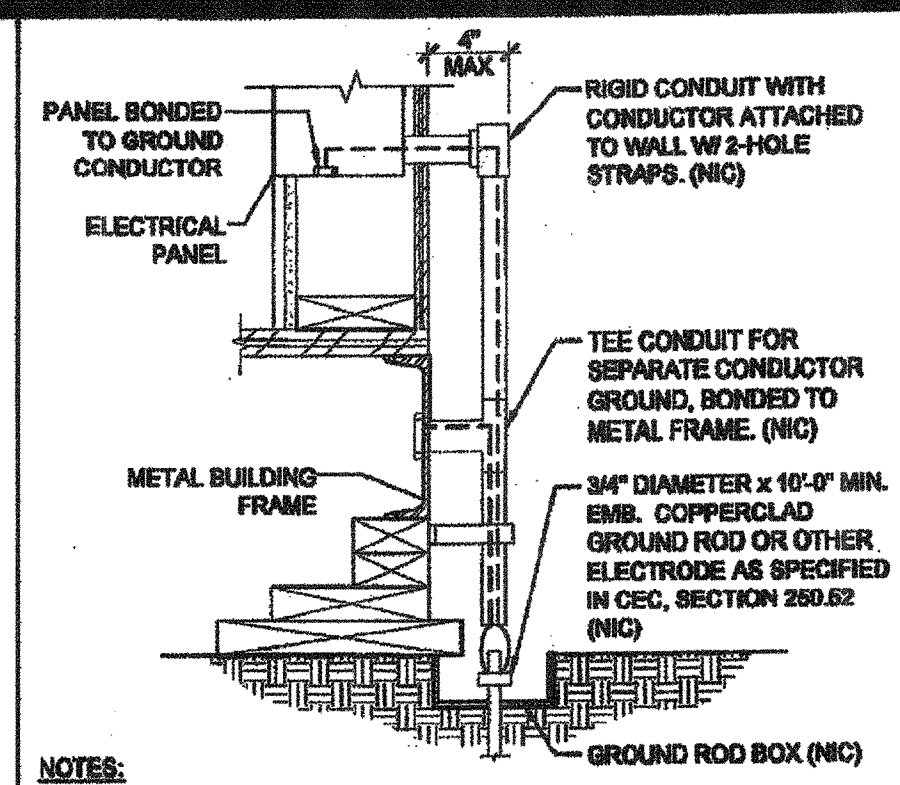
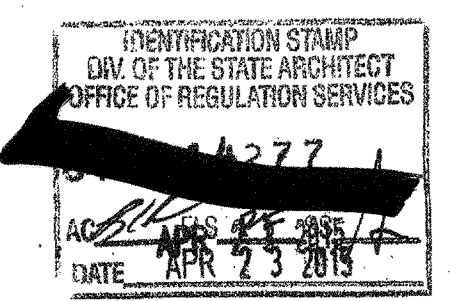


ELECTRICAL PLAN

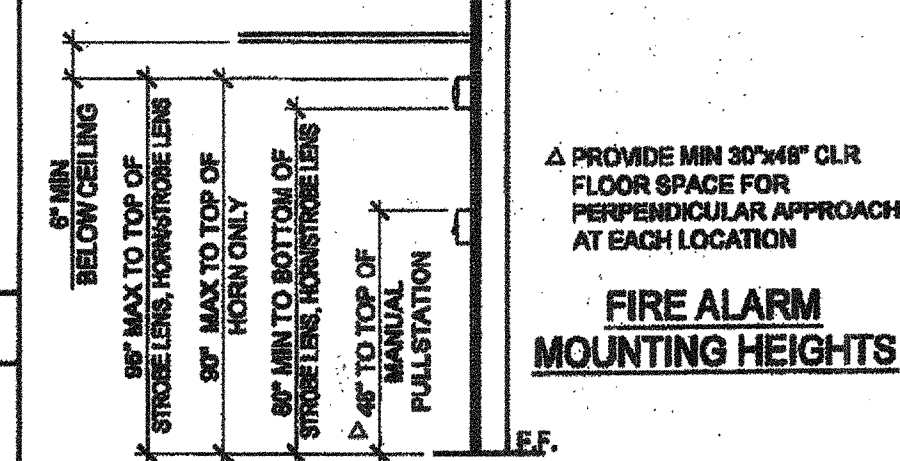
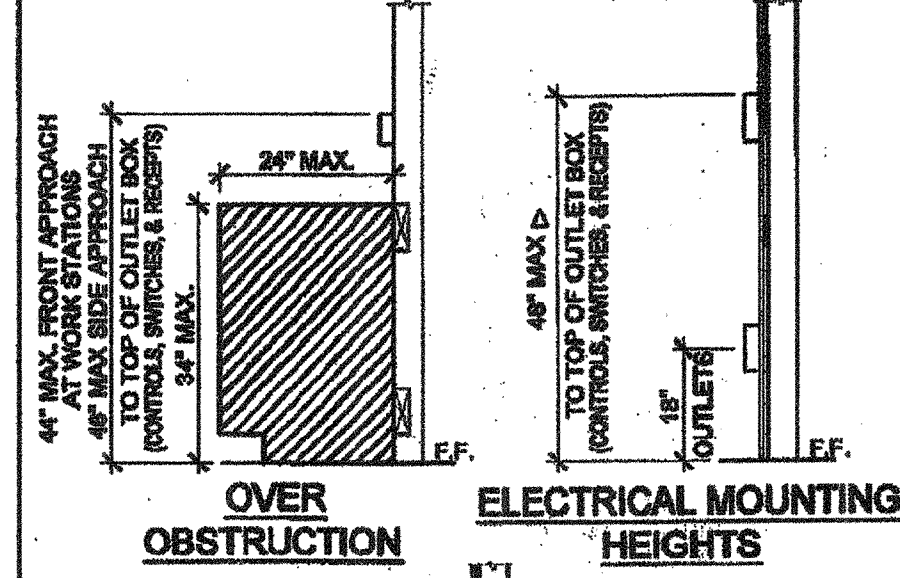
SCALE: 1/4" = 1'-0"

NOTE: SEE CCD-1 FOR SITE SPECIFIC CONFIGURATION

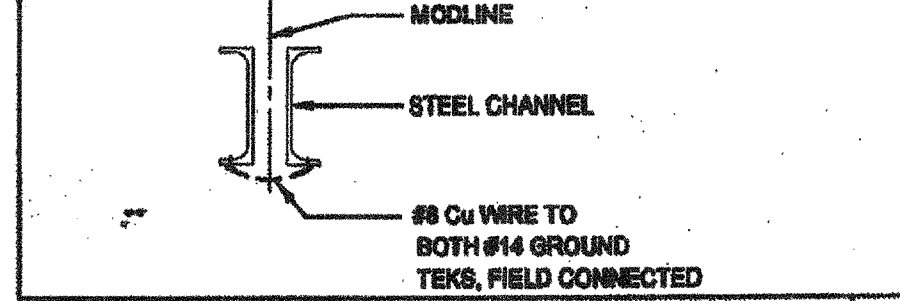


- NOTES:
- SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.06
 - ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
 - BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL & TO METAL BUILDING FRAME (CEC 250.50) IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
 - ALL MODULES OF METAL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP.
 - CHECK RESISTANCE TO GROUND ROD, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.50).

TYPICAL GROUNDING DETAIL 1



ACCESSIBLE HEIGHTS 2



GROUND JUMPER AT MODLINE 3

GENERAL GROUNDING NOTES
EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" DIA. X 6' COPPERCLAD STEEL GROUND ROD, WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREE'S FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP (BY SITE ELECTRICAL).

TESTING: TEST FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS, (BY SITE ELECTRICAL).

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAY BE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR. ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.

NOT USED 6 NOT USED 5

SCHOOL EQUIPMENT ANCHORAGE

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2010 CBC, SECTIONS 1815A.1.12 THROUGH 1815A.1.22 AND ASCE 7-05 CHAPTER 6 AND 12.

- 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 STATIONED 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 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 6 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A FLOOR OR HUNG 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.

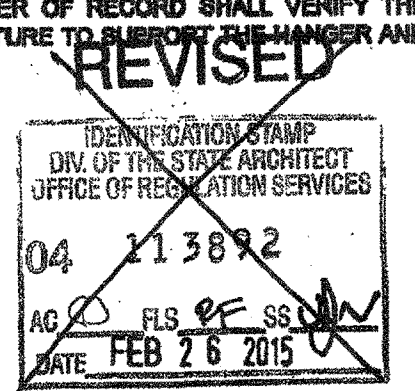
PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-05 SECTION 13.3 AS DESCRIBED IN ASCE 7-05 SECTION 13.3.6, 13.3.7, 13.6.5.6 AND 2010 CBC SECTIONS 1815A.1.10, 1815A.1.21 AND 1815A.1.22.

THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPA #) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING 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.



FIRE ALARM NOTES

- SMOKE AND HEAT DETECTOR SHALL BE CONNECTED TO FIRE ALARM SYSTEM BY OTHERS
- PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOCKED-ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCKED-ON WITH APPROVED LOCKING DEVICE, MARKED RED AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT". NFPA 72 4.4.1.4.2.2

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN WITHIN 75°C COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED			
SIZE			1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	8	16	26	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

JUNCTION BOX SIZE TABLE

BOX SIZE	CU. IN.	MAX NO. OF CONDUCTORS			
		#12	#10	#8	#6
48B	1 1/2" x 4" SQ	18.0	6	7	6
48	1 1/2" x 4" SQ	21.0	8	8	7
48D	2 1/8" x 4" SQ	30.3	13	12	10
48X	2 7/8" x 4" SQ	43.5	20	23	17
56D	2 1/2" x 4 1/8" SQ	42.0	19	18	14
56X	3 7/8" x 4 1/8" SQ	60.0	28	24	23
66A	4" x 6" SQ	144.0	64	57	49

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING LIGHT WITH (3) T-8 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH ELECTRONIC BALLAST ORACLE LIGHTING - MODEL 24.0T.332.2.T8A12.L41K.C4 WATTAGE: 32W T8 (41FLS) OR EQUAL
- OPTIONAL 2x4 CEILING LIGHT WITH (1) T-8 LAMP, LAY-IN FLUORESCENT LIGHT FIXTURE WITH ELECTRONIC BALLAST
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
- ELECTRICAL PANEL AT 4'-0" AFF TO TOP OF ELECTRICAL PANEL WITH 1/2" DIA POWER STUB OUT
- DUAL CEILING OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE CONNECTED TO LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR OPEN ROOM OVER 100 SQ FT W/ (2) CIRCUITS.
- ULTRASONIC CEILING OCCUPANCY SENSOR. WATTSTOPPER W-500A OR EQUAL. SENSOR TO BE CONNECTED TO KEYPAD LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
- SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT 4'-6" AFF. AND USE FOR OPEN ROOM (OR RESTROOM) LESS THAN 100 SQ FT W/ (1) CIRCUIT.
- DUAL SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT 4'-6" AFF. AND USE FOR OPEN ROOM OVER 100 SQ FT W/ (2) CIRCUITS.
- LIGHT SWITCH. MOUNT AT 4'-6" AFF TO TOP OF OUTLET BOX
- 3-WAY LIGHT SWITCH. MOUNT AT 4'-6" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE (15A - 120V - 3 WIRE. MOUNT AT 4'-6" AFF U.O.N. TO CENTERLINE OF DEVICE
- EXTERIOR WEATHER PROOF GFI RECEPTACLE AT 2'-4" AFF FOR AC SERVICES (MAX 25'-0" FROM UNITS)
- GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EXTERIOR LIGHT FIXTURE. MOUNT AT 4'-6" AFF
- CLOCK OUTLET AT 4'-0" AFF TO CENTERLINE OF DEVICE
- EXIT SIGN WITH BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH 7500 OR MORE EXTERIOR DOORS, CLASSROOMS WITH ONE EXTERIOR DOOR - (OPTIONAL)
- 48D J-BOX FOR FIRE ALARM PULLSTATION (DEVICE BY OTHERS). MOUNT AT 4'-6" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING
- 48D J-BOX FOR FIRE ALARM STROBE (DEVICE BY OTHERS). BOTTOM OF LENS SHALL BE BETWEEN 8'-0" TO 8'-6" AFF WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING
- 48D J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT 4'-0" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT TO FIRE ALARM BACKBOX WITH PULLSTRING
- RECESSED 48D J-BOX W/ COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT 4'-6" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING
- 48D J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). DETECTORS SHALL BE PLACED SO THAT THERE IS A DETECTOR WITHIN 18'-0" FROM ADJACENT WALLS, AND 21'-0" FROM ANY POINT IN ROOM. DETECTORS SHALL BE PLACED 30'-0" O.C. MAX. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. PROVIDE 3/4" CONDUIT FROM J-BOX TO FIRE ALARM BACKBOX WITH PULLSTRING (ALARM NOTE #1)
- 48D J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). DETECTORS SHALL BE PLACED SO THAT THERE IS A DETECTOR WITHIN 20'-0" FROM ADJACENT WALLS, 30'-0" FROM ANY POINT IN ATTIC. DETECTORS SHALL BE PLACED 80'-0" O.C. MAX. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. PROVIDE 3/4" CONDUIT FROM J-BOX TO FIRE ALARM BACKBOX WITH PULLSTRING (ALARM NOTE #1)
- 48D J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO LIGHT
- 100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING LIGHT WITH (3) T-8 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH ELECTRONIC BALLAST ORACLE LIGHTING - MODEL 24.0T.332.2.T8A12.L41K.C4 WATTAGE: 32W T8 (41FLS) OR EQUAL. EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE EQUIPPED WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE WIRED SUCH THAT WHEN THE FIXTURE IS BEING OPERATED USING BATTERY POWER THE LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.
- OPTIONAL 48D J-BOX w/3/4" CONDUIT INTO ATTIC SPACE-HEIGHT T.B.D. LOCATIONS AS REQUIRED

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PHONE: 951-943-9393 FAX: 951-943-2211

PROJECT NAME:
CLASS LEASING CLASSROOMS BLDG'S

SHEET TITLE:
ELECTRICAL PLAN AND SCHEDULE 36' x 40'

STAVARES ASSOCIATES
ARCHITECTS
10332
5-28-17
NO. 02881
ISS. 10-24-2005

12/23/2011
ARCHITECT OF RECORD
SUBMISSION DATE

REGISTERED ARCHITECT
NO. 10322
5-28-17
FILE OF CALIFORNIA

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
04 1 1 3892
AC 011 FLS 01 03 14
DATE FEB 26 2015

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
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DATE DEC 9 2011

REVISIONS

SILVER CREEK INDUSTRIES
24' x 40' FC
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 12-23-11
P.C. SHEET NUMBER
STK-P 140

E-1.02

ELECTRICAL PANEL WALL MOUNTED HVAC

VOLTS: 120/208 V		PANEL: "A"		FEED: REAR	
MAIN: 100 A		LOCATION: INTERIOR ACCESS		MOUNTING: FLUSH	
LOAD	QTY	WATTS	BREAKER	WATTS	QTY
RECEPTACLES	5	900	20 1 1	6960	1
RECEPTACLE/CLOCK	6	900	20 1 3	6960	1
INTERIOR/EXTERIOR LIGHTING	19	1005	20 1 5		
INTERIOR/EXTERIOR LIGHTING	10	1005	20 1 7		
WALL RECEPTACLE (GFI)	1	180	20 1 9		
A = 9045 WATTS / PHASE		2085	1905	6960	7000
TOTAL = 17,950 WATTS		75	AMPS	120/208	VOLTS

ELECTRICAL PANEL ROOF MOUNTED HVAC

VOLTS: 120/208 V		PANEL: "A"		FEED: REAR	
MAIN: 100 A		LOCATION: INTERIOR ACCESS		MOUNTING: FLUSH	
LOAD	QTY	WATTS	BREAKER	WATTS	QTY
RECEPTACLES	5	900	20 1 1	4200	1
RECEPTACLE/CLOCK	6	900	20 1 3	4200	1
INTERIOR/EXTERIOR LIGHTING	19	1005	20 1 5		
INTERIOR/EXTERIOR LIGHTING	10	1005	20 1 7		
ROOF RECEPTACLE (GFI)	1	180	20 1 9		
A = 6285 WATTS / PHASE		2085	1905	4200	4240
TOTAL = 12,490 WATTS		52	AMPS	120/208	VOLTS