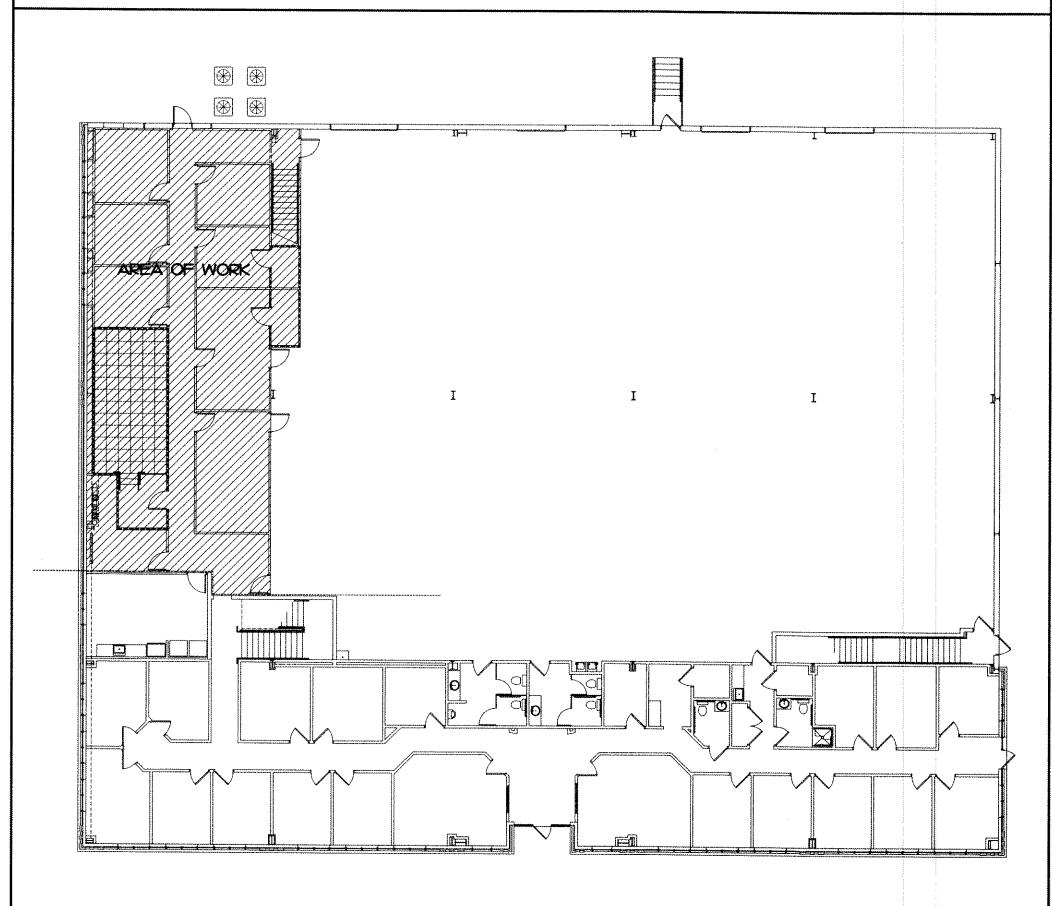




- I. DASHED LINES INDICATE DEMOLITION.
- 2. TURN OVER ALL ELECTRICAL ITEMS DEMOLISHED TO OWNER.

3 KEY PLAN

- REMOVE EXISTING 30A, 3P STARTER/DISCONNECTS AND ASSOCIATED FEEDERS.



IST FLOOR DEMOLITION PLAN SCALE: 1/8" - 1'-0"

2 2ND FLOOR DEMOLITION PLAN El.O 1/8" - 1'-0"

KEY NOTES

2 REMOVE EXISTING CEILING MOUNTED CORD DROPS.

REMOVE EXISTING SUSPENDED WAREHOUSE LIGHT FIXTURES AND ASSOCIATED SWITCH, REWIRE EXISTING TO REMAIN WAREHOUSE LIGHTING TO EXISTING CONTROL DEVICE, COORDINATE IN FIELD.

4 RELOCATE EXISTING LIGHTING FIXTURE NEW LOCATION SHOWN ON ELL

(5) REMOVE POWER AND CONTROL TO EXISTING MOTORIZED ROLL-UP DOOR.

RELOCATE EXISTING DEVICES TO ACCOMMODATE CONSTRUCTION OF NEW WALL IN FRONT OF EXISTING WALL. EXTEND BOXES AND CIRCUITS AND RE-INSTALL IN ORIGINAL LOCATION WITHIN NEW WALL.

04.07.14 DATE DR. SCB DJW CH. PROJ. # 13049 REVISIONS DATE

ELECTRICAL **DEMOLITION PLAN**



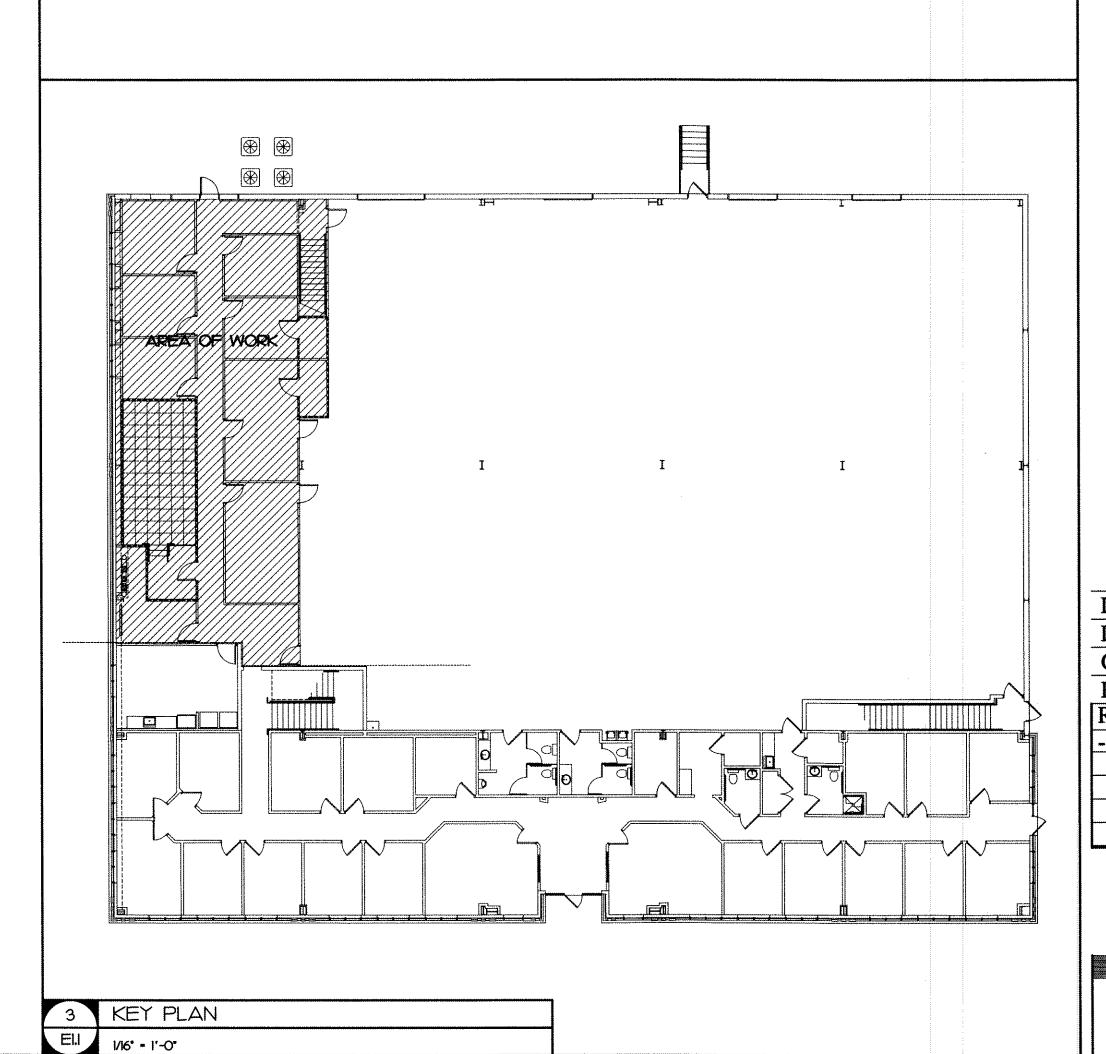


I. ALL TYPE "AI" LUMINAIRES PROVIDED BY OWNER, INSTALLED BY CONTRACTOR.

KEY NOTES

() NO WORK THIS AREA

OFFICE



15.5 EAST HARGETT STREET, SUITE 3 RALEIGH, NORTH CAROLINA 27601 TEL. 919-829-4969 FAX. 919-829-0860

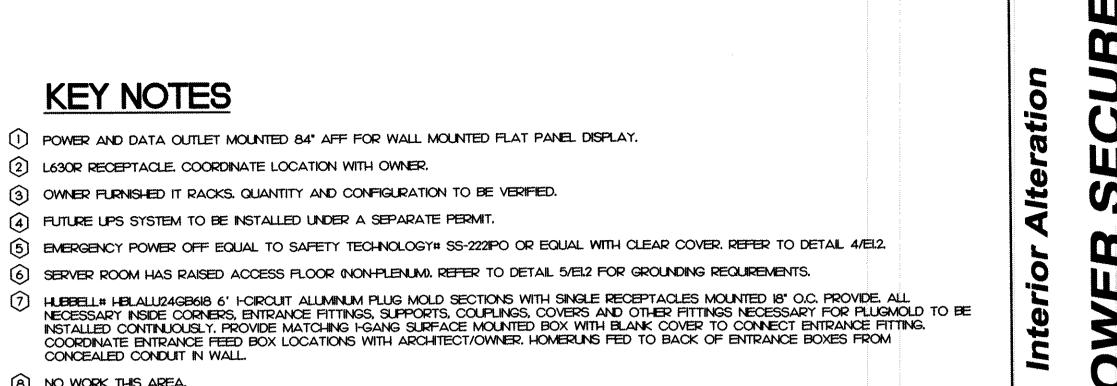
05.05.14 DATE SCB CH. DJW PROJ. # 13049 REVISIONS DATE

> ELECTRICAL LIGHTING PLAN

2 2ND FLOOR LIGHTING PLAN

El.l 1/8" - 1'-0"

IST FLOOR LIGHTING PLAN SCALE: 1/8" - 1'-0"



KEY NOTES

(B) NO WORK THIS AREA.

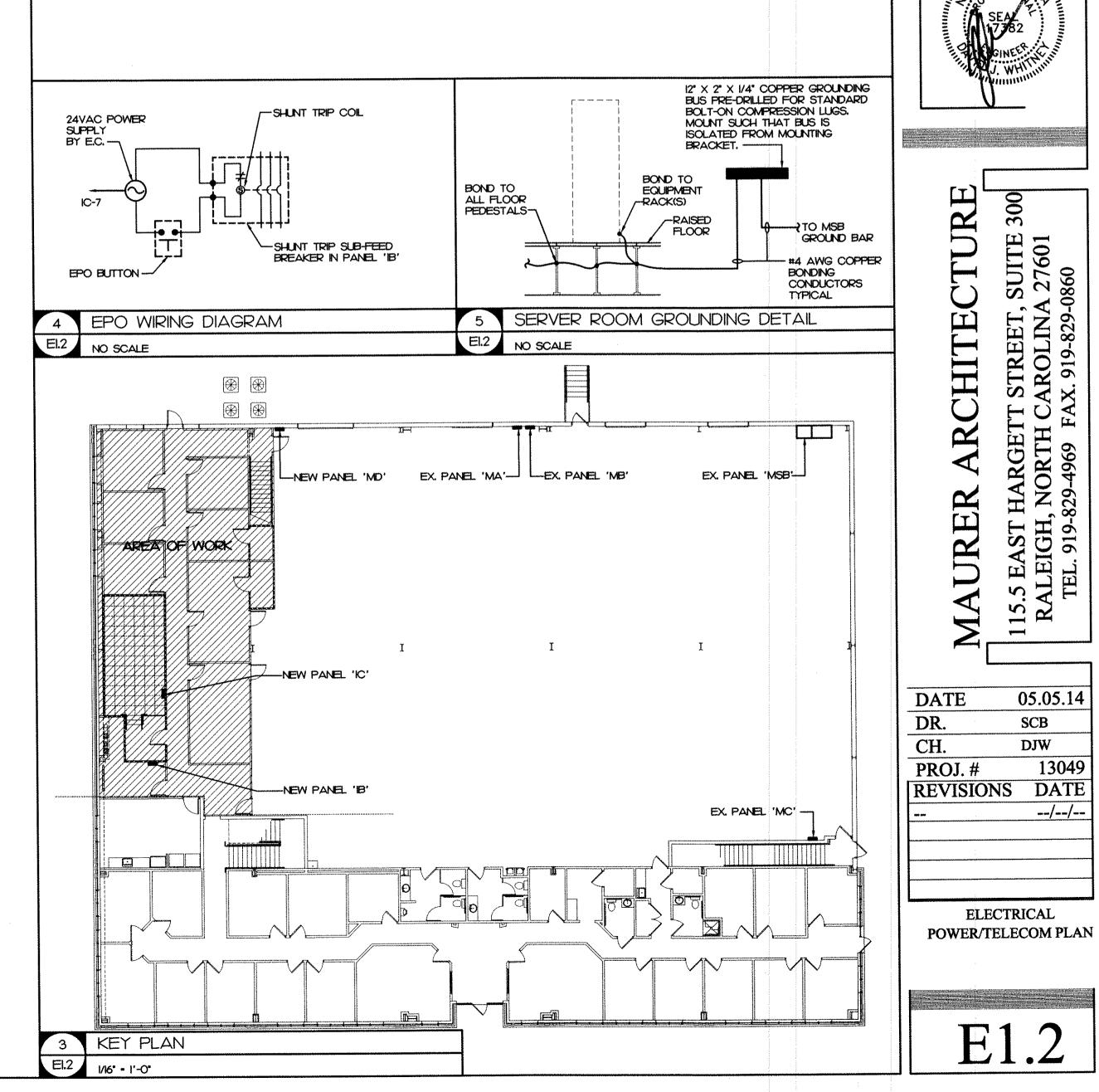
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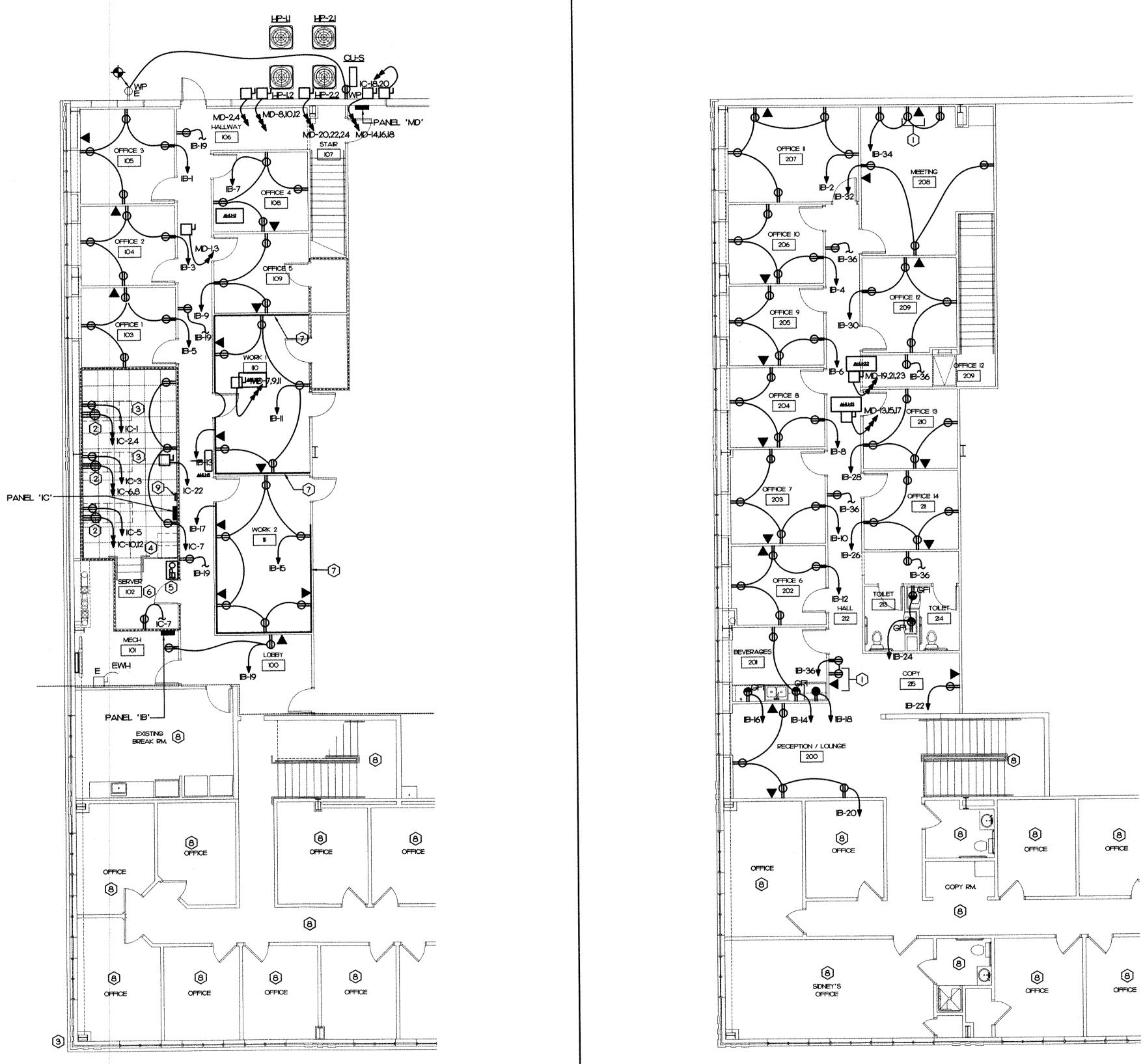
OFFICE

OFFICE

OFFICE

9 GROUND BUS. SEE DETAIL 5/EI.2.





I IST FLOOR POWER/TELECOM PLAN SCALE: 1/8" - 1'-0"

2ND FLOOR POWER/TELECOM PLAN El.2 1/8" - 1'-0"

ELECTRICAL

ARCHITECTUR

URER

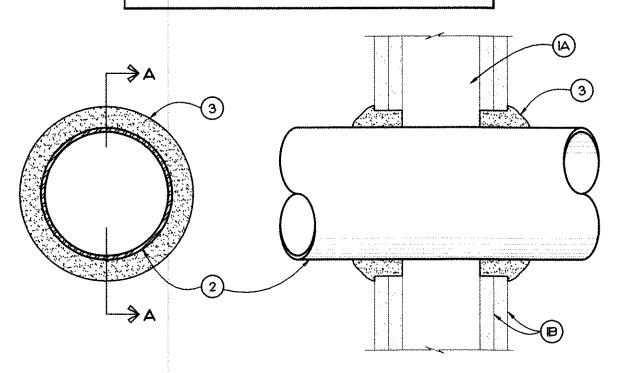
15.5 EAST HARGETT STREET, SUITE RALEIGH, NORTH CAROLINA 27601 TEL. 919-829-4969 FAX. 919-829-0860

05.05.14

13049

SCB

DJW



SECTION A - A

- WALL ASSEMBLY THE I, 2, 3 OR 4 HOUR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
- A. STUDS WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAXIMUM 2 HOUR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER SPACED 16" ON CENTER WITH NOMINAL 2" x 4" LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MINIMUM 3 5/8" WIDE x I 3/8" DEEP CHANNELS SPACED MAXIMUM 24" ON
- B. GYPSUM BOARD* NOMINAL 1/2" OR 5/8" THICK, 4' WIDE WITH SQUARE OR TAPERED EDGES, THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY, MAXIMUM DIAMETER OF OPENING IS 26".
- THROUGH PENETRANT ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MINIMUM OF O' (POINT CONTACT) TO MAXIMUM 2" PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED!
 - A. STEEL PIPE NOMINAL 24" DIAMETER (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
 - B. RON PIPE NOMINAL 24" DIAMETER (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST RON SOIL PIPE, NOMINAL 12" DIAMETER (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.
 - C. CONDUIT NOMINAL 6" DIAMETER (OR SMALLER) STEEL CONDUIT OR NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.
- D. COPPER TUBING NOMINAL 6" DIAMETER (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
- E. COPPER PIPE NOMINAL 6" DIAMETER (OR SMALLER) REGULAR (OR HEAVIER)
- F. THROUGH PENETRATING PRODUCT. FLEXIBLE METAL PIPING THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED.

 I. NOMINAL 2" DIAMETER (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

 OMEGA FLEX INC
- 2. NOMINAL I' DIAMETER (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

 TITEFLEX CORP
 A BUNDY CO
- NOMINAL I' DIAMETER (OR SMALLER) STEEL FEXIBLE METAL GAS PIPING.
 PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH
 SIDES OF FLOOR OR WALL ASSEMBLY.
 WARD MFG INC
- FILL, VOID OR CAVITY MATERIAL* CALLK OR SEALANT MINIMUM 5/8", I 1/4", I 7/8" AND 2 1/2" THICKNESS OF CAULK FOR I, 2, 3 AND 4 HOUR RATED ASSEMBLIES, RESPECTIVELY, APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL, MINIMUM 1/4" DIAMETER BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED

		
MAXIMUM PIPE OR CONDUIT DIAMETER INCHES	F RATING HOUR	T RATING HOUR
	1 OR 2	O+, I OR 2
	3 OR 4	3 OR 4
4	I OR 2	0
6	3 OR 4	0
12	1022	0

+WHEN COPPER PIPE IS USED, T RATING IS O HOUR.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT.

*BEARING THE UL CLASSIFICATION MARKING

GENERAL NOTES

- I. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS. DO NOT SCALE THESE DRAWINGS.
- 2. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THE PROJECT, PRIOR TO THE INSTALLATION OF HIS EQUIPMENT SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND TO ALLOW FOR OPTIMUM MAINTENANCE AND WORKING SPACE
- 3. USE OF THE CONDUIT SYSTEM FOR EQUIPMENT GROUNDING SHALL NOT BE ACCEPTABLE, A SEPARATE GREEN GROUND WIRE SHALL BE RUN WITH THE CIRCUIT CONDUCTORS IN EACH CONDUIT.
- 4. ALL BREAKER SIZES, SHOWN FOR MECHANICAL EQUIPMENT, SHALL BE VERIFIED BEFORE THE PURCHASE OR INSTALLATION OF SAID EQUIPMENT, WITH THE EQUIPMENT SUPPLIER AND THE MECHANICAL CONTRACTOR.
- 5. ALL WORK AND MATERIAL SHALL BE PROVIDED IN ACCORDANCE WITH THE STATE, LOCAL AND NATIONAL CODES AND ORDINANCES.
- 6. EACH CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER, UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 7. THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT, PRIOR TO INSTALLATION FOR USE WITH THE ACTUAL EQUIPMENT, CASEWORK, AND MILLWORK TO BE FURNISHED.
- 8. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DISCONNECTS, SWITCHES, AND RECEPTACLES UNDER THE ELECTRICAL BID AND SHALL INCLUDE ALL NECESSARY CIRCUITS TO AND FINAL CONNECTIONS TO THE EQUIPMENT PROVIDED BY ALL SUPPLIERS. SEE DETAILS FOR CONNECTION TO EQUIPMENT PROVIDED BY MECHANICAL AND PLUMBING CONTRACTORS
- 9. PENETRATION:
 WHERE ELECTRICAL EQUIPMENT PENETRATES RATED WALLS AND CEILINGS, EXTERIOR WALLS, THEY SHALL BE PROPERLY SEALED PER APPROVED UL METHODS.
 WHERE ELECTRICAL EQUIPMENT PENETRATES EXTERIOR WALLS, THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ENGINEER. SUBMIT DETAIL OF PROPOSED SEALING METHODS.
- IO. ALL PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID BY THE ELECTRICAL CONTRACTOR.
- II. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR.
- 12. THE CONTRACTOR SHALL PROVIDE COMPLETE UPDATED TYPEWRITTEN PANEL SCHEDULES FOR ALL PANELBOARDS.
- 13. AS BUILT DRAWINGS SHALL BE GIVEN TO THE OWNER AT THE COMPLETION OF THE PROJECT.
- 14. THE CONTRACTOR SHALL VERIFY THE CEILING TYPES WITH THE GENERAL CONTRACTOR PRIOR TO THE PURCHASE OF ANY LIGHT FIXTURES SO THAT THE PROPER TRIM WILL BE PROVIDED FOR ALL FIXTURES. ANY DIFFERENCES WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
- 15. ALL WIRE SIZES INDICATED ON THE PANEL SCHEDULES ARE BASED ON 75 DEGREE COPPER THIN/THWN WIRE, ALL WIRE TERMINALS AND EQUIPMENT SHALL BE LISTED AND APPROVED FOR 75°C. ONLY THWN-2 WIRE SHALL BE INSTALLED IN WET AND EXTERIOR LOCATION.
- 16. MINIMUM CONDUIT SIZE SHALL BE 1/2" AND MINIMUM WIRE SIZE SHALL BE #12 AWG.
- 17. METAL-CLAD CABLE (TYPE MC) AND ARMORED CABLE (TYPE AC) IS AN ACCEPTABLE WIRING METHOD SUBJECT TO RESTRICTIONS OF THE NEC. TYPES "MC" OR "AC" CABLE SHALL NOT BE USED WHEN PENETRATING RATED WALLS.
- 18. THE MAXIMUM NUMBER OF HOMERUNS IN A CONDUIT SHALL NOT EXCEED THREE (3). BREAKERS FEEDING CIRCUITS WITH SHARED NEUTRAL SHALL BE SWITCHED TOGETHER.
- 19. WHERE OUTLETS ARE SHOWN BACK TO BACK ON RATED WALLS, STAGGER OUTLETS SO THAT THEY ARE SEPARATED BY A MINIMUM OF 24".
- 20. FOR ALL RECEPTACLES LOCATED ABOVE COUNTER TOP, MOUNTING HEIGHT SHALL COMPLY WITH ANSI AII7.I, SECTION 308. E.C. SHALL FIELD VERIFY CASEWORK DETAIL WITH ARCHITECT PRIOR TO ROUGH-IN.

RENOVATION NOTES

- I. EXISTING ELECTRICAL EQUIPMENT AND DEVICES NOTED ON THESE PLANS WERE FOUND BY NON-DESTRUCTIVE FIELD OBSERVATIONS. NOT ALL EXISTING ELECTRICAL EQUIPMENT, CONDUIT, DEVICES, WIRING, ETC. ARE SHOWN ON THE PLANS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETE ELECTRICAL DEMOLITION NOTED OR IMPLIED ON THESE PLANS.
- 2. ALL ABANDONED AND UNUSED CABLES IN HOLLOW SPACES, VERTICAL SHAFTS, AND VENTILATION OR AIR-HANDLING DUCTS SHALL BE REMOVED PER NEC 725.3(B), 760.3(A), 770.3(A), 800.52(B), 820.52(B),
- 3. PRIOR TO CONNECTING ANY NEW RECEPTACLES TO EXISTING CIRCUITS, THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY THAT NO MORE THAN 10 RECEPTACLES ARE CONNECTED TO A 20 AMP CIRCUIT, AFTER RECONNECTING ALL NEW AND RELOCATED LIGHT FIXTURES, THE ELECTRICAL CONTRACTOR SHALL MEASURE THE CONNECTED LOAD FOR EACH LIGHTING CIRCUIT TO INSURE THAT NO MORE THAN 16 AMPS IS CONNECTED TO A 20 AMP CIRCUIT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF EITHER OF THE ABOVE CONDITIONS ARE FOUND.
- 4. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CIRCUIT CONTINUITY TO ALL LIGHTING, DEVICES AND EQUIPMENT NOT SUBJECT TO REMOVAL. PROVIDE ADDITIONAL CONDUIT AND WIRING AS REQUIRED.
- 5. RELOCATE ALL EXISTING CIRCUITS FOUND PASSING THROUGH THE AREA OF CONSTRUCTION WHICH ARE PRESENTLY IN USE IN OTHER PARTS OF THE BUILDING UNAFFECTED BY THIS PROJECT PHASE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CONTINUITY OF SERVICE AND GROUNDING, OF SUCH EXISTING CIRCUITS AND SHALL CONCEAL THEM ABOVE NEW CELLINGS.
- 6. WHERE EXISTING EQUIPMENT AND DEVICES ARE SHOWN TO BE REMOVED, THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL OF THE ASSOCIATED CONDUIT AND CONDUCTORS NOT REMAINING IN OPERATION BACK TO THEIR RESPECTIVE SOURCE OR TO THE POINT ON A SHARED CIRCUIT FROM WHERE THE EQUIPMENT OR DEVICE IS SERVED.
- 7. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR TO PATCH AND PAINT ALL VOIDS WHERE EXISTING ELECTRICAL DEVICES WERE REMOVED.

SYMBOL LEGEND

	STMBOL LEGEND	
SYMBOL.	DESCRIPTION	REMARKS
P	SPECIFICATION GRADE DUPLEX RECEPTACLE. MOUNT 16' A.F.F. UNLESS OTHERWISE NOTED.	HUBBELL CR5362*** WITH NPJ8 COVER PLATE
•	SPECIFICATION GRADE QUAD RECEPTACLE MOUNT 16' A.F.F. UNLESS OTHERWISE NOTED.	HUBBELL (2) CR5362 WITH NPJ82 COVER PLATE
wP P	SPECIFICATION GRADE WEATHER RESISTANT/GROUND FAULT INTERRUPTING DUPLEX RECEPTACLE WITH IN-USE WEATHER PROOF COVER, MOUNT 16" AFF. UNLESS OTHERWISE NOTED.	HUBBELL GFTR20-** WITH WP26M COVER PLATE
GFIP	SPECIFICATION GRADE GROUND FAULT INTERRUPTING DUPLEX RECEPTACLE - MOUNT 4" ABOVE COUNTER/BACKSPLASH.	HUBBELL GF20-*** WITH NPJ26 COVER PLATE
"AMP	250 VOLT RECEPTACLE WITH GROUND, 'AMP' DESIGNATED RATING FIELD VERIFY NUMBER OF POLE AND NEUTRAL MOUNT 16" AFF. UNLESS OTHERWISE NOTED.	HUBBELL TO MATCH EQUIPMENT
•	SPECIFICATION GRADE DUPLEX RECEPTACLE. MOUNT 16° AFF. UNLESS OTHERWISE NOTED. FED FROM GFCI CIRCUIT BREAKER.	HUBBELL CR5362-** WITH NPJB COVER PLATE
<u>J</u>	JUNCTION BOX SIZED PER N.E.C.	
마	DISCONNECT SWITCH SEE PLANS FOR SIZE AND TYPE	SQUARE D HEAVY DUTY
Δ	CEILING PANEL CABINET FAN. FURNISHED AND INSTALLED BY M.C., WIRED BY E.C.	SEE MECH PLAN.
•	COMMUNICATION OUTLET - MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED STUB 3/4" CONDUIT TO ACCESSIBLE CELLING OR ATTIC SPACE. OUTLET, COVER PLATE AND WIRING BY OTHERS.	SINGLE GANG BOX HUBBELL NPJB COVER PLATE
	NEW CONCEALED WIRING	PER NE.C.
	UNSWITCHED LIGHTING CONDUCTOR	PER NE.C.
	HOME RUN TO PANEL BOARD NUMBERS OF ARROW INDICATE CIRCUITS	PER NE.C.
	120/208V 30, 4W PANEL BOARD - EXISTING, SEE PANEL SCHEDULES	square d no/h.ine
S	SINGLE POLE TOGGLE SWITCH, MOUNT 42' AFF. UNLESS NOTED OTHERWISE.	HUBBELL CSI22I-** WITH NPJI COVER PLATE
S ₃	THREE WAY TOGGLE SWITCH. MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE.	HUBBELL CSI223-** WITH NPJI COVER PLATE
SM	WALL MOUNTED OCCUPANCY SENSOR SWITCH, PASSIVE INFRARED MOUNT 42° AFF. UNLESS NOTED OTHERWISE. 800W/120VAC OR 1200W/277VAC	WATTSTOPPER PW-100-** NPJ26 COVER PLATE
AF.C.	ABOVE FINISHED CELLING	
AFF.	ABOVE FINISHED FLOOR - NOTE ALL MOUNTING DIMENSIONS GIVEN ARE TO THE BOTTOM OF THE OUTLET BOX	
BF.F.	BELOW FINISHED FLOOR	
B.F.G.	BELOW FINISHED GRADE	
'RE'	EXISTING ELECTRICAL DEVICE, LIGHTING FIXTURE, AND/OR TELECOM DEVICE TO BE RELOCATED. SEE PLANS FOR TYPES. NEW LOCATION SHOWN ON RENOVATION PLANS	
'E'	EXISTING ELECTRICAL DEVICE, LIGHTING FIXTURE, AND/OR TELECOM DEVICE TO REMAIN. SEE PLANS FOR TYPES.	
♦	CONNECT TO EXISTING CIRCUIT	
# \ (<u>)</u>	ALL ELECTRICAL ITEMS SHOWN DASHED ARE EXISTING ELECTRICAL ITEM TO BE REMOVED OR RELOCATED, RELOCATED ITEMS ARE DENOTED WITH 'RE', REFER TO PLANS FOR ITEM SPECIFIC NOTES.	EXISTING
E E	EXISTING EXIT / EGRESS LIGHTING FIXTURES TO REMAIN	EXISTING
E	EXISTING 2X4 LIGHTING FIXTURE TO REMAIN	EXISTING
\(\phi	CORD DROP TO BE REMOVED	EXISTING

NOTES:

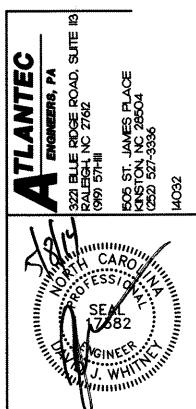
E.C. SHALL SUBMIT CATALOG SHEETS FOR COLOR AND MATERIAL APPROVAL OF ALL SWITCH, RECEPTACLE AND WALL PLATE TO ARCHITECT PRIOR PURCHASING ANY.

2. REFER TO LUMINAIRE SCHEDULE FOR NEW LIGHTING SYMBOLS AND TYPES

POWER SECUI

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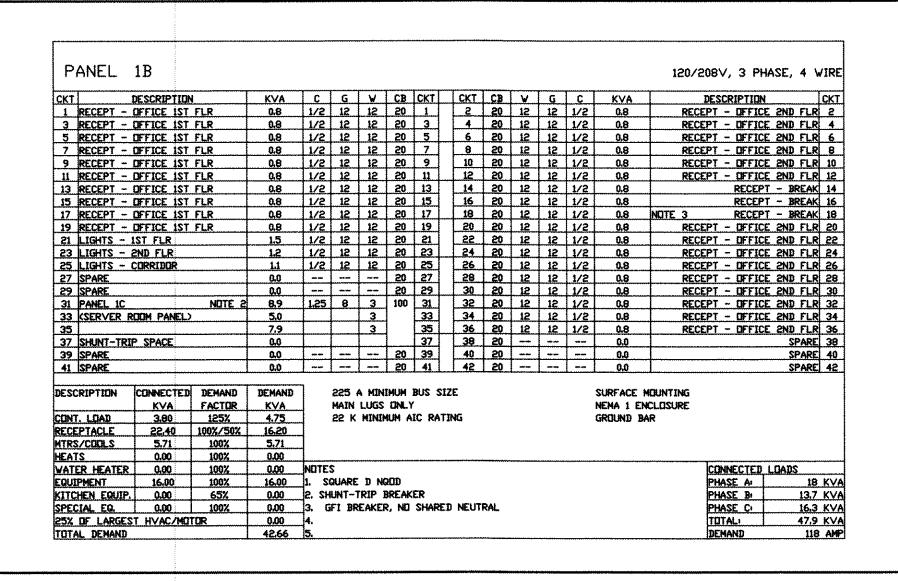
RER ARCHITECTUR
AST HARGETT STREET, SUITE 30
IGH, NORTH CAROLINA 27601

DATE 04.07.14
DR. SCB
CH. DJW
PROJ. # 13049
REVISIONS DATE

ELECTRICAL SYMBOLS, NOTES &

DETAILS

E2.1



JUNCTION BOX MAY BE SHOWN ON -

EXTERNALLY OR INTERNALLY MOUNTED
DISCONNECT SWITCH FURNISHED BY THE
MECHANICAL CONTRACTOR, AND
INSTALLED BY THE ELECTRICAL CONTRACTOR

ELECTRICAL DRAWINGS FOR SOME

EQUIPMENT (NOT NECESSARY IF WIRING IS CONNECTED DIRECTLY TO

EQUIPMENT IN MECHANICAL WORK SEE MECHANICAL DRAWINGS FOR LOCATION OF ALL EQUIPMENT.

4 EQUIP. CONNECTION DETAIL

NOTES:

E2.2 NO SCALE

NOTES:

STARTER OR DISCONNECT SWITCH)

-BRANCH CIRCUIT AND CONDUIT IN ELECTRICAL WORK - SEE PANEL SCHEDULES FOR WIRE AND BREAKER SIZES TO MECHANICAL

PANEL

EQUIPMENT.

- WIRING IN ELECTRICAL

- WIRING IN ELECTRICAL

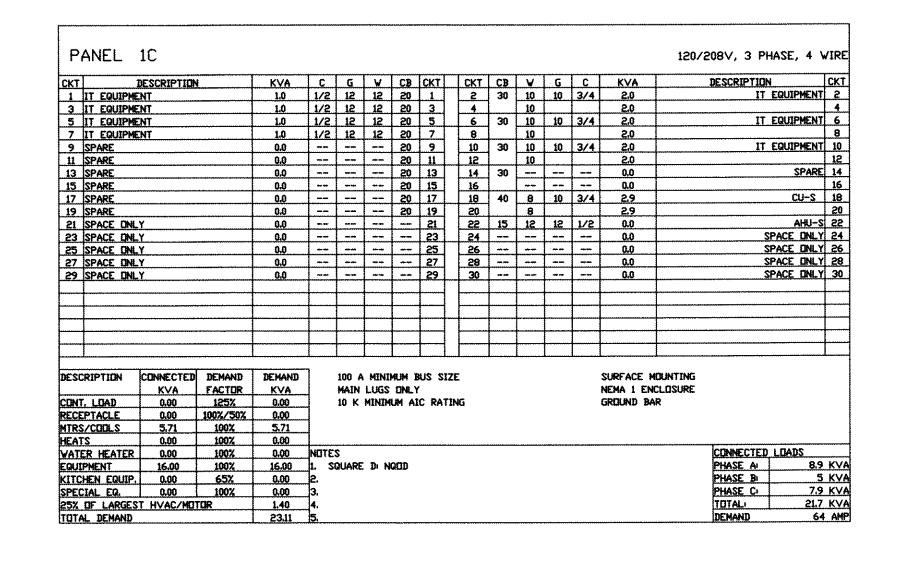
- WIRING IN ELECTRICAL

- WIRING IN ELECTRICAL WORK

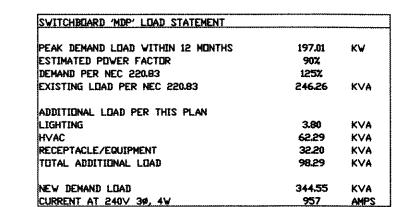
--- FINAL CONNECTIONS INSIDE EQUIPMENT TO BE MADE BY THE MECHANICAL CONTRACTOR

I. A COMBINATION STARTER MAY BE USED IN LIEU OF A A SEPARATE DISCONNECT SWITCH AND STARTER

2. E.C. SHALL FURNISH ALL REQUIRED FUSES.

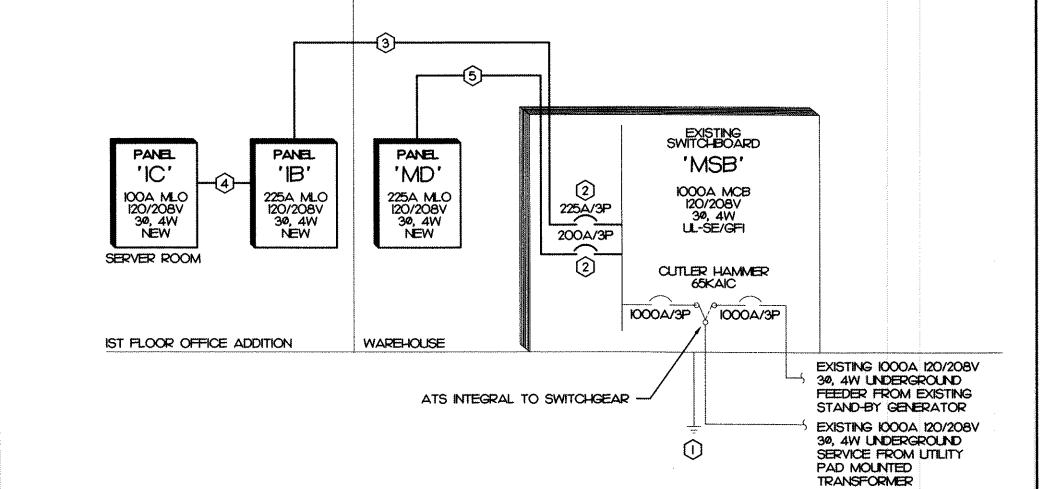


•		MD																208V, 3 P	nnot.
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	HU 1.1			2.2	3/4	10	10	30	1	1		0	12	12	1/2	1.0			
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7 A	HU 1.2			3,0	3/4	10	8	35	7		<u> </u>	0 L	12	12	3/4	1.4			
9				3,0			8		9	_1	0	L	12			1.4			
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CONT.	LOAD	0.00	125%	0.00	7	25 K	MININ	IUM A	IC RA	TING						GROUND BA	AR		
	TACLE	0.00	100%/50%	0.00]														
	COOLS	23.58	100%	23.58															
HEATS		33,00	100%	33.00															
WATER	RHEATER	0.00	100%	0.00	NOTE	S												CONNECTED	L
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TOTAL	DEMAND			59.88	5.													DEMAND	



MSB LOAD STATEMENT

NO SCALE



NOTES

- ALL ELECTRICAL EQUIPMENT AND ASSOCIATED FEEDERS AND BRANCH CIRCUITS ARE EXISTING TO REMAIN IN PLACE UNLESS NOTED OTHERWISE.
- 2. COORDINATE SHUTDOWN OF MSB WITH OWNER, BUILDING TO REMAIN IN OPERATION DURING WORK.

- (1) EXISTING SERVICE GROUND.
- 2 NEW COMPATIBLE 65KAIC BREAKER INSTALLED IN EXISTING SPACE PROVIDE BUS HARDWARE AS REQUIRED
- (3) NEW PANEL FEEDER. 4#4/0, #4G, 2-1/2°C.
- 4 SEE PANEL SCHED, FOR FEEDER INFO.

WA

N/Δ

NΑ

N/A

N/A

NA

NA

(5) NEW PANEL FEEDER, 4#3/0, #6G, 2°C.

PARTIAL POWER RISER NO SCALE

2012 NORTH CAROLINA **ENERGY CODE**

ELECTRICAL SYSTEM AND EQUIPMENT METHOD OF COMPLIANCE: PRESCRIPTIVE LIGHTING SCHEDULE: FLUORESCENT T8 CF LED MH INCAN LAMP TYPE REQUIRED: NUMBER OF LAMPS: N/A BALLAST TYPE USED: N/A N/A N/A NUMBER OF BALLASTS: N/A N/A N/A TOTAL WATTAGE PER FIXTURE: N/A

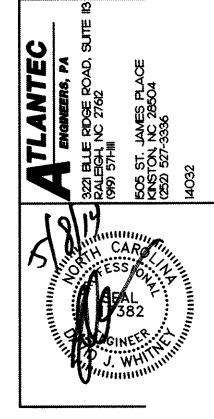
	SPECIFIED	ALLOWED BY CODE
INTERIOR WATTAGE		
OFFICE SPACE (0.89W/SF)	3,885 W	5,520 W

DESIGNER STATEMENT: TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE, 2012 - ENERGY. I WHITNEY, P.E.

2. EGRE MINUT	SS LIGHT ES MININ		OR AT LEAST I LED ARRAY FOR 90	LUMINAIR	E SCHEI	DULE	•		,				
SYMBOL	TYPE	MANUFACTURER	DESCRIPTION	MOUNT	ANSH	UL	VOLTS	LAMP	LAMP QTY.	LAMP WATTS	LUMENS (INITIAL)	LUMINAIRE WATTS	BALLAST
	Al	ENERY-LITE	2X2 LED PANEL LIGHT PROVIDED BY OWNER, INSTALLED BY ELECTRICAL CONTRACTOR.	LAY-IN	-	-	120	LED - 3500K	ARRAY	-	2300	35	INTEGRAL LED DRIVER
**	XE	LITHONIA# LHOM-LED-R-HO	QUANTUM LED EXIT WITH INTEGRAL BATTERY INTEGRAL EMERGENCY EGRESS LIGHTING, RED LED'S, UNIVERSAL DIRECTIONAL CHEVERONS, MOUNTING, AND OPTIONAL I OR 2 FACE.	UNIVERSAL	WHITE PLASTIC	DAMP	120	LED	2 ARRAYS	15W ◆ 9.6VDC	→	4.3	-
1	B	LITHONIA# ELM LED SD	QUANTUM LED BATTERY PACK	UNIVERSAL	WHITE PLASTIC	DAMP	120	LED	2 ARRAYS	1.5W • 9.6VDC	-	4.3	•
	RE	EXISTING	RELOCATED EXISTING FIXTURE. SEE DEMOLITION AND NEW WORK PLANS	*	*	-	-	-	•	_	-	-	•

PANEL SCHEDULES

NO SCALE

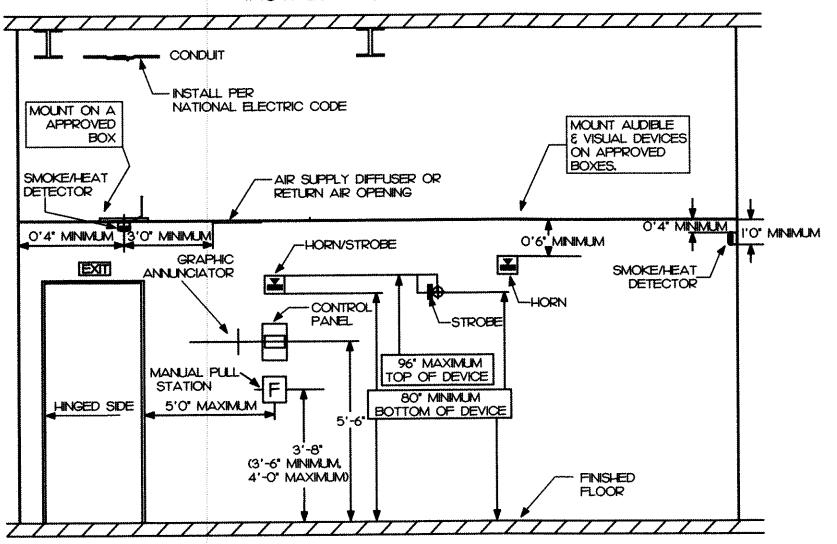


04.07.14 DATE DR. SCB DJW 13049 PROJ. # REVISIONS DATE

> **ELECTRICAL** SCHEDULES, RISER & DETAILS







SYSTEM OUTPUTS FIRE ALARM SYSTEM **INPUT/OUTPUT MATRIX** REQUIRED FIRE SAFETY CONTROL FACP ANNUNCIATION SYSTEM INPUTS FIRE ALARM SYSTEM AC POWER FAILURE FIRE ALARM SYSTEM LOW BATTERY OPEN CIRCUIT GROUND FAULT NOTIFICATION APPLIANCE CIRCUIT SHORT BUILDING MANUAL PULL STATIONS **AREA SMOKE DETECTORS** HVAC AIR DUCT SMOKE DETECTORS 0000 SPRINKLER WATER FLOW SWITCH A B C D E F G H I J K L M N O 10 SPRINKLER VALVE TAMPER SWITCH

FIRE ALARM DEVICE MOUNTING DETAIL NO SCALE

FIRE ALARM NOTES

SEE PLANS FOR QUANTITY AND LOCATION OF ALL EQUIPMENT.

THIS PLAN SHOWS ONLY ADDITIONAL EQUIPMENT TO EXISTING FIRE ALARM SYSTEM.

E.C. SHALL VERIFY CAPACITY OF EXISTING SYSTEM PRIOR DO ANY MODIFICATION.

ALL MODIFICATION SHALL NOT VOID EXISTING SYSTEM CURRENT WARRANTY OR SERVICE CONTRACT.

REPROGRAM EXISTING PANEL AS REQUIRED BY E.C. - E.C. SHALL PROVIDE ALL REQUIRED ISOLATION MODULES OR NAC BOOSTER PANELS.

CONTRACTOR SHALL PROVIDE COMPLETE DOCUMENT PER 2012 FIRE CODE SECTION 907.1.1 AND 907.1.2
TO ENGINEER FOR APPROVAL PRIOR TO SUBMIT TO AND TESTING BY STATE FIRE MARSHAL'S
OFFICE.

3. PLACARD THE ENTIRE FIRE ALARM SYSTEM. PROVIDE PANEL AND CIRCUIT NUMBERS ON A NAME PLATE AFFIXED TO THE FACE OF THE FIRE ALARM CONTROL PANEL.

4. CONTRACTOR SHALL PROVIDE UPDATED ZONE MAPS COMPLETE WITH ADDRESSES FOR EACH FIRE ALARM DEVICE. MOUNT MAP(S) ADJACENT TO THE EXISTING FIRE ALARM CONTROL

5. ELECTRICAL CONTRACTOR SHALL PROVIDE BATTERY CALCULATIONS AND CUT SHEETS FOR FIRE ALARM SYSTEM TO ENGINEER FOR APPROVAL.

6. ALL WIRING SHALL BE SUPERVISED.

7. ALL WIRING SHALL BE PER MANUFACTURER'S SPECIFICATIONS.

8. ALL WIRING IN WALLS OR FURRED SPACES SHALL BE IN CONDUIT.

WHERE PERMITTED BY CODE, WIRING ABOVE ACCESSIBLE CEILINGS MAY BE RUN EXPOSED AND THE
FOLLOWING REQUIREMENTS SHALL BE MET:

 WIRING SHALL BE PLENUM RATED WHERE APPLICABLE.
 PROVIDE BRIDLE RINGS FOR INDEPENDENT FIRE ALARM CABLE SUPPORT UNLESS SPECIFICALLY
NOTED OTHERWISE. ANALOG LOOP WIRING INCOMING AND OUTGOING SHALL NOT BE
SUPPORTED IN THE SAME BRIDLE RING.

10. ALL NOTIFICATION CIRCUIT WIRING SHALL BE 'CLASS B'.

II. PROVIDE WITH 'SYNC MODULE' AS REQUIRED PER NFPA 72.

12. FURNISH NOTIFICATION CIRCUITS AS REQUIRED TO ACCOMMODATE CIRCUIT LOADING. NO NOTIFICATION CIRCUIT SHALL BE LOADED TO MORE THAN 80% CAPACITY.

13. PROVIDE SOUND (dB) AND CANDELA (Cd) RATINGS FOR ALL HORN/STROBE DEVICES PER NFPA 72, ALL VISIBLE NOTIFICATION APPLIANCES SHALL BE SYNCHRONIZED PER NFPA 72, 75.4.4.7 AND 75.2.6.

14. A DECIBEL LEVEL OF (15 dB ABOVE AMBIENT ON NFPA 72, TABLE A.7.4.2) SHALL BE MAINTAINED IN ALL GENERAL AREAS AND 100 dB (15 dB ABOVE AN AMBIENT OF 85 dB IN NFPA 72, 7.4.2.1) SHALL BE MAINTAINED IN ALL MECHANICAL EQUIPMENT ROOMS PER NFPA 72 AND THE 2012 NORTH CAROLINA STATE BUILDING CODE (SECTION 907.6.2).

2 FIRE ALARM MATRIX

NO SCALE

SYMBOL LEGEND

SMOKE	DETECTOR.	PHOTOELECTRIC
	ENT, ADDRE	

DUCT SMOKE DETECTOR, PHOTOELECTRIC WITH SAMPLING TUBE. INTELLIGENT, ADDRESSABLE.

FIRE ALARM PULLSTATION, MOUNT 42" A.F.F. ADDRESSABLE.

FIRE ALARM STROBE/HORN MOUNT 80" AFF., 75 dBA SOUND LEVEL, "XX" INDICATES CANDELA RATING.

FIRE ALARM CEILING STROBE/HORN.
75 dBA SOUND LEVEL, 'XX' INDICATES CANDELA RATING.

FIRE ALARM STROBE, MOUNT 80° A.F.F. 'XX' INDICATES CANDELA RATING.

FIRE ALARM CELLING STROBE.
'XX' INDICATES CANDELA RATING.

RELAY CONTROL MODULE

MATCH EXISTING SYSTEM MATCH EXISTING SYSTEM

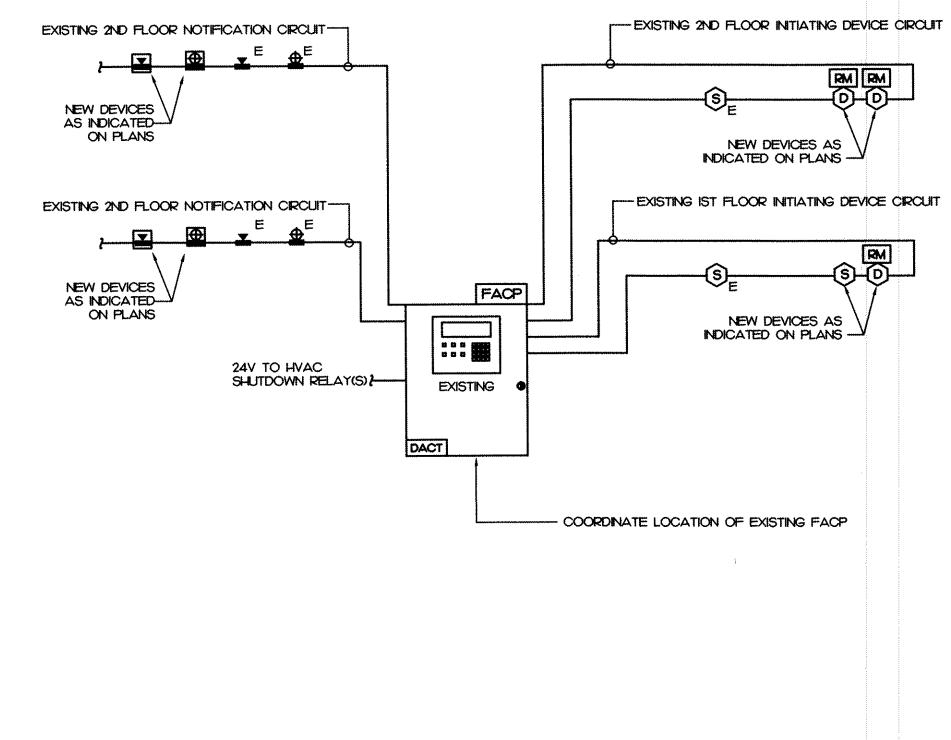
MATCH EXISTING SYSTEM

MATCH EXISTING SYSTEM MATCH EXISTING SYSTEM

MATCH EXISTING SYSTEM

MATCH EXISTING SYSTEM

MATCH EXISTING SYSTEM



FIRE ALARM RISER DIAGRAM NO SCALE

4 FIRE ALARM SYMBOL LEGEND

3 FIRE ALARM NOTES NO SCALE

NO SCALE

CHITE

04.07.14 DATE SCB DJW REVISIONS DATE

> FIRE ALARM NOTES, SYMBOLS, RISER & DETAILS