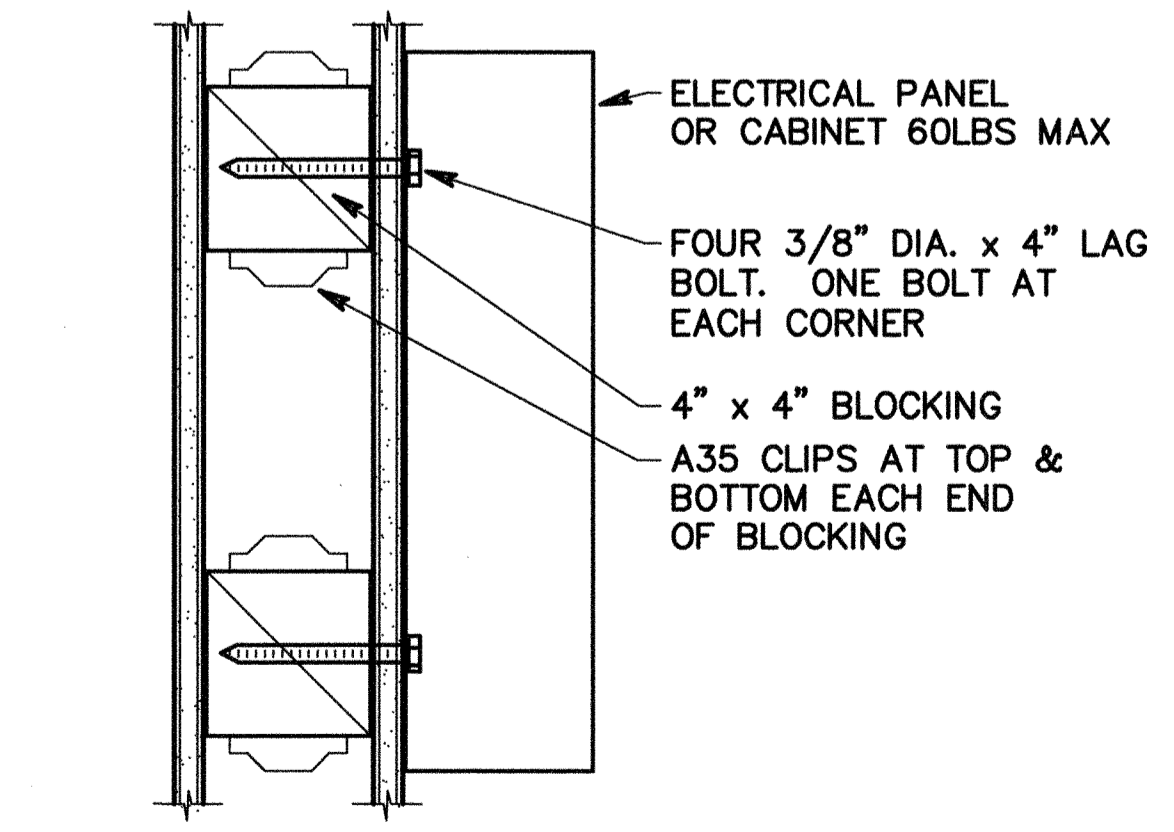


POWER AND SIGNAL PLAN

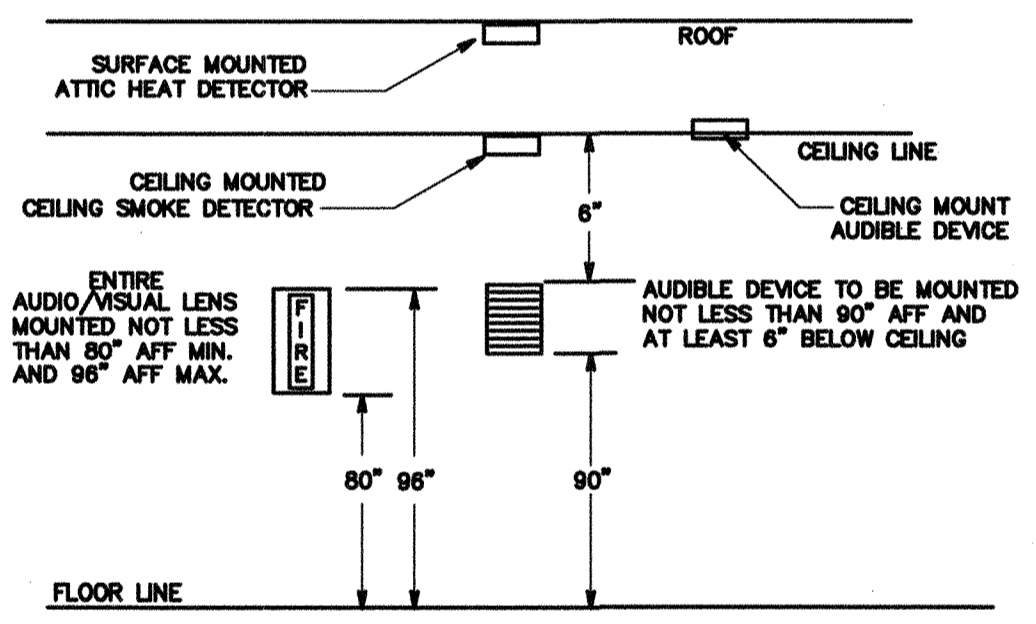
SCALE : 1/8" = 1' - 0"



2 SURFACE MOUNTED IDF DETAIL N.T.S.

SERVING		NOTE		AMP		PULSE		TOTAL LOAD KVA		REAR		FLUSH	
1	2	12/12	20/1	0.7	1.1	ØA	ØB	ØA	ØB	AMP	AVG	NOTE	SERVING
1	RECEPTACLE	12/12	20/1	0.7	1.1					60/2	8	10	HVAC 3.5 TON
3	RECEPTACLE	12/12	20/1			0.7	1.1						
5	IDF	12/12	20/1	0.1						20/1	12/12		SPACE
7	SECURITY ALARM	12/12	20/1			0.1				20/1	12/12		SPACE
9	INT/EXT LIGHTS	12/12	20/1	0.9						20/1	12/12		SPACE
11	INT LIGHTS	12/12	20/1			0.8	0.1			20/1	12/12	2	FIRE ALARM NAC PANEL
				8.7KVA		8.7KVA							
				72A		72A							

NOTES:
 1. PROVIDE CIRCUIT DIRECTORY INSIDE PANEL.
 2. PROVIDE NEW MATCHING BREAKER AND MECHANICAL LOCK ON BREAKER PER NFPA 72, 10.6.5.2: DEDICATED CIRCUIT, MECHANICALLY PROTECTED (LOCKOUT), RED MARKING, ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL. I'D AS FIRE ALARM, EMERGENCY COMMUNICATIONS OR FIRE ALARM/ECS. LOCATION OF CIRCUIT DISCONNECT (BREAKER) PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.



1 TYPICAL FIRE ALARM DEVICES MT'D DETAIL N.T.S.

MEP COMPONENT ANCHORAGE NOTES

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAILS IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND REPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2015 CBC, SECTIONS 1911A.1.1 THROUGH 1911A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
- MOVABLE EQUIPMENT WHICH IS STORED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE ATTACHMENT OF THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAIL ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

- COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- COMPONENTS WEIGHING LESS THAN 25 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HANG FROM A WALL.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND REPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS REFERRED IN ASCE 7-10 SECTION 12.8A, 13.6.5.2 AND 2015 CBC, SECTION 1911A.1.23, 1911A.1.24, 1911A.1.25 AND 1911A.1.26.

THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAIL ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE CBC'S PRE-APPROVALS (PFA) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACS 316, APPENDIX D.

COPIES OF THE MANUAL SHALL BE AVAILABLE TO THE AGENT PRIOR TO THE START OF INSTALLATION AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

SHEET NOTES

- APPROXIMATE LOCATION FOR NEW FIRE ALARM SIGNAL AND AUDIO BOOSTER PANEL. PROVIDE 110V POWER CONNECTION AND DEDICATED CIRCUIT FROM PANEL A-12. SEE DRAWING E-3 FOR MORE INFORMATION.
- PROVIDE POWER CONNECTION FOR RELOCATABLE BUILDING PRE-WIRED PANEL. SEE SINGLE LINE DIAGRAM ON DRAWING E-4.
- PROVIDE PULL BOX AND INTERCEPT EXISTING UNDERGROUND CONDUIT AND FEEDERS. EXTEND NEW U.G. CONDUIT AND FEEDER TO NEW BUILDING PER PLANS. SINGLE LINE DIAGRAM.
- PROVIDE #6 COPPER GROUNDING CONDUCTOR AND BOND TO EACH SECTION STRUCTURAL STEEL BEAM. FIELD VERIFY EXACT LOCATION WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
- NEW SECURITY ALARM PANEL AND SYSTEM. PROVIDE 110V POWER CONNECTION AND INTERCONNECTION TO (E) MASTER EQUIPMENT IN ADMIN OFFICE. FIELD VERIFY EXACT LOCATION AND REQUIREMENT WITH OWNER PRIOR TO INSTALLATION. SEE RISER DIAGRAM.
- NEW IDF AND CABINET SURFACE MOUNTED BELOW CEILING. PROVIDE 110V POWER CONNECTION, DATA SWITCH, FO CABLE AND DATA CABLE PATCH PANEL FOR NEW DATA OUTLET CONNECTION. PROVIDE FO CABLE TO (E) MOF IN ADMIN OFFICE FOR INTERCONNECTION. FIELD VERIFY EXACT LOCATION AND REQUIREMENT WITH OWNER PRIOR TO INSTALLATION. SEE RISER DIAGRAM.
- DATA AND POWER OUTLET AT CEILING FOR SMART BOARD. FIELD VERIFY EXACT LOCATION AND REQUIREMENT WITH OWNER PRIOR TO INSTALLATION. SEE RISER DIAGRAM.
- PROVIDE 50 PAIR PUNCH DOWN BLOCK AND SURFACE MOUNTED BELOW CEILING FOR INTERCOM / TELEPHONE WIRING TERMINATION.
- EXISTING SIGNAL TC. PULL IN NEW CONDUCTORS TO MASTER EQUIPMENT PER PLANS. SEE RISER DIAGRAM.
- FURNISH AND INSTALL NEW UNDERGROUND SIGNAL CONDUITS. SAW CUT AND PATCH EXISTING FLOOR AS REQUIRED. SEE RISER DIAGRAMS. FIELD VERIFY LOCATION.
- NEW 24"x24"x4" NEMA3R SIGNAL TC SURFACE MOUNTED ON EXTERIOR WALL AT CEILING LEVEL. PROVIDE (2) 2" TC STUB INTO BUILDING ATTIC CAVITY. SEE SIGNAL RISER DIAGRAM.

SIGNAL AND COMM. LEGEND

- SECURITY ALARM SYSTEM**
- [ESC] DIGITAL SECURITY ALARM CONTROL PANEL MODEL SONITROL (64ZONE). INTERFACE WITH EXISTING BUILDING MASTER SECURITY ALARM PANEL AS REQUIRED.
 - [K] LED KEYPAD - MATCH EXISTING EQUIPMENT AS REQUIRED.
 - [M] DUAL TECHNOLOGY CEILING MOUNT DETECTOR. MATCH EXISTING EQUIPMENT AS REQUIRED.
 - [E] EXTERIOR BELL (SIREN) - DISCONNECT WITH WEATHERPROOF BACKBOX AND TAMPER SWITCH.
 - [W] DOOR CONTACT SWITCH. RECESS ABOVE DOOR JAMB AT OPEN SIDE.
- B— INDOOR SECURITY ALARM CABLE. WEST PENN #241
 —B1— OUTDOOR SECURITY ALARM CABLE. WEST PENN #AQ224
- COMMUNICATION (TELEPHONE/INTERCOM) SYSTEM**
- [H] HANDESET/PHONE - FIELD VERIFY MODEL NO. AND MATCH EXISTING MASTER EQUIPMENT AS REQUIRED.
 - [SF] CEILING SPEAKER - RAULAND #J50221 W/ACC1000 BAFFLE. PROVIDE BACKBOX AND CEILING SUPPORT AS REQUIRED.
 - [SP] OUTDOOR SPEAKER - ATLAS #APF15 HORN W/APR AND LOWELL (#2894 FOR SURFACE, #1675X FOR RECESS) BACK BOX W/S&L GRILL
 - T— OUTDOOR TELE/AC CABLE. 22AWG SOLID COPPER 12 PAIR SHIELDED AND 12 PAIR UNSHIELDED CABLE.
 - T1— INDOOR TELEPHONE CABLE. CAT.3 22AWG SOLID COPPER 4UTP SHIELDED CABLE.
 - P1— OUTDOOR PA/VC CABLE - WEST PENN #AQC-389
- DATA COMMUNICATION SYSTEM**
- [E2] DATA OUTLET - LEVITON CAT 5E (DUAL RECEPTACLE RED IN COLOR FOR ADMINISTRATIVE)
 - [E2] DATA OUTLET - LEVITON CAT 5E (DUAL RECEPTACLE BLUE IN COLOR FOR INSTRUCTIONAL)
 - FO— FIBER OPTIC CABLE VIA INNER DUCT WITH J-HOOK IN ATTIC AND 2" FOR OUTDOOR. SEE RISER DIAGRAM FOR MODEL NO.
 - C1— (ONE) CAT 5E 22AWG 4UTP. SEE RISER DIAGRAM FOR MODEL NO.
 - C2— (TWO) CAT 5E 22AWG 4UTP. SEE RISER DIAGRAM FOR MODEL NO.

NOTES:
 1. ALL SIGNAL CONDUCTORS CANNOT SPLICE INSIDE PULL BOX. CONDUCTOR MUST BE CONTINUOUS RUN BETWEEN SIGNAL DEVICES BACK BOX OR ABOVE GROUND TERMINAL CABINET.

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POWER AND SIGNAL PLAN

Project Name & Address:
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1 RELOCATABLE CLASSROOM
 BAKERSFIELD CITY SCHOOL DISTRICT
 2161 POTOMAC AVE., BAKERSFIELD, CA

Issue Date: 05/08/14
 Date: 05/28/14
 Designer: J. CHONG
 DR: J. CHONG
 PC: C.M.

Agency Approval Stamp:
 FILE #15-6
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 DIV. OF THE STATE ARCHITECT
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 103-117024
 AC: J. FLS
 SS: J.C.
 DATE: 06/02/2016
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