PA	NELBOARD	PB									i				
Voltage: 240/120V, 1Ø, 3W		Ø, 3W				X Equ	ipment Grou	nd Bus	Poles: 42	2			Min CB	IC: 10k	
Main Bus: 250 A			X	MCB	250 A	Isolated Ground Bus		Bus	Mtg: FI	ush	1		Comments:		
Ckt	Serves	Load	Br	eaker			Ph	ase			Break	cer	Load	Serves	Ck
#		VA	Р	Trip			Α	В			Trip	P	VA		#
1	REC - BEDROOM	720	1	20*			1620				20*	1	900	REC - BEDROOM	2
3	REC - BATHROOM	900	1	20				1800			20*	1	900	REC - BEDROOM	4
5	REC - LIVING ROOM	900	1	20*	•••••••••	***************************************	1800		•	***************************************	20*	1	900	REC - BEDROOM	6
7	REC - KITCHEN	1500	1	20				2760			20	1	1260	REC - OUTDOOR	8
9	ELECTRIC HEATER	1000	2	20**			1980				20**	1	980	INDOOR MECH UNIT	10
11		1000						2400	-		20*	1	1400	ЦGHTS	12
13	REC - KITCHEN	1500	1	20			2700				20	1	1200	DISHWASHER	14
15	REC - REFRIGERATOR	960	1	20		***************************************		1140	•		20	1	180	GAS RANGE	16
17	DISPOSAL	600	1	20			4400				40**	2	3800	REC - WASHER/DRYER	18
19	HOOD / MICROWAVE	1500	1	20				5300					3800		20
21	REC - KITCHEN	1500	1	20			2100		-		20*	1	600	SMOKE DETECTORS	22
	REC - SUMP PUMP	750	1	20				750			20	1		SPARE	24
25	∐GHTS	1900	1	20*		***************************************	2260			***************************************	20	1	360	REC - KITCHENETTE	26
	LIGHTS	1700	1	20*				2450			20**	1	750	GAS WATER HEATER	28
29	REC - LIVING ROOM	1080	1	20*	***************************************	***************************************	2280		***************************************	•••••	20	1	1200	DISHWASHER	30
31	REC - DEN	720	1	20*				1440			20*	1	720	REC - BEDROOM	32
33	OUTDOOR COMPRESSOR	2016	2	35**			2016				20	1		SPARE	34
35		2016	***********	***************************************	***************************************	***************************************		2016	***************************************	•••••	20	1	•••••	SPARE	36
37	MINI-SPLIT SYSTEM	2880	2	40**			2880							SPACE	38
39		2880	*********	***************************************	••••••••••	***************************************		2880	•	***************************************		**********	***************************************	SPACE	40
41	SPACE						1600				20*	1	1600	ЦGHTS	42
							25636	22936	(VA/Phase	e)					
	Total Connected	(VA) <b>48572</b>				106.8 95.6		(Amps/Ph	202.4		Total Connected Load (Amps)				
* - <i>F</i>	RC-FAULT BREAKER														
k# _	COORDINATE BREAKER SIZ	7F AND	ы	UG CC	NEGLIRA	ATION WI	TH FOLIPM	FNT MA	NUFACTUE	RFR	i				

A	UNIT #1 PANEL SCHEDULE (PB)
$\tilde{}$	SCALE: 1/4" = 1'-0"

	NELBOARD	P1															
Voltage: <b>240/120V, 1Ø, 3W</b> Main Bus: <b>250 A</b>				MLO		Х	Equipment Ground E Isolated Ground E				: 42 Flush	ì		Min CB	IC:	10k	
			X	MCB	250 A				Bus	Mtg:				Comme	ents:		
Ckt	Serves	Load	Br	eaker				Ph	ase			Break	er	Load	Serve	es	Ck
#		VA	P	Trip				Α	В			Trip	P	VA			#
1	REC - BEDROOM	720	1	20*				1620				20*	1	900	REC	- BEDROOM	2
3	REC - BATHROOM	1260	1	20					2160			20*	1	900	REC	- BEDROOM	4
5	REC - LIVING ROOM	1080	1	20*	***************************************	***************************************	***************************************	1800			***************************************	20*	1	720	REC	- BEDROOM	6
7	REC - KITCHEN	1500	1	20					2760			20	1	1260	REC	- OUTDOOR	8
9	SPARE		1	20				980				20**	1	980	INDO	OR MECH UNIT	1(
11	SPARE		1	20					1700			20*	1	1700	LIGH	TS	12
13	REC - KITCHEN	1500	1	20				2700				20	1	1200	DISH	WASHER	14
15	REC - REFRIGERATOR	960	1	20	•••••	***************************************	***************************************		1140		•••••	20	1	180	GAS	RANGE	16
17	DISPOSAL	600	1	20				600				20	1		SPA	RE	18
19	HOOD / MICROWAVE	1500	1	20					2100			20*	1	600	SMO	KE DETECTORS	20
21	REC - KITCHEN	1500	1	20				5300				40**	2	3800	REC	- WASHER/DRYER	22
-	REC - SUMP PUMP	750	1	20					4550					3800			24
25	ЦGHTS	1800	1	20*	••••••	***************************************	***************************************	2160			***************************************	20	1	360	REC	- KITCHENETTE	26
27	LIGHTS	1800	1	20*					2550			20**	1	750	GAS	WATER HEATER	28
29	REC - LIVING ROOM	1080	1	20*	***************************************		***************************************	2280		***************************************	***************************************	20	1	1200	DISH	WASHER	30
31	REC - DEN	900	1	20*					1620			20*	1	720	REC	- BEDROOM	32
33	OUTDOOR COMPRESSOR	2016	2	35**				2016				20	1		SPA		34
35		2016		***************************************	***************************************	***************************************		33.5	2016		***************************************	20	1	***************************************	SPA	RE	36
1000	SPACE							2880				40**	2	2880	MINI-	SPLIT SYSTEM	38
39	SPACE	***************************************		***************************************	***************************************	***************************************	***************************************		2880		***************************************			2880			4(
41	SPACE							1500				20*	1	1500	LIGH	TS	42
								23836	23476	(VA/Phas	se)					_	
	Total Connected	Load (V	(A)		17312			99.3	97.8	(Amps/F	hase)	197.	1	Total C	Connec	cted Load (Amps)	



\*\* - COORDINATE BREAKER SIZE AND PLUG CONFIGURATION WITH EQUIPMENT MANUFACTURER

**GENERAL NOTES** VERIFY MOUNTING HEIGHTS AND PLACEMENT OF ALL DEVICES BY CONTRACTOR TO COORDINATE POWER OUTLET AND TELECOMMUNICATIONS CONTRACTOR TO INSURE CIRCUIT CONDUCTORS ARE INCREASED AS NECESSARY DUE TO VOLTAGE DROP. ELECTRICAL CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER FOR INSTALLATION PRIOR TO ROGH-IN. ALL ELECTRICAL MATERIALS AND EQUIPMENT INSTALLED IN LOCATION EXPOSED TO MOISTURE OR THE ELEMENT SHALL BE WEATHERPROOF PROVIDE ALL CONDUITS FOR COMMUNICATIONS WITH CAT 5 DATA/TELEPHONE CABLE COORDINATE WITH OWNER FOR FINAL CONNECTIONS. PROVIDE ALL CONDUIT FOR TV WITH COAXIAL CABLE COORDINATE WITH LOCAL SUPPLIER FOR TYPE OF CABLE COORDINATE WITH OWNER FOR FINAL CONNECTIONS. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY ,240V RATED NEMA 1 IN DRY LOCATION, NEMA 3R WHERE INSTALLED IN ANY LOCATION EXPOSED TO THE ELEMENTS. CONTRACTOR SHALL PROVIDE FUSED DISCONNECT WITH WITH FUSES AS RECOMMENDED BY EQUIPMENT SUPPLIER. ALL LIGHTING FIXTURES TO BE APPROVED BY THE ARCHITECT/OWNER PRIOR TO ORDERING AND INSTALLING. ARCHITECT TO SELECT COLOR OF LIGHTING FIXTURES AND COORDINATE WITH ARCHITECTURAL REFLECTED CEILING AND ELEVATION PLANS FOR LOCATION AND MOUNTING HEIGHTS ELECTRICAL CONTRACTOR TO COORDINATE ALL MECHANICAL EQUIPMENT POWER REQUIREMENT, EXACTION LOCATION AND QUANTITY WITH MECHANICAL DRAWINGS PRIOR TO ROUGH-IN. ELECTRICAL CONTRACTOR TO PROVIDE HACR TYPE CIRCUIT BREAKER MECHANICAL UNIT AND ARC-FAULT CIRCUIT INTERRUPTER FOR CIRCUIT BREAKER SERVING RECEPTACLES IN THE BEDROOM. ELECTRICAL CONTRACTOR TO COORDINATE WITH UTILITY SERVICE FOR METERING UNIT REQUIREMENT. **ABBREVIATIONS** CONTR.
COOR.
COORDINATE
DWG.
EACH
ELEV.
ELEVATION
ELECT.
EQUIL
EQUIP.
EQUIL
EQUIP.
EXISTING
GEN.
GENERAL
GFI.
GROUND FAUL
HGT.
J.B.
JUNCTION BOX RISER
RETURN AIR
REFLECTED CEILING PLAN
RIGHT HAND
ROUGH OPENING
ROD AND SHELF
RADIUS
REFERENCE
RECESSED
REFRIGERATOR
REQUIRED
REVISION
ROOM
SCHEDULE
SPARE
TYPICAL
UNLESS OTHERWISE NOTE
WASHER/DRYER DRAWING
EACH
ELEVATION
ELECTRICAL
EQUIAL
EQUIPMENT
EXISTING
GENERAL
GROUND FAULT INTERRUPTER
HEIGHT
JUNCTION BOX REQ. REV. RM. SCHED. SPR. TYP. U.O.N. LIGHT
MOTION DETECTOR
MECHANICAL
METAL
MANUFACTURER
MINIMUM
MOUNTED
NOT IN CONTRACT
NOT TO SCALE
NATIONAL
NECESSARY
NUMBER WASHER/DRYER WITHOUT WATER CLOSET WATERPROOF NOTE: 75% OF LIGHT LAMPS SHALL BE HIGH EFFICIENCY

3 - #410, 1 - #46 IN 2"C-PANEL - P1 PANEL - PB NEW 250A, NEW 250A, **NEW 250A** 120 / 240 VAC, 120 / 240 VAC, SINGLE PHASE METER SINGLE PHASE -GROUND PER NEC MIN #1/0 COPPER SERVICE ENTRANCE

# **ELECTRICAL SYMBOLS**

STANDARD SWITCH — SET 38" A.F.F. — U.N.O. DUAL SWITCH STACK -SET 38" A.F.F. - U.N.O. 3-WAY SWITCH -SET 38" A.F.F. — U.N.O. 4-WAY SWITCH -SET 38" A.F.F. - U.N.O. CONVENIENCE OUTLET (AFCI)

@ 12" A.F.F. — U.N.O. CONV. OUTLET- SET 42" A.F.F. - U.N.O.

> CONVENIENCE OUTLET -1/2 SWITCHED 12" A.F.F.

GARAGE DOOR OPENER

FLOOR OUTLET

220 VOLT OUTLET

DISHWASHER OUTLET

TELEVISION OUTLET

TELEPHONE OUTLET

CONTROL CONSOLE

CEILING FAN PREWIRE PROVIDE ADEQUATE SUPPORT

DOOR CHIMES

CONV. OUTLET- GROUND FAULT INTERRUPT

CONV. OUTLET— ABOVE SET 42" A.F.F. —
GROUND FAULT INTERRUPT GROUND FAULT INTERRUPT WP/GFI CONV. OUTLET— WATERPROOF -GROUND FAULT INTERRUPT

CEILING FAN/LIGHT PREWIRE PROVIDE ADÉQUATE SUPPORT LIGHT FIXTURE WITH PULL CHAIN SURFACE MOUNTED LIGHT FIXTURE SURFACE MOUNTED LIGHT FIXTURE

VENT TO EXT. FAN - VENT TO EXTERIOR FAN/LIGHT COMBO - VENT TO EXTERIOR FAN-LIGHT COMBO

VENT TO EXT. DOORBELL - SET 32" A.F.F. RECESSED LIGHT FIXTURE

OPTIONAL RECESSED LIGHT FIXTURE THERMOSTAT

ELECTRICAL PANEL ELECTRICAL METER

FLUORESCENT LIGHT FLOOD LIGHT

SMOKE DETECTOR - AC POWERED, INTECONNECTED W/ BATTERY BACK-UP - LOCATE 4'-0" MIN. FROM RA REGISTERS (LOCATE @ HIGHEST POINT OF A VOLUME CEILING)

S.D./C.M. COMBINATION SMOKE/CARBON MONOXIDE DETECTOR ONLY IF REQ'D BY LOCAL CODE. AC POWERED, INTERCONNECTED W/ BATTERY BACK-UP LOCATE 4'-0" MIN. FROM RA REGISTERS (LOCATE @ HIGHEST POINT OF A VOLUME CEILING)

ELECTRICAL RUN --- ELECTRICAL SYMBOLS OPT. ELECTRICAL RUN

Permit No. B1805207 These plans are cond as submitted or noted during plan revi and are subject to field inspection. Approved plans must be kept on site and are needed for

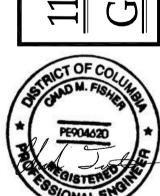
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all inspections. No changes or Enoughications to these plans. Changes require a Ferision permit with the revised plans. Is a good or mits are required for trade work. DOEE SE-SW Review - Charles Edward Mechanical Review - Wayne Ferguson

ATIONS DIVISION

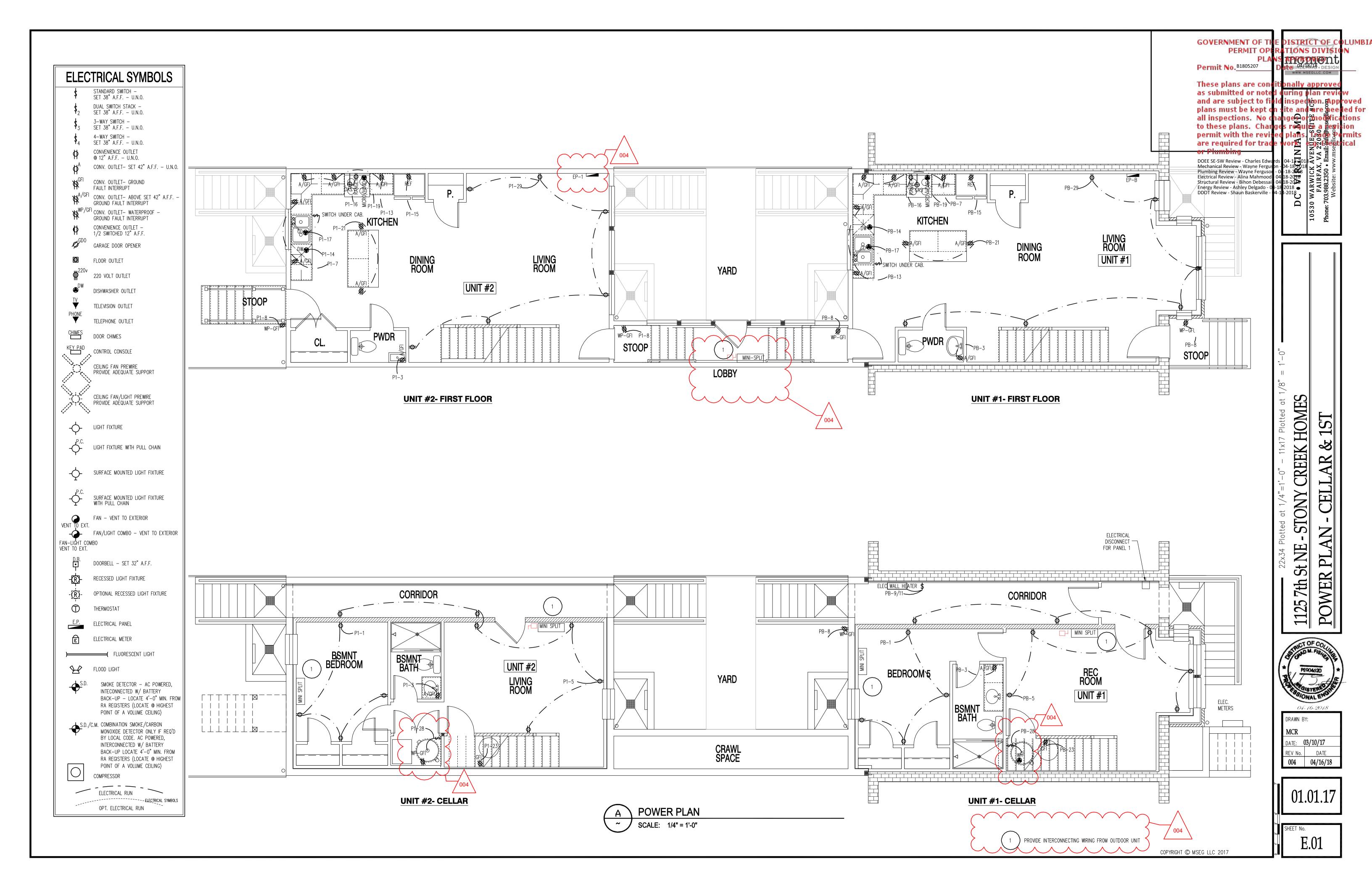
Plumbing Review - Wayne Fergusor 4 18-20<del>18</del> 4 18-20<del>28</del> Electrical Review - Alina Mahmoo Structural Review - Bihon Debessai Energy Review - Ashley Delgado - 0 DDOT Review - Shaun Baskerville -

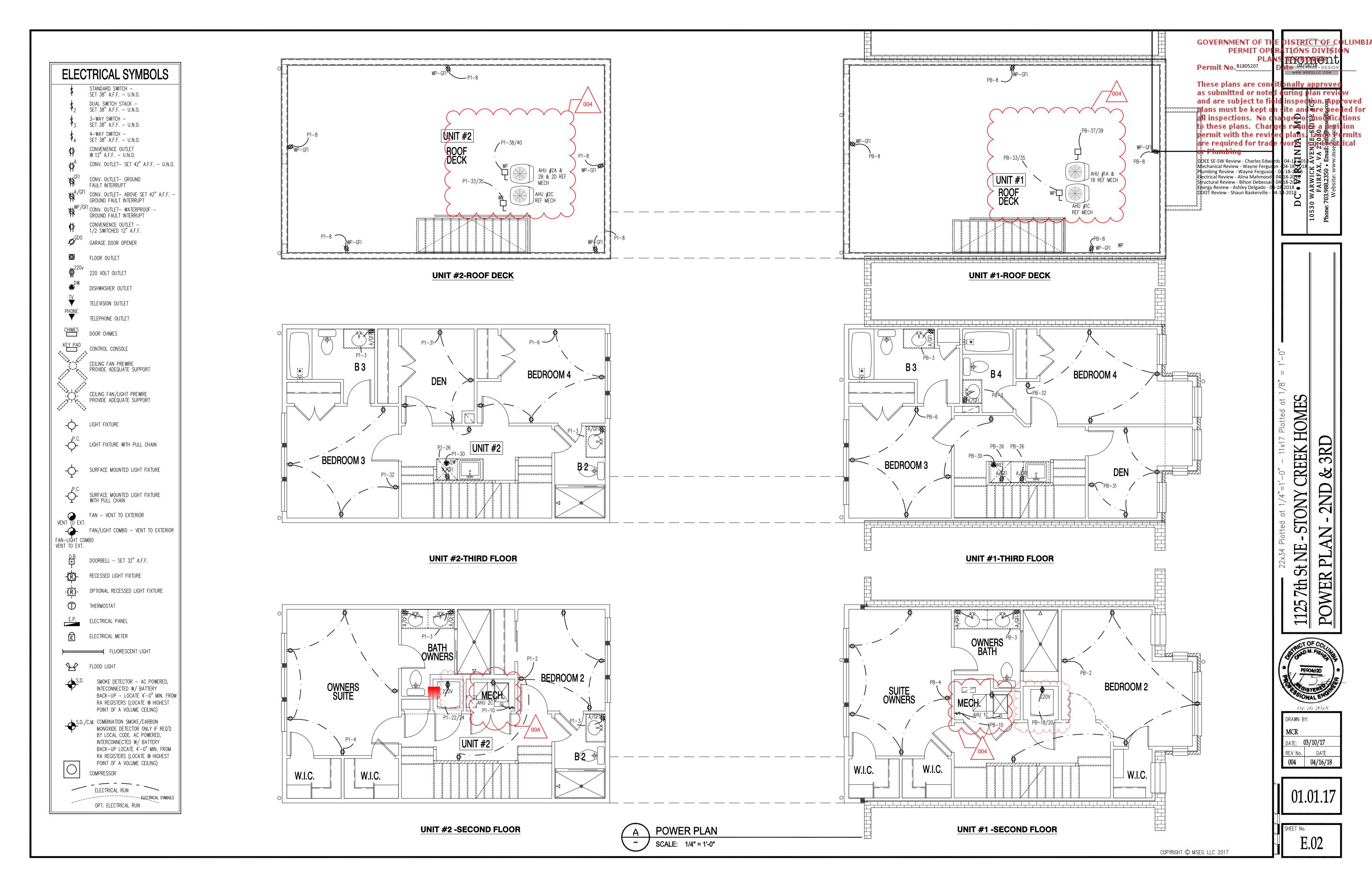
SCHEDULE HOMES ANEL CREEK Р NOTES STON St NE **GENERAL** 7th 1125

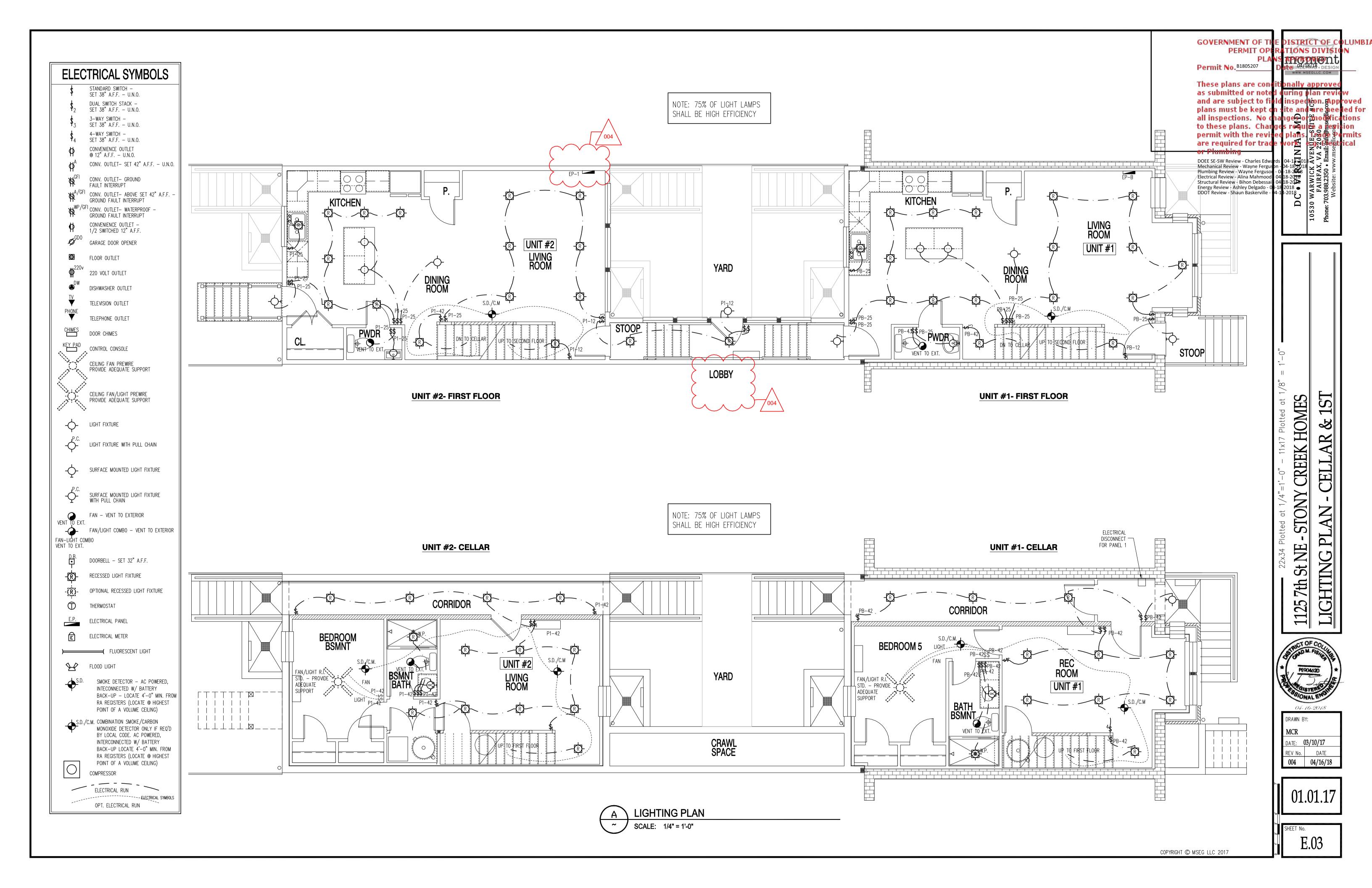


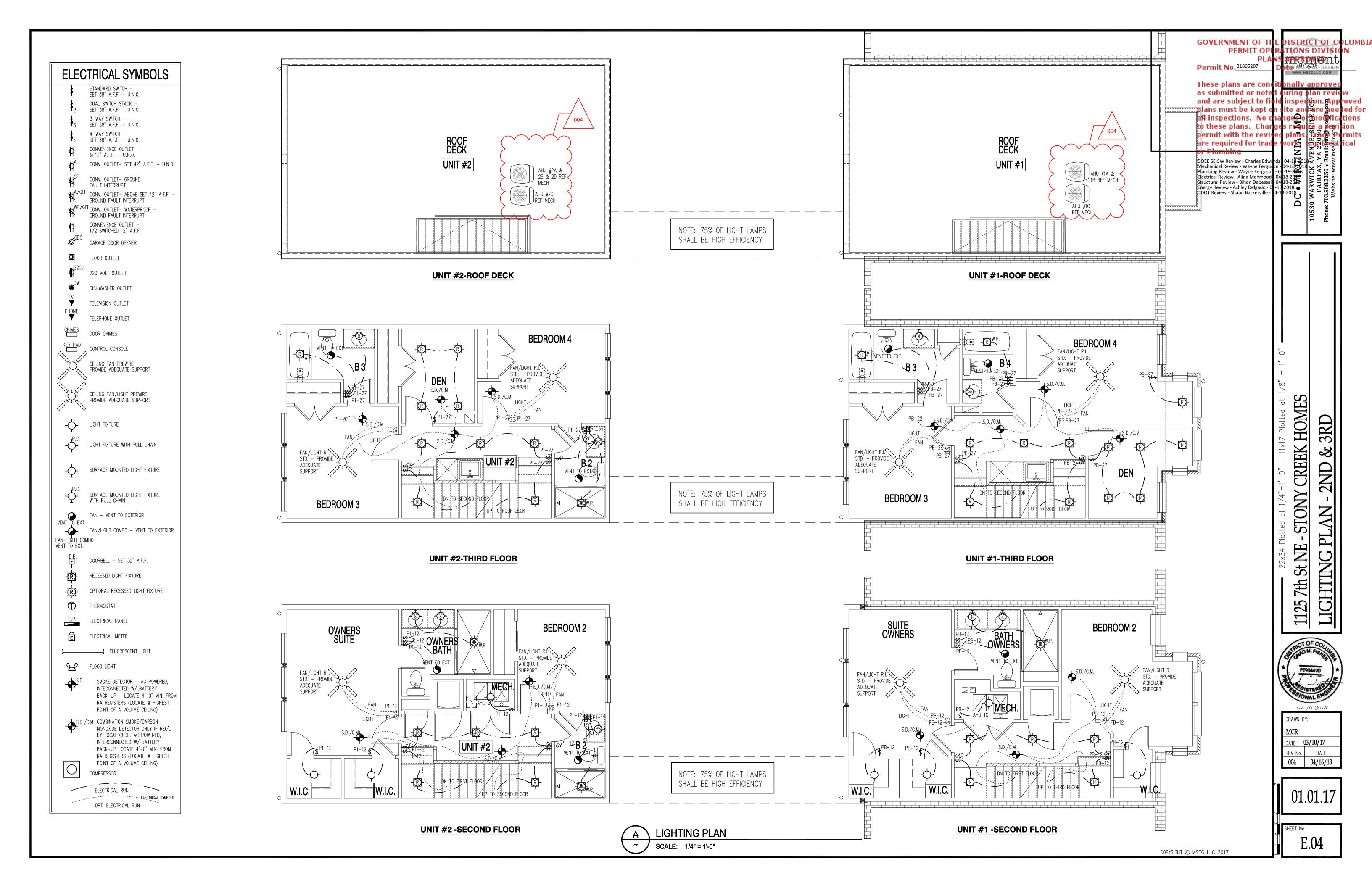
DRAWN BY: MCR DATE: **03/10/17** REV No. DATE 004 04/16/18

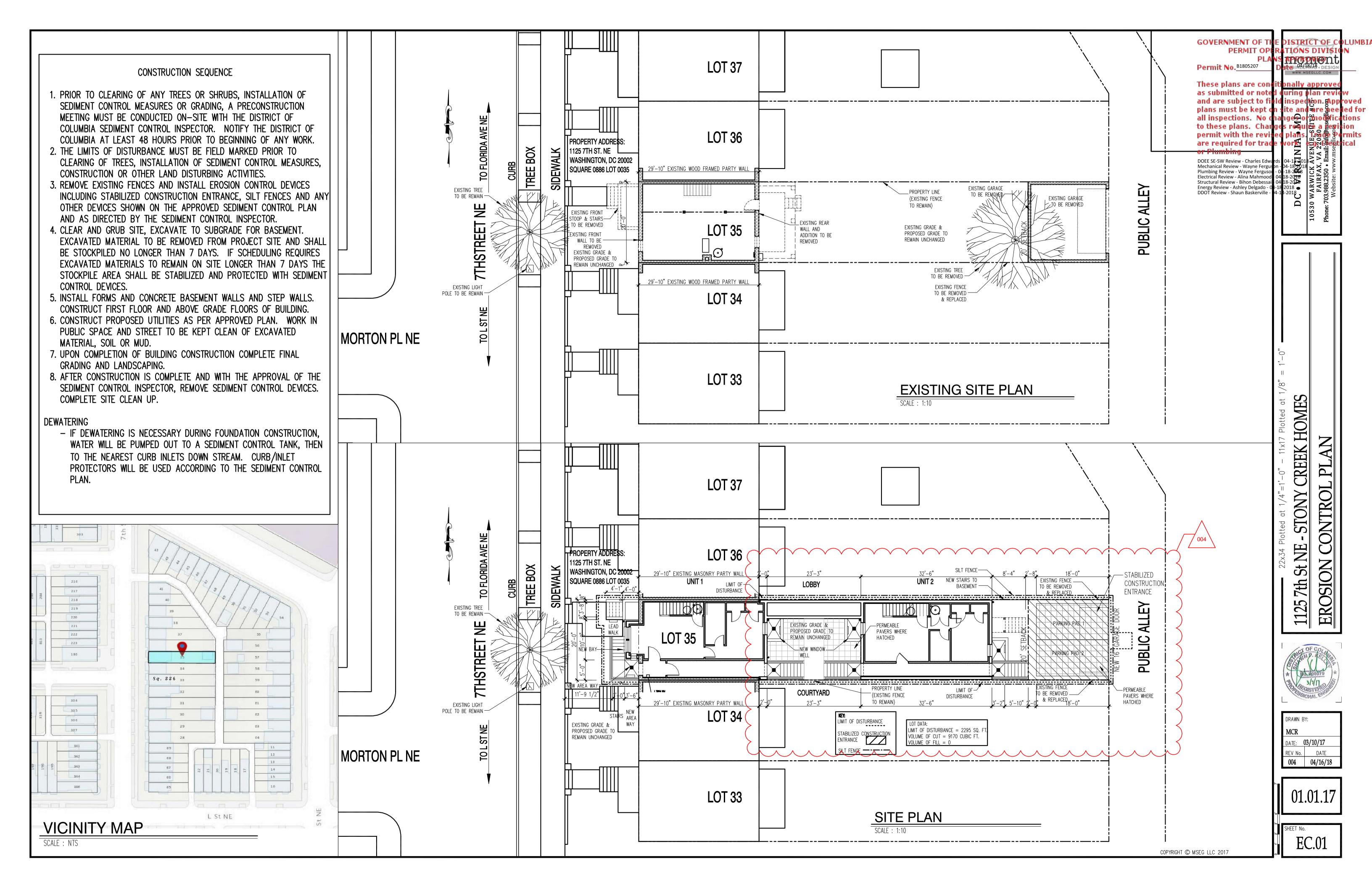
EXHIBIT NO.42B2

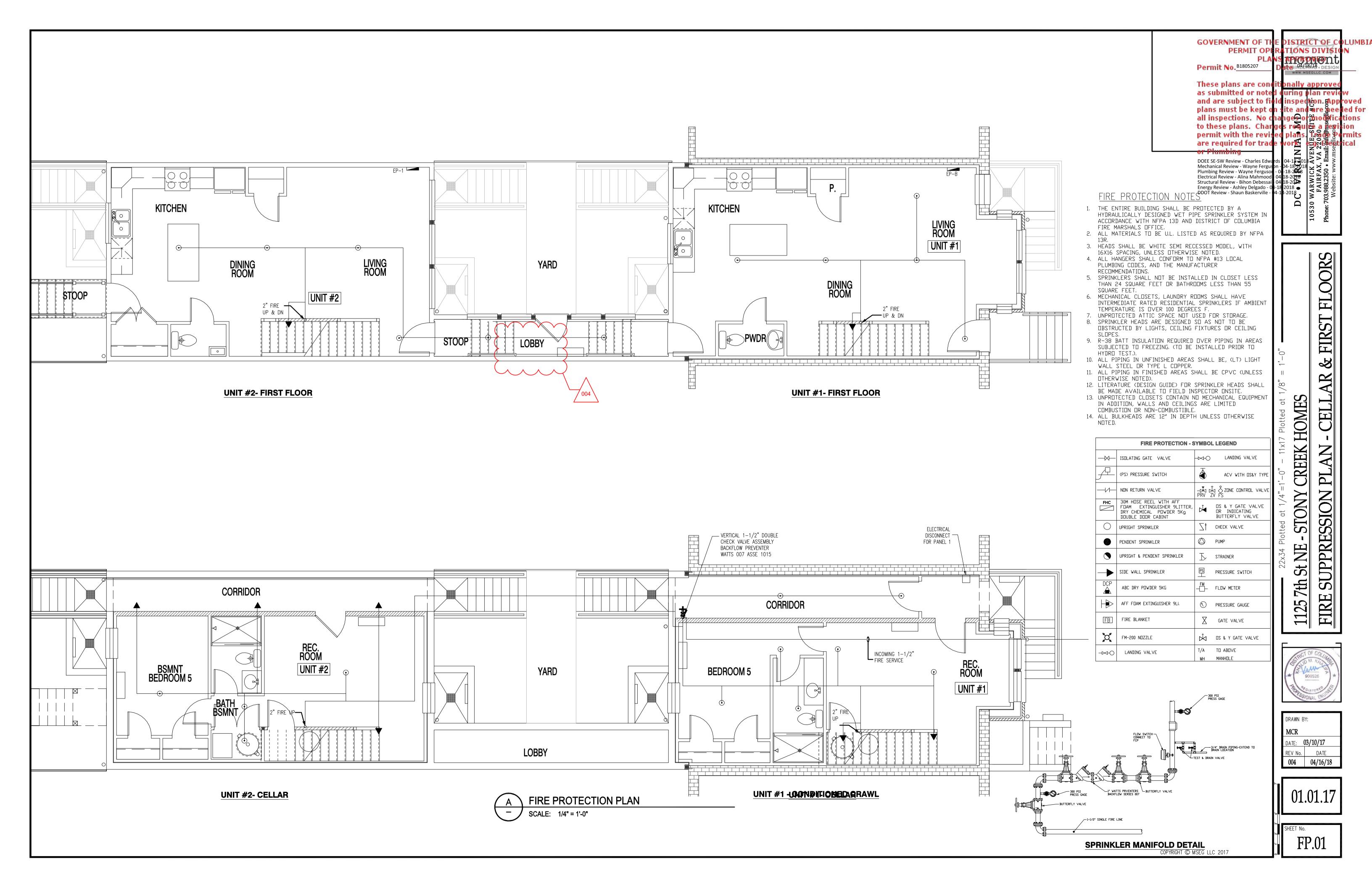


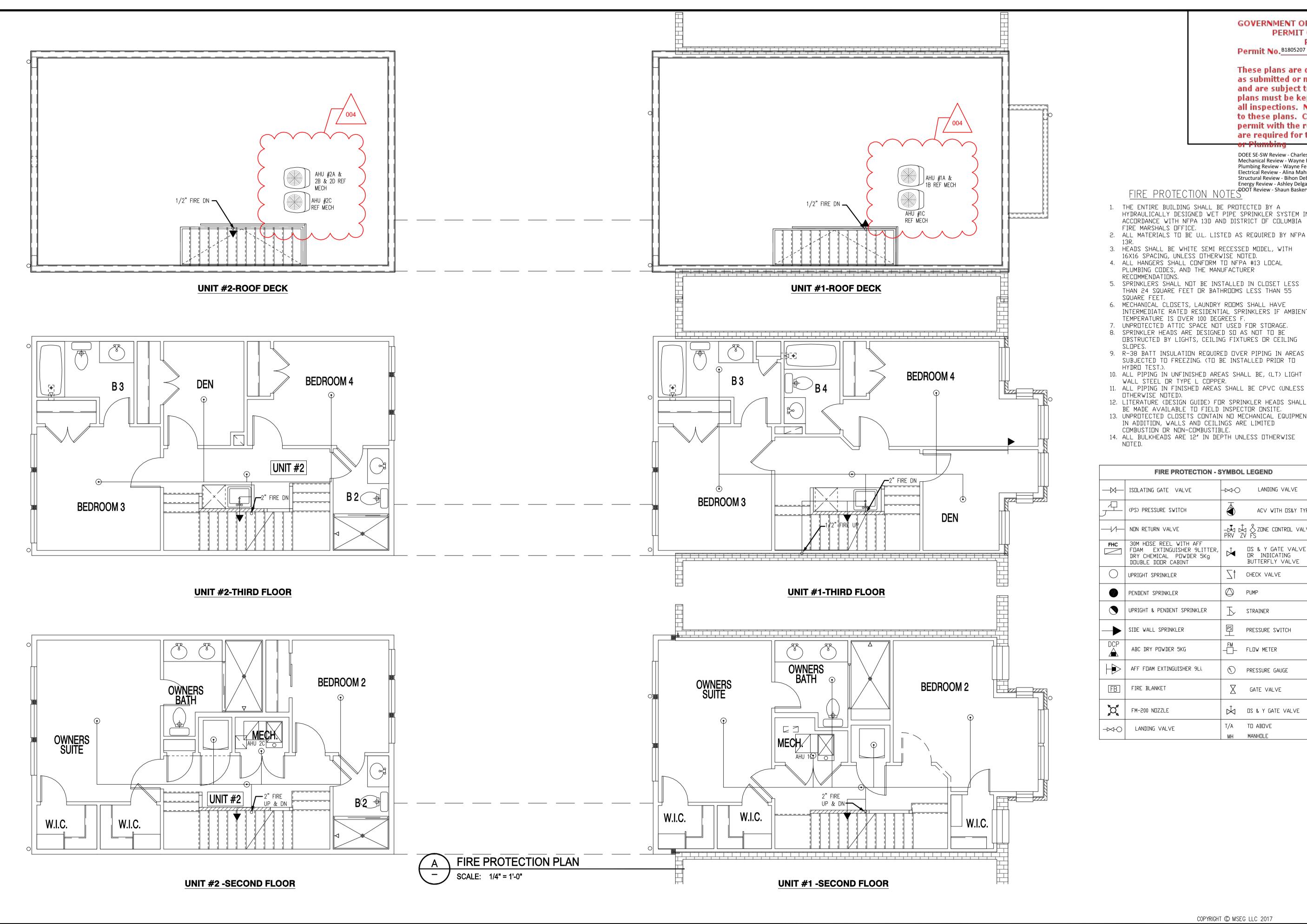












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Permit No. B1805207

These plans are cond as submitted or noted during plan rev and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans. Changes require a registion permit with the revised plans. Trace Permits are required for trade work.

DOEE SE-SW Review - Charles Edward Mechanical Review - Wayne Ferguson Plumbing Review - Wayne Fergusor Electrical Review - Alina Mahmo Structural Review - Bihon Debessai Energy Review - Bihon Debessal Energy Review - Ashley Delgado - O FIRE PROTECTION NOTES DOOT Review - Shaun Baskerville -

- 1. THE ENTIRE BUILDING SHALL BE PROTECTED BY A HYDRAULICALLY DESIGNED WET PIPE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13D AND DISTRICT OF COLUMBIA FIRE MARSHALS OFFICE.
- 2. ALL MATERIALS TO BE U.L. LISTED AS REQUIRED BY NFPA
- 3. HEADS SHALL BE WHITE SEMI RECESSED MODEL, WITH 16X16 SPACING, UNLESS OTHERWISE NOTED.
- 4. ALL HANGERS SHALL CONFORM TO NFPA #13 LOCAL PLUMBING CODES, AND THE MANUFACTURER RECOMMENDATIONS.
- 5. SPRINKLERS SHALL NOT BE INSTALLED IN CLOSET LESS THAN 24 SQUARE FEET OR BATHROOMS LESS THAN 55 SQUARE FEET.
- 6. MECHANICAL CLOSETS, LAUNDRY ROOMS SHALL HAVE INTERMEDIATE RATED RESIDENTIAL SPRINKLERS IF AMBIENT TEMPERATURE IS OVER 100 DEGREES F.
- 7. UNPROTECTED ATTIC SPACE NOT USED FOR STORAGE. 8. SPRINKLER HEADS ARE DESIGNED SO AS NOT TO BE DBSTRUCTED BY LIGHTS, CEILING FIXTURES OR CEILING
- 9. R-38 BATT INSULATION REQUIRED OVER PIPING IN AREAS SUBJECTED TO FREEZING. (TO BE INSTALLED PRIOR TO
- 10. ALL PIPING IN UNFINISHED AREAS SHALL BE, (LT) LIGHT WALL STEEL OR TYPE L COPPER.
- OTHERWISE NOTED). 12. LITERATURE (DESIGN GUIDE) FOR SPRINKLER HEADS SHALL
- BE MADE AVAILABLE TO FIELD INSPECTOR ONSITE. 13. UNPROTECTED CLOSETS CONTAIN NO MECHANICAL EQUIPMENT IN ADDITION, WALLS AND CEILINGS ARE LIMITED
- 14. ALL BULKHEADS ARE 12" IN DEPTH UNLESS OTHERWISE

	FIRE PROTECTION - S	YMBOL	LEGEND
$\longrightarrow$	ISOLATING GATE VALVE	₩	LANDING VALVE
<del></del>	(PS) PRESSURE SWITCH		ACV WITH DS&Y TYPE
	NDN RETURN VALVE	PRV Z	ZONE CONTROL VALVE V FS
FHC	30M HOSE REEL WITH AFF FOAM EXTINGUISHER 9LITTER, DRY CHEMICAL POWDER 5K9 DOUBLE DOOR CABINT	$\downarrow$	OS & Y GATE VALVE OR INDICATING BUTTERFLY VALVE
$\bigcirc$	UPRIGHT SPRINKLER	$\sum \downarrow$	CHECK VALVE
	PENDENT SPRINKLER		PUMP
	UPRIGHT & PENDENT SPRINKLER	ightharpoons	STRAINER
-	SIDE WALL SPRINKLER	PS	PRESSURE SWITCH
DCP	ABC DRY POWDER 5KG	FM ————	FLOW METER
	AFF FOAM EXTINGUISHER 9Li.	$\bigcirc$	PRESSURE GAUGE
FB	FIRE BLANKET	X	GATE VALVE
X	FM-200 NDZZLE	$\downarrow$	DS & Y GATE VALVE
<b>→</b> ⊠ <b>+</b> ○	LANDING VALVE	T/A MH	TO ABOVE MANHOLE

SECOND CREEK PI STON FIRE SUPPRESSIO 7th St NE

THIRD FLOORS

DRAWN B	Y:
MCR	
DATE:	03/10/17
REV No.	DATE
004	04/16/18

01.01.17

FP.02

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- A. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS INCLUDING BUT NOT LIMITED TO: 2012 IRC INTERNATIONAL BUILDING CODE
- B. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO EXAMINE THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS AND SPECIFICATIONS, AND SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND SHALL NOTIFY ARCHITECT AND/OR ENGINEER IF A CONDITION EXISTS WHICH PREVENTS THE CONTRACTOR FROM ACCOMPLISHING THE INTENT OF THE DRAWINGS.
- C. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL WORK AND MATERIALS TO ACCOMPLISH THE INTENT OF THE PLANS. PLANS INDICATE THE EXTENT, GENERAL CHARACTER AND LOCATION OF WORK DIAGRAMMATICALLY ONLY. WORK INDICATED BY HAVING MINOR DETAILS NOT SHOWN, SHALL BE FURNISHED COMPLETE, BY THIS CONTRACTOR, TO PERFORM THE FUNCTION INTENDED.
- D. ALL WORK AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL CODES HAVING JURISDICTION AND TO BE STRICTLY OBSERVED.
- E. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER AND/OR HIS DULY AUTHORIZED REPRESENTATIVE.
- CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLABS FOR ANY SLEEVES, INSERTS OR FOR ANY REASON WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE STRUCTURAL ENGINEER AND THE OWNER.
- G. ALL WORK AND EQUIPMENT SHALL BE THOROUGHLY CLEANED AND THE CONTRACTOR SHALL PROVIDE A NEW SET OF FILTERS IN ALL HVAC EQUIPMENT AT THE TIME OF SUBSTANTIAL COMPLETION PLUS ONE ADDITIONAL SET FOR ALL HVAC EQUIPMENTS. TO BE READY FOR THE USE OF THE OWNER BEFORE FINAL INSPECTION AND APPROVAL BY THE ARCHITECT AND/OR HIS REPRESENTATIVE.
- THE CONTRACTOR SHALL LAY OUT HIS WORK WITH THAT OF ALL OTHER TRADES AND BE RESPONSIBLE FOR ALL MEASUREMENTS, HE SHALL NOTIFY ARCHITECT AND/OR ENGINEER IF A CONDITION EXISTS WHICH PREVENTS WORK TO BE INSTALLED IN ACCORDANCE WITH THE INTENT OF THESE DRAWINGS.
- ALL MATERIAL SHALL BE NEW (UNLESS NOTED OTHERWISE ON THE DRAWINGS) AND SHALL BE OF FIRST QUALITY. THE QUALITY OF WORKMANSHIP SHALL BE THE FINEST AND HIGHEST OBTAINABLE IN EACH PARTICULAR TRADE. WORKMANSHIP SHALL BE ACCEPTABLE TO THE OWNER AND HIS DECISION AS TO ACCEPTABLE QUALITY IS FINAL; UNACCEPTABLE WORK SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT ALL SYSTEMS AND EQUIPMENT SUPPLIED SHALL BE COMPATIBLE WITH THE EXISTING BASE BUILDING SYSTEMS AND EQUIPMENT.
- IN AREAS WHERE IT IS NECESSARY TO CUT FLOORS, WALLS AND CEILINGS, THIS CONTRACTOR SHALL DO ALL CUTTING AND REPLACEMENT. BEFORE ANY CUTTING OR PATCHING, CONTRACTOR SHALL DBTAIN THE APPROVAL OF THE OWNER.
- ALL FIXTURES AND EQUIPMENT SHALL BE CONNECTED AND MADE READY FOR USE UNLESS OTHERWISE NOTED.
- K. PROVIDE FLUSH MOUNTED SUITABLE BACKBOX AT 48° AFF. TO CENTERLINE OF EACH THERMOSTAT.

#### MECHANICAL NOTES:

- CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS AND LOCATIONS OF EQUIPMENT AND PRIOR TO ANY DUCTWORK FABRICATION CONTRACTOR SHALL SUBMIT FOR APPROVAL, SHOP DRAWINGS ON ALL NEW WORK AND EQUIPMENT PRIOR TO FABRICATION AND INSTALLATION, INCLUDING EQUIPMENTS SPECS AND DUCTWORK LAYOUT AND SOUND ISOLATION DEVICES.
- PROPER MOUNTINGS FOR ALL EQUIPMENT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SHALL BE INSTALLED BY THIS CONTRACTOR. PROVIDE APPROVED TYPE VIBRATION DAMPENING MEDIA WHEREVER CALLED FOR BY THE MANUFACTURER BETWEEN EQUIPMENT AND THE FLOOR OR CEILING. ISOLATORS SHALL BE MASON INDUSTRIES OR APPROVED EQUAL AND/OR AS NOTED ON DETAILS. SEE VIBRATION ISOLATION SCHEDULE.
- 3. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO INSTALL THE HEATING, VENTILATION AND AIR CONDITIONING SYSTEM SO AS TO INSURE QUIET OPERATION. NO VIBRATION OR SOUND SHALL BE TRANSMITTED TO THE BUILDING STRUCTURE OR OCCUPIED AREAS. THE DECISION OF THE ENGINEER AS TO QUIETNESS OF THE SYSTEM AND EQUIPMENT SHALL BE FINAL. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO CORRECT OR REPLACE ANY NOISY SYSTEMS OR EQUIPMENT AS REQUIRED.
- PHYSICAL DIMENSIONS AS WELL AS COOLING, HEATING CAPACITIES AND ELECTRICAL CHARACTERISTICS OF SUBMITTED UNITS SHALI MATCH THAT OF SPECIFIED EQUIPMENT, MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL COSTS DUE TO CHANGES RELATED TO SUBSTITUTED EQUIPMENT
- COORDINATE WITH ELECTRICAL CONTRACTOR TO INSURE N.E.C. REQUIRED CLEARANCES FROM DUCTWORK, PIPING, ETC ARE MAINTAINED AROUND ELECTRICAL EQUIPMENT (PANEL BOARDS, SWITCHBOARDS, DISCONNECTS, ETC.)/
- CONTRACTOR SHALL REFER TO THE ELECTRICAL DRAWINGS FOR THE PROPER ELECTRICAL CHARACTERISTICS FOR ALL MOTORS, HEATERS, AND ALL OTHER ELECTRICAL DEVICES FURNISHED BY THE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL REQUIRED ELECTRICAL CONNECTIONS AND CIRCUITS, ETC. REQUIRED FOR MECHANICAL EQUIPMENT, HEATERS, CONTROLS, ETC.
- CONTRACTOR SHALL SUPPLY AND INSTALL ALL NECESSARY DUCT ACCESSORIES; SUCH AS VOLUME DAMPERS, FIRE DAMPERS, TURNING VANES, DUCT HARDWARE, DUCT ACCESS DOORS, FLEXIBLE CONNECTIONS, AND CEILING ACCESS DOORS. THE DUCTWORK SHALL COMPLY WITH SMACNA DUCT CONSTRUCTION STANDARDS. COORDINATE INSTALLATION OF DUCT ACCESSORIES WITH OTHER WORK.
- 8. PROVIDE FLEXIBLE DUCT CONNECTIONS WHEREVER DUCTWORK CONNECTIONS TO VIBRATION ISOLATED EQUIPMENT. CONSTRUCT FLEXIBLE CONNECTIONS OF NEOPRENE-COATED FLAMEPROOF FABRIC CRIMPED INTO DUCT FLANGES FOR ATTACHMENT TO DUCT AND EQUIPMENT, MAKE AIRTIGHT JOINT, PROVIDE ADEQUATE JOINT FLEXIBILITY TO ALLOW FOR THERMAL, AXIAL, TRANSVERSE, AND TORSIONAL MOVEMENT, AND ALSO CAPABLE OF ABSORBING VIBRATIONS OF CONNECTED EQUIPMENT.
- RECTANGULAR DUCTVORK: ALL DUCTVORK SHALL CONFORM TO THE RECOMMENDED CONSTRUCTION FOR LOW AND MEDIUM PRESSURE DUCTWORK AS APPROVED BY THE SHEETMETAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION. SEAL CLASS "C" FOR ALL LOW PRESSURE DUCTWORK; SEAL CLASS "A" FOR HIGH PRESSURE DUCTWORK, ALL DUCTS SHALL BE MADE OF THE BEST GRADE GALVANIZED SHEET STEEL. THE GAUGE OF THE SHEET STEEL AND DUCT SUPPORTS SHALL CONFORM TO SMACNA STANDARDS. EXPOSED ROUND DUCT SHALL BE SPIRAL LOCKSEAM OR LONGITUDINAL WELDED SEAM AS MANUFACTURED BY UNITED MCGILL SHEET METAL COMPANY. MODELS UNISEAL, UNICOAT, OR LONGITUDINAL SEAM.
- 10. FLEXIBLE DUCT: SHALL BE SUPPLIED AND INSTALLED FOR CONNECTIONS BETWEEN LOW PRESSURE MAIN AIR SUPPLY DUCTS AND CEILING DIFFUSERS AND LINEAR DIFFUSERS. FLEXIBLE DUCT TO BE SMOOTH INTERIOR WITH NO SPIRAL SEAM FOR LOW PRESSURE DROP. DUCT SHALL MEET NFPA 90A AND 90B AND UL-181 CLASS 1 AIR DUCT AND SHALL WITHSTAND TEMPERATURES OF 0 DEGREES F TO 250 DEGREES F AND PRESSURE OF 6' WG. WITHOUT LEAKAGE. DUCT SHALL BE GENFLEX WITH 1' INSULATION AND VAPOR BARRIER TYPE IMPR OR APPROVED EQUAL.
- 11. FLEXIBLE DUCT: PROVIDE INSULATED U.L. LISTED CLASS 1 DUCT COMPLYING WITH NFPA 90A, FLEX MASTER, THERMAFLEX, WIRE MOLD OR CLEVAFLEX.

### 12. AIR DEVICES

CR

- A. PROVIDE TITUS AIR DEVICES AS INDICATED ON PLANS AND SCHEDULED EQUAL TO THE FOLLOWING TITUS MODEL NUMBER:
- WITH #25 WHITE FINISH. NO SUBSTITUTIONS SHALL BE CONSIDERED OR PERMITTED. PROVIDE REGISTERS WITH DAMPERS.
- SUPPORT ALL AIR DEVICES INDEPENDENT OF CEILING GRID SYSTEM.
- ADJUST ALL PATTERN CONTROLLERS OR INSTALL BLOW CLIPS TO PROVIDE DISCHARGE PATTER INDICATED. E. PROVIDE AIR DEVICES AS FOLLOWS:

<u>DEVICE</u>

☐ A MINIMUM ☐F R-6.

SUPPLY REGISTER

TITUS MODEL <u>FRAME TYPE</u>

INSULATE (D.A.) AND SUPPLY AIR DUCTWORK WITH GLASS FIBER 2" THICK, 1.5 LB./FT3 DENSITY DUCT WRAP, MIN R-6 FACED WITH A REINFORCED ALUMINUM FOIL KRAFT WITH VAPOR BARRIER FACING AND A 2° TAPING FLANGE. CERTAINTEÉD CUT WRAP OR EQUIVALENT. EXTERIOR DUCT WORK SHALL BE LINED WITH 2-1/2" THICK DUCT LINER BOARD MIN R-8. SUPPLY DUCTS LOCATED N ATTICS SHALL BE INSULATED TO A MINIMUM OF R-8. ALL OTHER DUCTS SHALL BE INSULATED

- 14. CONDENSATE DRAIN PIPING: SCHEDULE 40, CPVC PIPE AND FITTINGS: ASTM F 441/F 441M, WITH PLAIN ENDS FOR SOLVENT-CEMENTED JOINTS WITH ASTM F 438, SOCKET-TYPE FITTINGS. PITCH AT MINIMUM 1 PERCENT SLOPE. PROVIDE MINIMUM 2 INCH DEEP TRAP AT EACH A/C UNIT. INSULATE WITH 1/2 INCH THICK INSULATION.
- 15. DUCTWORK EXPOSED ON ROOF SHALL BE ALUMINUM CONSTRUCTION W/ WATER PROOF SEAMS & JOINTS.
- 16. PROVIDE AUTOMATIC TEMPERATURE CONTROL SYSTEMS TO AFFECT COMPLETE, OPERATING SYSTEMS, PROGRAMMABLE THERMOSTAT. MOUNT NEST THERMOSTATS AT 60" AFF. VIF LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION, THERMOSTATS LOCATED IN ACCESSIBLE UNITS SHALL BE LOCATED AT A MAX 48' AAF PER ANSI 117.1, 308. OPERATING TEMPS 32F TO 104F.THERMOSTATIC CONTROLS HAVE A 5 DEGREE F DEADBAND HEATING: 1, 2 AND 3 STAGES, COOLING: 1 AND 2 STAGES, HEAT PUMP: WITH AUXILIARY AND EMERGENCY HEAT.

- 17. PROVIDE REQUIRED ATC POWER CONNECTIONS TO CIRCUIT BREAKER PANELS.
- 18. DEMONSTRATE SYSTEM OPERATION TO OWNER.
- 19. PROVIDE AUTO./ GRAVITY DAMPERS INSTALL ON ALL INTAKES/ EXHAUSTS.
- 20. PROVIDE 18 GAUGE GALVANIZED SHEET METAL SLEEVES FOR ALL PIPE AND DUCT PENETRATIONS THROUGH CONCRETE FLOORS AND MASONRY WALLS. PACK VOID SPACE WITH FIRE PROOF INSULATION AND /OR NOTED IN DETAILS.
- 21. DBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR THE WORK.
- 22. PERFORM THE WORK IN ACCORDANCE WITH ALL APPLICABLE LOCAL & NATIONAL CODES.
- 23. DUCTWORK DIMENSION SHOWN ON DRAWINGS ARE SHEETMETAL DIMENSIONS. NET FREE AREA SHALL BE SHEETMETAL DIMENSIONS LESS THE LINEAR THICKNESS ON LINED DUCTWORK...
- 24. BALANCE DAMPERS: SHALL BE INSTALLED WHERE INDICATED AND/OR REQUIRED FOR PROPER BALANCING OF SYSTEM.
- 25. INSTALL ALL DUCTWORK ABOVE CEILING AND HOLD TIGHT TO UNDERSIDE OF STRUCTURE ABOVE UNLESS OTHERWISE INDICATED. SPIRAL DUCT SHALL BE INSTALLED WITH CONCENTRIC.
- 26. ALL RETURN AIR DUCT OPENINGS ABOVE CEILING SHALL BE COVERED WITH 1/2" MESH SCREEN.
- 27. CHANGES TO DUCT DUE TO FIELD CONDITIONS SHALL BE MADE ONLY IF THE DUCT SIZE FREE AREA IS MAINTAINED AND SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL.
- 28. FLEXIBLE CONNECTORS:
- A. PROVIDE FLEXIBLE CONNECTORS AT THE INLET AND DUTLET CONNECTION FOR EACH FAN AND AIR HANDLING UNIT.
- B. EACH FLEXIBLE CONNECTOR SHALL ALLOW 1' OF FREE MOVEMENT AND SHALL BE COMPLETELY AIR TIGHT.

CONDITIONED FLOOR AREA WHEN TESTED AT 25PA DIFFERENTIAL PRESSURE.

- C. PROVIDE NEOPRENE COATED GLASS FABRIC MATERIAL, MINIMUM 30 DZ. PER SQUARE YARD. D. CONTRACTOR SHALL BRACE DUCTWORK (AS REQUIRED) AT ALL FLEXIBLE CONNECTORS TO ENSURE THAT DUCTWORK IS KEPT IN
- 29. TURNING VANES: PROVIDE SINGLE THICKNESS TURNING VANES OF GALVANIZED STEEL IN ALL MITERED ELBOWS 30° OR GREATER.
- 30. LEAKAGE: A. ALL DUCT JOINTS SHALL BE SEALED WITH HARD CAST 601. SPIRAL DUCTWORK JOINTS AND FITTINGS SHALL BE SEALED WITH UNITED
- MCGILL SEALER. B. TESTING IS PERFORMED BY USING TEST EQUIPMENT TO VERIFY HOW MUCH LEAKAGE EXISTS IN THE DUCTWORK.THIS
- DUCT LEAKAGE SHALL BE VERIFIED BY EITHER OF THE FOLLOWING: 1-A POST CONSTRUCTION TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 8 CFM PER 100 SQUARE FEET OF
- CONDITIONED FLOOR AREA WHEN TESTED AT 25PA DIFFERENTIAL PRESSURE. 2-ROUGH IN TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM PER 100 SQUARE FEET OF
- C. PERFORM ALL TESTING AFTER THE SEALS HAVE CURED COMPLETELY AND BEFORE COVERING WITH INSULATION OR CONCEALING
- D. AIR HANDLERS SHALL HAVE A MANUFACTURER'S DESIGNATION FOR AIR LEAKAGE OF NO MORE THAN 2 PERCENT OF THE DESIGN AIR FLOW RATE WHEN TESTED IN ACCORDANCE WITH ASHRAE 193.
- A. AN INDEPENDENT CONTRACTOR WITH NEBB OR AABC CERTIFICATION SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES AND PERFORM ALL OPERATIONS REQUIRED FOR COMPLETE BALANCING OF THE AIR SYSTEMS AND RELATED WORK AS INDICATED ON
- THE DRAWINGS AND SPECIFIED HEREIN. B. BALANCING SHALL NOT BE PERFORMED UNTIL ALL MECHANICAL EQUIPMENT IS PROPERLY INSTALLED AND IS 100% OPERATIONAL, ALL FEMPERATURE CONTROLS ARE INSTALLED AND CALIBRATED AND ALL SYSTEMS ARE CLEANED.
- C. IT IS THE INTENT OF THIS SPECIFICATION TO INSURE THAT THE ENTIRE PROJECT IS SUBSTANTIALLY COMPLETE SO THAT ALL COMPONENTS OF ALL MECHANICAL SYSTEMS CAN BE PUT INTO NORMAL OPERATION WITH ALL WINDOWS AND DOORS CLOSED AND WORK IN A PIECEMEAL FASHION.
- 32. QUALITY ASSURANCE: SUBMIT TO OWNER THREE (3) COPIES OF BALANCING AND TESTING RECORDS OF TESTS SPECIFIED HEREIN SHOWING THE AIR DISTRIBUTION SYSTEMS HAVE BEEN BALANCED AND ARE DELIVERING SPECIFIED QUANTITIES.
- 33. EACH PIECE OF EQUIPMENT SHALL BE IDENTIFIED AS TO LOCATION, SERVICE, MANUFACTURER AND MODEL NUMBER. THIS INFORMATION SHALL BE RECORDED AND INCLUDED IN THE FINAL BALANCE REPORT.
- 34. AFTER ADJUSTMENTS ARE COMPLETE, THE AIR CONDITIONING, HEATING, AND VENTILATING SYSTEMS SHALL BE TESTED, AND THE FOLLOWING INFORMATION RECORDED AND INCLUDED IN THE FINAL BALANCE REPORT:
- (1) EACH AIR DEVICE SHALL BE IDENTIFIED AS TO LOCATION AND SERVICE. (2) SIZE, TYPE AND MANUFACTURER OF AIR DEVICES LISTED. (3) REQUIRED CFM AND TEST RESULTANT CFM EACH AIR DEVICE
- 35. AFTER THE SYSTEMS HAVE BEEN BALANCED AND ALL ADJUSTMENTS COMPLETED, RUN A SIX HOUR TEST ON BOTH HEATING AND COOLING CYCLE TO DETERMINE IF SYSTEM IS RESPONDING TO TEMPERATURE CONTROLS. THERMOSTAT SETTING, THERMOSTAT TEMPERATURE READING, AND AN INDEPENDENT TEMPERATURE MEASUREMENT AT THE THERMOSTAT SHALL BE RECORDED AT EACH THERMOSTAT
- 36. BUILDING CAVITIES SHALL NOT USED AS DUCTS OR PLENUMS.
- 37. DUCT LINING SHALL BE 1" THICK SEMI-RIGID, COATED, GLASS FIBER BONDED BOARD, 3 LB. DENSITY. WHERE DUCTWORK ACOUSTICALLY LINED, ADDITIONAL INSULATION IS NOT REQUIRED ON THE EXTERIOR SURFACE. CERTAINTEED UL TRALITE DUCT LINER OR EQUIVALENT.
- 38. OBTAIN ALL PERMITS AND UPON COMPLETION OF WORK, PRESENT THE OWNER WITH A CERTIFICATE OF FINAL INSPECTION FROM LOCAL AUTHORITY.
- 39. REFRIGERANT PIPING SHALL BE INSULATED WITH 1" FOAMED PLASTIC OF CLOSED CELL STRUCTURE,"K" VALUE OF < 0.27 MAXIMUM AT 75 F. MAXIMUM WATER VAPOR TRANSMISSION RATING OF 0.20 PERM. APPLY WITH EDGES TIGHTLY BUTTED, SEAL JOINTS WITH VAPOR BARRIER TAPE OR SEALER. WHERE INSULATION IS LOCATED OUTDOOR, THE INSULATION SHALL BE PROTECTED FROM WEATHER AT ALL TIMES AND BE APPLIED DURING TIMES WHEN WEATHER IS CLEAR, PROTECT UNFINISHED INSULATION BY COVERING WITH WEATHERPROOF MATERIAL. INSULATION SHALL BE CONTINUOUS THROUGH THE WALLS. TO ROOF EQUIPMENT SHALL BE NEATLY SUSPENDED AND SUPPORTED ON UNITRUST OR WITH OTHER SUPPORTS TO BUILDING
- STRUCTURE AND SHALL NOT BE ATTACHED TO ROOF OR SEAL ON ROOF W/O INTERMSONTE WD OR METAL BLOCKING AND A SECONDARY ROOF MEMBRANE PROTECTIVE SHEET SUPPLIED BY ROOF MEMBRANE MANUFACTURER. INSULATION SHALL BE AP ARMAFLEX WITH SELF-SEALING JOINT. PROVIDE ULTRAVIOLET RESISTANT FINISH ON EXTERIOR ARMAFLEX INSULATION OR
- APPROVED EQUAL, REFRIGERANT SUCTION LINE: INSULATE WITH 3/4 INCH THICK ARMAFLEX MATERIAL. 40 ALL MECH. VENT. SYSTEM FANS NOT RART OF TESTED & LISTED HVAC EQUIPMENT SHALL MEET EFFICACY AND AIR FLOW

### SPLIT SYSTEM HEATPUMP AC UNIT-1A&1B

SPLIT SYSTEM GAS FIRED AC UNIT-2A&2 NDOOR UNIT(AHU-3&4)- TRANE HORIZONTAL FURNACE MODEL "TUH1B080A9421C" HANDLING UNIT MODEL'MSZ-GE06NA-8', 'MSZ-GE12NA-8'. AIR LEAKAGE SHALL BE 2% DR LESS . 1400 CFM @ 0.5″ E.S.P., HEATING CAPACIT || AHU-XA & XB "MSZ-GEO6NA-8"

- 7 MBH GAS INPUT, 73.15 MBH GAS DUTPUT. DX-C: TRANE CASED COIL MODEL "4TXCD008DS3" 42000 BTUH TOTAL AND 41000 BTUH SENSIBLE COOLING CAPACITY @ 95°F AMBIENT TEMPERATURE &
- ARI STANDARDS. ELECTRIC CHARACTERISTICS:
- 1- FAN MOTOR 1/24 HP
- 2- 115 VOLTS, 1 PHASE 3- MCA 10.2
- 4- M□CP 15
- OUTDOOR UNIT (ACCU-3&4)
- TRANE MODEL "4TTR6042A1"TO HAVE NOMINAL CAPACITY OF 42000 BTUH WIT 40° SST MIN SEER 16 PROVIDE LOW AMBIENT CONTROL DOWN TO 0°F
- ELECTRIC CHARACTERISTICS: 1- COMPRESSOR 1 @ 16.7 RLA/ 109 LRA
- 2- FAN 1 @ 1/8 HP 3- 240 VOLTS, 1 PHASE
- 4- MCA 21
- 5- MOCP 35

INDOOR UNIT(AHU-XA,XB&XC)-MITSUBISHI HORIZONTAL WALL MOUNTED DUCT-FREE AIR

- 6.000 BTUH TOTAL COOLING CAPACITY € ARI STANDARDS, PROVIDE W/ COND PUMP.
- || ELECTRIC CHARACTERISTICS: 1- MCA = 12- 240 VOLTS, 1 PHASE
- AHU-XC "MSZ-GE12NA-8"
- 12,000 BTUH TOTAL COOLING CAPACITY € ARI STANDARDS. PROVIDE W/ COND PUMP. ELECTRIC CHARACTERISTICS 1-MCA=12- 240 VOLTS, 1 PHASE
- DUTDOOR UNIT (ACCU-1&2)
- MITSUBISHI MODEL "MXZ-2C24NAHZ" TO HAVE TOTAL CAPACITY OF 23.6 MBH WITH 40° SST MIN SEER 19
- ELECTRIC CHARACTERISTICS 1- COMPRESSOR 1 @ 20 RLA, 28.8 LRA
- 2- FAN 1 € 1/5 HP
- 3- 240 VOLTS, 1 PHASE 4- MCA 30
- 5- MOCP 40
- OR APPRO∨ED EQUAL

## BUILDING THERMAL ENVELOPE

bracket I & II

1 Long screw

(ST4.2X20)

CEILING FAN DETAII

VANES

DX COIL

GAS-FIRED AIR HANDLING UNIT DETAIL

FLOOR/

2" DIAGRAM PVC

VENT/EXHAUST

LINES (SEE DETAIL)

VOLUME/

DAMPER

MOTORIZED

□.A. DUCT

INSTALLED IN

-GAS VENT &

COMBUSTION AIR

↓ GAS LINE

MANUFACTURER'S

PLUG VALVE

-2″ DIAGRAM P∨C

INTAKE/COMBUSTION

--- UNION

₹ DIRT LEG

TESTING. THE BUILDING OR DWELLING UNIT SHALL
BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF LESS THAN OR EQUAL TO 3 AIR CHANGES PER HOUR AT A PRESSURE OF 0.2 INCHES V.G. (50 PA). TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES V.G. (50 PA). VHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS

OF THE TEST SHALL BE SIGNED BY THE
PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL.
TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL
ENVELOPE, TESTING SHALL BE CONDUCTED IN ACCORDANCE

HORIZONTAL VENT TERMINAL/COMBUSTION AIR INLET

VITH A METHOD APPROVED BY THE CODE OFFICIAL INCLUDING, BUT NOT LIMITED TO, AN APPROVED SAMPLING PROTOCOL.

DURING TESTING:

1. EXTERIOR VINDOVS AND DOORS, FIREPLACE AND STOVE DOORS SHALL BE CLOSED, BUT NOT SEALED, BEYOND THE INTENDED VEATHERSTRIPPING OR OTHER INFILTRATION CONTROL MEASURES; 2. DAMPERS INCLUDING EXHAUST, INTAKE, MAKEUP AIR, BACKDRAFT AND FLUE DAMPERS SHALL BE CLOSED, BUT NOT SEALED BEYOND INTENDED INFILTRATION CONTROL MEASURES;

3. INTERIOR DOORS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE OPEN;
4. EXTERIOR DOORS FOR CONTINUOUS VENTILATION SYSTEMS AND HEAT RECOVERY VENTILATORS SHALL BE CLOSED AND SEALED;
5. HEATING AND COOLING SYSTEMS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE TURNED OFF; AND
6. SUPPLY AND RETURN REGISTERS, IF INSTALLED AT THE TIME OF THE TEST, SHALL BE FULLY OPEN.

			F	A	N		S C E	I E D	U L E		
NO.	AREA	FAN	CFM/	CFM	S.P.	MAX.	DRIVE	MOT	TOR .	CONTROL	BASIS OF DESIGN
NU.	SERVED	TYPE	WATT e0.1" SP		INCH	RPM		H.P(WATTS)	VOLTS/PH	INTERLOCK	" PANASONIC "
F-1	TOILET ROOMS	CEILING	3.8	80	0.25	1000	DIRECT	31	120V/1ø	WALL SWITCH	FV0811VFL5

<u>MOTES:</u> 1.ALL APT. TOILET EXHAUST FANS SHALL BE FURNISHED WITH LIGHT, RADIATION DAMPER & FACTORY INSTALLED THREE SPEED SWITCH FOR BALANCING.

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GOVERNMENT OF

Permit No. B1805207

These plans are conditionally approve

as submitted or noted during plan revi

permit with the revised plans. I race

are required for trade work

DOEE SE-SW Review - Charles Edwa

Mechanical Review - Wayne Fergus

Plumbing Review - Wayne Ferguso

Structural Review - Bihon Debessai

DUCT UNDER POSITIVE 中代 图像 图 - Alina Mahmo

DUCT UNDER NEGATI For By Review - Shaun Baskerville -

SQUARE ELBOW WITH TURNING VANES

ROUND TO RECTANGULAR TRANSITION

FIRE / SMOKE COMBINATION DAMPER

DUCT INCLINED RISE IN DIRECTION OF FLOW

DUCT INCLINED DROP IN DIRECTION OF FLOW

INDICATES ROUND DUCT DIA. (INCHES)

DESIGNATION FOR AIR HANDLING UNIT

DESIGNATION FOR AIR COOLED CONDENSING UNI

1" SOUND LINED DUCT - SHEET METAL

**NEW DUCTWORK** 

FLEXIBLE CONNECTION

MOTORIZED DAMPER

BALANCING DAMPER

BACKDRAFT DAMPER

REFRIG. PIPE-LIQUIDE REFRIG. PIPE-SUCTION

CONDENSATE DRAIN

LOUVERED DOOR

DIMENSION SHOWN

THERMOSTAT

-APARTMENT

APARTMENT

FLOOR DRAIN

TOP REGISTER

COMBUSTION AIR

CEILING REGISTER

BOTTOM OF DUCT ELEVATION

BOTTOM OF EQUIPMENT ELEVATION

**—**UNIT TYPE

1" MAXIMUM

SWITCH

—UNIT TYPE

12"ø

12X12-SL

ACCU-11

BOD

PIPE SLOPE DIRECTION

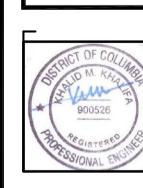
FIRE DAMPER

and are subject to field inspection. Approved

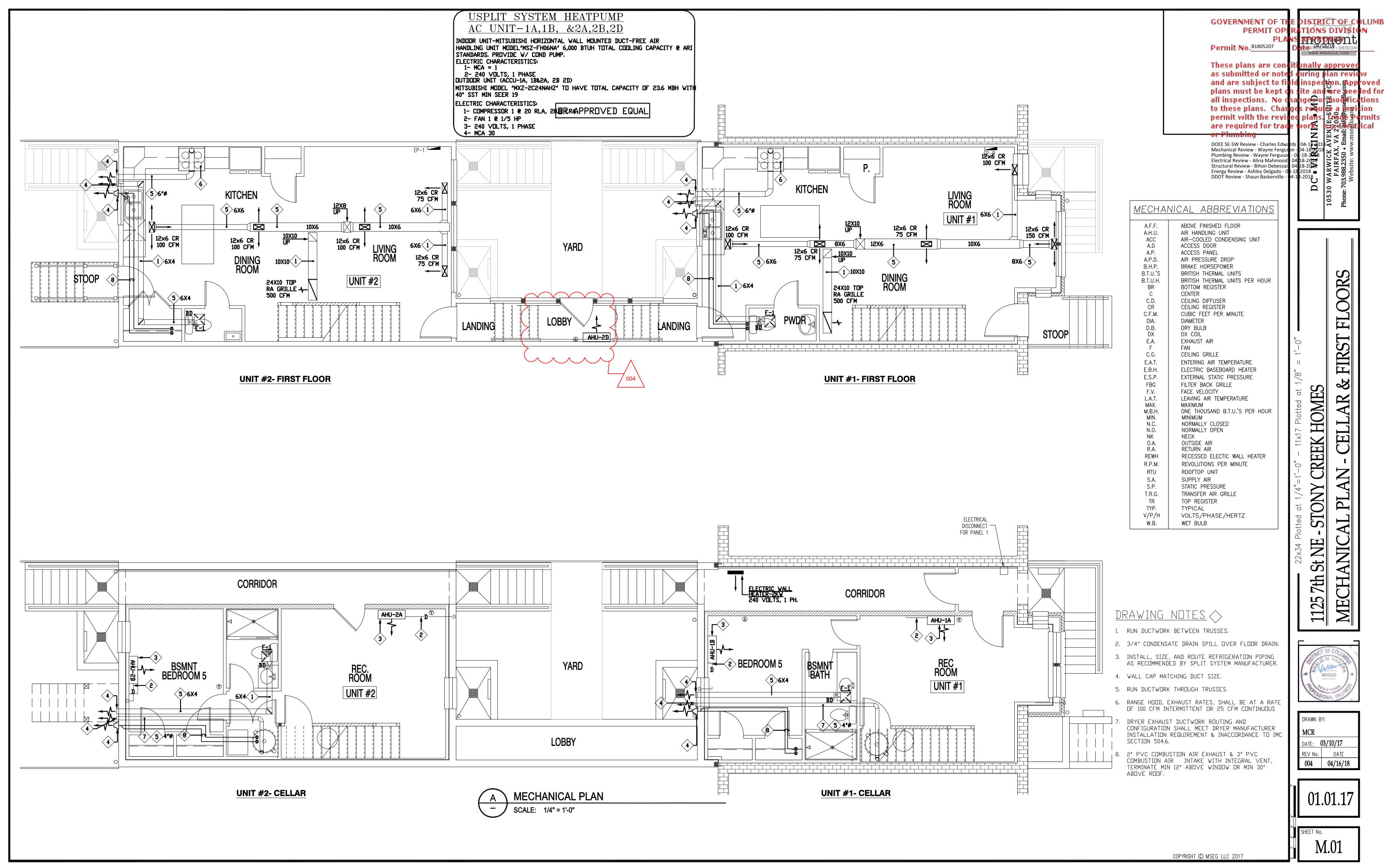
plans must be kept on site and are needed for

all inspections. No changes or modification to these plans. Changes require a regision

ITIONS DIVISION



DRAWN BY: MCR DATE: **03/10/17** DATE REV No. 003 02/06/18



ATIONS DIVISION