of 50 or less. Duct shall be a factory fabricated assembly composed of: an inner duct of woven and coated polyester fabric providing an air seal which is permanently, mechanically bonded to corrosion resistant coated steel wire helix and 1" thick fiber glass reinforced metalized film laminate. G. Flexible duct connections shall be Duro-Dyne "Thermafab" or equal (UL listed). Flexible connectors shall be pre-assembled with 24 gauge, 3-inch wide metal edges on both sides of the fabric secured by means of double lock seam. Install at all duct connections to motorized equipment. 	 D. Exposed round ductwork shall be spiral seam round type ducts constructed and supported in accordance with the latest SMACNA standards. Leave ductwork ready for finish painting by G.C. E. Furnish and install duct liner for all rectangular supply and return ducts. Duct lining shall be fireproof, Underwriters' approved, and conform to latest requirements of NFPA. Duct sizes shown on drawings are inside clear dimensions for air flow. For lined ducts make allowance and increase sheet metal dimensions accordingly. Install duct liner in accordance with SMACNA Installation Standards for Rectangular Ducts using flexible liner, Section II, pages 2–25 thru 2–29. Interrupt duct liner at fire dampers and heating coils. 	ing to the state of the state o	 F. Install all units as recommended by manufacturer and per their installation manual and listing. Refer to details and notes on drawings. Set condensing units on two equipment support rails (furnished and installed by Contractor). Run refrigeration piping up through roof using Pate pipe curb. 15890 AIR DISTRIBUTION A. Furnish and install a complete air distribution system for the heating, ventilating and air conditioning systems and exhaust systems for the building as shown on the drawings and as herein specified. Include cleaning, testing, balancing and adjusting the air systems for proper air circulation to each area of the building. Submit complete duct lay-out shop drawing prior to start of construction. 	 D. Furnish and install field fabricated refrigeration piping sized per manufacturer's recommendations. Insulate suction line with 1/2" Armaflex and seal all joints and seams. Provide required refrigeration charge, pressure test and leak test. At Contractor's option, refrigerant piping may be provided by Unit Manufacturer. E. Furnish and install condensate drain lines from units and extend where shown on the drawings. Optional accessories furnished as standard: wired remote controllers, factory installed condensate pump, mounting hanger kit. 	 E. Equipment shall consist of rork Ductiess Multi-Split system A/C units with indoor evaporators and condensing unit as noted on the drawings or approved equal (Carrier, Mitsubishi). Evaporator cabinets shall be complete with blower, DX coil, solid-state blower control, corrosion resistant drain pan, and condensate connection. C. Condensing units shall be complete with a hermetically sealed rotary compressors mounted to unit with rubber mounts, direct drive condenser fans with vertical discharge, aluminum finned condenser coils bonded to copper tubes with coil guards, heavy gauge galvanized steel cabinet with steel base channels. Unit to have high and low pressure switches and all other controls for complete operation. Condensing units shall be furnished with low ambient controls for operation down to 0 F. Condensing units shall have dual circuits to serve two evaporator sections. 		 Unit shall be furnished with two sets of medium efficiency filters, 30% (NBS dust spot). Unit shall not be operated without filters. Refer to manufacturer's installation manual and other requirements. Coordinate gas connections with Plumbing Contractor. Coordinate electrical connections with Electrical Contractor. K. Coordinate mounting locations and roof openings with General Contractor in the field. Shim units as required for level mounting. L. Roof flashing shall be by the Roofing Contractor. Roof openings shall be by the General Contractor. M. Unit shall be furnished with BACnet MS/TP interfaces. 		 Compressors shall have five (5) year warranty on parts. F. Heating systems shall be gas fired with automatic spark ignition and power forced draft. (Two stage where noted). Controls shall include pilot valve, automatic combination main gas valve and pressure regulator; combination fan cycle control thermostat, venter motor protected by centrifugal switches, high limit thermostats, flame sensor and automatic relight system. Heat exchanger shall be aluminized steel and have ten (10) year warranty on parts. 	 D. Evaporator blowers shall be centrifugal type, belt or direct drive, as noted. Blower motor shall be a permanently lubricated motor with inherent overload protection, sized as shown on the drawings. Blower assembly for belt drive units shall be fully adjustable by means of both a variable pitch motor pulley and a movable motor base. Direct drive units shall have multiple speed permanent split capacitor motor with field adjustment wiring for speed capacitor motor with field adjustment wiring for speed capacitor motor with field adjustment wiring to speed capacitor motor with field adjustment wiring to speed capacitor motor with field adjustment wiring for speed capacitor motor with field adjustment wiring for speed capacitor drive and the ball be of the propeller type, permanently lubricated. Condenser fans shall be of the propeller type each directly driven by a fractional HP inherently protected motor. E. Refrigeration system shall incorporate an integral direct expansion refrigerant system complete with factory charge of R-410A refrigerant fins mechanically bonded on seamless copper tubes, refrigerant metering device and liquid line filter drier. Unit shall be equipped with compressors of the semi-hermetic type with internal overload protection from short for a period of 3-5 montee.
 The following will be provided by the Owner. Main Building Controller Air Handling Unit Control Panels (5 total, RTU-1 thru RTU-5) 	 3. Electric motorized control dampers. 4. Exceptions: Dampers supplied as part of air handling units. H. Furnish the following as required for installation by the Electrical Contractor. 1. Wiring of power feeds through all disconnect starters and varia speed controllers to electric motors. 2. Wiring of any remote start—stop switches and manual or autor motor speed control devices not furnished by the BAS Contrac 3. Rough—in, installation, and 120 Volt power wiring of all BAS contraction. 	 equipment recommended of acceptance on the owner's IT standards for all contractor shall also conform to the Owner's IT standards for all / cabling and connection details and shall comply with NFPA 90/ G. Provide IP drops as required to the main building control panel. owner shall provide the IP address(es) for the BAS to utilize the IT infrastructure. H. The Building Level Communication Network (BLCN) shall originate main building controller and be routed as shown on the drawings. I. Furnish the following as required for installation by the HVAC Contractor 1. Control valves, flow meters. 2. Gauge taps, flow meters. 	 4. Packaged controls provided by the HVAC contractor. 4. Packaged controls provided as part of an associated piece of equipment will be integral to that equipment. Any associated mounted components (sensors, interface cards, etc.) that are loose shall be installed under this contract. D. All field mounted devices, including but not limited to, all sensors, acture remote relays, etc. shall be provided and installed under this contract on the associated project drawings, unless noted otherwise. This inclurough—in of these devices. E. Provide all labor and incidental material for a complete installatic thermowells, flow switches, humidity sensors, and static pressure devices in the ducts or air handling units. F. Install the system as recommended by the Manufacturer, using on the system as recommended by the Manufacturer. 	 C. The BAS extension consists of new stand-alone direct digital con (DDC) and associated sensors and controlled devices, communica- the existing central server. New DDC panels include: 1. Building Controllers (BC) - New BC's shall be provided by the a complete preconfigured panel ready for installation as shown associated project drawings. 2. Custom Programmable Controllers (CPC) - New CPC's shall be by the owner as a complete preconfigured panel ready for inst as shown on the associated project drawings. New Panels sho provided for each Air Handling Unit RTU-1 through RTU-5. 3. Application Specific Controllers (ASC) - New ASC's for the HV/ 	 framework utilizes FOX/ OBIX TCP / IP protocol at the enterprise to allow communications between the Niagara AX Supervisor and AX based BC's located throughout the county's buildings. Local communications networks utilizing BACnet MS/TP protocols at the building level allow communication between the BC's and the CPC within each of the buildings. B. The BAAS architectural design for this building is an extension of existing Niagara AX Framework with new BACnet MS/TP protocol communications networks as specified herein and shown on the associated project drawings. The system is modular in nature ar permits expansion of both capacity and functionality through the of BC's, ASC's, sensors, actuators, etc. 	A. The existing county-wide BAS employs the use of Niagara AX Su software running on a network server in the county's IT data cer located at the Fairfield County Courthouse. The supervisor is the primary engineering Operator Workstation used for basic operator interface functions as well as advanced supervisory functions, programming functions, GUI development functions, Communications	 General Contractor with approval by Architect. 15930 MISCELLANEOUS ELECTRIC HEATING A. Furnish and install miscellaneous electric heating units as shown drawings and specified herein. Capacities, voltage, and accessorinoted on the drawings. Install equipment in accordance with manufacturer's recommendations. B. Electric unit heaters shall be Q-Mark MUH Series or equal by Marcomplete with thermostat and disconnect switch. Size and type noted on drawings. 15935 BAS CONTROLS AND INSTALLATION 	 C. Louver finish shall be factory applied baked fluorocarbon coating equal to "Duranar" by PPG, a 2 coat system with total minimum thickness of 1.2 mils. Coating system to comply with the publisl specifications by PPG and meet requirements of AAMA 605.2. A finishes shall be selected by Architect. D. Verify final locations of air devices as shown on the drawings wit Architect or architectural reflected ceiling plan. Support air device suspended ceilings by the use of independent hangers. Air device system. Use flexible ducts when making duct connections to lay-outlets. Louvers shall be furnished to the General Contractor wit mounting sleeve for installation. This Contractor shall locate opended context is a shall be furnished to the General Contractor shall locate opended context is a shall be furnished to the General Contractor wit mounting sleeve for installation. This Contractor shall locate opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be furnished to the General Contract opended context is a shall be shall be the sh	 B. Stationary louvers shall be extruded aluminum stationary louver timining. All devices shall have a factory baked enamel finish as scheduled on the drawings. Finisi be selected by Architect. B. Stationary louvers shall be extruded aluminum stationary louver timinimum 12 gauge blades and frame and 1/2" aluminum mesh sinside. Optional manufacturers: Louvers and Dampers, Ruskin, A Warming and Ventilating, Airolite, Arrow. 	 H. All ductwork shall be constructed, joined, braced and supported in accordance with the latest Standards of SMACNA. All duct runs coordinated with building conditions (structural, piping, etc.) and other contractors. Provide off-sets or duct size modifications a required for clearance. All changes must be approved by the Arprior to installation. Run all ductwork concealed in finished area: I. When making connections to existing ductwork, report to Architec dissimilar duct or insulation types. Do not connect single wall duct duct to wrapped duct etc., unless otherwinnoted. 15910 AIR DEVICES AND LOUVERS A. Furnish and install air devices and louvers as noted on the drawings or equal by Anemostat, Metalaire, Tut Balance for the drawings or equal by Anemostat.

MECHANICAL

SPECIFICATIONS





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DRAWN

PAUL R. MCMULLEN

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FLOOR PLAN BSA-HVAC

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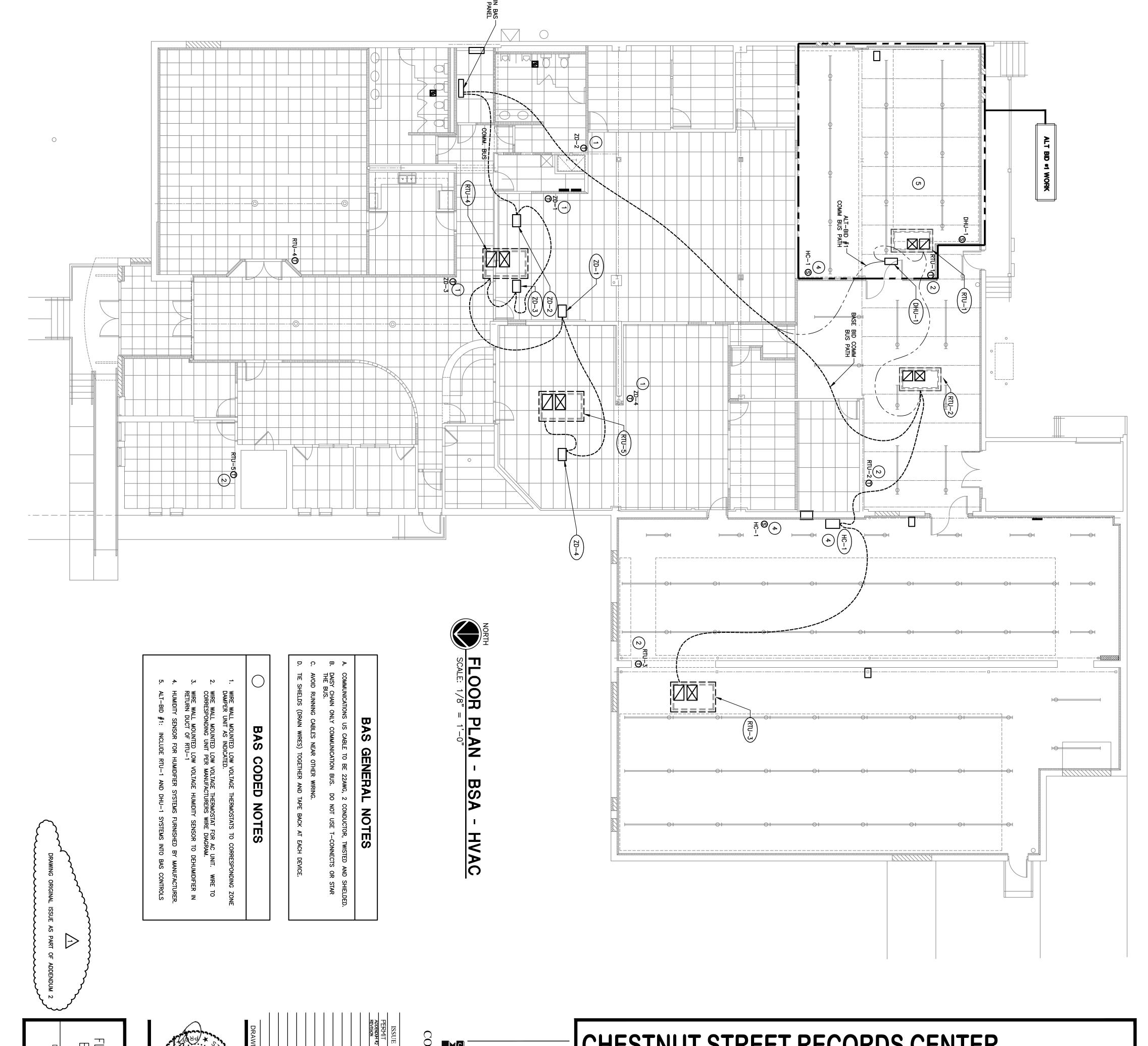
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CHESTNUT STREET RECORDS CENTER MCMULLEN ENGINEERING CO., INC. MECHANICAL AND ELECTRICAL ENGINEERS MECHANICAL AND ELECTRICAL ENGINEERS100 South State Street, Westerville, Ohio 43081614-895-9408FAX:614-895-9450E-Mail:meci@mcmulleneng.comWeb:http://www.mcmulleneng.com **BUILDING AND SITE REMODELING**

for the FAIRFIELD COUNTY COMMISSIONERS 138 W. Chestnut St. Lancaster, OH 43130