

SHEET NOTES

1. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 811 TO LOCATE UNDERGROUND UTILITIES AT LEAST 2 WORKING DAYS PRIOR TO DIGGING. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF EXISTING IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
2. VERIFY LOCATION OF ALL BUILDINGS AND APPENDICES ON ARCHITECTURAL AND CIVIL PLANS.
3. FIELD VERIFY LOCATION ON ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING. SCHEDULE AND COORDINATE ALL SITE WORK WITH OWNER PRIOR TO ANY TRENCHING.
4. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH.
5. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUIT & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
6. ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
7. CONTRACTOR SHALL COORDINATE AND PROVIDE ALL SITE ELECTRICAL SERVICE REQUIREMENTS WITH SERVING UTILITY.
8. ALL SERVICE ENTRANCE EQUIPMENT SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL UTILITY COMPANY FOR APPROVAL, WITH WRITTEN APPROVAL RECEIVED PRIOR TO SUBMISSION TO ELECTRICAL ENGINEER FOR APPROVAL.
9. VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
10. MINIMUM CONDUIT BURIAL DEPTH IS 24" 36" MINIMUM BELOW STREETS AND PARKING LOTS. FOR 0-600 VOLT SYSTEMS.
11. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
12. 1" CONDUIT MINIMUM UNDERGROUND.
13. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
14. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUIT MANUFACTURERS RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
15. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION. CONTRACTOR SHALL NOTIFY DISTRICT REPRESENTATIVE OF WORK BEING PERFORMED. COORDINATE WITH DISTRICT REPRESENTATIVE.
16. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH DIMENSIONED NYLON PULL STRING.
17. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION OR TRENCHING. CONTRACTOR SHALL PROTECT ALL EXISTING/REMAINING UTILITIES IN PLACE. CONTRACTOR, AT HIS SOLE EXPENSE, SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.

NOTE:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CIVIL ENGINEERING DRAWINGS AND SITE AS-BUILTS (OBTAIN FROM OWNER) TO IDENTIFY THE LOCATION AND ROUTING OF ALL EXISTING UNDERGROUND UTILITIES, METERS, DRAINS, LANDSCAPING AND STRUCTURAL OBSTACLES PRIOR TO TRENCHING AND CONDUIT DUCT BANK ROUTING. THE CONTRACTOR SHALL CONDUCT AN UNDERGROUND SCAN OF THE CORRIDOR WHERE NEW TRENCHING SHALL OCCUR, AND TO COORDINATE THE ROUTING OF NEW TRENCHING IN AREAS OF EXISTING UNDERGROUND UTILITIES. TRENCHING FOR NEW UNDERGROUND CONDUITS IN AREAS WHERE EXISTING UNDERGROUND UTILITIES ARE PRESENT, WHETHER SHOWN ON THESE PLANS OR NOT, SHALL BE EXCAVATED BY HAND AND WITH EXTREME CAUTION SO AS NOT TO DISTURB EXISTING UTILITIES. CONTRACTOR SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION. UNDERGROUND POWER AND COMMUNICATION PULL BOXES, WHERE SHOWN ON THE SITE PLAN TO BE RELOCATED TO A POSITION AS CLOSE AS POSSIBLE TO THE LOCATION SHOWN ON THE DRAWING. CONTRACTOR SHALL PROMPTLY NOTIFY OWNER IF ANY EXISTING UTILITY OR IRRIGATION LINE IS DAMAGED, AND SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION.

NOTE: UNLESS OTHERWISE NOTED, ALL EXISTING PANELS, SWITCHBOARDS, TRANSFORMERS, ELECTRICAL EQUIPMENT, CONDUITS, FEEDERS, ETC., SHALL BE PROTECTED IN PLACE.

NOTE: ALL EXISTING UNDERGROUND FEEDERS ARE SHOWN DIAGRAMMATIC. EXACT ROUTING IS UNKNOWN. CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK & MATERIALS IN ORDER TO PROTECT EXISTING UNDERGROUND CONDUIT(S)/FEEDERS THAT SHALL REMAIN.

DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SWITCH, RECEPTACLE, DEVICE, PANEL, TRANSFORMER, ETC., SHALL BE PROTECTED IN PLACE IF DISTURBED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUITORS BACK TO NEAREST UPSTREAM DEVICE OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUITORS IN PLACE. RECONNECT NEW DEVICE, IN SAME LOCATION, TO THE EXISTING BRANCH CIRCUIT. SEE POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND RECONNECTION. SEE LIGHTING PLAN FOR WORK & LOCATIONS. REMOVE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUITORS. REPLACE ANY BROKEN LAMPS IN LIGHT FIXTURE.

AGENCY INFORMATION:

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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION

815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO.:

PROJECT NO: 118934

DRAWN BY: VPZ

CHK'D BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE

**PARTIAL
SITE ELECTRICAL
DEMOLITION PLAN
SHEET #1**

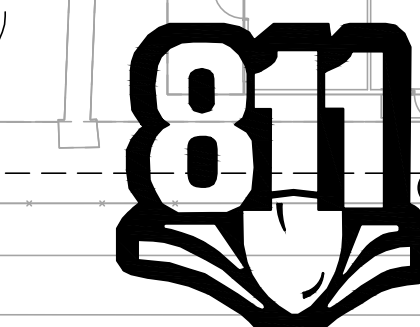
SHEET NUMBER

E200

DSA SUBMITTAL SET

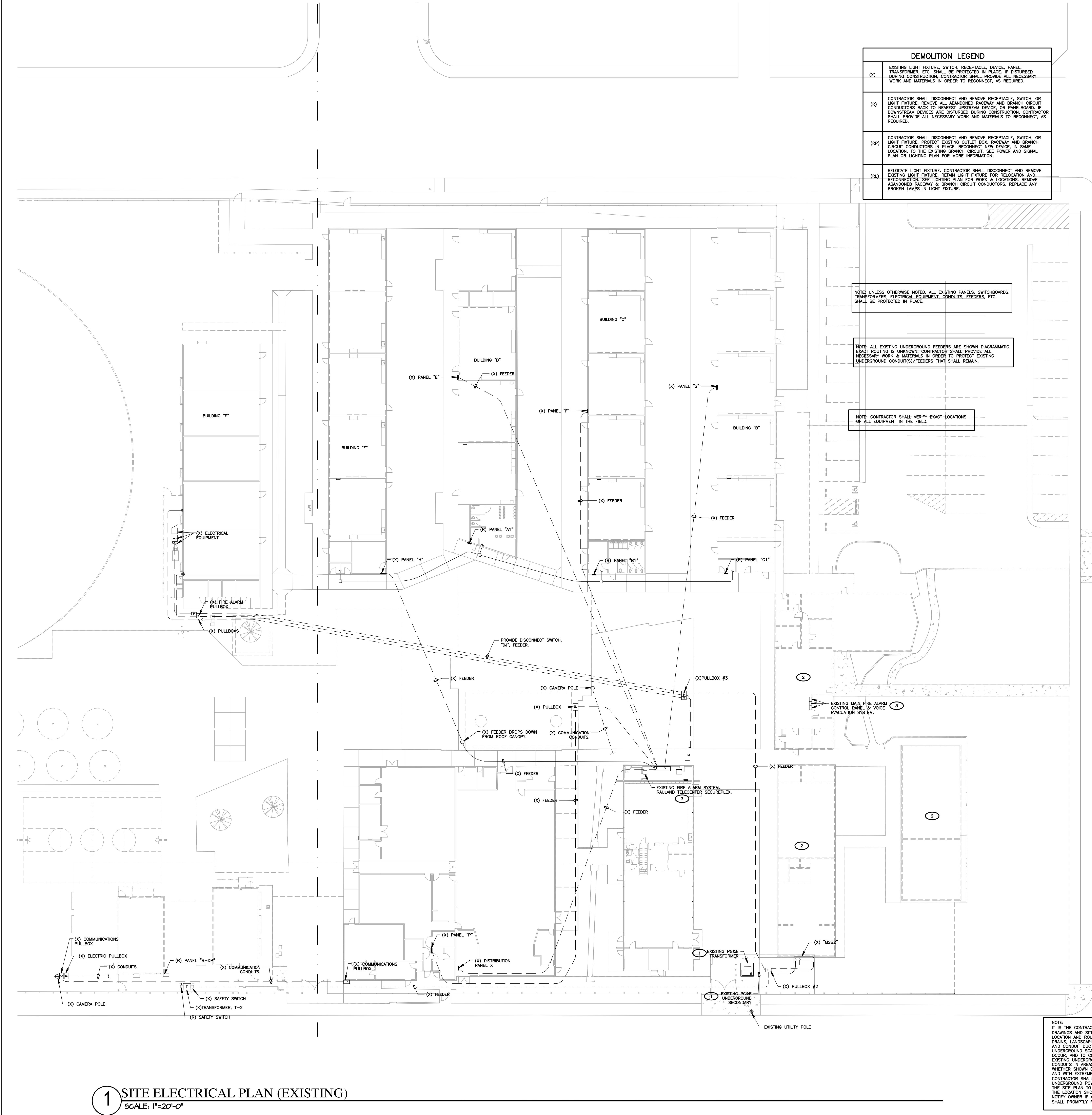
1 SITE ELECTRICAL DEMOLITION PLAN (EXISTING)

SCALE: 1"=20'-0"



Know what's below.

Call before you dig.



SHEET NOTES

- CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (CUSA) TO LOCATE UNDERGROUND UTILITIES AT LEAST 5 WORKING DAYS PRIOR TO TRENCHING. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF EXISTING IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
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- CONTRACTOR SHALL IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
- ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
- CONTRACTOR SHALL COORDINATE AND PROVIDE ALL SITE ELECTRICAL SERVICE REQUIREMENTS WITH SERVING UTILITY.
- ALL SERVICE ENTRANCE EQUIPMENT SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL UTILITY COMPANY FOR APPROVAL, WITH WRITTEN APPROVAL RECEIVED PRIOR TO SUBMISSION TO ELECTRICAL ENGINEER FOR APPROVAL.
- VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
- MINIMUM CONDUIT BURIAL DEPTH IS 24", 36" MINIMUM BELOW STREETS AND PARKING LOTS, FOR 0-600 VOLT SYSTEMS.
- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
- 1" CONDUIT MINIMUM UNDERGROUND.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
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KEY NOTES

- (NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
- THIS EQUIPMENT SHALL BE PROTECTED IN PLACE UNTIL NEW "MSB" IS INSTALLED. ENERGIZED & EXISTING "MSB2" IS CUT OVER & BACKFED. EXACT TIMING & PHASING OF REMOVAL SHALL BE COORDINATED WITH POSE, BCSO REPRESENTATIVE, & FINAL POSE CONSTRUCTION/DEMOLITION DRAWINGS.
 - THIS BUILDING IS BEING DEMOLISHED. VERIFY WITH ARCHITECTURAL PLANS. EXACT TIMING & PHASING OF ALL DEMOLITION SHALL BE COORDINATED WITH ARCHITECT & SCHOOL DISTRICT PRIOR TO START OF CONSTRUCTION/DEMOLITION.
 - THIS SYSTEM SHALL BE PROTECTED IN PLACE WHILE NEW FIRE ALARM SYSTEM IS BEING INSTALLED. DISCONNECT & REMOVE THIS SYSTEM AFTER NEW SYSTEM IS INSTALLED & TESTED. COORDINATE EXACT TIMING & PHASING OF REMOVAL OF THIS SYSTEM WITH BCSO & ARCHITECT.

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BAKERSFIELD CITY SCHOOL DISTRICT



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815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO.:

PROJECT NO. 118934

DRAWN BY: VPZ

CHKD BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE

**PARTIAL
SITE ELECTRICAL
PLAN (EXISTING)
SHEET #2**

SHEET NUMBER

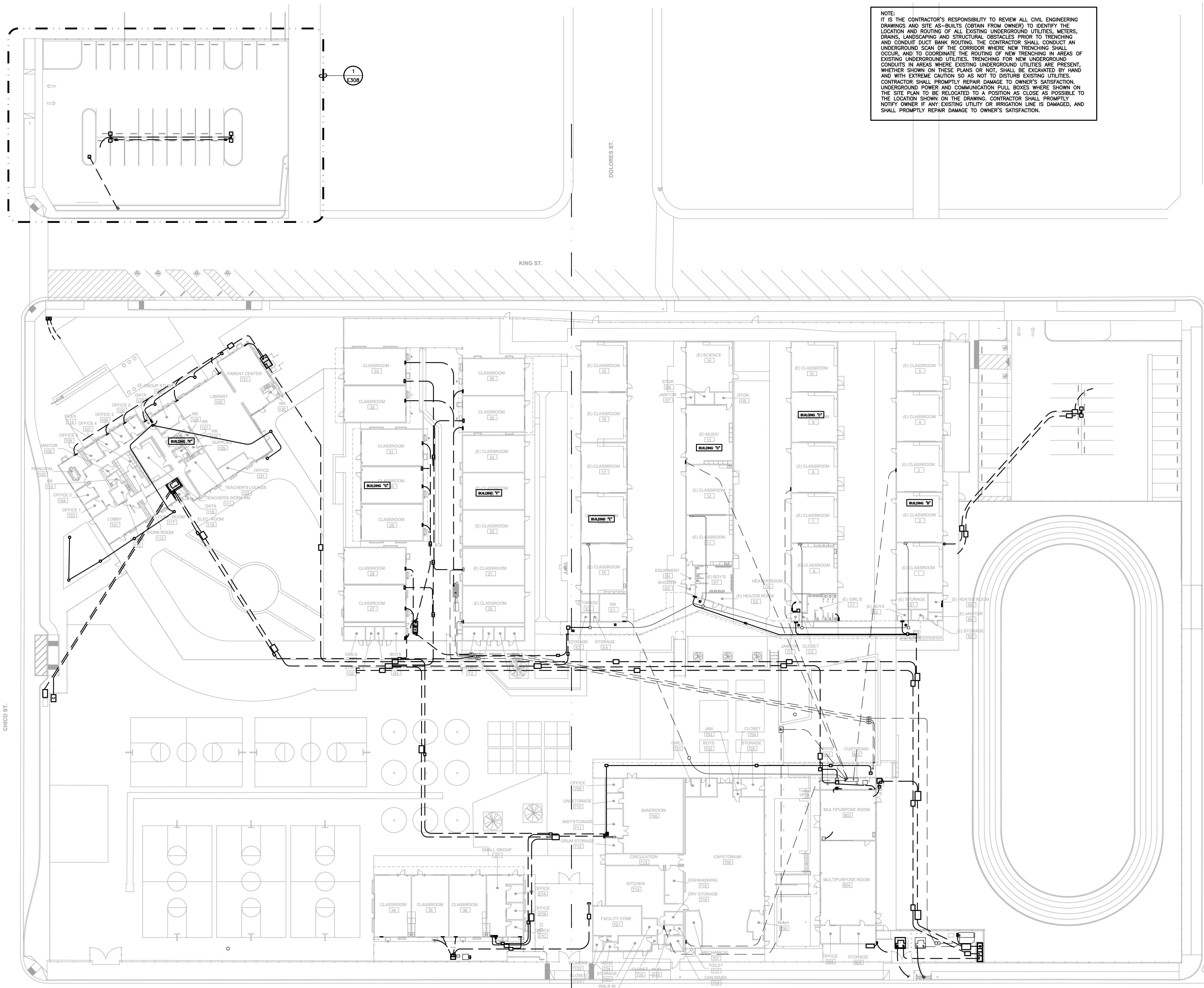
E201



Know what's below.
Call before you dig.

1 SITE ELECTRICAL PLAN (EXISTING)
SCALE: 1"=20'-0"

NOTE:
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10. MINIMUM CONDUIT BURIAL DEPTH IS 24", 36" MINIMUM BELOW STREETS AND PARKING LOTS. FOR 0-800 VOLT SYSTEMS.
11. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
12. 1" CONDUIT MINIMUM UNDERGROUND.
13. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
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1 SITE ELECTRICAL PLAN
SCALE: 1"=30'-0"



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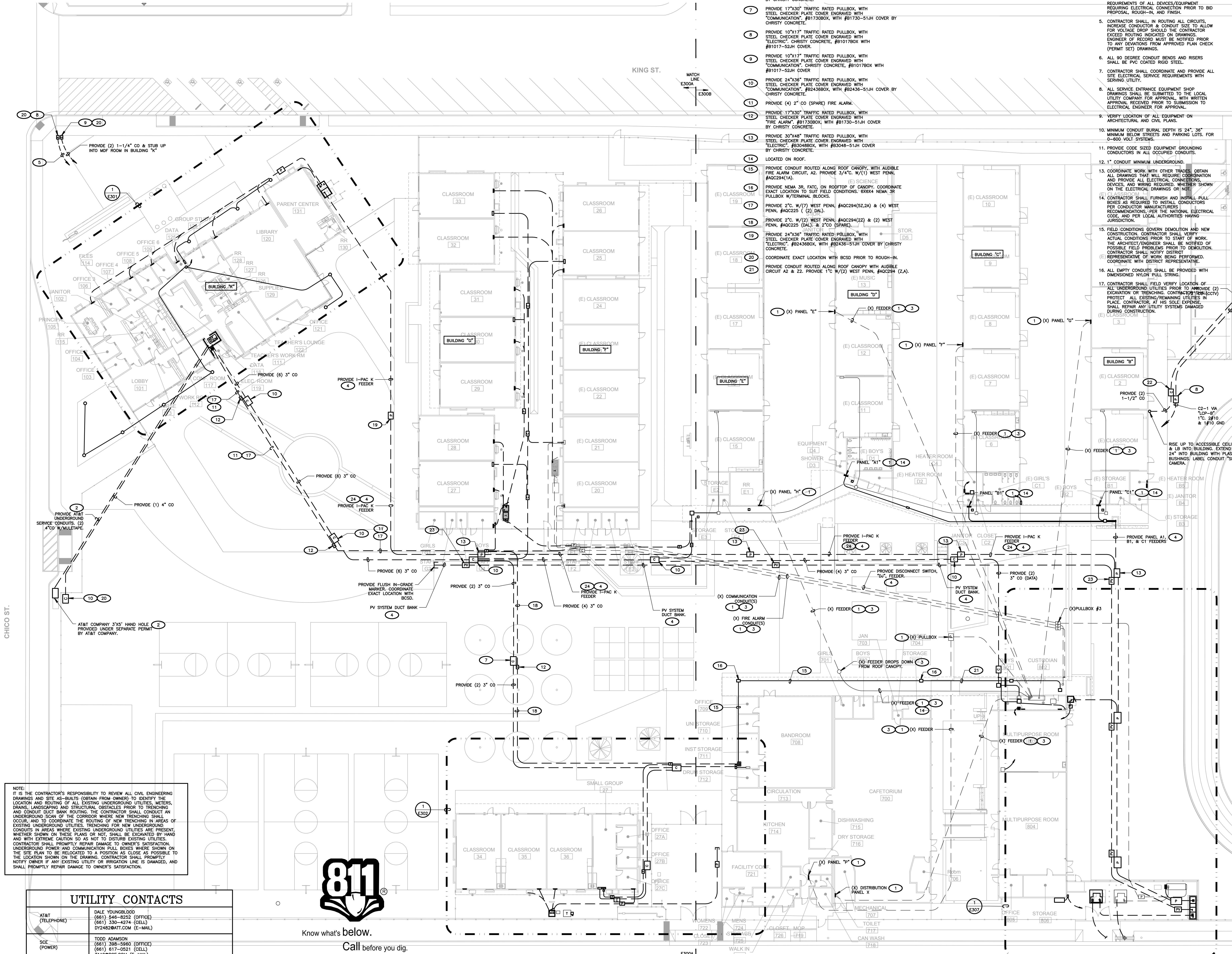
SHEET TITLE

SITE ELECTRICAL PLAN

SHEET NUMBER

E300

DSA SUBMITTAL SET



KEY NOTES (E300A & 300B)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

1. PROTECT IN PLACE.
2. VERIFY & PROVIDE PER UTILITY COMPANY REQUIREMENTS.
3. SHOWN DIAGRAMMATIC. EXACT ROUTING IS UNKNOWN.
4. REFER TO PROPOSED SINGLE LINE DIAGRAM FOR FEEDER INFORMATION.
5. PROVIDE 1-1/4" CO TO PANEL C IN BUILDING K FOR FUTURE POWER.
6. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #B1017B0X, WITH #B1017-51JH COVER BY CHRISTY CONCRETE.
7. PROVIDE 17"x30" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION", #B1730B0X, WITH #B1730-51JH COVER BY CHRISTY CONCRETE.
8. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC", #B1017B0X, WITH #B1017-51JH COVER BY CHRISTY CONCRETE.
9. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION", #B1017B0X, WITH #B1017-51JH COVER BY CHRISTY CONCRETE.
10. PROVIDE 24"x36" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION", #B2436B0X, WITH #B2436-51JH COVER BY CHRISTY CONCRETE.
11. PROVIDE (4) 2" CO (SPARE) FIRE ALARM.
12. PROVIDE 17"x30" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #B1730B0X, WITH #B1730-51JH COVER BY CHRISTY CONCRETE.
13. PROVIDE 30"x48" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC", #B3048B0X, WITH #B3048-51JH COVER BY CHRISTY CONCRETE.
14. LOCATED ON ROOF.
15. PROVIDE CONDUIT ROUTED ALONG ROOF CANOPY, WITH AUDIBLE FIRE ALARM CIRCUIT, A2. PROVIDE 3/4" W/(1) WEST PENN, #AOC294(1A).
16. PROVIDE NEMA 3R, FATC, ON ROOFTOP OF CANOPY, COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
17. PROVIDE 2" W/(2) WEST PENN, #AOC294(2Z,2A) & (4) WEST PENN, #AOC225 ((2) DAL).
18. PROVIDE 2" W/(2) WEST PENN, #AOC294(2Z) & (2) WEST PENN, #AOC225 (DAL) & 2" CO (SPARE).
19. PROVIDE 24"x36" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC", #B2436B0X, WITH #B2436-51JH COVER BY CHRISTY CONCRETE.
20. COORDINATE EXACT LOCATION WITH BCSO PRIOR TO ROUGH-IN.
21. PROVIDE CONDUIT ROUTED ALONG ROOF CANOPY WITH AUDIBLE CIRCUIT A2 & 22. PROVIDE 1" W/(2) WEST PENN, #AOC294 (2A).

22. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #B1017B0X, WITH #B1017-51JH COVER.
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24. PROVIDE (3) 3" CO SPARE.

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13. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
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15. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION. CONTRACTOR SHALL NOTIFY DISTRICT REPRESENTATIVE OF WORK BEING PERFORMED. COORDINATE WITH DISTRICT REPRESENTATIVE.
16. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH DIMENSIONED NYLON PULL STRING.
17. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO APPROVE (2) LOCATION OR TRENCHING. CONTRACTOR SHALL PROTECT ALL EXISTING/REMAINING UTILITIES IN PLACE. CONTRACTOR, AT HIS SOLE EXPENSE, SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.

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BAKERSFIELD CITY SCHOOL DISTRICT

BESSIE OWENS JUNIOR HIGH MODERNIZATION
815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:
PROJECT NO: 118934
DRAWN BY: VPZ
CHK'D BY: DF
ISSUE DATE: 3/3/2020
SHEET TITLE

PARTIAL SITE ELECTRICAL PLAN

SHEET NUMBER

E300A

DSA SUBMITTAL SET



Know what's below.
Call before you dig.

NOTE:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CIVIL ENGINEERING DRAWINGS AND SITE AS-BUILTS (OBTAIN FROM OWNER) TO IDENTIFY THE LOCATION AND ROUTING OF ALL EXISTING UNDERGROUND UTILITIES, METERS, DRAINAGE, LANDSCAPING, AND STRUCTURAL OBSTACLES PRIOR TO TRENCHING AND CONDUIT DUCT BANK ROUTING. THE CONTRACTOR SHALL CONDUCT AN UNDERGROUND SCAN OF THE CORRIDOR WHERE NEW TRENCHING SHALL OCCUR, AND TO COORDINATE THE ROUTING OF NEW TRENCHING IN AREAS OF EXISTING UNDERGROUND UTILITIES. TRENCHING FOR NEW UNDERGROUND CONDUITS IN AREAS WHERE EXISTING UNDERGROUND UTILITIES ARE PRESENT, WHETHER SHOWN ON THESE PLANS OR NOT, SHALL BE EXCAVATED BY HAND AND WITH EXTREME CAUTION SO AS NOT TO DISTURB EXISTING UTILITIES. CONTRACTOR SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION. UNDERGROUND POWER AND COMMUNICATION PULL BOXES WHERE SHOWN ON THE SITE PLAN TO BE RELOCATED TO A POSITION AS CLOSE AS POSSIBLE TO THE LOCATION SHOWN ON THE DRAWING. CONTRACTOR SHALL PROMPTLY NOTIFY OWNER IF ANY EXISTING UTILITY OR IRRIGATION LINE IS DAMAGED, AND SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION.

SHEET NOTES

- CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 811 TO LOCATE UNDERGROUND UTILITIES AT LEAST 2 WORKING DAYS PRIOR TO DIGGING. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF EXISTING IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
- VERIFY LOCATION OF ALL BUILDINGS AND APPENDICES ON ARCHITECTURAL AND CIVIL PLANS.
- FIELD VERIFY LOCATION ON ALL UNDERGROUND REQUIREMENTS PRIOR TO TRENCHING, SCHEDULE AND COORDINATE ALL SITE WORK WITH OWNER PRIOR TO ANY TRENCHING.
- CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH.
- CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
- ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
- CONTRACTOR SHALL COORDINATE AND PROVIDE ALL SITE ELECTRICAL SERVICE REQUIREMENTS WITH SERVING UTILITY.
- ALL SERVICE ENTRANCE EQUIPMENT SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL UTILITY COMPANY FOR APPROVAL. WITH WRITTEN APPROVAL RECEIVED PRIOR TO SUBMISSION TO ELECTRICAL ENGINEER FOR APPROVAL.
- VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
- MINIMUM CONDUIT BURIAL DEPTH IS 24", 36" MINIMUM BELOW STREETS AND PARKING LOTS, FOR 0-600 VOLT SYSTEMS.
- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
- 1" CONDUIT MINIMUM UNDERGROUND.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
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BAKERSFIELD CITY SCHOOL DISTRICT



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PROJECT NO: 118934

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ISSUE DATE: 3/3/2020

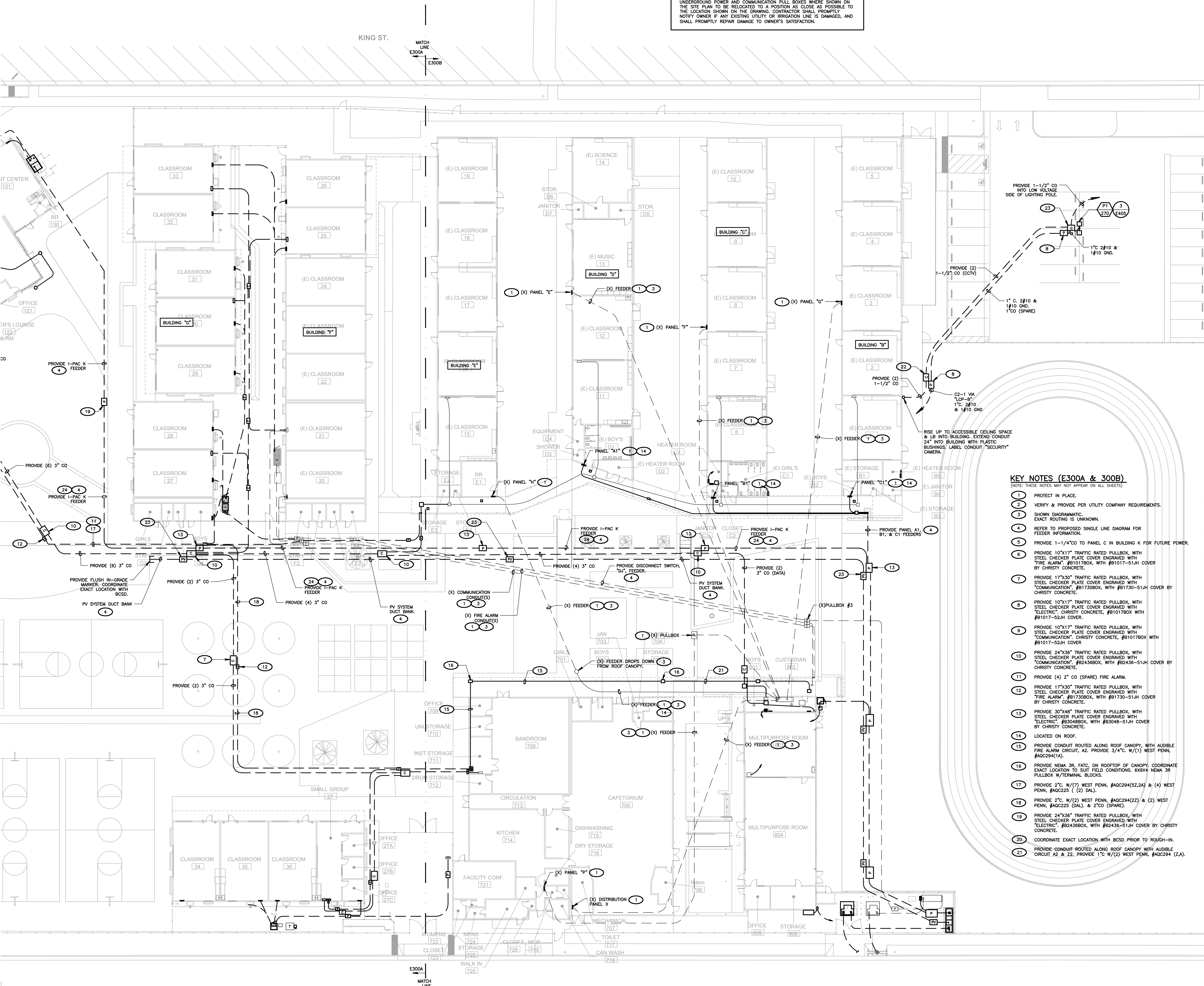
SHEET TITLE

**PARTIAL
SITE ELECTRICAL
PLAN**

SHEET NUMBER

E300B

DSA SUBMITTAL SET

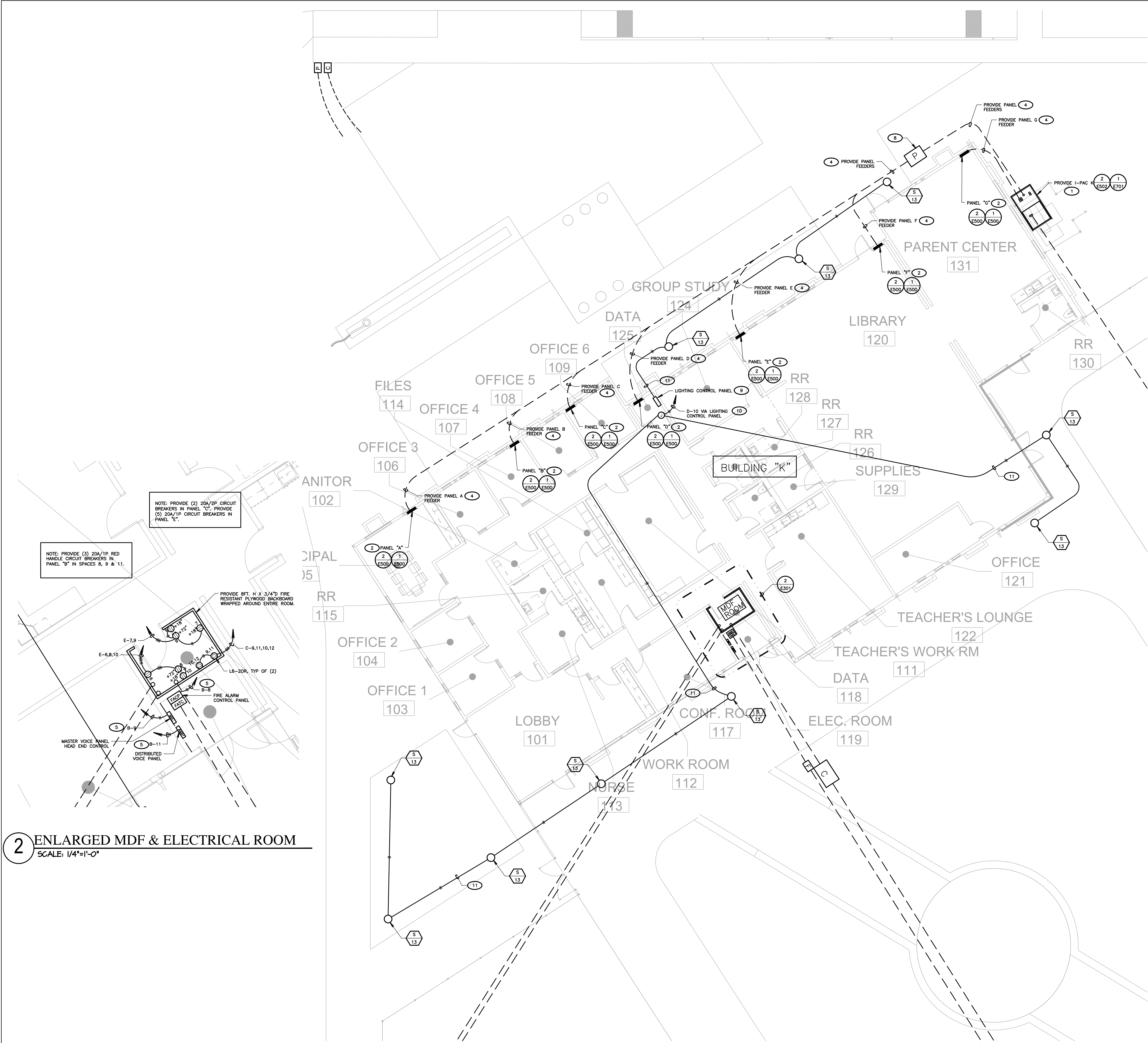


KEY NOTES (E300A & 300B)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- PROTECT IN PLACE.
- VERIFY & PROVIDE PER UTILITY COMPANY REQUIREMENTS.
- SHOW DIAGRAMMATIC.
- EXACT ROUTING IS UNKNOWN.
- REFER TO PROPOSED SINGLE LINE DIAGRAM FOR FEEDER INFORMATION.
- PROVIDE 1-1/4" CO TO PANEL C IN BUILDING K FOR FUTURE POWER.
- PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #B1017B-51JH COVER BY CHIRSTY CONCRETE.
- PROVIDE 17"x30" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION", #B1730B-51JH COVER BY CHIRSTY CONCRETE.
- PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC", CHIRSTY CONCRETE, #B1017B-51JH COVER BY CHIRSTY CONCRETE.
- PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION", CHIRSTY CONCRETE, #B1017B-51JH COVER BY CHIRSTY CONCRETE.
- PROVIDE 17"x30" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #B1730B-51JH COVER BY CHIRSTY CONCRETE.
- PROVIDE 30"x48" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC", #B3048B-51JH COVER BY CHIRSTY CONCRETE.
- LOCATED ON ROOF.
- PROVIDE CONDUIT ROUTED ALONG ROOF CANOPY, WITH AUDIBLE FIRE ALARM CIRCUIT, A2, PROVIDE 5/4" C, W/1" WEST PENN, #AGC294(1A).
- PROVIDE NEMA 3R, FATC, ON ROOFTOP OF CANOPY. COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
- PROVIDE 2" C, W/1" WEST PENN, #AGC294(52,2A) & (4) WEST PENN, #AGC225 (2) DAL.
- PROVIDE 2" C, W/2" WEST PENN, #AGC294(22) & (2) WEST PENN, #AGC225 (DAL) & 2" D2 (SPARE).
- PROVIDE 24"x36" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC", #B2436B-51JH COVER BY CHIRSTY CONCRETE.
- COORDINATE EXACT LOCATION, WITH BSSD PRIOR TO ROUGH-IN.
- PROVIDE CONDUIT ROUTED ALONG ROOF CANOPY WITH AUDIBLE CIRCUIT A2 & Z2, PROVIDE 1" C W/2" WEST PENN, #AGC294 (2A).

1 PARTIAL SITE ELECTRICAL PLAN
SCALE: 1"=20'-0"



SHEET NOTES

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- VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
- MINIMUM CONDUIT BURIAL DEPTH IS 24". 36" MINIMUM BELOW STREETS AND PARKING LOTS. FOR 0-500 VOLT SYSTEMS.
- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
- 1" CONDUIT MINIMUM UNDERGROUND.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
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KEY NOTES (E301)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- REFER TO SINGLE LINE DIAGRAM.
- BRANCH CIRCUIT LOAD CENTER PROVIDED BY MODULAR CLASSROOM MANUFACTURER. SEE MODULAR CLASSROOM SHOP DRAWINGS FOR PANEL SCHEDULE. VERIFY LOCATION & PROVIDE CONNECTION FOR VENDOR'S SHOP DRAWINGS.
- FOR FEEDER INFORMATION REFER TO SINGLE LINE DIAGRAM.
- PROVIDE (1) 20/1P CIRCUIT BREAKER IN EXISTING SPACE OR USE SPARE 20/1P CIRCUIT BREAKER. THE CIRCUIT BREAKER SHALL HAVE A RED MARKING & BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL". PROVIDE A LOCK-ON DEVICE ON THE CIRCUIT BREAKER HANDLE. CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE "TAG" & "TAG". PROVIDE SURGE SUPPRESSORS ON THE INPUT OF CONTROL PANELS, EXCEPT FOR CONTROL PANELS WITH BUILT-IN SURGE SUPPRESSORS.
- PROVIDE 17"x30" TRAFFIC RATED PULLBOX WITH STEEL CHECKER PLATE COVER ENGRAVED W/ "ELECTRIC". #B1730BOX W/B1730-511W COVER, BY CHRISTY CONCRETE.
- PROVIDE WATSTOPPER, #LC8-102/277 WITH (4) #LCSF-2.
- PROVIDE 20A/1-POLAR CIRCUIT BREAKER IN PANEL FOR LIGHTING CIRCUIT.

NOTE: CONTRACTOR SHALL TRANSITION FROM EMT CONDUIT TO LIQUIDTITE FLEXIBLE METAL CONDUIT WITH SLACK FOR 4" MIN. HORIZONTAL & VERTICAL MOVEMENT DUE TO SEISMIC. PROVIDE THIS BETWEEN MODULAR BLDG & CANOPY. VERIFY LOCATIONS IN THE FIELD TO SUIT FIELD CONDITIONS.

NOTE:
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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION

815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:

PROJECT NO: 118934

DRAWN BY: VPZ

CHKD BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE

**PARTIAL
SITE ELECTRICAL
PLAN
(BUILDING K)**

SHEET NUMBER

E301

2 ENLARGED MDF & ELECTRICAL ROOM
SCALE: 1/4"=1'-0"

1 PARTIAL SITE ELECTRICAL PLAN (BUILDING K)
SCALE: 1/8"=1'-0"

SHEET NOTES

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- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
- 1" CONDUIT MINIMUM UNDERGROUND.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
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KEY NOTES (E302)

- (NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
- PROVIDE 10"x12" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #B1017BOX, WITH #B1017-51JH COVER BY CHRISTY CONCRETE.
 - PROVIDE 17"x30" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION", #B1730BOX, WITH #B1730-51JH COVER BY CHRISTY CONCRETE.
 - BRANCH CIRCUIT LOAD CENTER PROVIDED BY MODULAR CLASSROOM MANUFACTURER. SEE MODULAR CLASSROOM SHOP DRAWINGS FOR PANEL SCHEDULE. VERIFY LOCATION & PROVIDE CONNECTION PER VENDOR'S SHOP DRAWINGS.
 - FOR FEEDER INFORMATION, REFER TO SINGLE LINE DIAGRAM.
 - REFER TO SINGLE LINE DIAGRAM.
 - PROVIDE 17"x30" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #B1730BOX, WITH #B1730-51JH COVER BY CHRISTY CONCRETE.
 - PROVIDE FATC, 600X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS. RISE CONDUIT UP & LB INTO ACCESSIBLE CEILING SPACE W/FIRE ALARM CONDUCTORS.
 - PROVIDE (3) 2" CO
 - RISE UP TO SIGNAL TERMINAL CABINET.
 - PROVIDE 13"x24" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC", #B1324BOX, WITH #B1324-51JH COVER BY CHRISTY CONCRETE.
 - PROVIDE PANEL "A" FEEDER. SEE SINGLE LINE DIAGRAM FOR FEEDER INFORMATION.
 - PROVIDE (1) 2" CO, (1) 1-1/4" CO, & (1) 1" CO.
 - COORDINATE EXACT LOCATION WITH BCSD PRIOR TO ROUGH-IN.

NOTE:
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SHEET TITLE

**PARTIAL
SITE ELECTRICAL
PLAN
(BUILDING L & J)**

SHEET NUMBER

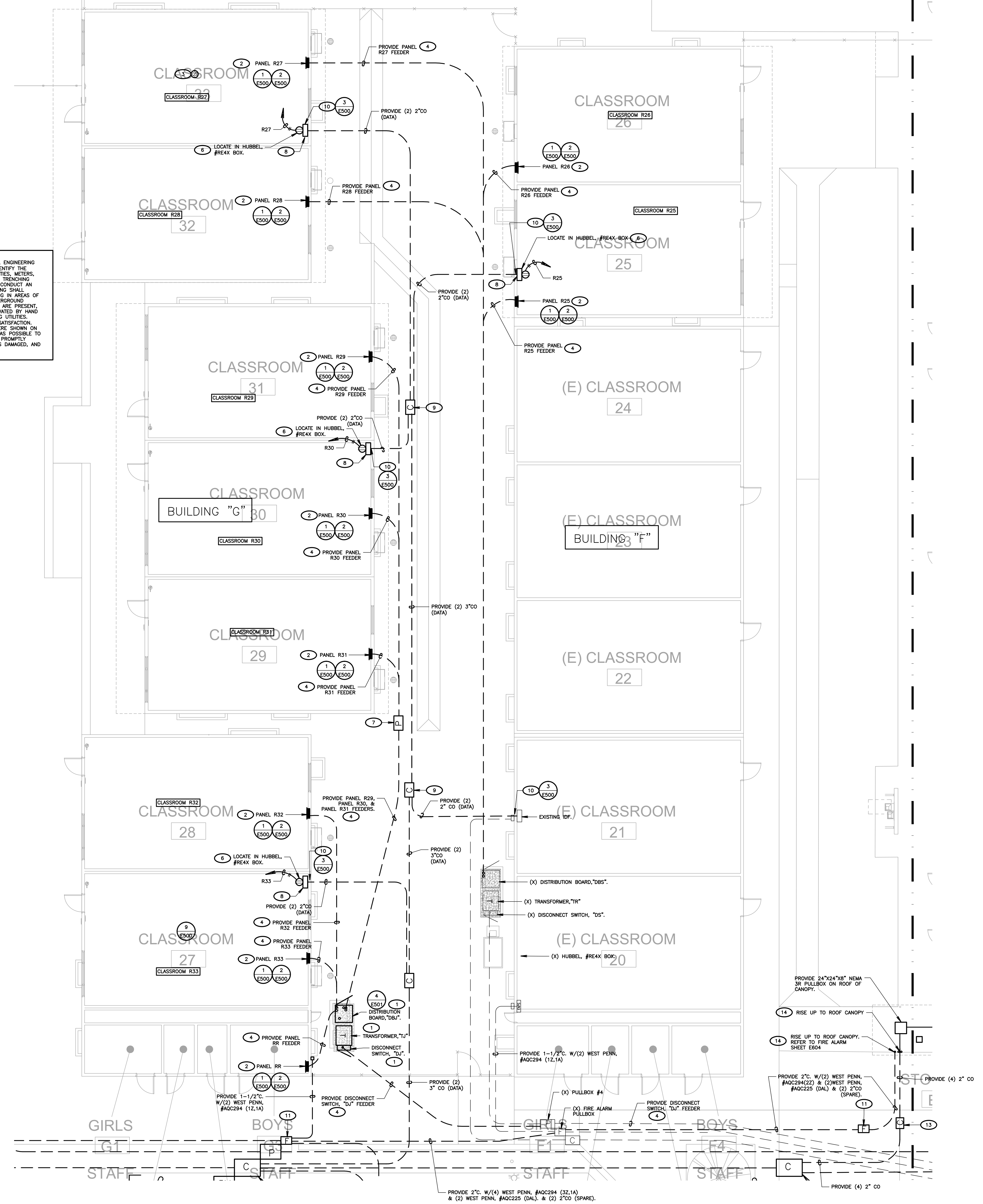
E302



DSA SUBMITTAL SET

1 PARTIAL SITE ELECTRICAL PLAN (BUILDINGS F & G)
SCALE: 1/8"=1'-0"

NOTE:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CIVIL ENGINEERING DRAWINGS AND SITE AS-BUILTS (OBTAIN FROM OWNER) TO IDENTIFY THE LOCATION AND ROUTING OF ALL EXISTING UNDERGROUND UTILITIES, METERS, GRANS, LANDSCAPING AND STRUCTURAL OBSTACLES PRIOR TO TRENCHING AND CONDUIT DUCT BANK ROUTING. THE CONTRACTOR SHALL CONDUCT AN UNDERGROUND SCAN OF THE CORRIDOR WHERE NEW TRENCHING SHALL OCCUR, AND TO COORDINATE THE ROUTING OF NEW UNDERGROUND CONDUITS IN AREAS WHERE EXISTING UNDERGROUND UTILITIES ARE PRESENT, WHETHER SHOWN ON THESE PLANS OR NOT, SHALL BE EXCAVATED BY HAND AND WITH EXTREME CAUTION SO AS NOT TO DISTURB EXISTING UTILITIES. CONTRACTOR SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION. UNDERGROUND POWER AND COMMUNICATION PULL BOXES WHERE SHOWN ON THE SITE PLAN TO BE RELOCATED TO A POSITION AS CLOSE AS POSSIBLE TO THE LOCATION SHOWN ON THE DRAWING. CONTRACTOR SHALL PROMPTLY NOTIFY OWNER IF ANY EXISTING UTILITY OR IRRIGATION LINE IS DAMAGED, AND SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION.



SHEET NOTES

1. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 811 TO LOCATE UNDERGROUND UTILITIES AT LEAST 2 WORKING DAYS PRIOR TO DIGGING. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF EXISTING IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
2. VERIFY LOCATION OF ALL BUILDINGS AND APPENDICES ON ARCHITECTURAL AND CIVIL PLANS.
3. FIELD VERIFY LOCATION ON ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING. SCHEDULE AND COORDINATE ALL SITE WORK WITH OWNER PRIOR TO ANY TRENCHING.
4. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH.
5. CONTRACTOR SHALL IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
6. ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
7. CONTRACTOR SHALL COORDINATE AND PROVIDE ALL SITE ELECTRICAL SERVICE REQUIREMENTS WITH SERVING UTILITY.
8. ALL SERVICE ENTRANCE EQUIPMENT SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL UTILITY COMPANY FOR APPROVAL, WITH WRITTEN APPROVAL RECEIVED PRIOR TO SUBMISSION TO ELECTRICAL ENGINEER FOR APPROVAL.
9. VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
10. MINIMUM CONDUIT BURIAL DEPTH IS 24". 36" MINIMUM BELOW STREETS AND PARKING LOTS, FOR 0-600 VOLT SYSTEMS.
11. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
12. 1" CONDUIT MINIMUM UNDERGROUND.
13. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
14. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUIT MANUFACTURER'S RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
15. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION. CONTRACTOR SHALL VERIFY THE SCOPE OF REPRESENTATIVE OF WORK BEING PERFORMED. COORDINATE WITH DISTRICT REPRESENTATIVE.
16. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH UNDESIGNED NYLON PULL STRING.
17. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY DEMOLITION OR TRENCHING. CONTRACTOR SHALL PROTECT ALL EXISTING/REMAINING UTILITIES IN PLACE. CONTRACTOR, AT HIS SOLE EXPENSE, SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.

POWER PLAN KEY NOTES(E305)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

1. REFER TO PROPOSED SINGLE LINE DIAGRAM.
2. BRANCH CIRCUIT LOAD CENTER PROVIDED BY MODULAR CLASSROOM MANUFACTURER. SEE MODULAR CLASSROOM SHOP DRAWINGS FOR PANEL, SCHEDULE, VERIFY LOCATION & PROVIDE CONNECTION PER VENDOR'S SHOP DRAWINGS.
3. PROVIDE ALL NECESSARY WORK & MATERIALS IN ORDER TO INTERCEPT EXISTING LIGHTING BRANCH CIRCUIT TO PROVIDE TITLE 24 COMPLIANT OCCUPANCY SENSOR CONTROL. PROVIDE ALL REQUIRED RELAYS, POWER PACKS, & SENSORS FOR A COMPLETE SYSTEM.
4. FOR FEEDER INFORMATION REFER TO SINGLE LINE DIAGRAM.
5. PROVIDE (1) 20/1P CIRCUIT BREAKER IN EXISTING SPACE OR USE SPARE 20/1P CIRCUIT BREAKER. THE CIRCUIT BREAKER SHALL HAVE A RED MARKING & BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL". PROVIDE A LOCK-ON DEVICE ON THE CIRCUIT BREAKER HANDLE. CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE "TRIP" & "ON/OFF" PROVIDE SURGE SUPPRESSORS ON THE INPUT OF CONTROL PANELS, EXCEPT FOR CONTROL PANELS WITH BUILT-IN SURGE SUPPRESSORS.
6. PROVIDE TYSSE TYPE 120V/20A RECEPTACLE. LOCATE IN RE4 XBOX.
7. PROVIDE 13"x24" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "ELECTRIC" #B1324BOX WITH B1324-51JH COVER, BY CHRISTY CONCRETE.
8. PROVIDE HUBBEL, #RE4XBOX.
9. PROVIDE 13"x24" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION" #B1324BOX WITH B1324-51JH COVER, BY CHRISTY CONCRETE.
10. RISE UP TO SIGNAL TERMINAL CABINET.
11. PROVIDE 17"x30" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM" #B1730BOX, WITH #B1730-51JH COVER BY CHRISTY CONCRETE.
13. PROVIDE 13"x24" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "COMMUNICATION" #B1324BOX WITH B1324-51JH COVER, BY CHRISTY CONCRETE.
14. RISE UP ALONGSIDE STEEL SUPPORT COLUMN ATTACHED TO CANOPY. PROVIDE ALL REQUIRED SUPPORTS, UNISTRUT ASSEMBLIES, ETC. IN ORDER TO TRANSITION CONDUIT IN-GRADE, AS SHOWN. VERIFY EXACT LOCATION IN THE FIELD.



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PROJECT NO.	118934
DRAWN BY:	VPZ
CHKD BY:	DF
ISSUE DATE:	3/3/2020

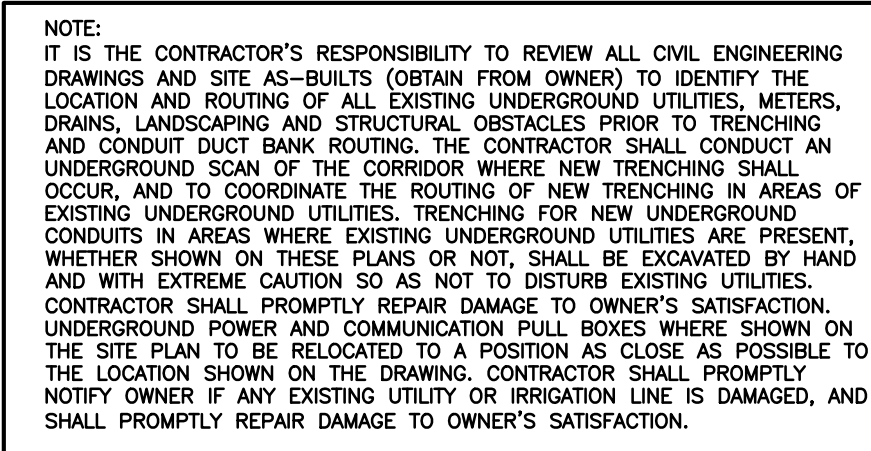
SHEET TITLE

**PARTIAL
SITE ELECTRICAL
PLAN
(BUILDINGS F & G)**

SHEET NUMBER

E305

DSA SUBMITTAL SET



1. CONTRACTOR SHALL CALL UNDERGROUND SERVICE AT 811 TO LOCATE UNDERGROUND UTILITIES PRIOR TO TRENCHING. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO START OF CONSTRUCTION.
2. VERIFY LOCATION OF ALL BUILDINGS AND UTILITIES ON ARCHITECTURAL AND CIVIL PLANS.
3. VERIFY FIELD LOCATION ON ALL UNDERGROUND UTILITIES TO TRENCHING DEPTH AND COORDINATE ALL SITE WORK WITH OWNER PRIOR TO ANY TRENCHING.
4. CONTRACTOR SHALL VERIFY LOCATION OF ALL SERVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID SUBMITTAL TO THE OWNER.
5. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR 25% TYPICAL DROP SHORT CIRCUIT AND EXCESS ROUTING INDICATED ON DRAWINGS.
6. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL TRENCH DEVIATIONS FROM APPROVED PLAN AND CHECKED DRAWINGS.
7. ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
7. CONTRACTOR SHALL COORDINATE AND PROVIDE ALL SITE ELECTRICAL SERVICE REQUIREMENTS WITH UTILITY.
8. ALL SERVICE ENTRANCE EQUIPMENT SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL PERMITS DEPARTMENT FOR APPROVAL. A WRITTEN APPROVAL RECEIVED PRIOR TO SUBMISSION TO THE LOCAL PERMITS DEPARTMENT FOR APPROVAL.
9. VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
10. MINIMUM BURIAL DEPTH IS 24", 36" MINIMUM FOR STRONG AND PARALLEL, 48" FOR 0-6000 VOLT SURFICIAL.
11. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDITS.
12. 1" CONDUIT MINIMUM UNDERGROUND.
13. COORDINATE WORK WITH OTHER TRADES. OBTAIN NECESSARY PERMITS AND COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS. PROVIDE ALL WIRING REQUIREMENTS SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
14. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES, TERMINALS, AND WIRING REQUIRED FOR PER CONDUCTOR MANUFACTURERS.
15. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL, CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
15. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL ACTUAL CONDITIONS PRIOR TO START OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION. CONTRACTOR SHALL NOTIFY THE ARCHITECT, REPRESENTATIVE OF WORK BEING PERFORMED, IMMEDIATELY OF ANY OBSTACLES ENCOUNTERED.
16. ALL EMTY CONDUITS SHALL BE PROVIDED WITH DIMENSIONED NYLON PULL STRING.
17. CONTRACTOR SHALL FIELD VERIFY LOCATION OF MINOR UTILITIES PRIOR TO ANY EXCAVATION OR TRENCHING. CONTRACTOR SHALL MAINTAIN ALL DISTANCES FROM EXISTING IN PLACE CONDUITS AT HIS SOLE EXPENSE. SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.

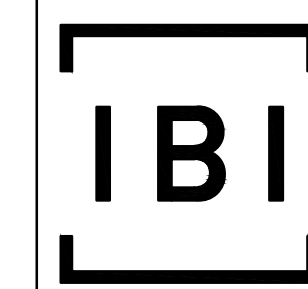
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ISSUE DATE:	3/3/202
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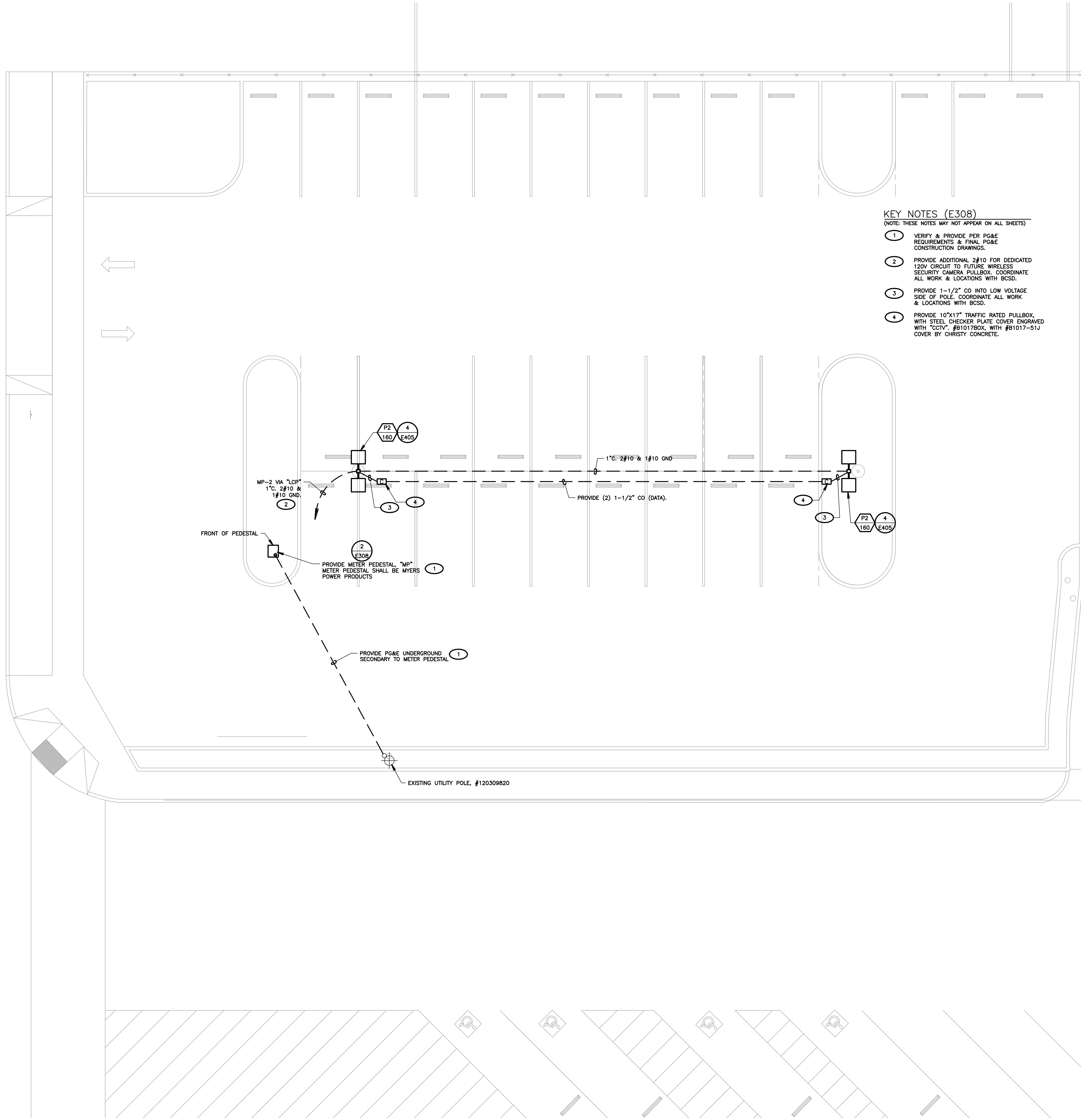


Know what's below.
Call before you dig.

E307

1 PARTIAL SITE ELECTRICAL PLAN
SCALE: 1/8"=1'-0"

1 PARTIAL SITE ELECTRICAL PLAN
SCALE: 1/8"=1'-0"

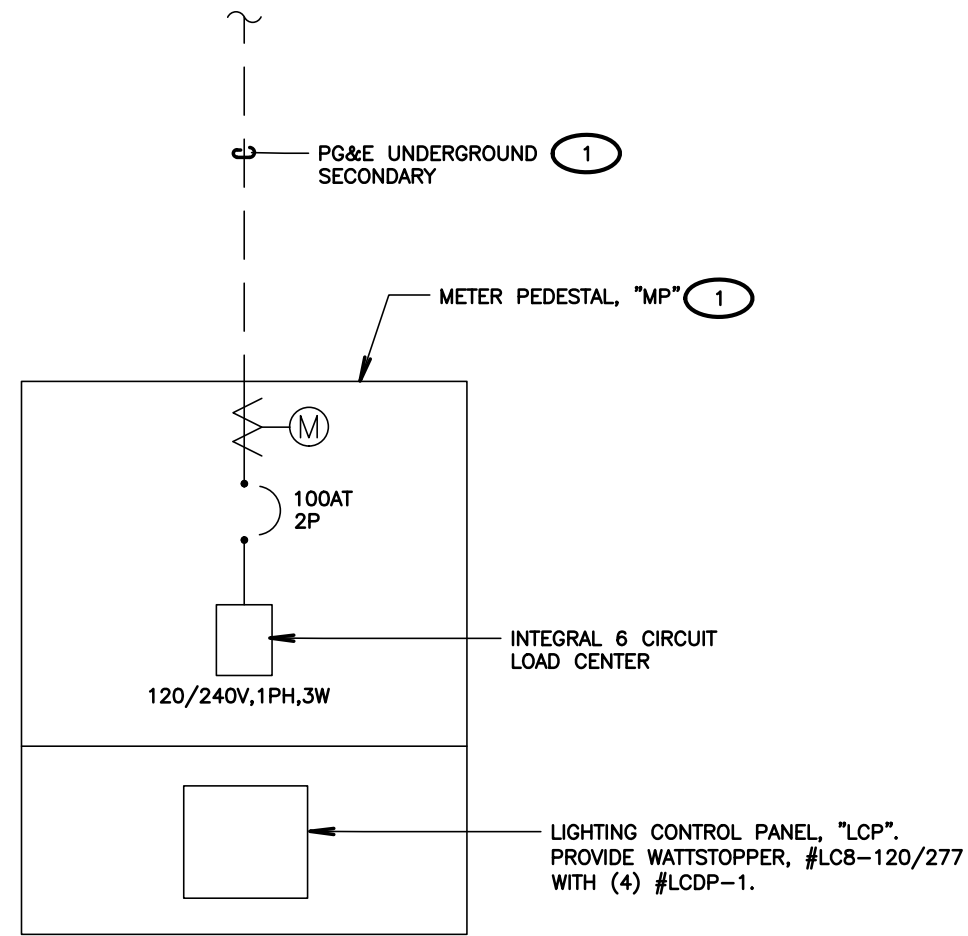


KEY NOTES (E308)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

1. VERIFY & PROVIDE PER PG&E REQUIREMENTS & FINAL PG&E CONSTRUCTION DRAWINGS.
2. PROVIDE ADDITIONAL 2&10 FOR DEDICATED 120V CIRCUIT TO FUTURE WIRELESS SECURITY CAMERA PULLBOX. COORDINATE ALL WORK & LOCATIONS WITH BCSD.
3. PROVIDE 1-1/2" CO INTO LOW VOLTAGE SIDE OF POLE. COORDINATE ALL WORK & LOCATIONS WITH BCSD.
4. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "CCV", #B101780X, WITH #B1017-51J COVER BY CHRSTY CONCRETE.

2 METER PEDESTAL SINGLE LINE DIAGRAM
SCALE: NOT TO SCALE



NOTE:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CIVIL ENGINEERING DRAWINGS AND SITE AS-BUILTS (OBTAIN FROM OWNER) TO IDENTIFY THE LOCATION AND ROUTING OF ALL EXISTING UNDERGROUND UTILITIES, METERS, DOWNS, LANDSCAPING AND STRUCTURAL OBSTACLES PRIOR TO TRENCHING AND CONDUIT DUCT BANK ROUTING. THE CONTRACTOR SHALL CONDUCT AN UNDERGROUND SCAN OF THE CORRIDOR WHERE NEW TRENCHING SHALL OCCUR, AND TO COORDINATE THE ROUTING OF NEW TRENCHING IN AREAS OF EXISTING UNDERGROUND UTILITIES. TRENCHING FOR NEW UNDERGROUND CONDUITS IN AREAS WHERE EXISTING UNDERGROUND UTILITIES ARE PRESENT, WHETHER SHOWN ON THESE PLANS OR NOT, SHALL BE EXCAVATED BY HAND AND WITH EXTREME CAUTION SO AS NOT TO DISTURB EXISTING UTILITIES. CONTRACTOR SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION. UNDERGROUND POWER AND COMMUNICATION PULL BOXES WHERE SHOWN ON THE SITE PLAN TO BE RELOCATED TO A POSITION AS CLOSE AS POSSIBLE TO THE LOCATION SHOWN ON THE DRAWING. CONTRACTOR SHALL PROMPTLY NOTIFY OWNER IF ANY EXISTING UTILITY OR IRRIGATION LINE IS DAMAGED, AND SHALL PROMPTLY REPAIR DAMAGE TO OWNER'S SATISFACTION.



SHEET NOTES

1. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 811 TO LOCATE UNDERGROUND UTILITIES AT LEAST 2 WORKING DAYS PRIOR TO DIGGING. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF EXISTING IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
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4. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH.
5. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
6. ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
7. CONTRACTOR SHALL COORDINATE AND PROVIDE ALL SITE ELECTRICAL SERVICE REQUIREMENTS WITH SERVING UTILITY.
8. ALL SERVICE ENTRANCE EQUIPMENT SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL UTILITY COMPANY FOR APPROVAL, WITH WRITTEN APPROVAL RECEIVED PRIOR TO SUBMISSION TO ELECTRICAL ENGINEER FOR APPROVAL.
9. VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
10. MINIMUM CONDUIT BURIAL DEPTH IS 24", 36" MINIMUM BELOW STREETS AND PARKING LOTS, FOR 0-800 VOLT SYSTEMS.
11. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
12. 1" CONDUIT MINIMUM UNDERGROUND.
13. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
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15. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION. CONTRACTOR SHALL NOTIFY DISTRICT REPRESENTATIVE OF WORK BEING PERFORMED. COORDINATE WITH DISTRICT REPRESENTATIVE.
16. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH DIMENSIONED NYLON PULL STRING.
17. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION OR TRENCHING. CONTRACTOR SHALL PROTECT ALL EXISTING/REMAINING UTILITIES IN PLACE. CONTRACTOR, AT HIS SOLE EXPENSE, SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.

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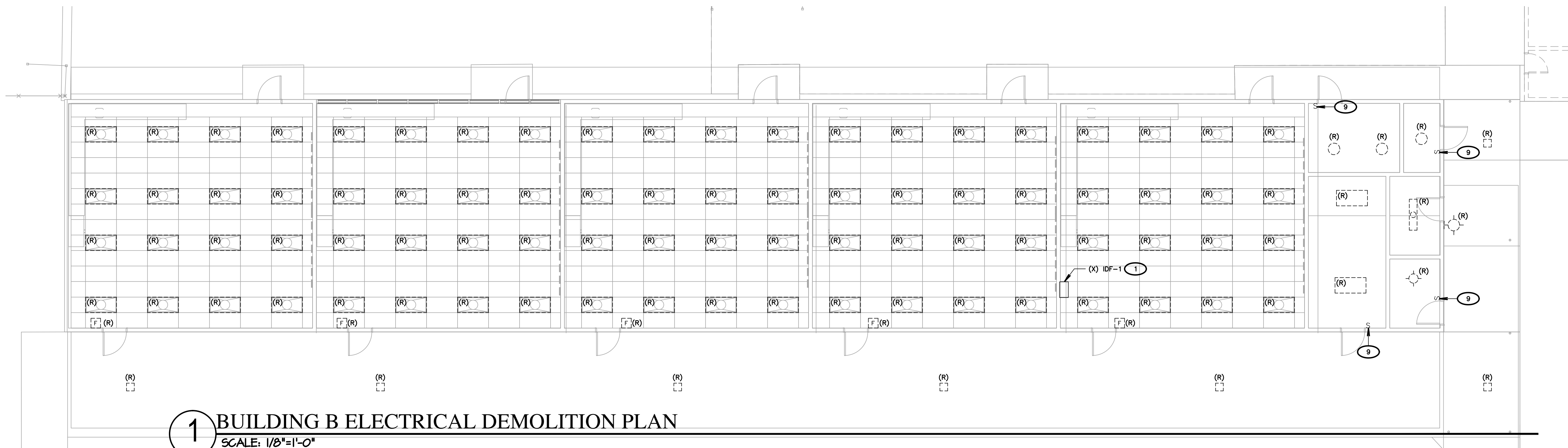
SHEET TITLE

**PARTIAL
SITE ELECTRICAL
PLAN**

SHEET NUMBER

E308

DSA SUBMITTAL SET



DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SWITCH, RECEPTACLE, DEVICE, PANEL, TRANSFORMER, ETC. SHALL BE PROTECTED IN PLACE. IF DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUCTORS BACK TO NEAREST UPSTREAM DEVICE, OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUCTORS IN PLACE. RECONNECT NEW DEVICE IN SAME LOCATION TO THE EXISTING BRANCH CIRCUIT. SEE POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND RECONNECTION. SEE LIGHTING PLAN FOR WORK & LOCATIONS. REMOVE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUCTORS. REPLACE ANY BROKEN LAMPS IN LIGHT FIXTURE.

ELECTRICAL DEMOLITION PLAN NOTES

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- 1 PROTECT IN PLACE

LIGHTING SHEET NOTES

- CONTRACTOR SHALL VERIFY LOCATION, CEILING TYPE, TRIM, AND REQUIREMENTS OF ALL LIGHT FIXTURES AND CONTROL PRIOR TO BID PROPOSAL, ROUGH-IN AND FINISH INSTALLATION.
- CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
- CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURER'S RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
- 3/4" CONDUIT MINIMUM, UNLESS OTHERWISE NOTED.
- ALL LIGHTING FIXTURES SHALL BE SECONDARILY SUPPORTED WITH SAFETY CABLES, PROVIDED BY CONTRACTOR.
- VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
- MAINTAIN A MAXIMUM 2% VOLTAGE DROP ON ALL LIGHTING HOMERUNS.
- ALL EXIT SIGNS ARE +12" TO CENTER LINE OF FIXTURE ABOVE DOOR FRAME UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE ALL BACKING BRACKETS, SUPPORTS, AND MOUNTING HARDWARE NECESSARY TO PROPERLY INSTALL LIGHTING FIXTURES.
- VERIFY THE EXACT ROUTING OF ALL EXPOSED CONDUIT WITH OWNER PRIOR TO INSTALLATION.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTOR IN ALL LIGHTING SYSTEM CONDUITS.
- GRAPHICS / SIGNAGE: VERIFY & PROVIDE CONNECTION TO SIGNAGE PER VENDOR'S SHOP DRAWINGS. VERIFY SIGN LOCATION, MOUNTING ELEVATION AND BRANCH CIRCUIT REQUIREMENTS PRIOR TO ROUGH-IN.
- ALL LIGHTING FIXTURES, EXCEPT EMERGENCY, SHALL BE CONTROLLED BY CONTRACTOR PROVIDED AUTOMATIC LIGHTING CONTROL SYSTEM AS REQUIRED BY STATE OF CALIFORNIA TITLE 24 REGULATIONS.
- PROVIDE ALL REQUIRED DEVICE COVER PLATES.

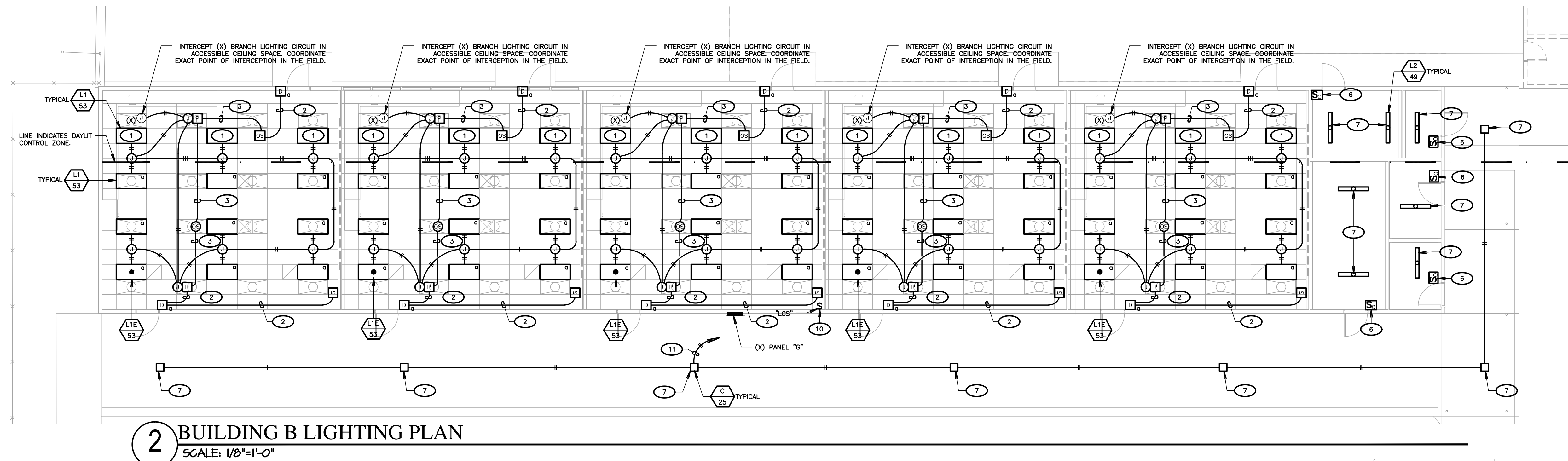
KEYNOTES

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- LIGHT FIXTURE LOCATED IN DAYLIT ZONE SHALL BE CONTROLLED BY SENSOR W/DAYLIGHT CONTROL.
- PROVIDE 1" C. EMT TO ACCESSIBLE CEILING SPACE W/PLASTIC BUSHING(S). PROVIDE ALL REQUIRED PRE-TERMINATED (HIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLEING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
- PROVIDE PRE-TERMINATED HIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLEING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
- INTERCEPT EXISTING RESTROOM BRANCH LIGHTING CIRCUIT HOT & NEUTRAL.
- PROVIDE CEILING MOUNT OCCUPANCY SENSOR. SENSOR SWITCH, #QMR-POT-10. SET TIME DELAY TO 30 MINUTES. PROGRAM FOR AUTO-ON.
- PROVIDE WALL SWITCH OCCUPANCY SENSOR. SENSOR SWITCH, #WSX-POT-WH.
- CONNECT LIGHT FIXTURE TO EXISTING BRANCH CIRCUIT AT SAME LOCATION OF REMOVED LIGHT FIXTURE.
- NOT USED
- REMOVE SWITCH & REPLACE WITH OCCUPANCY SENSOR SWITCH. SEE LIGHTING PLAN.
- LIGHTING CONTROL SWITCH, "LCS". PROVIDE TORK ASTRO-CLOCK TIME SWITCH. COORDINATE PROGRAMMING W/DISTRICT. TORK, #STJOSE.
- PROVIDE ALL WORK & MATERIALS IN ORDER TO INTERCEPT EXISTING BRANCH CIRCUIT HOMERUN & RE-ROUTE TO EXISTING 120V BRANCH CIRCUIT VIA "LCS" IN CLASSROOM.
- BLANK OFF SWITCH.

LIGHTING LEGEND

- D PROVIDE (LIGHT, #PDDM-2P-DX-VX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- S PROVIDE (LIGHT, #PDDM-4S-DX-VX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. TEACHERS STATION. VERIFY EXACT LOCATION W/ARCH.
- CS OCCUPANCY SENSOR WITH DAYLIGHT CONTROL, CEILING MOUNTED. PROVIDE (LIGHT, #CMPT-10-RUB-ADXY. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- CS OCCUPANCY SENSOR, CEILING MOUNTED. PROVIDE (LIGHT, #CMPT-10-RUB. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- P PROVIDE POWER/RELAY PACK IN ACCESSIBLE CEILING SPACE. PROVIDE (LIGHT, #PP16-D-EFP.



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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION

815 EUREKA ST. BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:

PROJECT NO: 118934

DRAWN BY: VPZ

CHKD BY: DF

ISSUE DATE: 3/3/2020

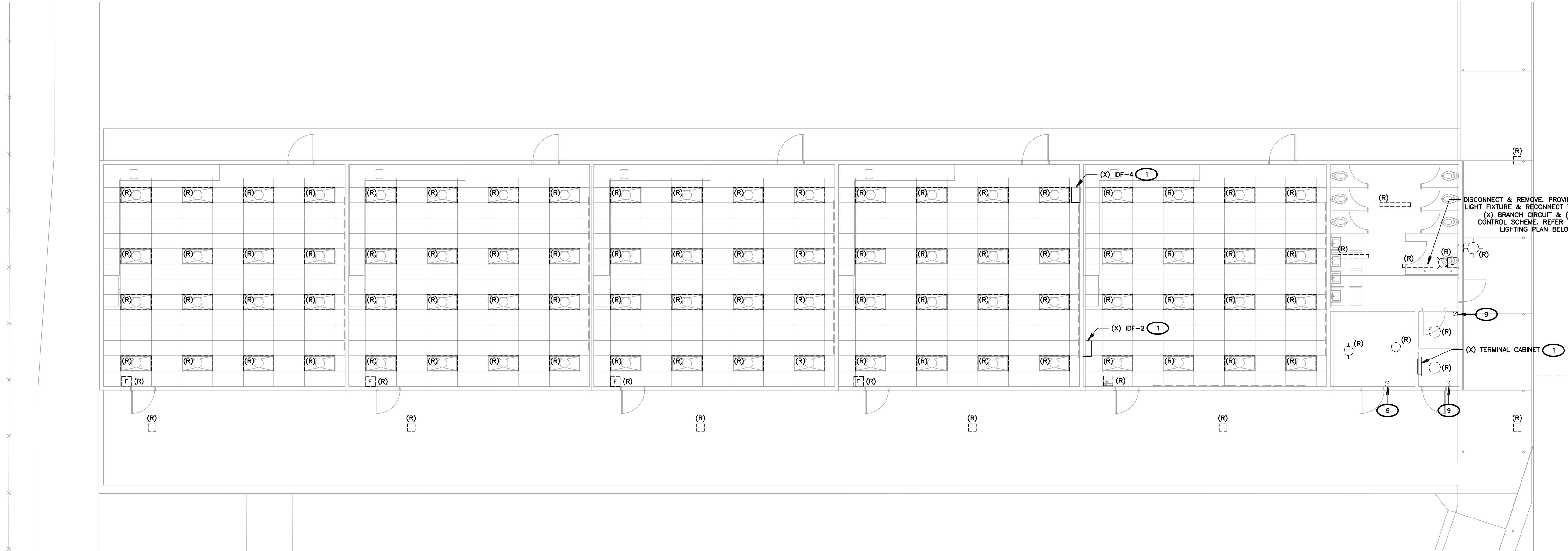
SHEET TITLE

**BUILDING B
LIGHTING
DEMOLITION/LIGHTING
PLAN**

SHEET NUMBER

E400

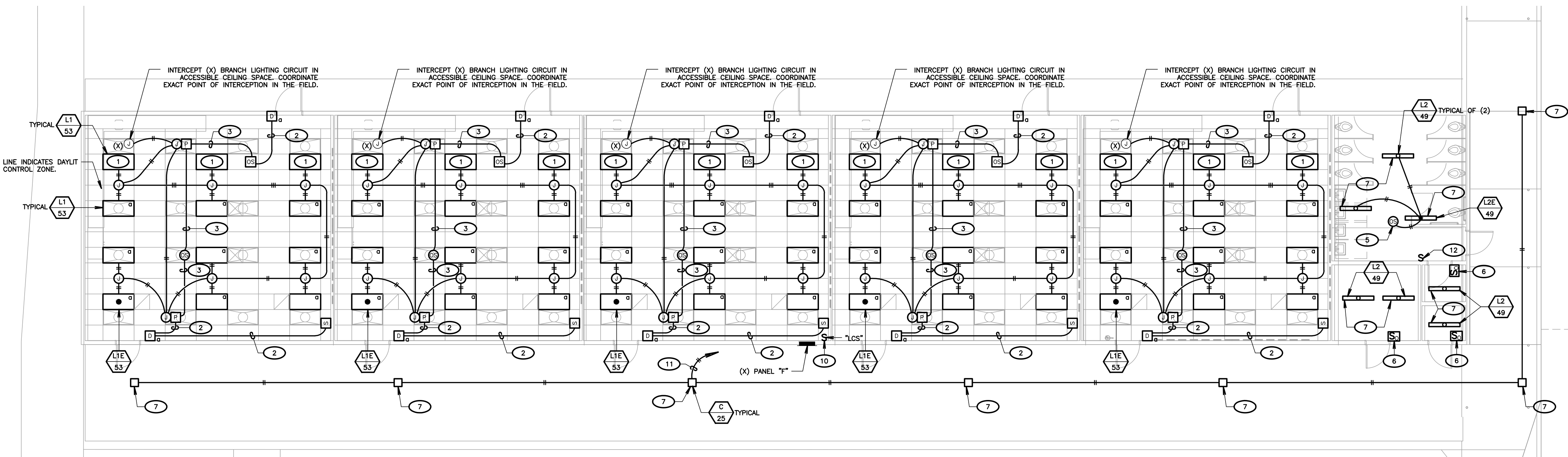
DSA SUBMITTAL SET



DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SWITCH, RECEPTACLE, DEVICE, PANEL, TRANSFORMER, ETC. SHALL BE PROTECTED IN PLACE. IF DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUCTORS BACK TO NEAREST UPSTREAM DEVICE, OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUCTORS IN PLACE. RECONNECT NEW DEVICE, IN SAME LOCATION, TO THE EXISTING BRANCH CIRCUIT. SEE POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND RECONNECTION. SEE LIGHTING PLAN FOR WORK & LOCATIONS. REMOVE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUCTORS. REPLACE ANY BROKEN LAMPS IN LIGHT FIXTURE.

ELECTRICAL DEMOLITION PLAN NOTES
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
1 PROTECT IN PLACE

1 BUILDING C ELECTRICAL DEMOLITION PLAN
SCALE: 1/8"=1'-0"



- KEYNOTES**
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
- 1 LIGHT FIXTURE LOCATED IN DAYLIT ZONE SHALL BE CONTROLLED BY SENSOR W/DAYLIGHT CONTROL.
 - 2 PROVIDE 1" C. ENT. TO ACCESSIBLE CEILING SPACE W/PLASTIC BUSHINGS). PROVIDE ALL REQUIRED PRE-TERMINATED LIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLEING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
 - 3 PROVIDE PRE-TERMINATED LIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLEING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
 - 4 INTERCEPT EXISTING RESTROOM BRANCH LIGHTING CIRCUIT HOT & NEUTRAL.
 - 5 PROVIDE CEILING MOUNT OCCUPANCY SENSOR. SENSOR SWITCH, F6MR-POT-10. SET TIME DELAY TO 30 MINUTES. PROGRAM FOR AUTO-ON.
 - 6 PROVIDE WALL SWITCH OCCUPANCY SENSOR. SENSOR SWITCH, #WSX-POT-WH.
 - 7 CONNECT LIGHT FIXTURE TO EXISTING BRANCH CIRCUIT AT SAME LOCATION OF REMOVED LIGHT FIXTURE.
 - 8 NOT USED
 - 9 REMOVE SWITCH & REPLACE WITH OCCUPANCY SENSOR SWITCH. SEE LIGHTING PLAN.
 - 10 LIGHTING CONTROL SWITCH, "LCS". PROVIDE TORK ASTRO-CLOCK TIME SWITCH. COORDINATE PROGRAMMING W/DISTRICT. TORK, #SST032.
 - 11 PROVIDE ALL WORK & MATERIALS IN ORDER TO INTERCEPT EXISTING BRANCH CIRCUIT HOMERUN & RE-ROUTE TO EXISTING 120V BRANCH CIRCUIT VIA "LCS" IN CLASSROOM.
 - 12 BLANK OFF SWITCH.

- LIGHTING SHEET NOTES**
- 1 CONTRACTOR SHALL VERIFY LOCATION, CEILING TYPE, TRIM, AND REQUIREMENTS OF ALL LIGHT FIXTURES AND CONTROL PRIOR TO BID PROPOSAL, ROUGH-IN AND FINISH INSTALLATION.
 - 2 CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
 - 3 CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURER'S RECOMMENDATIONS. PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
 - 4 3/4" CONDUIT MINIMUM, UNLESS OTHERWISE NOTED.
 - 5 ALL LIGHTING FIXTURES SHALL BE SECONDARILY SUPPORTED WITH SAFETY CABLES, PROVIDED BY CONTRACTOR.
 - 6 VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
 - 7 MAINTAIN A MAXIMUM 2% VOLTAGE DROP ON ALL LIGHTING HOMERUNS.
 - 8 ALL EXIT SIGNS ARE +12" TO CENTER LINE OF FIXTURE ABOVE DOOR FRAME UNLESS OTHERWISE NOTED.
 - 9 CONTRACTOR SHALL PROVIDE ALL BACKING BRACKETS, SUPPORTS, AND MOUNTING HARDWARE NECESSARY TO PROPERLY INSTALL LIGHTING FIXTURES.
 - 10 VERIFY THE EXACT ROUTING OF ALL EXPOSED CONDUIT WITH OWNER PRIOR TO INSTALLATION.
 - 11 COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
 - 12 PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTOR IN ALL LIGHTING SYSTEM CONDUITS.
 - 13 GRAPHICS / SIGNAGE: VERIFY & PROVIDE CONNECTION TO SIGNAGE PER VENDOR'S SHOP DRAWINGS. VERIFY SIGN LOCATION, MOUNTING ELEVATION AND BRANCH CIRCUIT REQUIREMENTS PRIOR TO ROUGH-IN.
 - 14 ALL LIGHTING FIXTURES, EXCEPT EMERGENCY, SHALL BE CONTROLLED BY CONTRACTOR PROVIDED AUTOMATIC LIGHTING CONTROL SYSTEM AS REQUIRED BY STATE OF CALIFORNIA TITLE 24 REGULATIONS.
 15. PROVIDE ALL REQUIRED DEVICE COVER PLATES..

- LIGHTING LEGEND**
- D PROVIDE LIGHT, #RPODM-2P-DX-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - S PROVIDE LIGHT, #RPODM-4S-DX-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. TEACHERS STATION. VERIFY EXACT LOCATION W/ARCH.
 - OS OCCUPANCY SENSOR WITH DAYLIGHT CONTROL. CEILING MOUNTED. PROVIDE LIGHT, #RCPOT-10-RB-HCK. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - CS OCCUPANCY SENSOR. CEILING MOUNTED. PROVIDE LIGHT, #RCPOT-10-RB-HCK. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - P PROVIDE POWER/RELAY PACK IN ACCESSIBLE CEILING SPACE. PROVIDE LIGHT, #RPP16-D-EFP.

2 BUILDING C LIGHTING PLAN
SCALE: 1/8"=1'-0"

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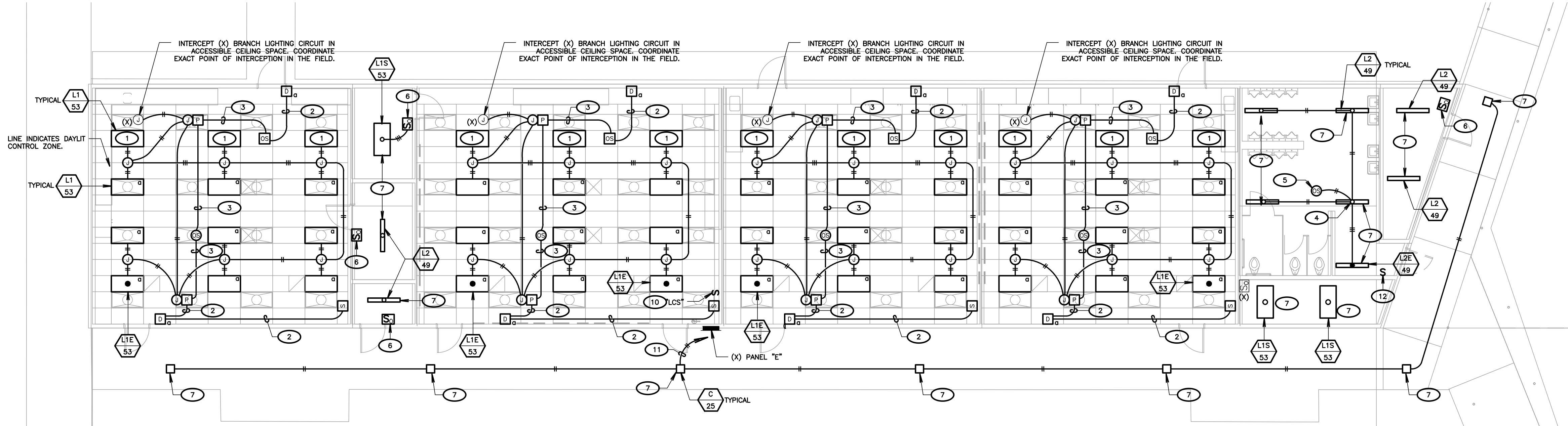
**BUILDING C
LIGHTING
DEMOLITION/LIGHTING
PLAN**

SHEET NUMBER
E401

DSA SUBMITTAL SET



1 BUILDING D ELECTRICAL DEMOLITION PLAN
SCALE: 1/8"=1'-0"



2 BUILDING D LIGHTING PLAN
SCALE: 1/8"=1'-0"

KEYNOTES
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- 1 LIGHT FIXTURE LOCATED IN DAYLIT ZONE SHALL BE CONTROLLED BY SENSOR W/DAYLIGHT CONTROL.
- 2 PROVIDE 1" C. ENT TO ACCESSIBLE CEILING SPACE W/PLASTIC BUSHING(S). PROVIDE ALL REQUIRED PRE-TERMINATED FLIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
- 3 PROVIDE PRE-TERMINATED FLIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
- 4 INTERCEPT EXISTING RESTROOM BRANCH LIGHTING CIRCUIT NOT & NEUTRAL.
- 5 PROVIDE CEILING MOUNT OCCUPANCY SENSOR. SENSOR SWITCH, #CMR-POT-10. SET TIME DELAY TO 30 MINUTES. PROGRAM FOR AUTO-ON.
- 6 PROVIDE WALL SWITCH OCCUPANCY SENSOR. SENSOR SWITCH, #WSX-POT-WH.
- 7 CONNECT LIGHT FIXTURE TO EXISTING BRANCH CIRCUIT AT SAME LOCATION OF REMOVED LIGHT FIXTURE.
- 8 NOT USED
- 9 REMOVE SWITCH & REPLACE WITH OCCUPANCY SENSOR SWITCH. SEE LIGHTING PLAN.
- 10 LIGHTING CONTROL SWITCH, "LCS". PROVIDE TORK ASTRO-CLOCK TIME SWITCH. COORDINATE PROGRAMMING W/DISTRICT. TORK, #SS7032.
- 11 PROVIDE ALL WORK & MATERIALS IN ORDER TO INTERCEPT EXISTING BRANCH CIRCUIT HOMERUN & RE-ROUTE TO EXISTING LOW VOLTAGE CIRCUIT VIA "LCS" IN CLASSROOM.
- 12 BLANK OFF SWITCH.

DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SWITCH, RECEPTACLE, DEVICE, PANEL, TRANSFORMER, ETC. SHALL BE PROTECTED IN PLACE. IF DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUCTORS BACK TO NEAREST UPSTREAM DEVICE, OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUCTORS IN PLACE. RECONNECT NEW DEVICE, IN SAME LOCATION, TO THE EXISTING BRANCH CIRCUIT. SEE POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND RECONNECTION. SEE LIGHTING PLAN FOR WORK & LOCATIONS. REMOVE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUCTORS. REPLACE ANY BROKEN LAMPS IN LIGHT FIXTURE.

ELECTRICAL DEMOLITION PLAN NOTES
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- 1 PROTECT IN PLACE

LIGHTING LEGEND

- 1 PROVIDE FLUORESCENT, #PDOM-0P-DX-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 2 PROVIDE FLUORESCENT, #PDOM-4S-DX-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. TEACHERS STATION. VERIFY EXACT LOCATION W/ARCH.
- 3 OCCUPANCY SENSOR WITH DAYLIGHT CONTROL. CEILING MOUNTED. PROVIDE FLUORESCENT, #CMPT-10-RUB-ADXX. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 4 OCCUPANCY SENSOR, CEILING MOUNTED. PROVIDE FLUORESCENT, #CMPT-10-RUB. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 5 PROVIDE POWER/RELAY PACK IN ACCESSIBLE CEILING SPACE. PROVIDE FLUORESCENT, #PPI6-D-EFP.

LIGHTING SHEET NOTES

1. CONTRACTOR SHALL VERIFY LOCATION, CEILING TYPE, TRIM, AND REQUIREMENTS OF ALL LIGHT FIXTURES AND CONTROL PRIOR TO PROPOSAL, ROUGH-IN AND FINISH INSTALLATION.
2. CONTRACTOR SHALL IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURER'S RECOMMENDATIONS PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
4. 3/4" CONDUIT MINIMUM, UNLESS OTHERWISE NOTED.
5. ALL LIGHTING FIXTURES SHALL BE SECONDARILY SUPPORTED WITH SAFETY CABLES, PROVIDED BY CONTRACTOR.
6. VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
7. MAINTAIN A MAXIMUM 2% VOLTAGE DROP ON ALL LIGHTING HOMERUNS.
8. ALL EXIT SIGNS ARE 1/2" TO CENTER LINE OF FIXTURE ABOVE DOOR FRAME UNLESS OTHERWISE NOTED.
9. CONTRACTOR SHALL PROVIDE ALL BACKING BRACKETS, SUPPORTS, AND MOUNTING HARDWARE NECESSARY TO PROPERLY INSTALL LIGHTING FIXTURES.
10. VERIFY THE EXACT ROUTING OF ALL EXPOSED CONDUIT WITH OWNER PRIOR TO INSTALLATION.
11. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
12. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTOR IN ALL LIGHTING SYSTEM CONDUITS.
13. GRAPHICS / SIGNAGE: VERIFY & PROVIDE CONNECTION TO SIGNAGE PER VENDOR'S SHOP DRAWINGS. VERIFY SIGN LOCATION, MOUNTING ELEVATION AND BRANCH CIRCUIT REQUIREMENTS PRIOR TO ROUGH-IN.
14. ALL LIGHTING FIXTURES, EXCEPT EMERGENCY, SHALL BE CONTROLLED BY CONTRACTOR PROVIDED. AUTOMATIC LIGHTING CONTROL SYSTEM AS REQUIRED BY STATE OF CALIFORNIA TITLE 24 REGULATIONS.
15. PROVIDE ALL REQUIRED DEVICE COVER PLATES.

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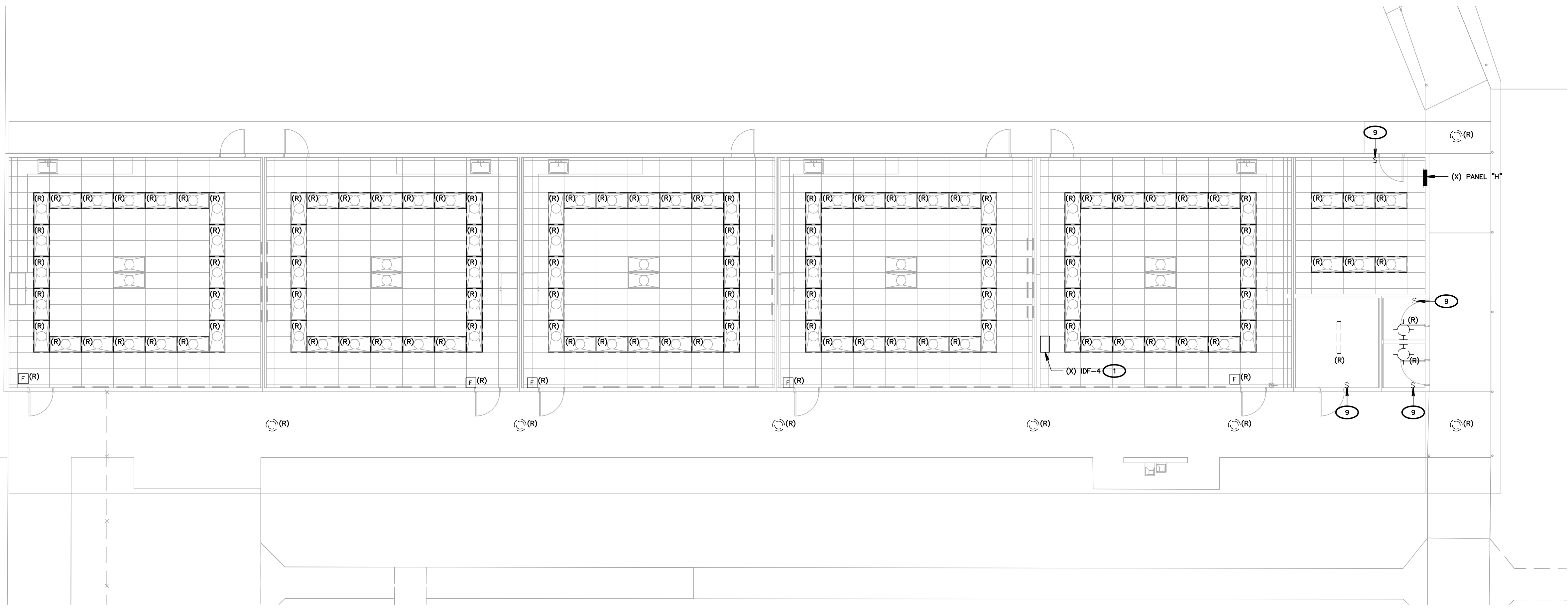
SHEET TITLE

**BUILDING D
LIGHTING
DEMOLITION/LIGHTING
PLAN**

SHEET NUMBER

E402

DSA SUBMITTAL SET



1 BUILDING E ELECTRICAL DEMOLITION PLAN
SCALE: 1/8"=1'-0"

DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SWITCH, RECEPTACLE, DEVICE, PANEL, TRANSFORMER, ETC. SHALL BE PROTECTED IN PLACE IF DISTURBED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUCTORS BACK TO NEAREST UPSTREAM DEVICE OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUCTORS IN PLACE. RECONNECT NEW DEVICE IN SAME LOCATION, TO THE EXISTING BRANCH CIRCUIT. SEE POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND RECONNECTION. SEE LIGHTING PLAN FOR WORK & LOCATIONS. REMOVE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUCTORS. REPLACE ANY BROKEN LAMPS IN LIGHT FIXTURE.

ELECTRICAL DEMOLITION PLAN NOTES
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- 1 PROTECT IN PLACE

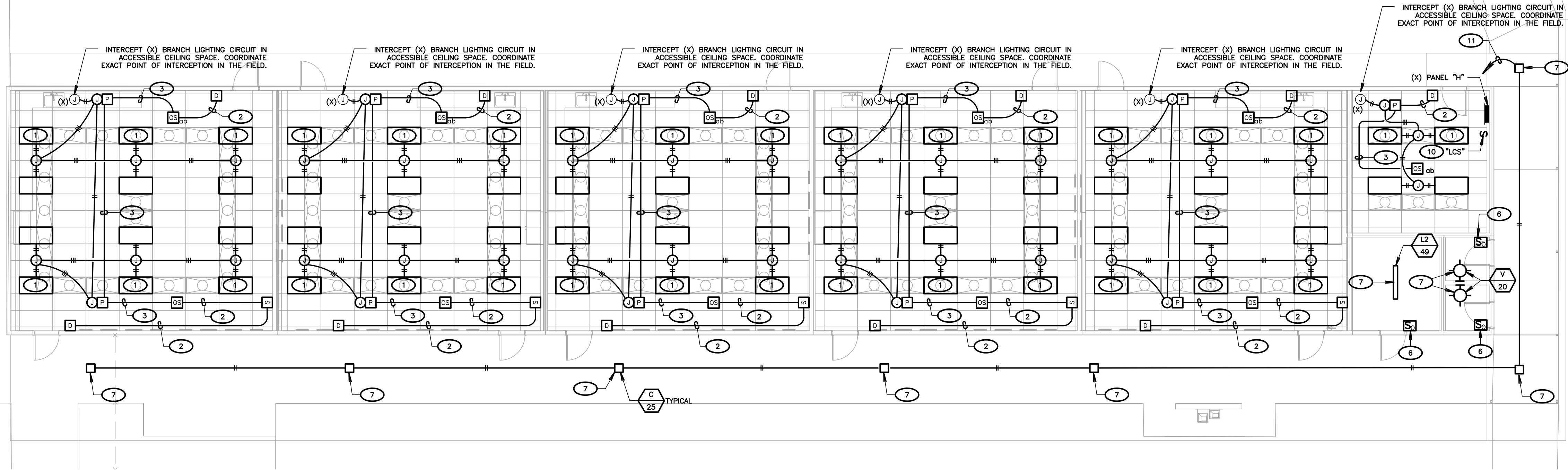
LIGHTING
SHEET NOTES

- CONTRACTOR SHALL VERIFY LOCATION, CEILING TYPE, TRIM, AND REQUIREMENTS OF ALL LIGHT FIXTURES AND CONTROL PRIOR TO BID PROPOSAL, ROUGH-IN AND FINISH INSTALLATION.
- CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
- CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURER'S RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
- 3/4" CONDUIT MINIMUM, UNLESS OTHERWISE NOTED.
- ALL LIGHTING FIXTURES SHALL BE SECONDARILY SUPPORTED WITH SAFETY CABLES, PROVIDED BY CONTRACTOR.
- VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
- MAINTAIN A MAXIMUM 2% VOLTAGE DROP ON ALL LIGHTING HOMERUNS.
- ALL EXIT SIGNS ARE 4"12" TO CENTER LINE OF FIXTURE ABOVE DOOR FRAME UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE ALL BACKING BRACKETS, SUPPORTS, AND MOUNTING HARDWARE NECESSARY TO PROPERLY INSTALL LIGHTING FIXTURES.
- VERIFY THE EXACT ROUTING OF ALL EXPOSED CONDUIT WITH OWNER PRIOR TO INSTALLATION.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES AND WIRING REQUIRED WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTOR IN ALL LIGHTING SYSTEM CONDUITS.
- GRAPHICS / SIGNAGE: VERIFY & PROVIDE CONNECTION TO SIGNAGE PER VENDOR'S SHOP DRAWINGS. VERIFY SIGN LOCATION, MOUNTING ELEVATION AND BRANCH CIRCUIT REQUIREMENTS PRIOR TO ROUGH-IN.
- ALL LIGHTING FIXTURES, EXCEPT EMERGENCY, SHALL BE CONTROLLED BY CONTRACTOR PROVIDED AUTOMATIC LIGHTING CONTROL SYSTEM AS REQUIRED BY STATE OF CALIFORNIA TITLE 24 REGULATIONS.
- PROVIDE ALL REQUIRED DEVICE COVER PLATES.

KEYNOTES

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- LIGHT FIXTURE LOCATED IN DAYLIT ZONE SHALL BE CONTROLLED BY SENSOR W/DAYLIGHT CONTROL.
- PROVIDE 1" C. EMT TO ACCESSIBLE CEILING SPACE W/PLASTIC BUSHING(S). PROVIDE ALL REQUIRED PRE-TERMINATED LIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
- PROVIDE PRE-TERMINATED ALIGHT CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. LOW VOLTAGE CABLING SHALL BE ROUTED ON J-HOOKS IN ACCESSIBLE CEILING SPACE.
- INTERCEPT EXISTING BEDROOM BRANCH LIGHTING CIRCUIT HOT & NEUTRAL.
- PROVIDE CEILING MOUNT OCCUPANCY SENSOR. SENSOR SWITCH, #CWR-POT-10, SET TIME DELAY TO 30 MINUTES. PROGRAM FOR AUTO-ON.
- PROVIDE WALL SWITCH OCCUPANCY SENSOR. SENSOR SWITCH, #WSD-POT-WH.
- CONNECT LIGHT FIXTURE TO EXISTING BRANCH CIRCUIT AT SAME LOCATION OF REMOVED LIGHT FIXTURE.
- NOT USED.
- REMOVE SWITCH & REPLACE WITH OCCUPANCY SENSOR SWITCH. SEE LIGHTING PLAN.
- LIGHTING CONTROL SWITCH, "LCS", PROVIDE YORK ASTRO-CLOCK TIME SWITCH. COORDINATE PROGRAMMING W/DISTRICT. YORK, #S7032.
- PROVIDE ALL WORK & MATERIALS IN ORDER TO INTERCEPT EXISTING BRANCH CIRCUIT HOMERUN & RE-ROUTE TO EXISTING 120V BRANCH CIRCUIT VIA "LCS" IN CLASSROOM.
- BLANK OFF SWITCH.



2 BUILDING E LIGHTING PLAN
SCALE: 1/8"=1'-0"

LIGHTING LEGEND

- (X) INTERCEPT (X) BRANCH LIGHTING CIRCUIT IN ACCESSIBLE CEILING SPACE. COORDINATE EXACT POINT OF INTERCEPTION IN THE FIELD.
- (1) PROVIDE LIGHT, #P00M-2P-DK-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- (2) PROVIDE LIGHT, #P00M-4S-DK-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. TEACHERS STATION. VERIFY EXACT LOCATION W/ARCH.
- (3) OCCUPANCY SENSOR WITH DAYLIGHT CONTROL. CEILING MOUNTED. PROVIDE W/LIGHT, #CMPDT-10-RUB-ADCK. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- (4) OCCUPANCY SENSOR, CEILING MOUNTED. PROVIDE W/LIGHT, #CMPDT-10-RUB. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- (5) PROVIDE POWER/RELAY PACK IN ACCESSIBLE CEILING SPACE. PROVIDE W/LIGHT, #PP18-D-EFP.

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DISTRICT



BESSIE OWENS JUNIOR HIGH
MODERNIZATION

815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO.:

PROJECT NO. 118934

DRAWN BY: VPZ

CHKD BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE

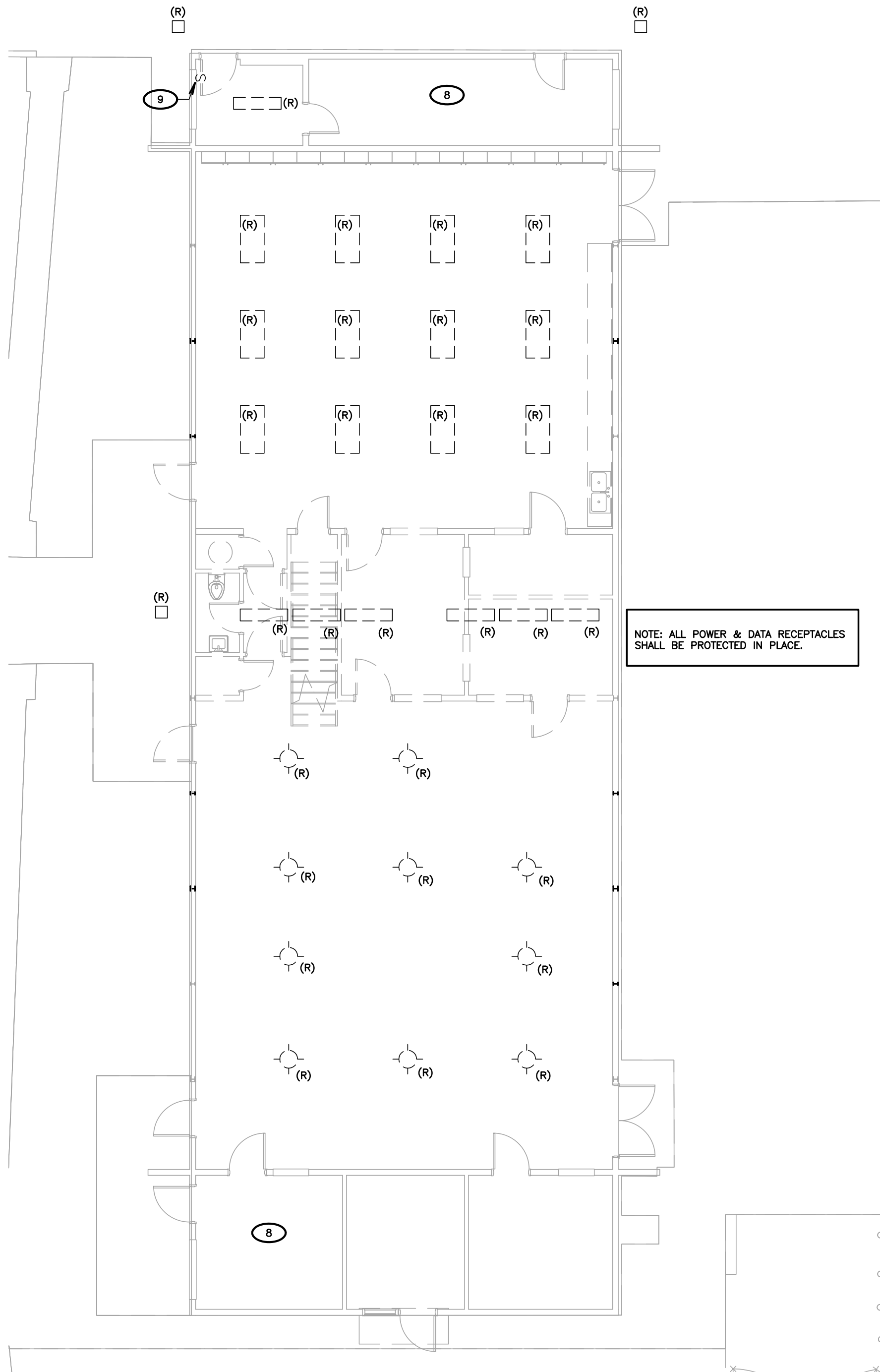
BUILDING E
LIGHTING
DEMOLITION/LIGHTING
PLAN

SHEET NUMBER

E403

DSA SUBMITTAL SET

DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SWITCH, RECEPTACLE, DEVICE, PANEL, TRANSFORMER, ETC. SHALL BE PROTECTED IN PLACE. IF DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUCTORS BACK TO NEAREST UPSTREAM DEVICE, OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUCTORS IN PLACE. RECONNECT NEW DEVICE, IN SAME LOCATION, TO THE EXISTING BRANCH CIRCUIT. SEE POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND RECONNECTION. SEE LIGHTING PLAN FOR WORK & LOCATIONS. REMOVE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUCTORS. REPLACE ANY BROKEN LAMPS IN LIGHT FIXTURE.



1 BUILDING H LIGHTING DEMOLITION PLAN
SCALE: 1/8"=1'-0"

ELECTRICAL DEMOLITION FOR REMODELING

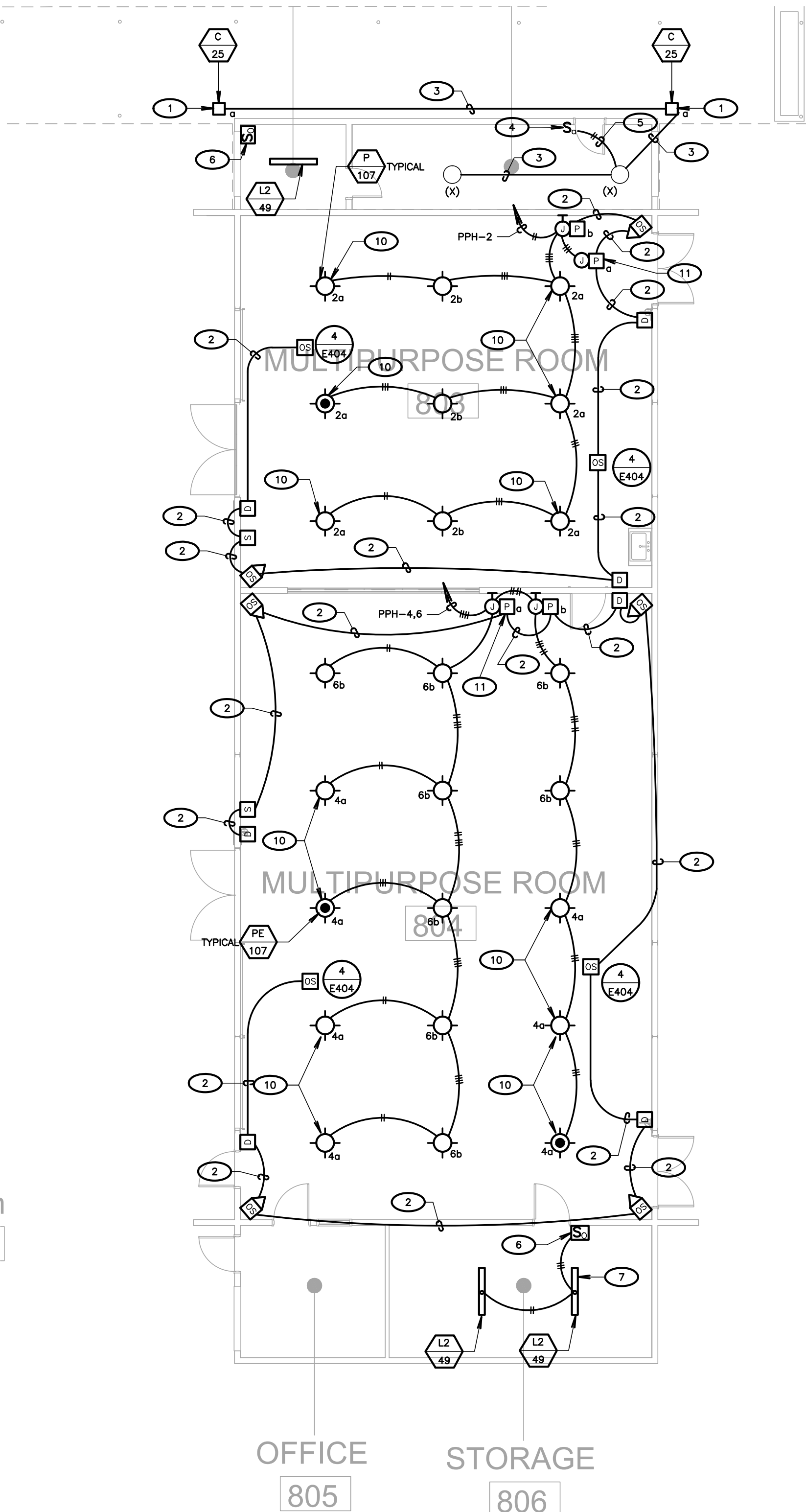
EXAMINATION:
OBTAIN RECORD DRAWINGS / AS-BUILTS FROM OWNER. VERIFY FIELD MEASUREMENTS AND CIRCUITING ARRANGEMENTS ARE AS SHOWN ON RECORD DRAWINGS. VERIFY THAT ABANDONED WIRING AND EQUIPMENT SERVE ONLY ABANDONED FACILITIES. DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO OWNER AND ARCHITECT/ENGINEER BEFORE DISTURBING EXISTING INSTALLATION. BEGINNING OF DEMOLITION MEANS INSTALLER ACCEPTS EXISTING CONDITIONS.

PREPARATION
DISCONNECT AND MAKE SAFE ALL ELECTRICAL SYSTEMS IN WALLS, FLOORS, AND CEILINGS SCHEDULED FOR REMOVAL. COORDINATE ELECTRICAL SERVICE OUTAGES WITH OWNER'S REPRESENTATIVE. PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN REQUIRED EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS. EXISTING ELECTRICAL SERVICE: MAINTAIN EXISTING SYSTEM IN SERVICE. DISABLE SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS. OBTAIN PERMISSION FROM OWNER AT LEAST 72 HOURS BEFORE PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION. MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREA WHEN OUTAGE AFFECTS BUSINESS OPERATION. EXISTING FIRE ALARM SYSTEM: MAINTAIN EXISTING SYSTEM IN SERVICE. EXISTING TELEPHONE SYSTEM: MAINTAIN EXISTING SYSTEM IN SERVICE. EXISTING SECURITY SYSTEM: MAINTAIN EXISTING SYSTEM IN SERVICE.

DEMOLITION AND EXTENSION OF EXISTING WORK
DEMOLISH AND EXTEND EXISTING ELECTRICAL WORK UNDER PROVISIONS OF THIS SECTION. REMOVE, RELOCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION. REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY AND RE-LABEL DEVICES AS SPARES. REMOVE EXPOSED ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE CEILING FINISHES. CUT CONDUIT FLUSH WITH WALLS AND FLOORS, AND PATCH SURFACES. DISCONNECT ABANDONED OUTLETS AND REMOVE DEVICES. REMOVE ABANDONED OUTLETS IF CONDUIT SERVICING THEM IS ABANDONED AND REMOVED. PROVIDE BLANK COVER FOR ABANDONED OUTLETS WHICH ARE NOT REMOVED. DISCONNECT AND REMOVE ELECTRICAL DEVICES AND EQUIPMENT SERVING UTILIZATION EQUIPMENT THAT HAS BEEN REMOVED. DISCONNECT AND REMOVE ABANDONED LUMINAIRES. REMOVE BRACKETS, STEMS, HANGERS, AND OTHER ACCESSORIES. DISCONNECT AND REMOVE ABANDONED CONDUIT. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE. MODIFY INSTALLATION OR PROVIDE ACCESS PANEL AS APPROPRIATE. EXTEND EXISTING INSTALLATIONS USING MATERIALS AND METHODS COMPATIBLE WITH EXISTING ELECTRICAL INSTALLATIONS, AND IN COMPLIANCE WITH NEW PROJECT SPECIFICATIONS. MODIFY EXISTING AS-BUILT DRAWINGS TO NOTE CHANGES.

CLEANING AND REPAIR
CLEAN AND REPAIR EXISTING MATERIALS AND EQUIPMENT WHICH REMAIN OR ARE TO BE REUSED. PANELBOARDS: CLEAN EXPOSED SURFACES AND CHECK TIGHTNESS OF ELECTRICAL CONNECTIONS. REPLACE DAMAGED CIRCUIT BREAKERS AND PROVIDE CLOSURE PLATES FOR VACANT POSITIONS. PROVIDE TYPED CIRCUIT DIRECTORY SHOWING REVISED CIRCUITING ARRANGEMENT. LUMINAIRES: REMOVE EXISTING LUMINAIRES, WHERE SCHEDULED TO REMAIN, FOR CLEANING. USE MILD DETERGENT TO CLEAN ALL EXTERIOR AND INTERIOR SURFACES; RINSE WITH CLEAN WATER AND WIPE DRY. REPLACE LAMPS, BALLASTS, AND BROKEN ELECTRICAL PARTS.

INSTALLATION
INSTALL RELOCATED MATERIALS AND AS REQUIRED BY THIS SECTION AND OWNER'S REPRESENTATIVE.



2 BUILDING H LIGHTING PLAN
SCALE: 1/8"=1'-0"

LIGHTING SHEET NOTES

- CONTRACTOR SHALL VERIFY LOCATION, CEILING TYPE, TRIM, AND REQUIREMENTS OF ALL LIGHT FIXTURES AND CONTROL PRIOR TO BID PROPOSAL, ROUGH-IN AND FINISH INSTALLATION.
- CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
- CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
- 3/4" CONDUIT MINIMUM, UNLESS OTHERWISE NOTED.
- ALL LIGHTING FIXTURES SHALL BE SECONDARILY SUPPORTED WITH SAFETY CABLES, PROVIDED BY CONTRACTOR.
- VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
- MAINTAIN A MAXIMUM 2% VOLTAGE DROP ON ALL LIGHTING HOMERUNS.
- ALL EXIT SIGNS ARE +12" TO CENTER LINE OF FIXTURE ABOVE DOOR FRAME UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE ALL BACKING BRACKETS, SUPPORTS, AND MOUNTING HARDWARE NECESSARY TO PROPERLY INSTALL LIGHTING FIXTURES.
- VERIFY THE EXACT ROUTING OF ALL EXPOSED CONDUIT WITH OWNER PRIOR TO INSTALLATION.
- COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
- PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTOR IN ALL LIGHTING SYSTEM CONDUITS.
- GRAPHICS / SIGNAGE: VERIFY & PROVIDE CONNECTION TO SIGNAGE PER VENDOR'S SHOP DRAWINGS. VERIFY SIGN LOCATION, MOUNTING ELEVATION AND BRANCH CIRCUIT REQUIREMENTS PRIOR TO ROUGH-IN.
- ALL LIGHTING FIXTURES, EXCEPT EMERGENCY, SHALL BE CONTROLLED BY CONTRACTOR PROVIDED AUTOMATIC LIGHTING CONTROL SYSTEM AS REQUIRED BY STATE OF CALIFORNIA TITLE 24 REGULATIONS.
- PROVIDE ALL REQUIRED DEVICE COVER PLATES.

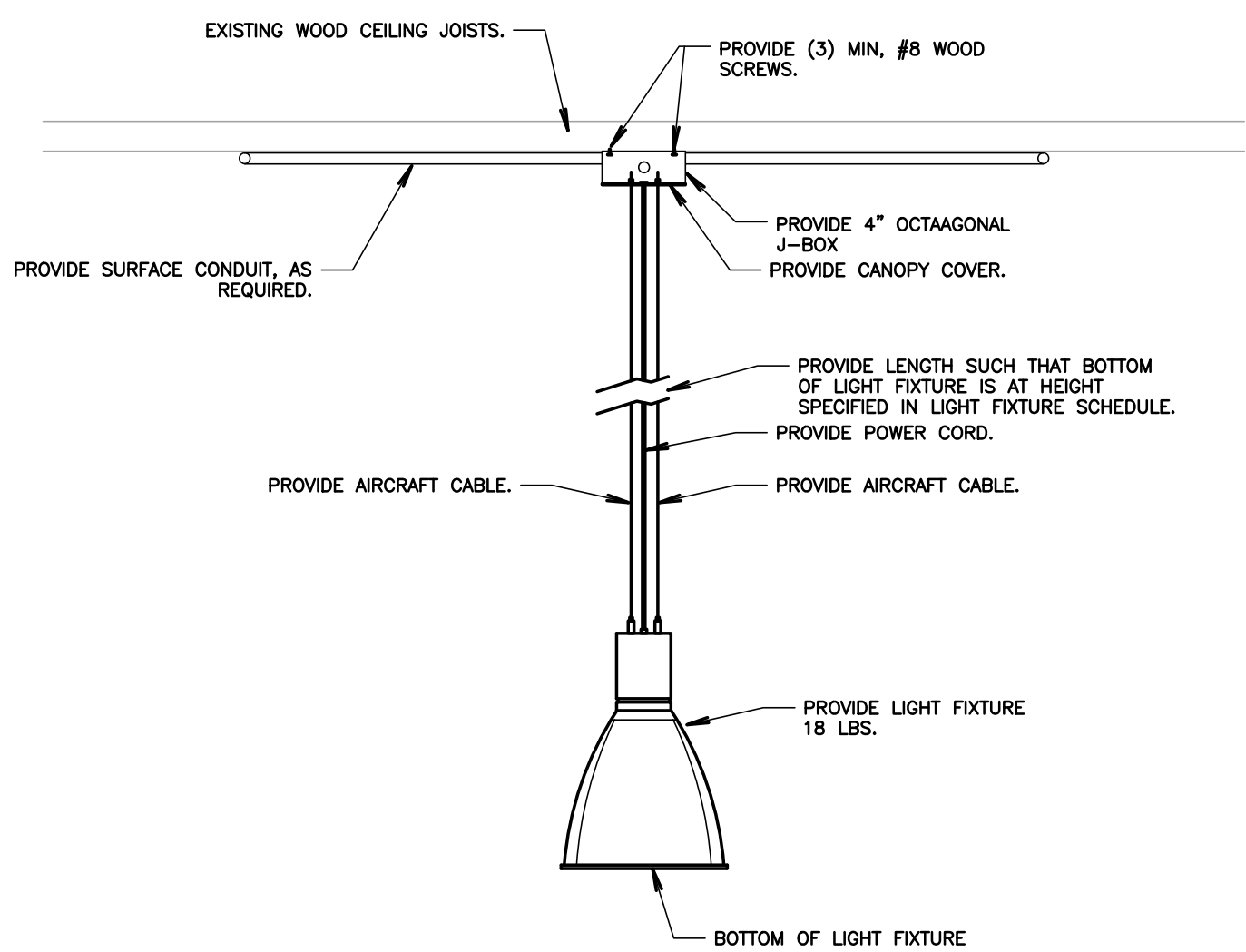
KEYNOTES (BLDG H)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

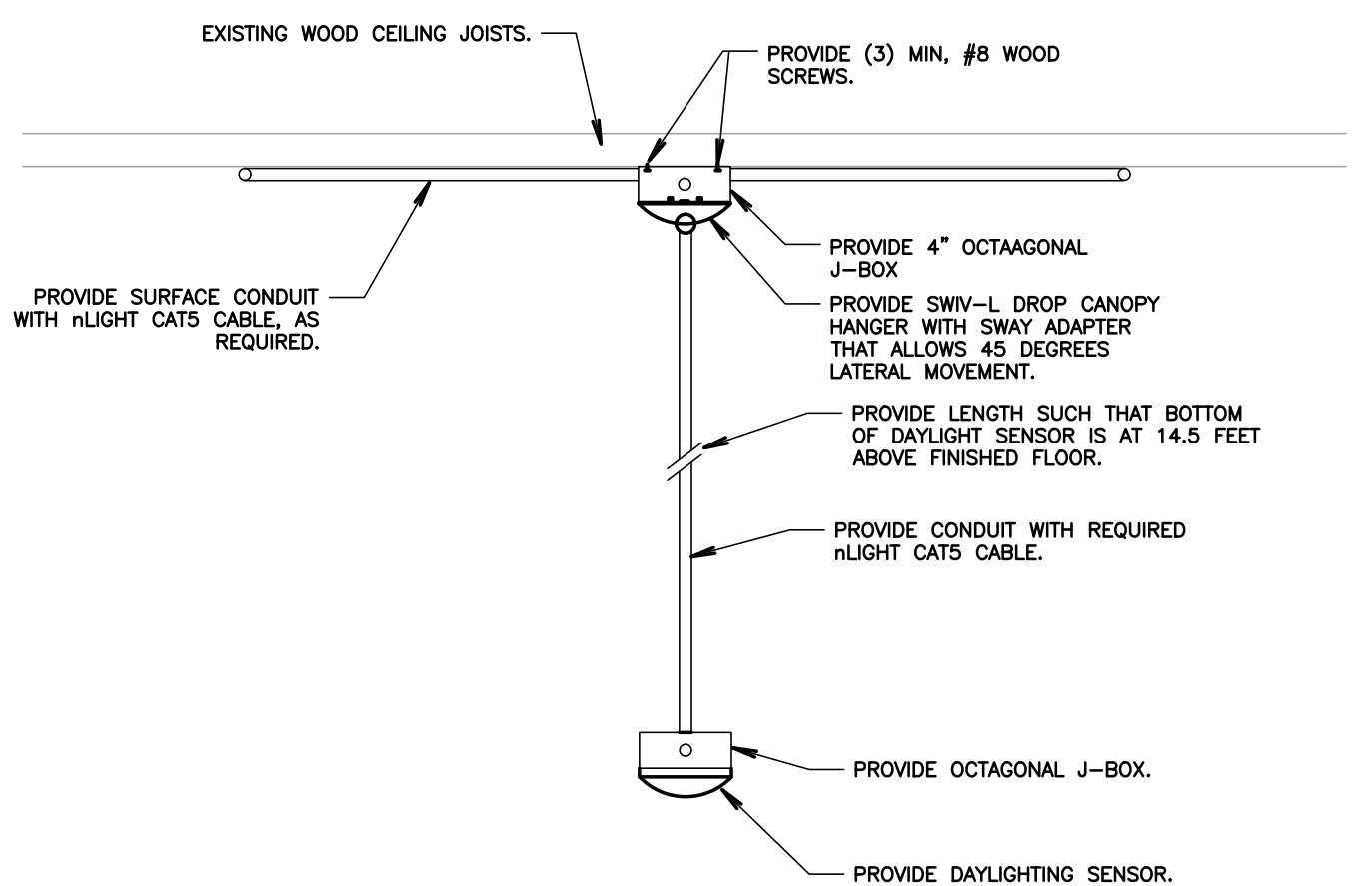
- REMOVE EXISTING LIGHT FIXTURE AT THIS LOCATION. PROVIDE LIGHT FIXTURE & RECONNECT TO EXISTING BRANCH CIRCUIT.
- PROVIDE 3/4" O. EMT. PROVIDE ALL REQUIRED PRE-TERMINATED 48" CATS CABLES & CONNECT DEVICES. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED CABLE LENGTHS. CONTRACTOR SHALL WALK JOB WITH BIDD REPRESENTATIVE IN ORDER TO DETERMINE EXACT ROUTING OF EXPOSED SURFACE MOUNTED CONDUIT PRIOR TO STARTING CONSTRUCTION.
- EXISTING CONDUIT & CONDUCTORS. PROTECT IN PLACE.
- LIGHTING CONTROL SWITCH, "LCS", PROVIDE TORK ASTRO-CLOCK TIME SWITCH. COORDINATE PROGRAMMING W/DISTRICT. TORK, #SS703Z.
- PROVIDE ALL WORK & MATERIALS IN ORDER TO RE-ROUTE EXISTING EXTERIOR LIGHTING BRANCH CIRCUIT THRU TIME SWITCH.
- PROVIDE WALL SWITCH OCCUPANCY SENSOR. SENSOR SWITCH, #WSX-POT-WH.
- CONNECT LIGHT FIXTURE TO EXISTING BRANCH CIRCUIT AT SAME LOCATION OF REMOVED LIGHT FIXTURE.
- PROTECT EXISTING LIGHTING IN PLACE.
- REMOVE SWITCH & REPLACE WITH OCCUPANCY SENSOR SWITCH. SEE LIGHTING PLAN.
- LIGHT FIXTURE SHALL BE CONTROLLED BY DAYLIGHT PHOTOSENSOR.
- POWER PACK DEDICATED FOR DAYLIGHTING CONTROL.

LIGHTING LEGEND (BLDG H)

- D** PROVIDE 48" LIGHT, #4800M-2P-DX-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- S** PROVIDE 48" LIGHT, #4800M-4S-DX-XX. VERIFY COLOR W/ARCH PRIOR TO ORDERING. PROVIDE 1-GANG J-BOX & MOUNT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. TEACHERS STATION. VERIFY EXACT LOCATION W/ARCH.
- OS** CORNER MOUNT OCCUPANCY SENSOR. PROVIDE 48" LIGHT, #48WPD-16. MOUNT AT 8FT AFF PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 16-4S SPLITTER.
- P** PROVIDE POWER/RELAY PACK IN ACCESSIBLE CEILING SPACE. PROVIDE 48" LIGHT, #48PP16-D-EFF.
- OS** OCCUPANCY SENSOR WITH DAYLIGHT CONTROL. CEILING MOUNTED. PROVIDE 48" LIGHT, #48WPD-16-RUB-400A. MOUNT TO J-BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.



3 TYPICAL PENDANT LIGHT MOUNTING DETAIL
SCALE: NOT TO SCALE



4 TYPICAL DAY LIGHT SENSOR MOUNTING DETAIL
SCALE: NOT TO SCALE

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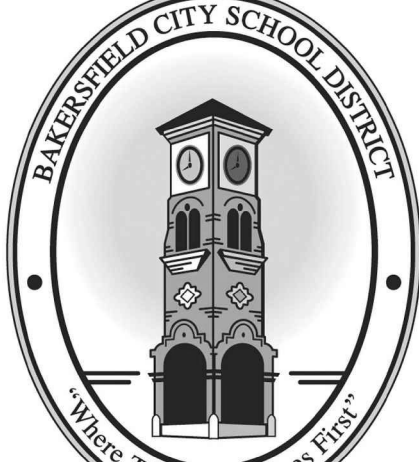
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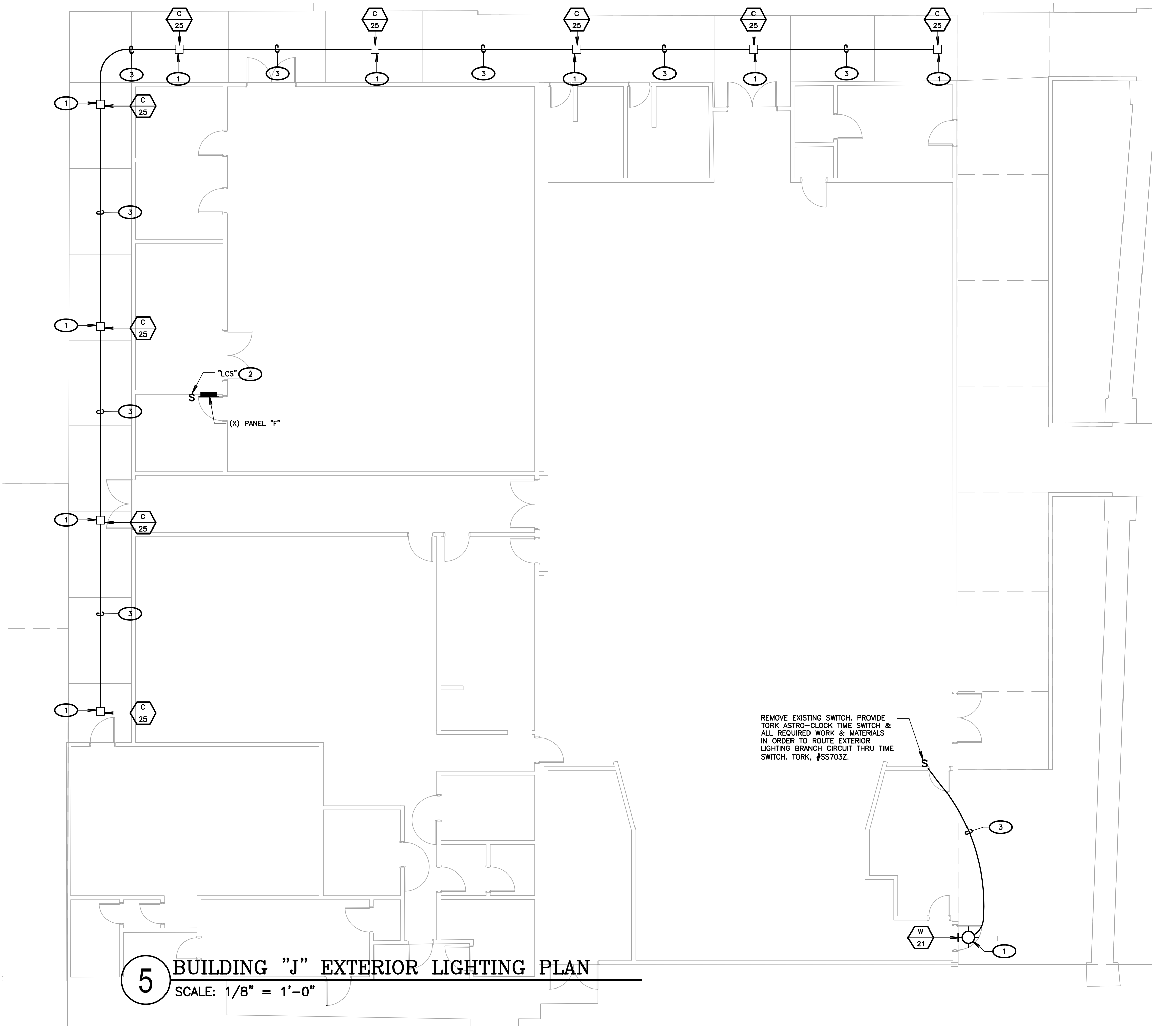
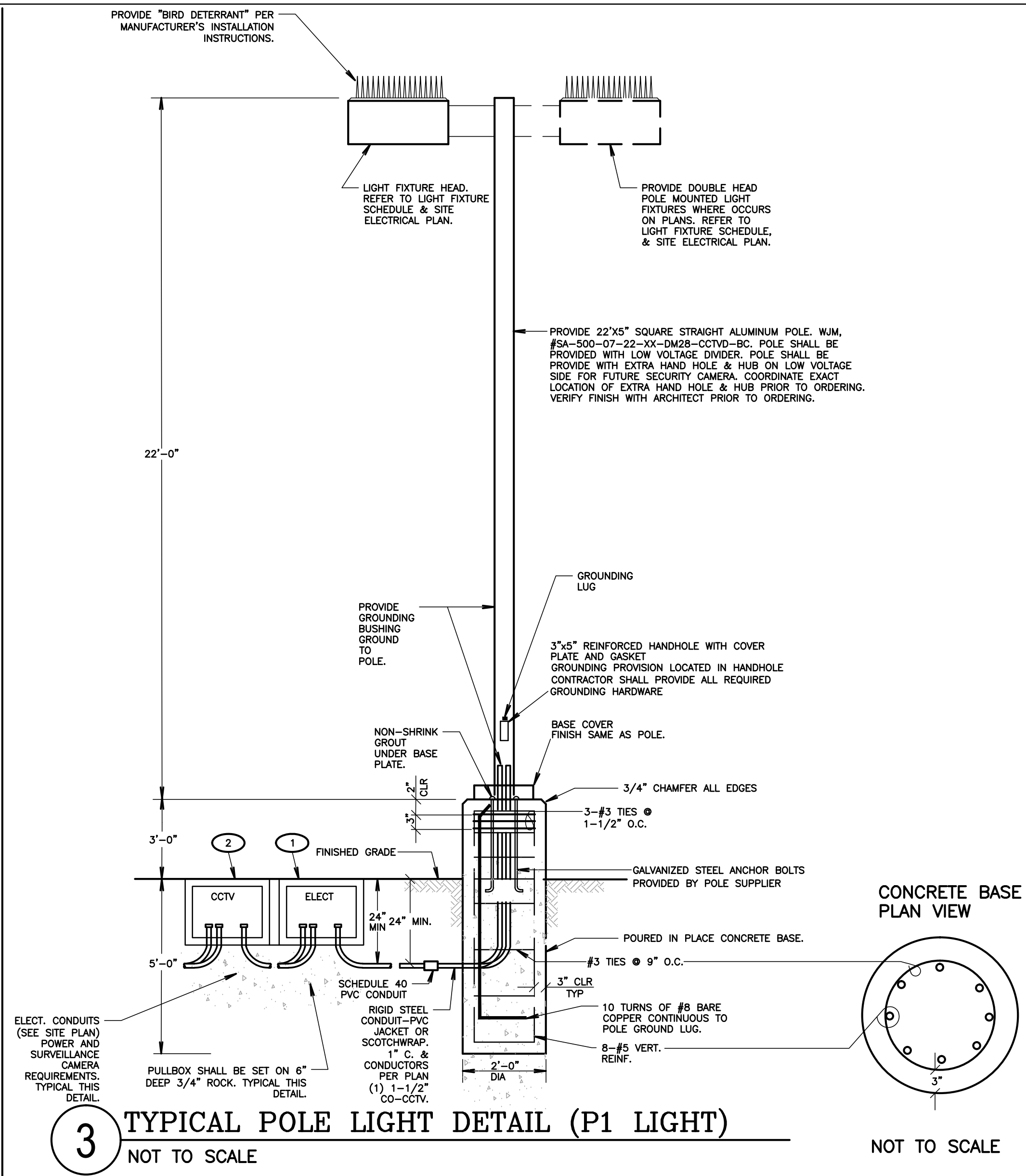
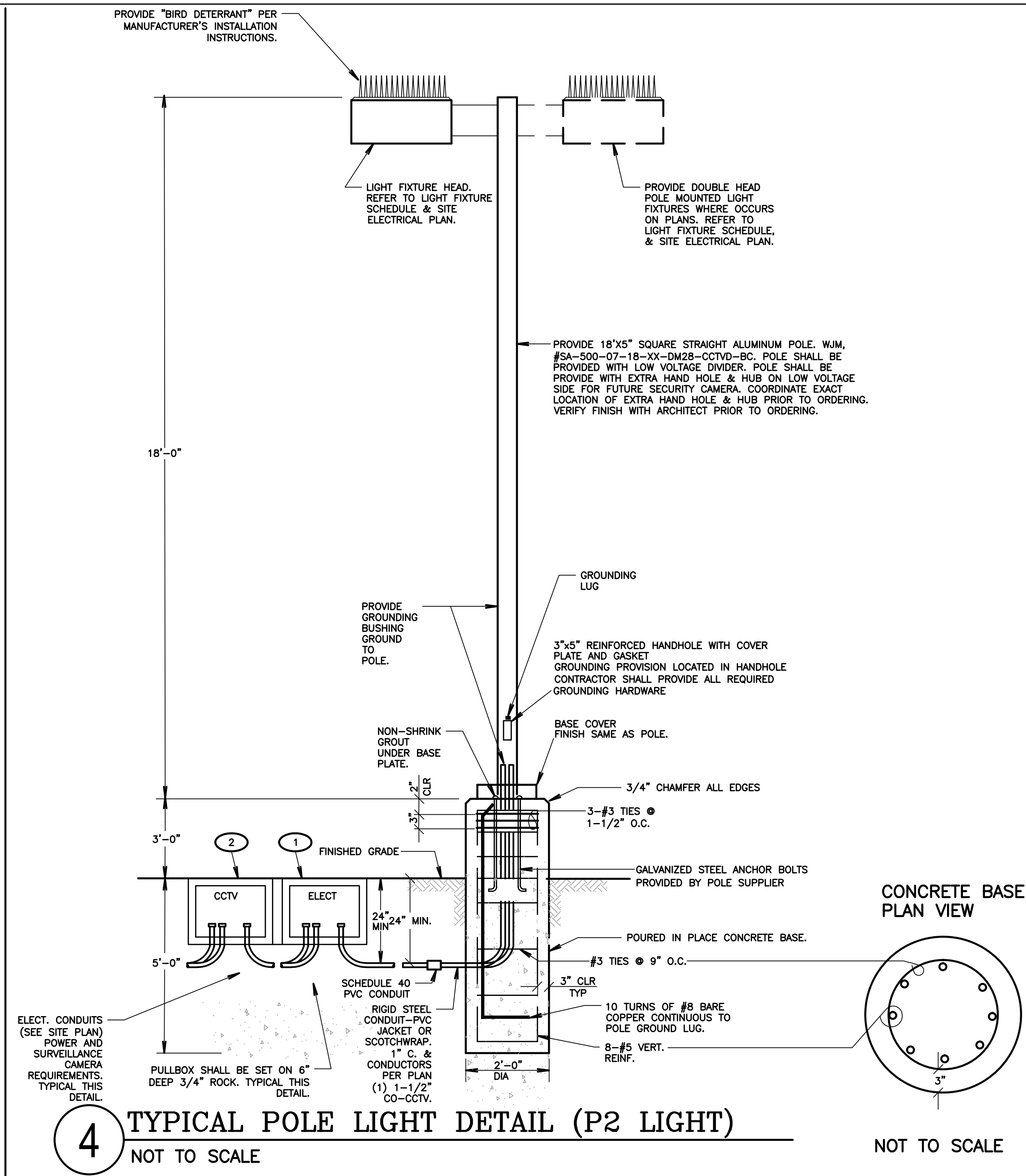
SHEET TITLE

**BUILDING H
LIGHTING
DEMOLITION/LIGHTING
PLAN**

SHEET NUMBER

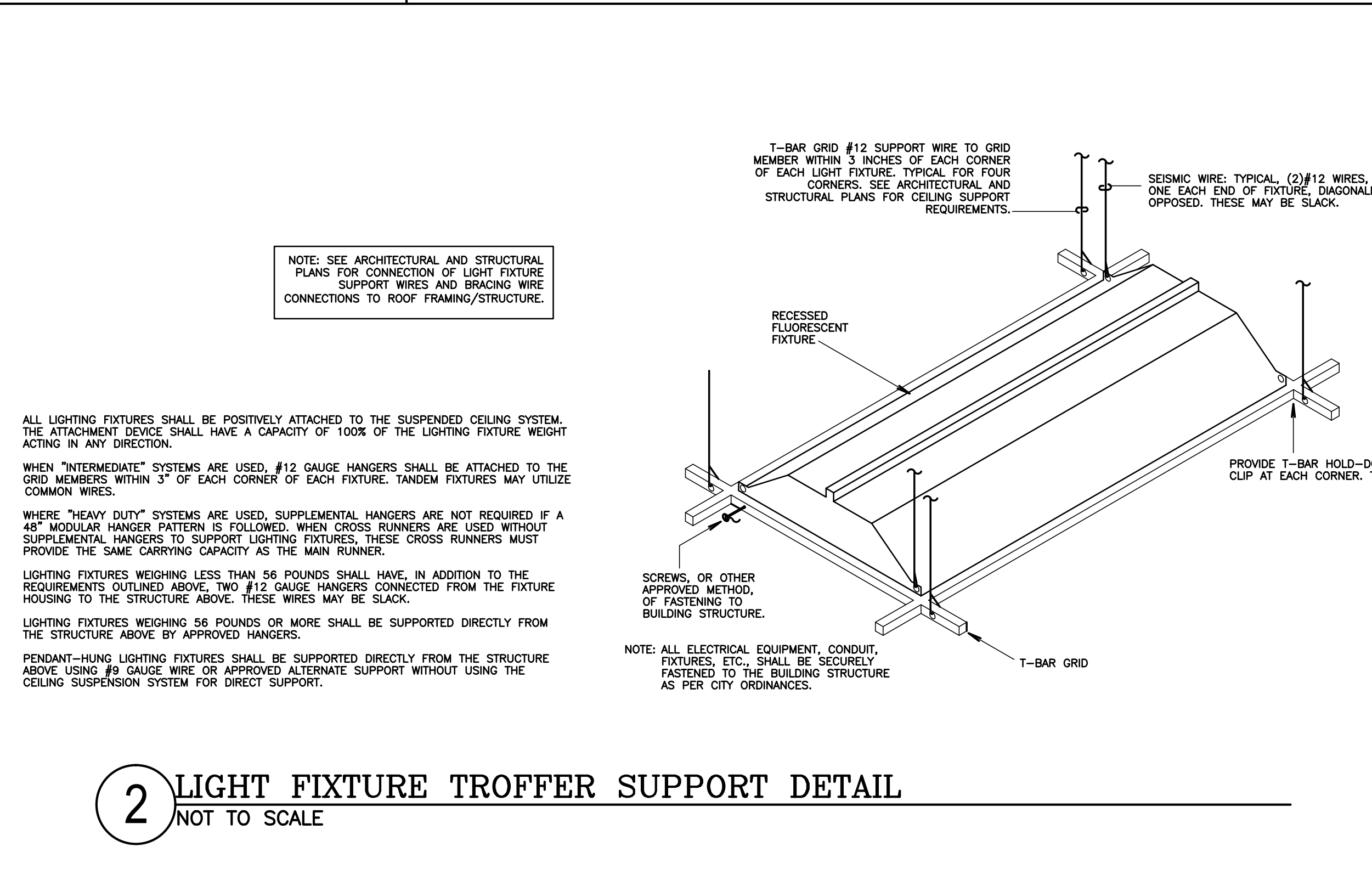
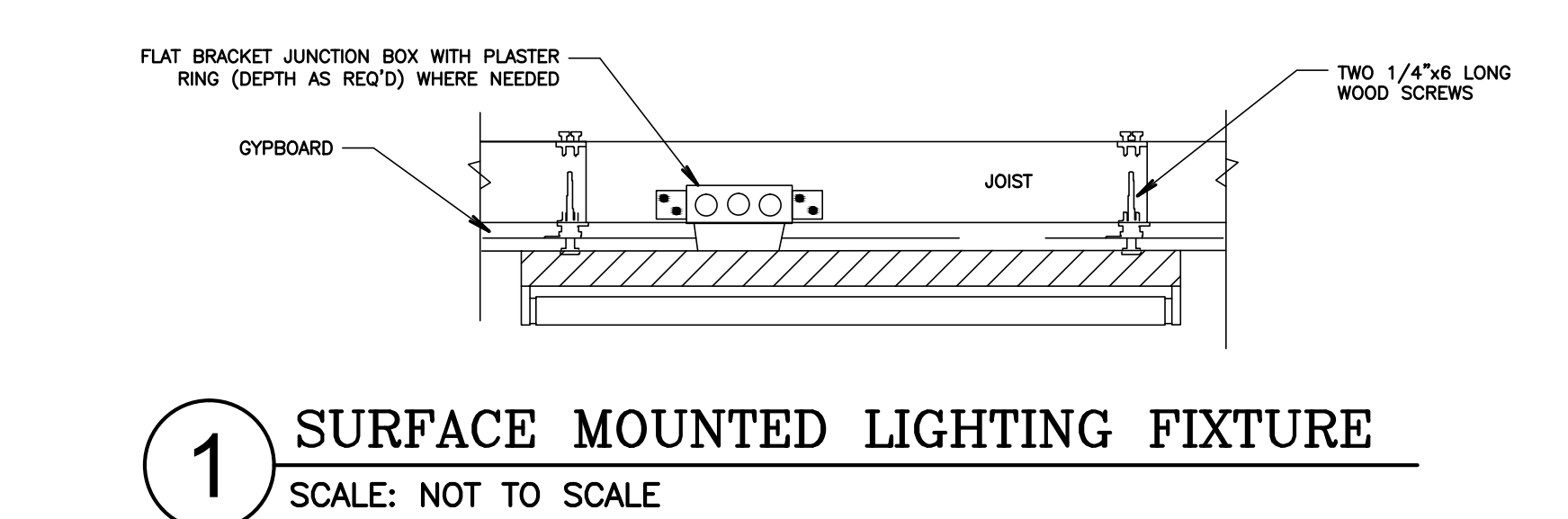
E404

DSA SUBMITTAL SET



LIGHT FIXTURE SCHEDULE										
TYPE	L A M P S		VOLTS	MOUNTING	DESCRIPTION					
	WATTS	No			MANUFACTURER	CATALOG No.	REMARKS			
L1	53		208	REC	LITHONIA	CPANL-2X4-40/50 60LM-40K-M2	2X4 FLAT PANEL, 4,000K	1		
L1E	53		208	REC	LITHONIA	CPANL-2X4-40/50 60LM-40K-M2	2X4 FLAT PANEL, 4,000K, 6000LM	1		
P1	270		208	REC	BEACON	PS1055CPMCEM	BATTERY PACK	1		
			208	REC	BEACON	VPL-6AL-135-4K7 5K-UNV-XX-BSP-	DOUBLE HEAD VIPER LARGE 4,000K	1		
			208	REC	BEACON	VPS-36L-80-4K7 4-UNV-XX-BSP-	DOUBLE HEAD VIPER SMALL 4,000K	1		
P	107		208	REC	DMF LIGHTING	DCP9-CN-09-35-XX-D-CPDS-R-18-P-FR	PENDANT 3,500K	2	1	
L1S	53		208	REC	LITHONIA	CPANL-2X4-40/50 60LM-40K-M2-24AC2M				
L2	49		208	REC	KENALL	MJHAB-48-F-MW-CP-1-45L40K-DCC-1-DV	4,000K	1		
L2E	49		208	REC	KENALL	MJHAB-48-F-MW-CP-1-45L40K-DCC-1-DV-LEL	4,000K	1		
C	25		208	REC	SYLVANIA	CANOPY-24-025-UNV-D-840-12-S-5-BZ	EXTERIOR LIGHT 4,000K	1	5	
S	13		208	REC	KENALL	MS11CL-PP-XX 12L40K-DV	4,000K	1	9	
V	20		208	REC	PRUDENTIAL	P40-LED35-SO-2-TM-W-SAL-01-SC-UNV-WM-ND	WALL VANITY 3,000K	1		
W	21		208	REC	RAB LIGHTING	SLIM-18-N-X	4,000K	1	7	

- LIGHTING FIXTURE SCHEDULE KEY NOTES**
- (NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
- 1 CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING PROPER TYPES OF TRIMS FOR ALL RECESSED LIGHT FIXTURES TO FIT THE CEILING BEING INSTALLED.
- 2 ALL BALLASTS SHALL BE ELECTRONIC SOLID STATE.
- 3 FIXTURES TYPE IN CONTACT WITH INSULATION SHALL HAVE U.L. LISTED THERMAL BARRIER.
- 4 CONTRACTOR SHALL VERIFY THE TYPE OF CEILING BEFORE ORDERING NEW FIXTURES. CONTRACTOR IS FULLY RESPONSIBLE TO PROVIDE ALL MOUNTING BRACKETS TO FIT CEILING CONDITIONS AT NO EXTRA CHARGE TO THE OWNER.
- 5 SEE ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND CEILING CONFIGURATION.
- 6 BOTTOM OF LIGHT FIXTURE SHALL BE SUSPENDED AT 13.5 FT. AFF.
- 7 PROVIDE ALL REQUIRED WORK & MATERIALS IN ORDER TO MAKE CONNECTIONS & INSTALL FULLY FUNCTIONAL BATTERY PACK.
- 8 POLE HAS DIVIDER FOR FUTURE SECURITY CAMERA WIRING. CONTRACTOR SHALL COORDINATE EXACT ORIENTATION OF POLE W/RESD PRIOR TO INSTALLATION. POLE SHALL BE PROVIDED WITH EXTRA HAND HOLE & HUB ON LOW VOLTAGE SIDE FOR FUTURE SECURITY CAMERAS. COORDINATE EXACT LOCATION OF EXTRA HAND HOLE & HUB PRIOR TO ORDERING.
- 9 PROVIDE MOUNTING PLATE & ALL WORK & MATERIALS IN ORDER TO INSTALL LIGHT FIXTURE. SYLVANIA, #CANOPYCA/ATG/PLATE/16/02.
- 10 LIGHT FIXTURE WEIGHT = 7.3 LBS.
- 11 LIGHT FIXTURE WEIGHT = 4.3 LBS. PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 12 NOT USED.
- 13 REFER TO STRUCTURAL FOR ATTACHMENT TO CANOPY.



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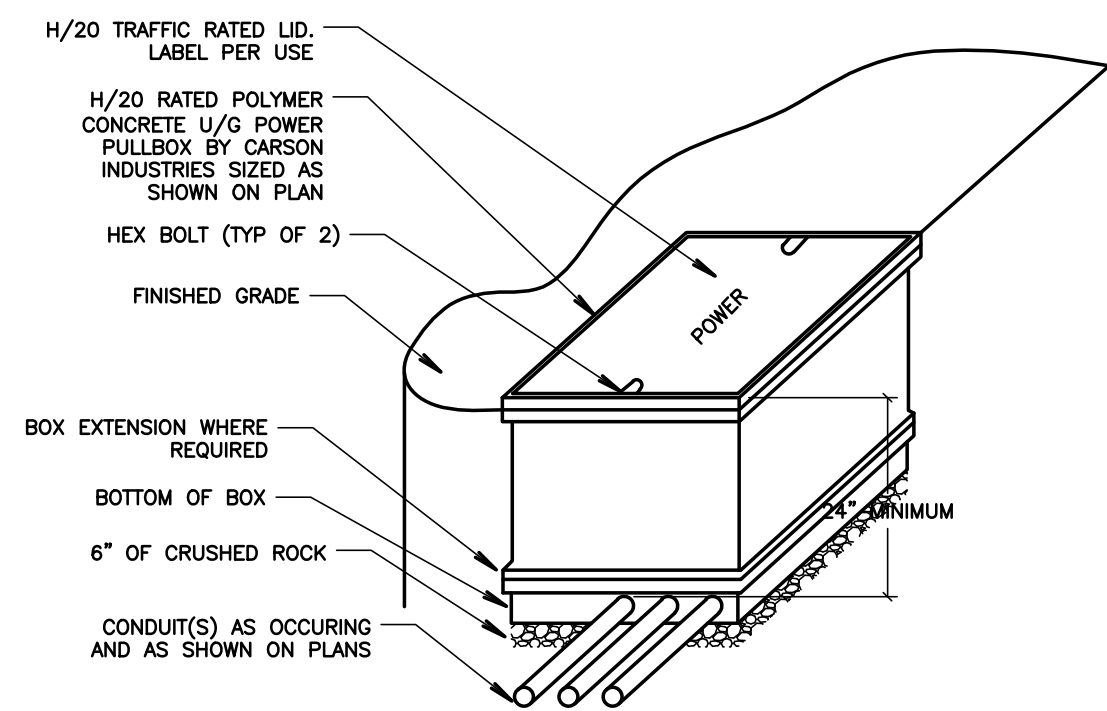
LIGHT FIXTURE SCHEDULE, LIGHTING DETAILS

SHEET NUMBER

E405

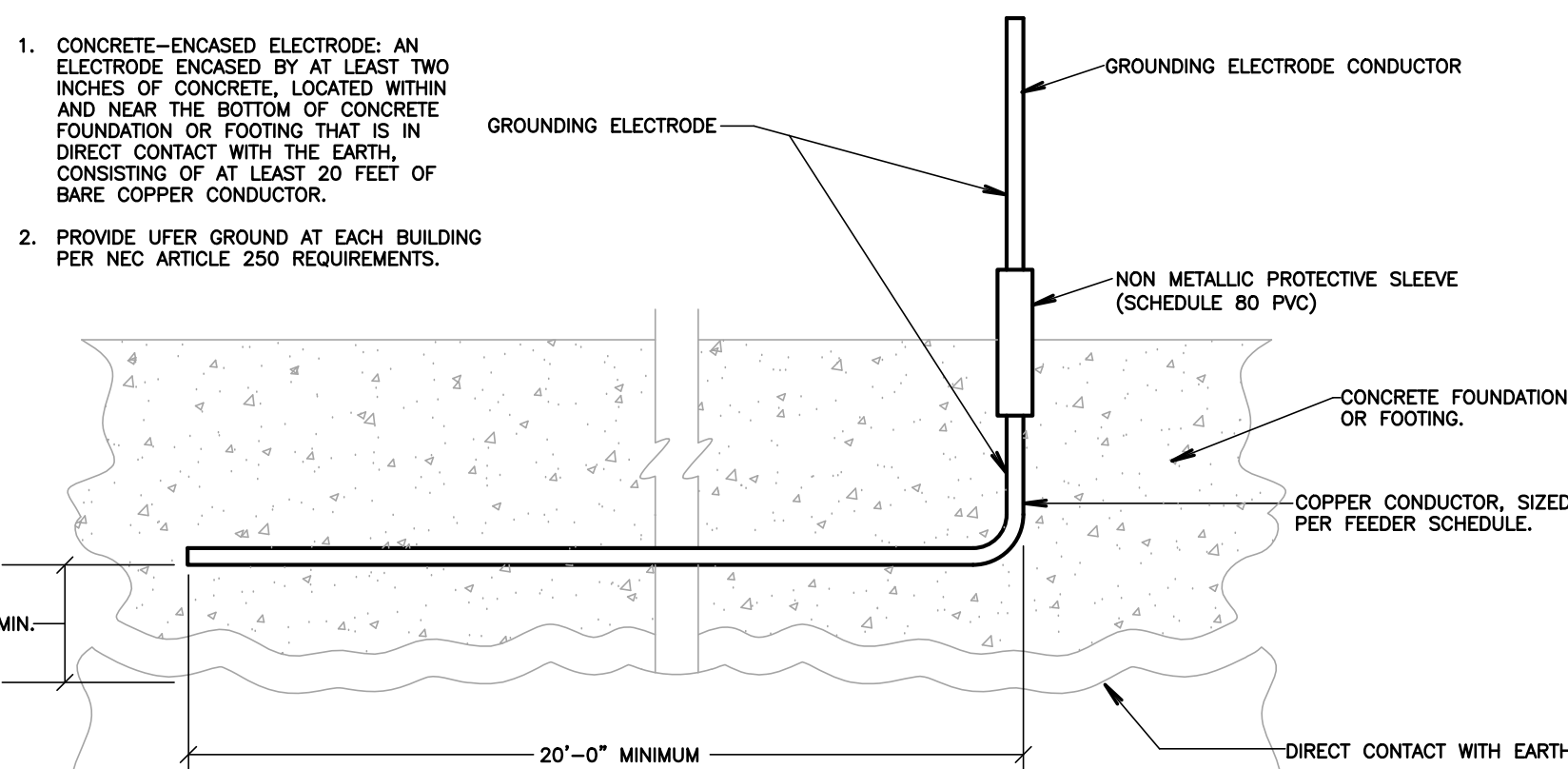
DSA SUBMITTAL SET

9 RELOCATABLE MODULE BONDING DETAIL
SCALE: NOT TO SCALE

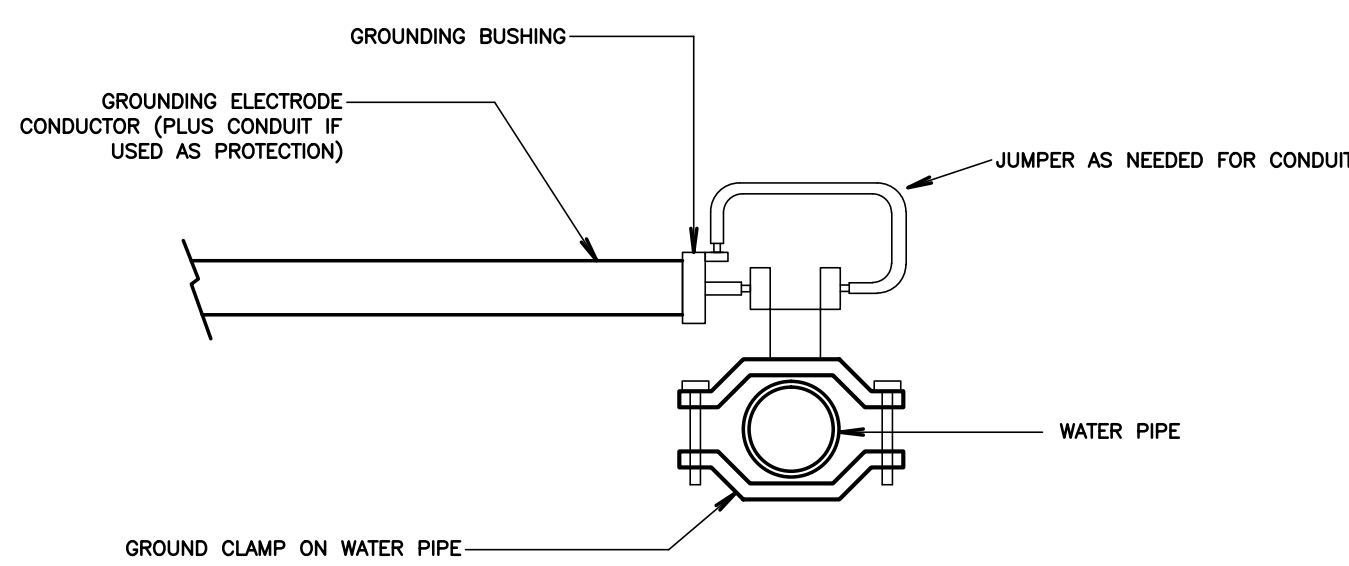


10 TYPICAL PULL BOX DETAIL
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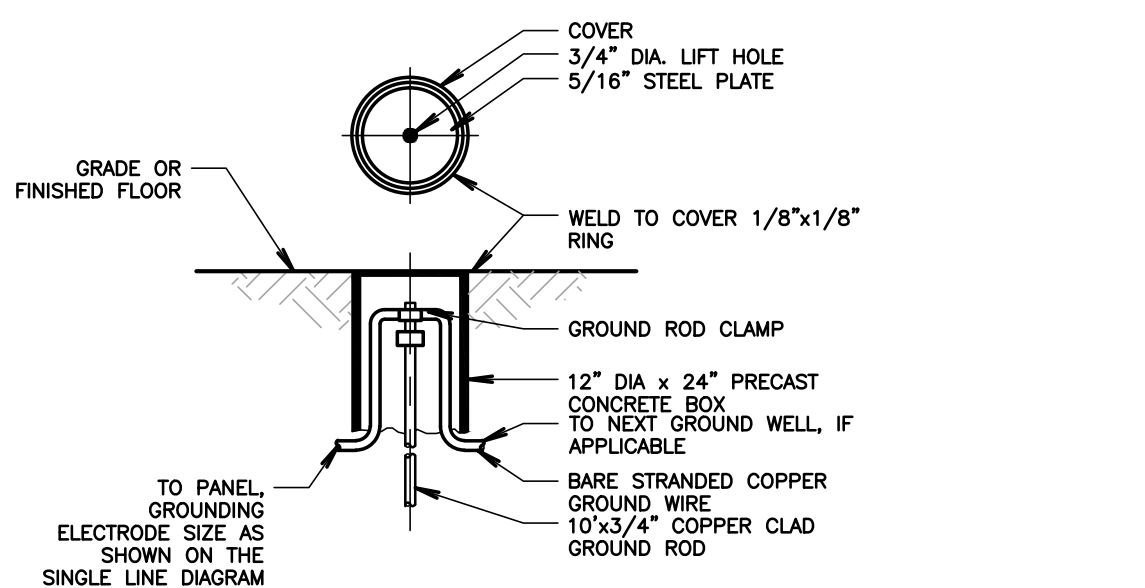
DETAIL NOTES



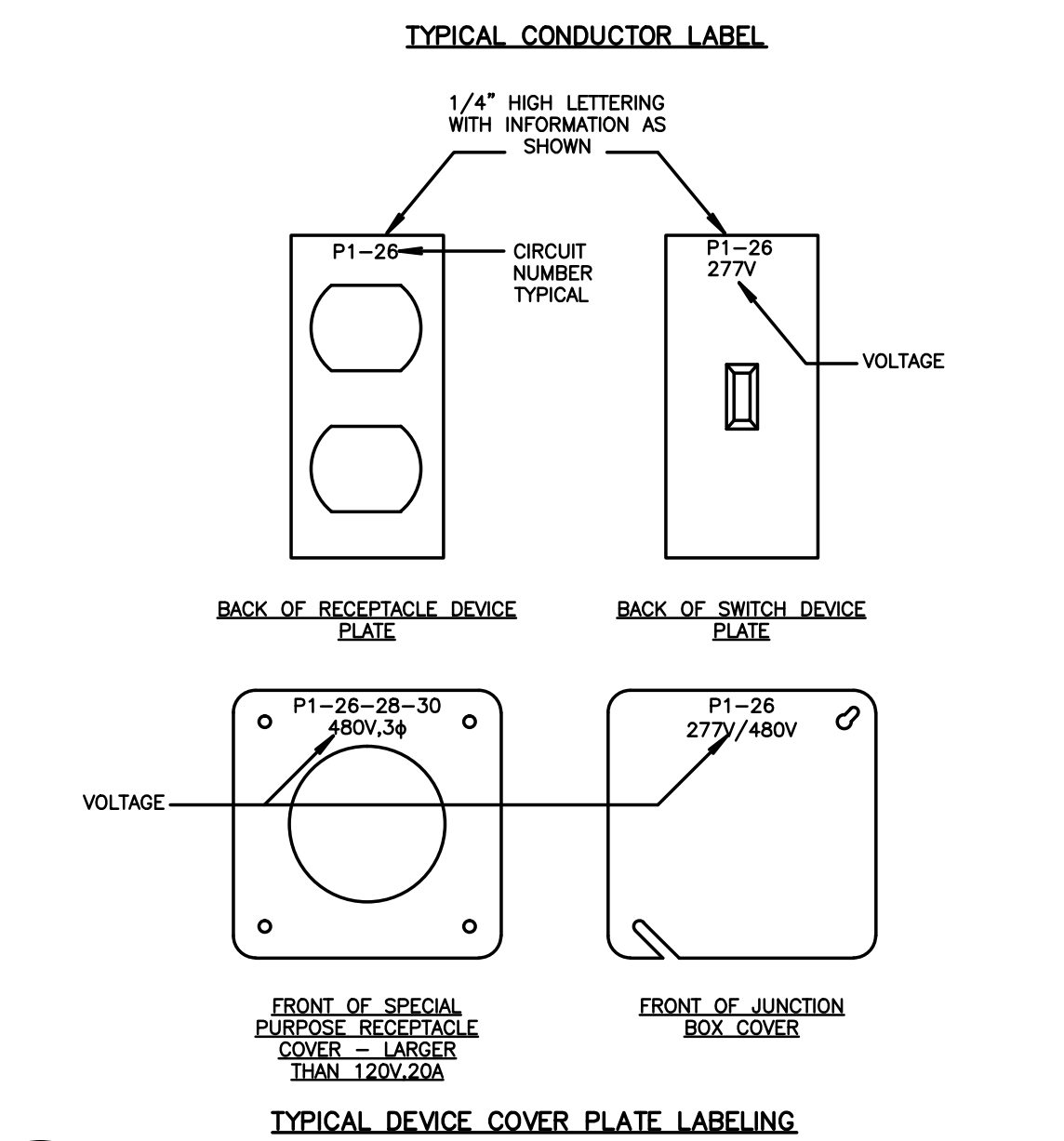
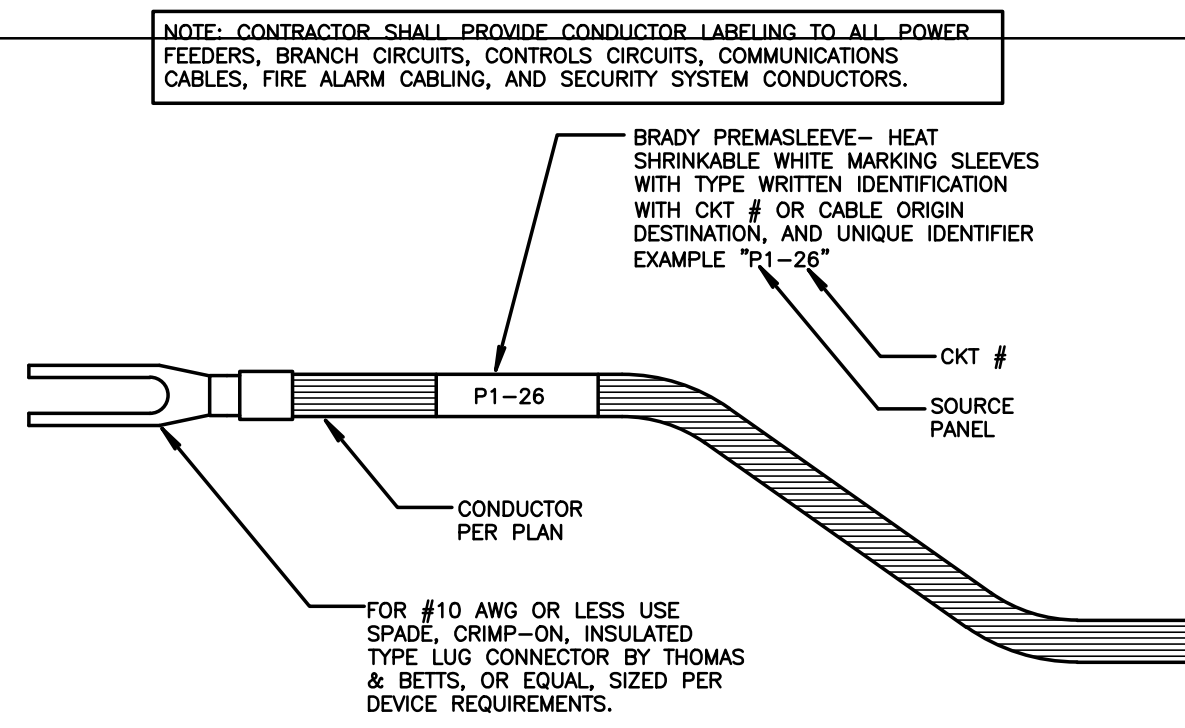
11 UFER GROUND DETAIL
SCALE: NOT TO SCALE



12 COLD WATER GROUND DETAIL
SCALE: NOT TO SCALE

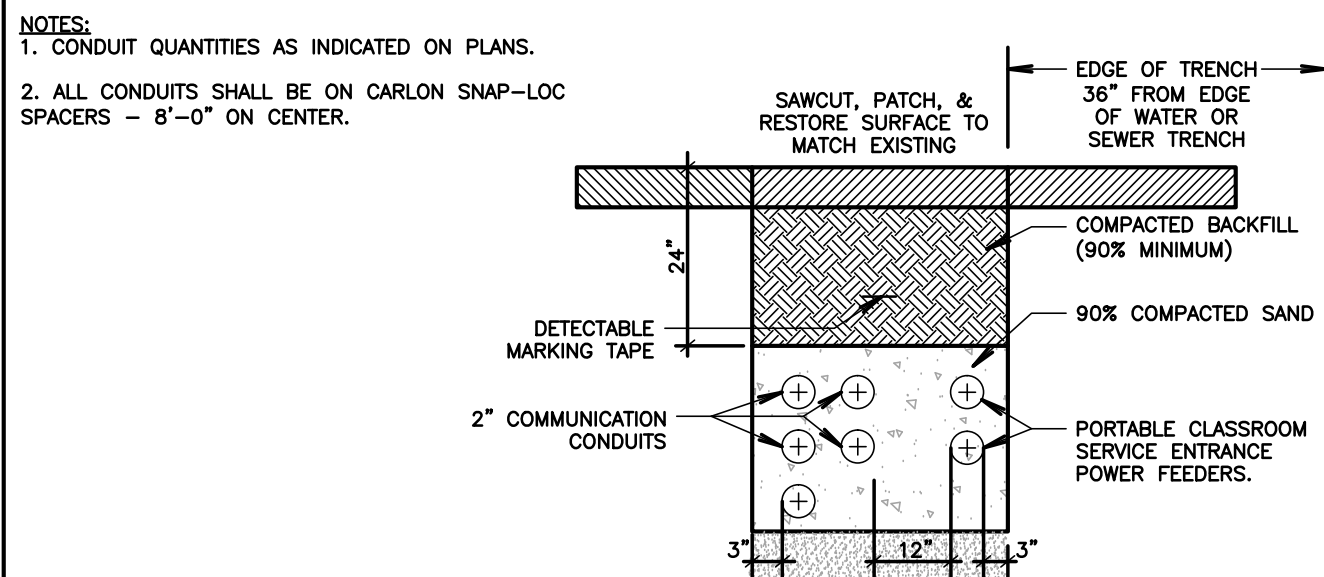


13 GROUND ROD DETAIL
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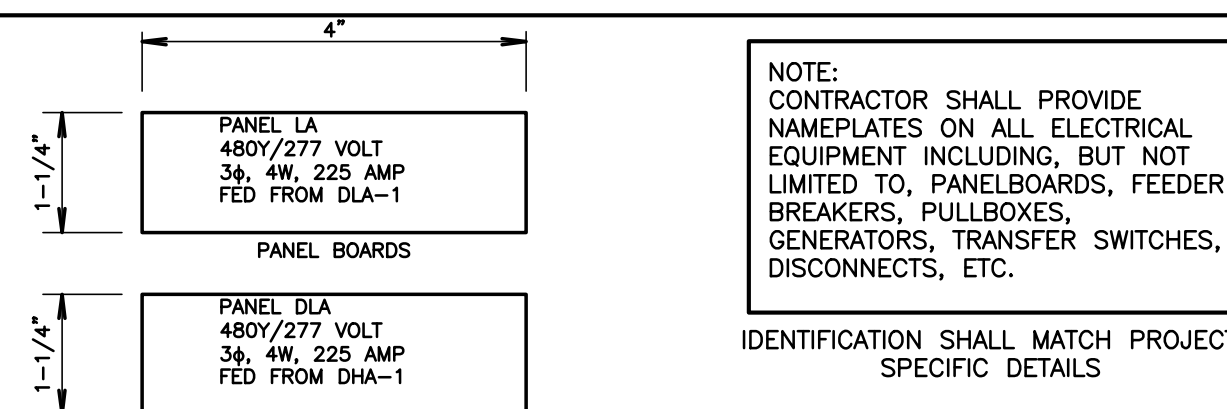


6 TYPICAL LABELING DETAIL
SCALE: NOT TO SCALE

NOTES:

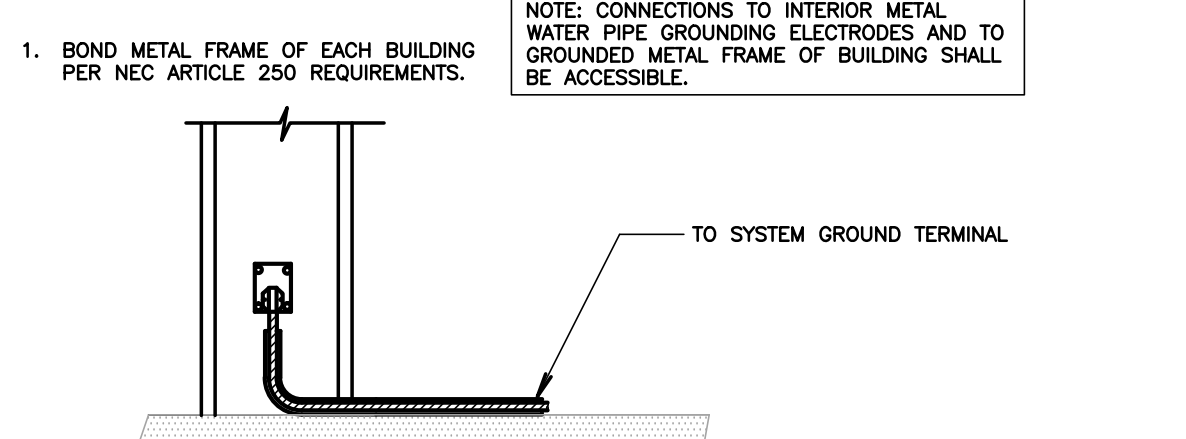


7 TYPICAL DUCT BANK SECTION
SCALE: NOT TO SCALE

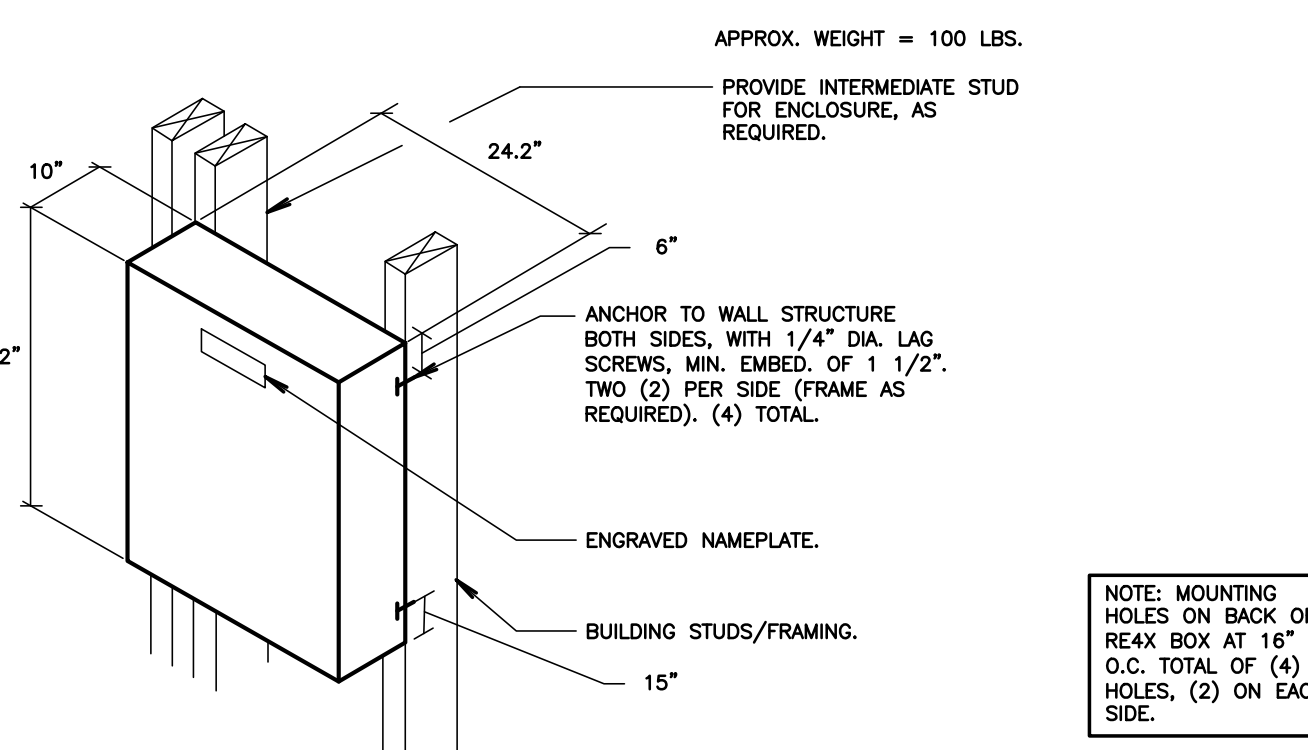


7A TYPICAL NAMEPLATE DETAILS
NOT TO SCALE

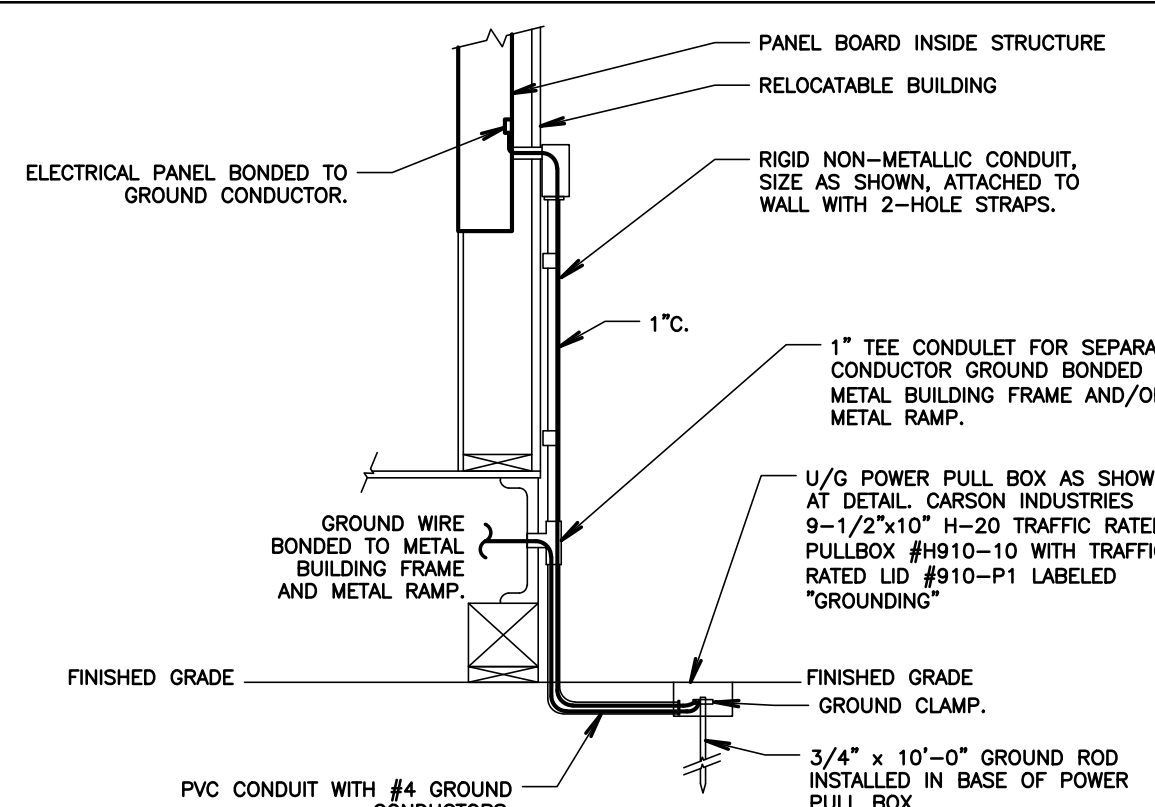
DETAIL NOTES



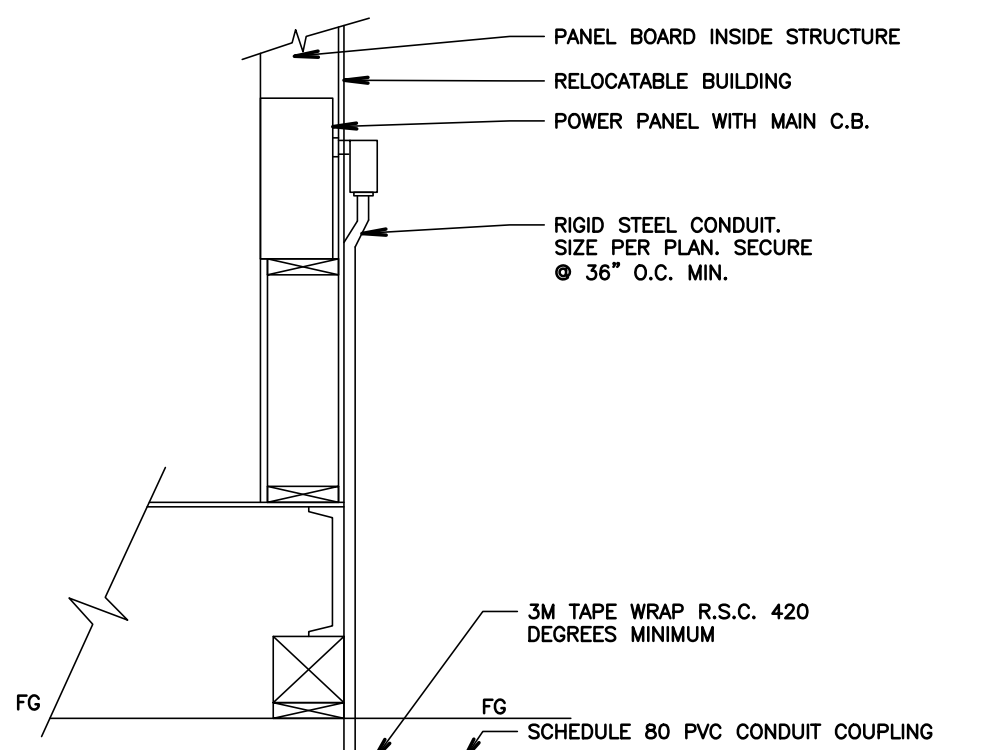
7B METAL FRAME GROUNDING DETAIL
SCALE: NOT TO SCALE



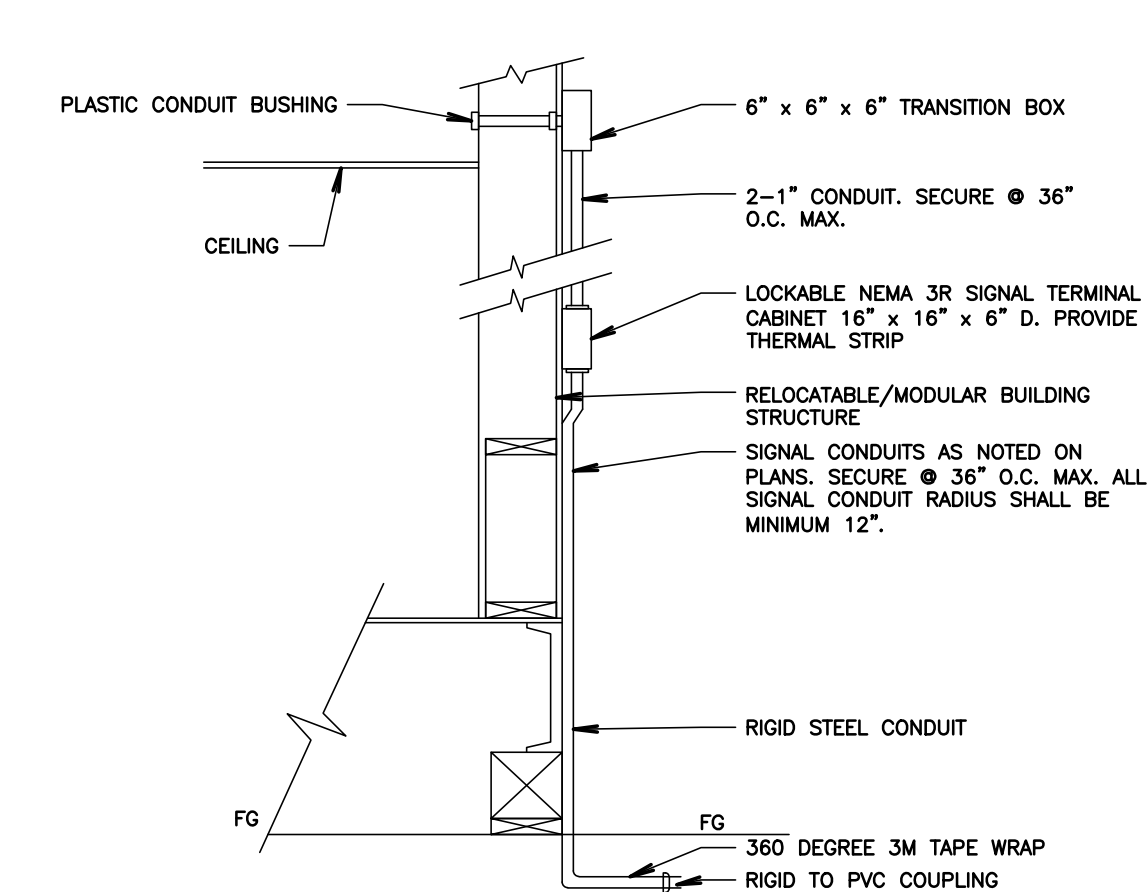
8 HUBBELL RE4X BOX MOUNTING DETAIL
NOT TO SCALE



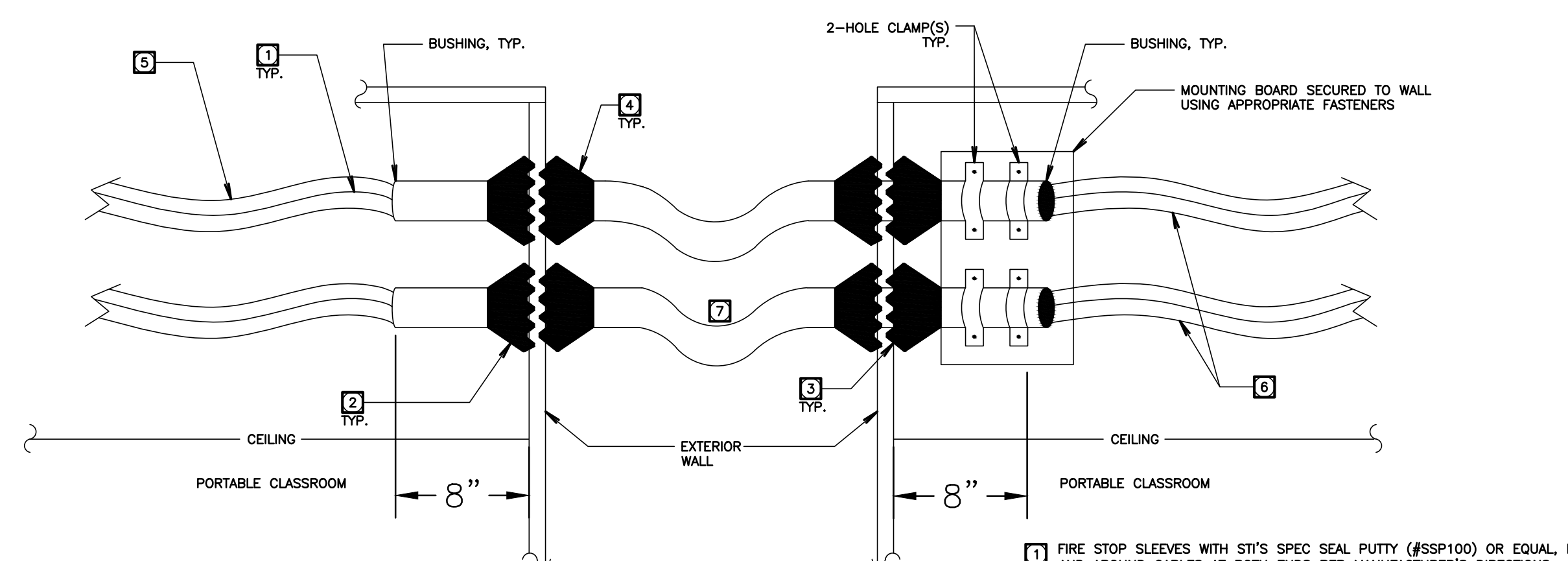
1 TYPICAL PORTABLE CLASSROOM GROUNDING DETAIL
SCALE: NOT TO SCALE



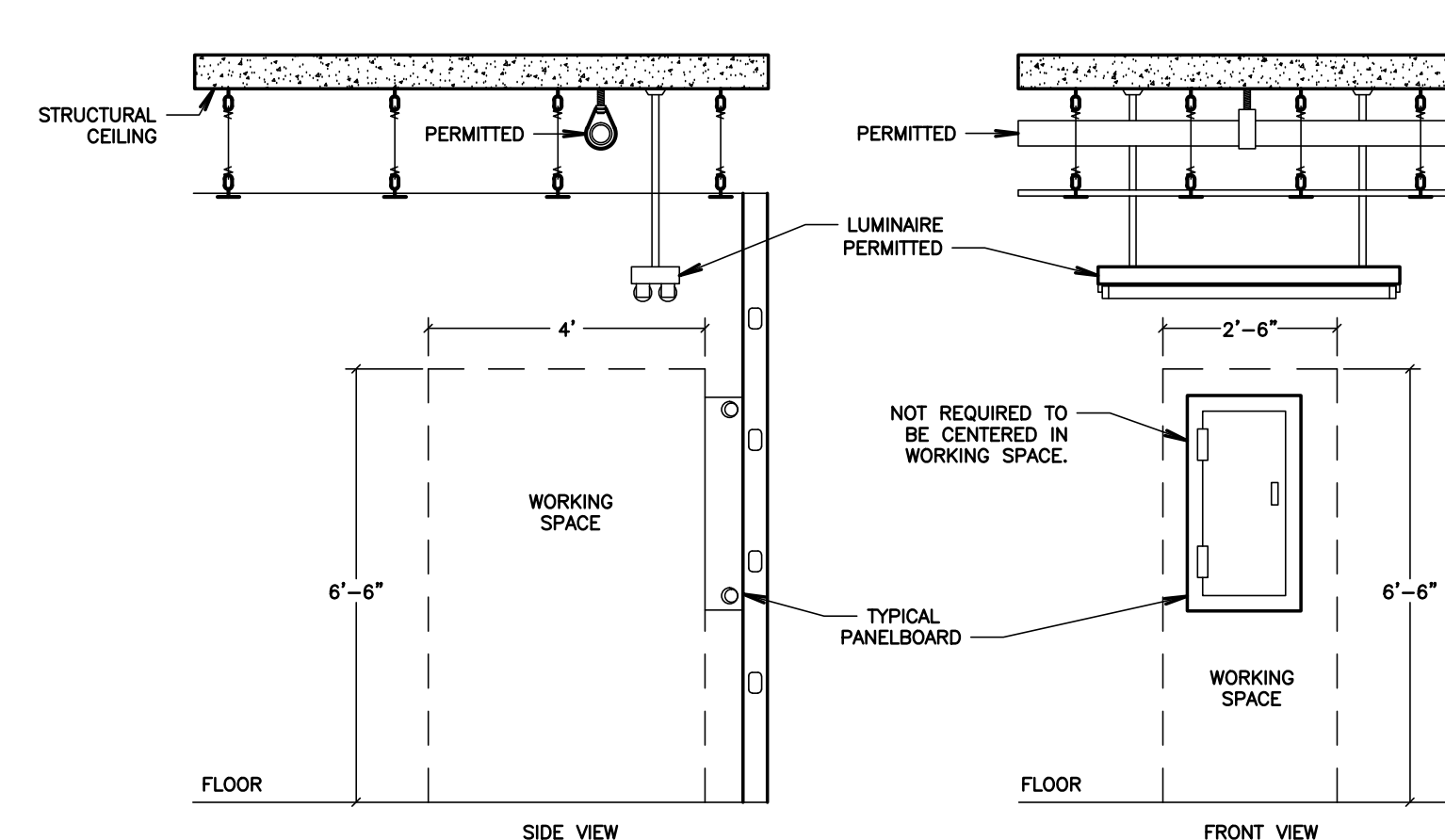
2 TYPICAL PORTABLE CLASSROOM POWER DETAIL
SCALE: NOT TO SCALE



3 TYPICAL PORTABLE CLASSROOM SIGNAL DETAIL
SCALE: NOT TO SCALE



4 TYPICAL CONDUIT EXPANSION DETAIL
NOT TO SCALE



5 TYPICAL PANELBOARD WORKING CLEARANCE
SCALE: NOT TO SCALE

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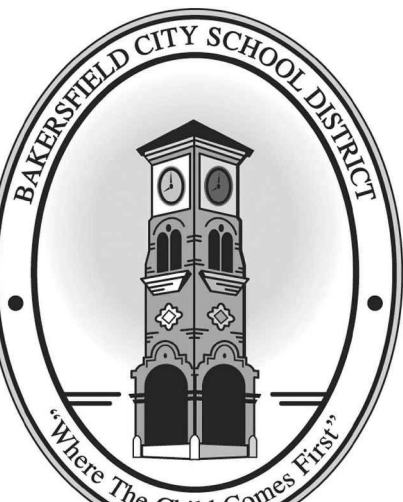
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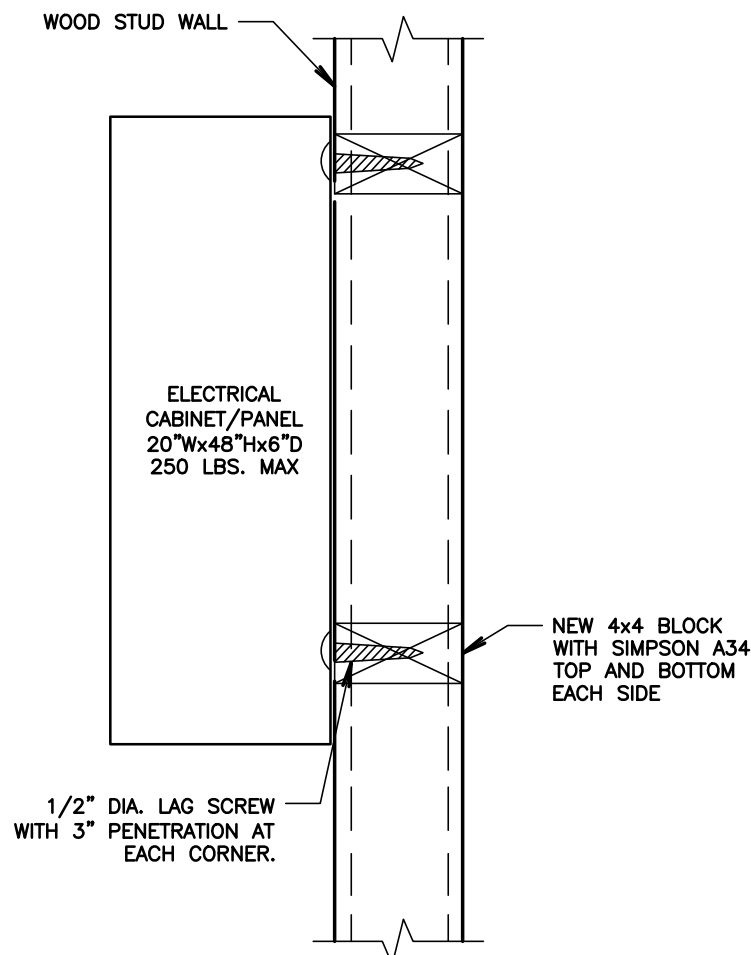
OPSC or OSHPD PROJ. NO:	
PROJECT NO:	118934
DRAWN BY:	VPZ
CHKD BY:	DF
ISSUE DATE:	3/3/2020
SHEET TITLE	

ELECTRICAL DETAILS
SHEET #1

SHEET NUMBER

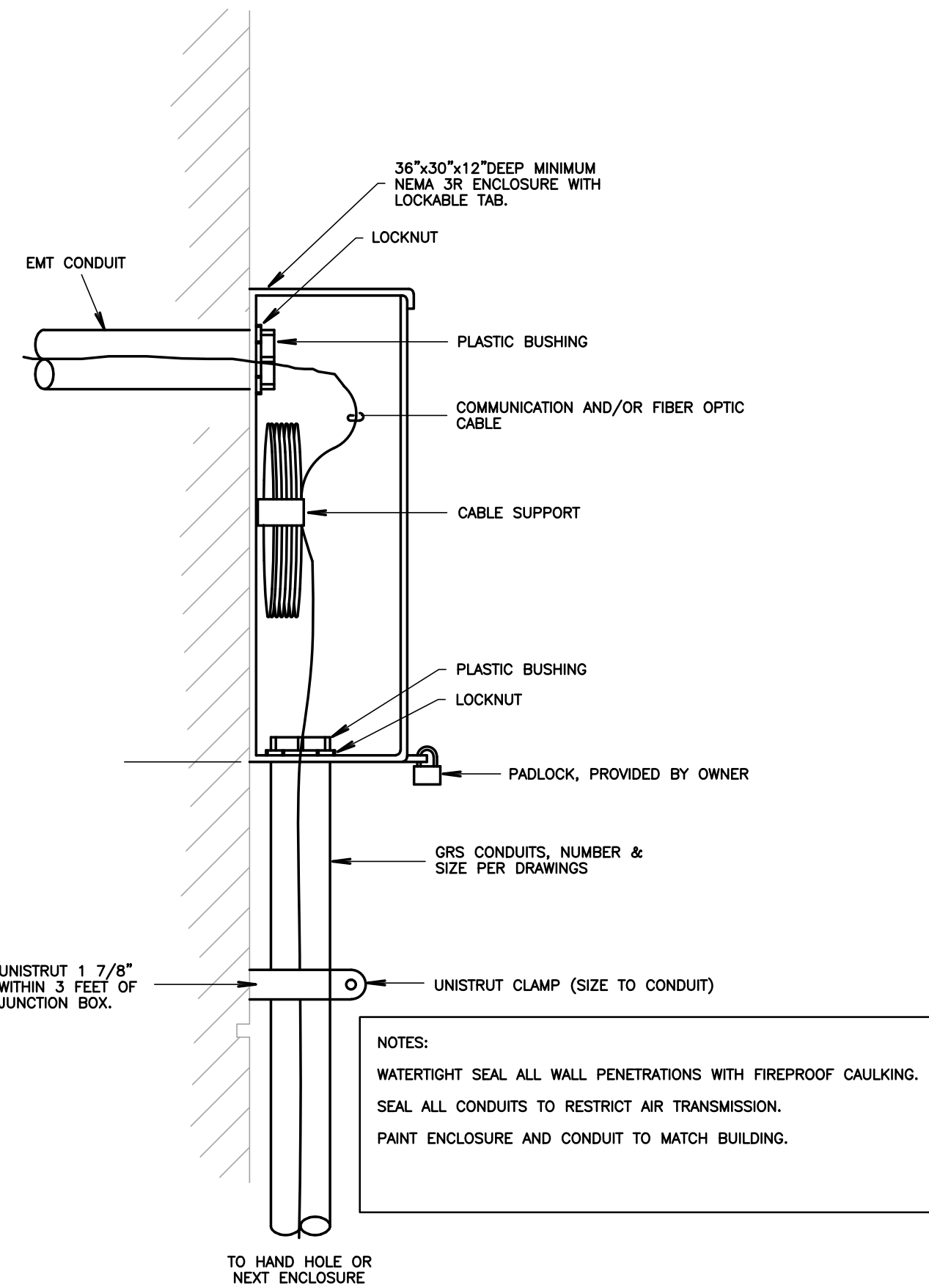
E500

DSA SUBMITTAL SET



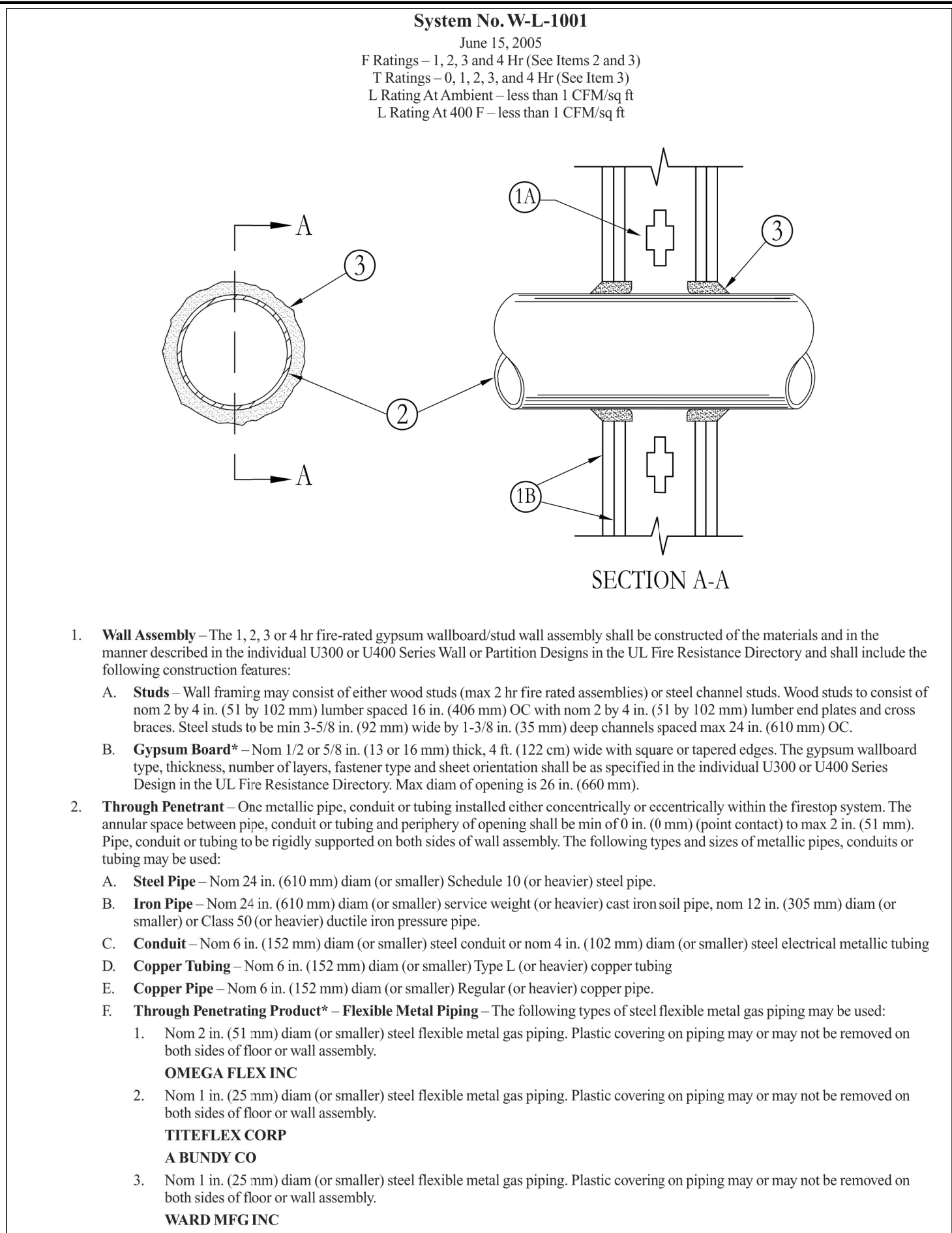
6 SURFACE ELECTRICAL PANEL MOUNTING

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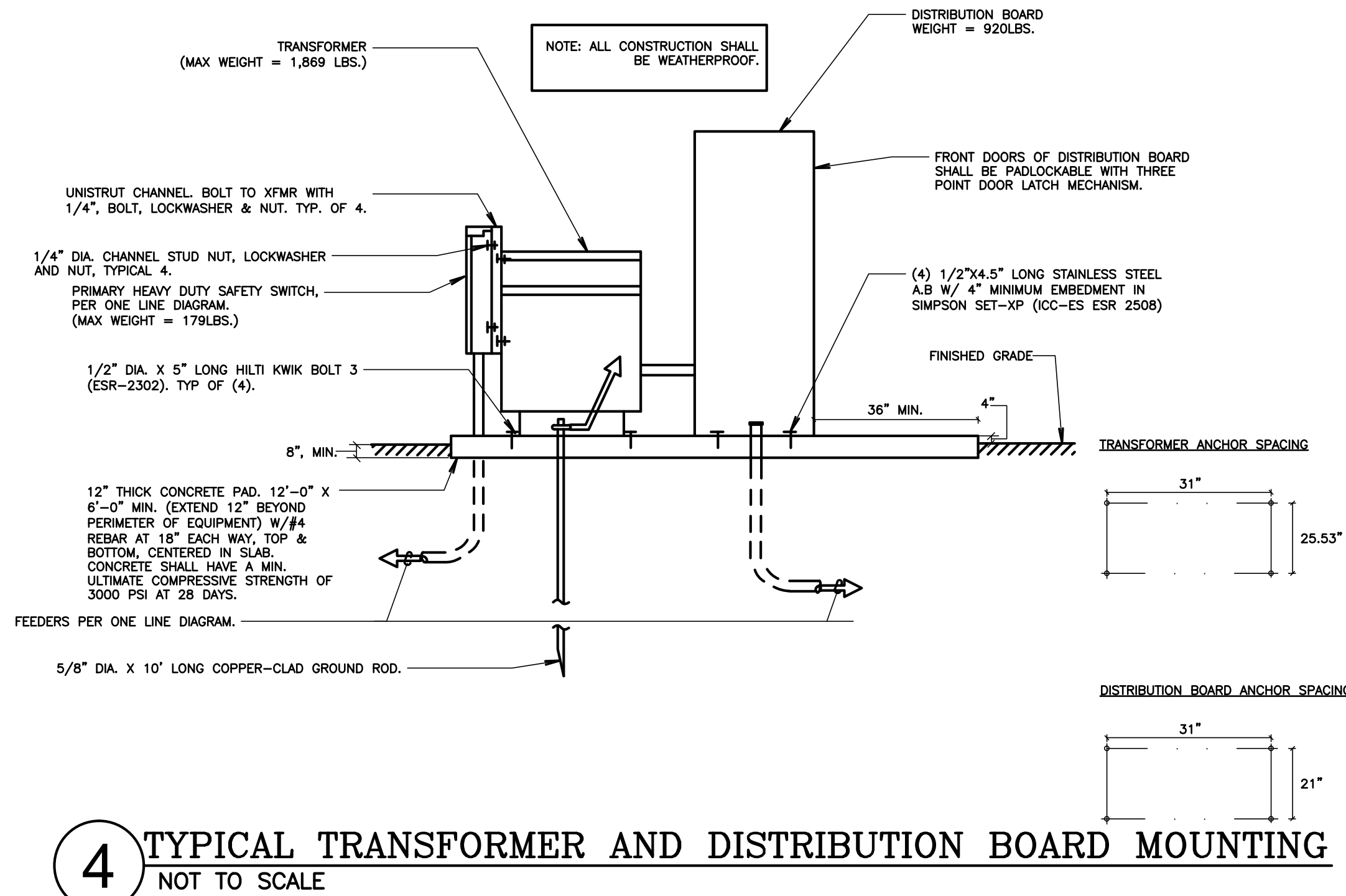
7 COMMUNICATIONS PULL BOX DETAIL

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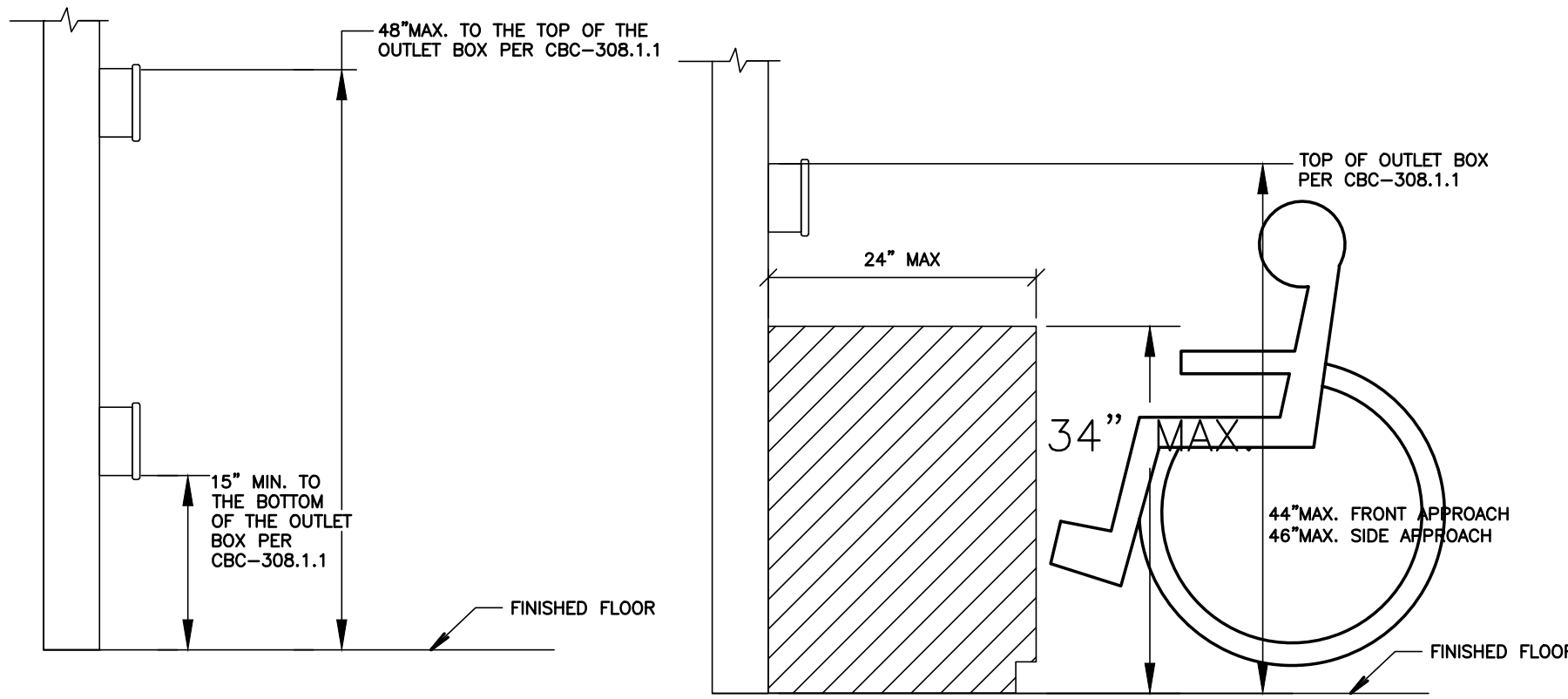
8 TYPICAL THROUGH PENETRATION FIRESTOP

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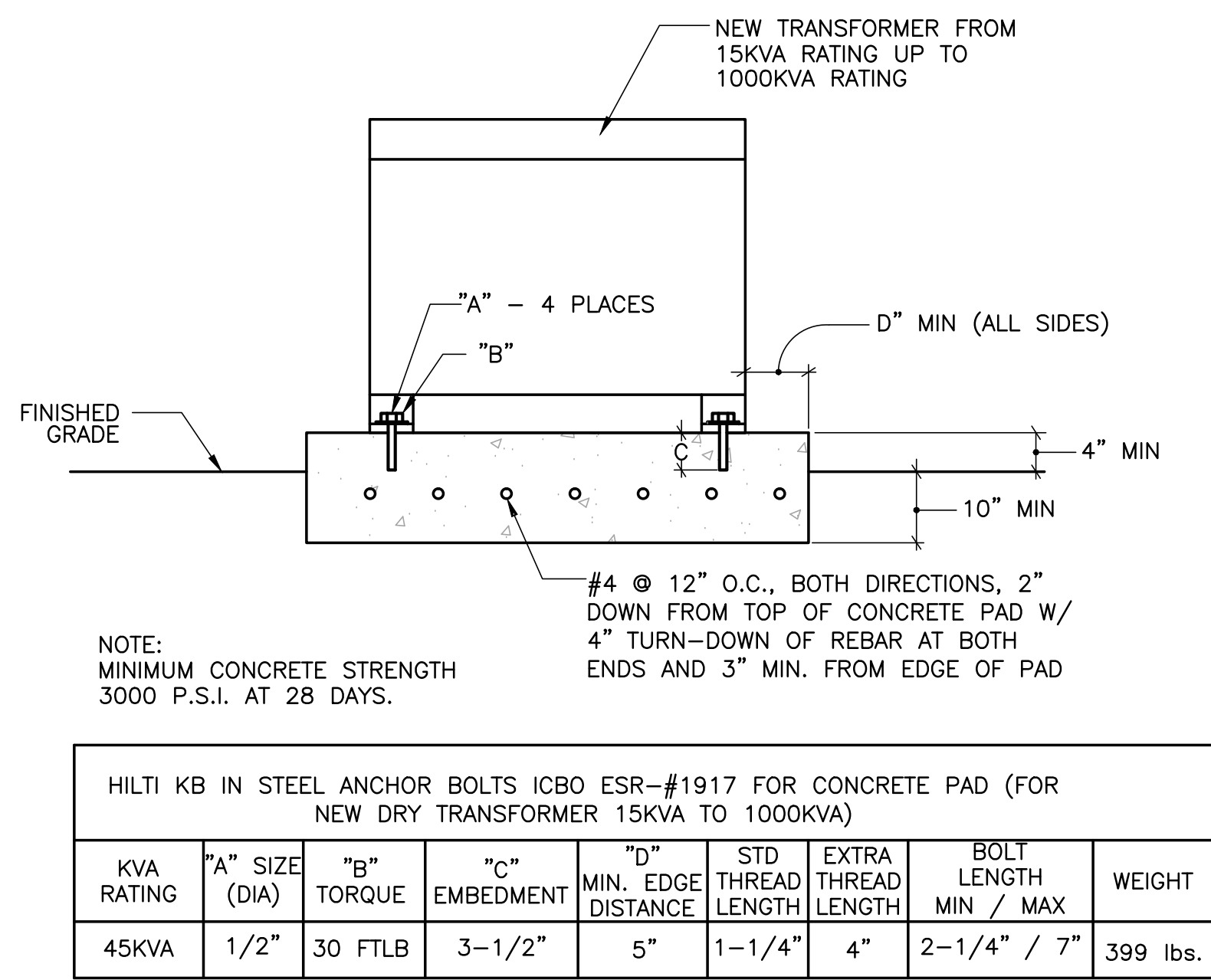
4 TYPICAL TRANSFORMER AND DISTRIBUTION BOARD MOUNTING

NOT TO SCALE



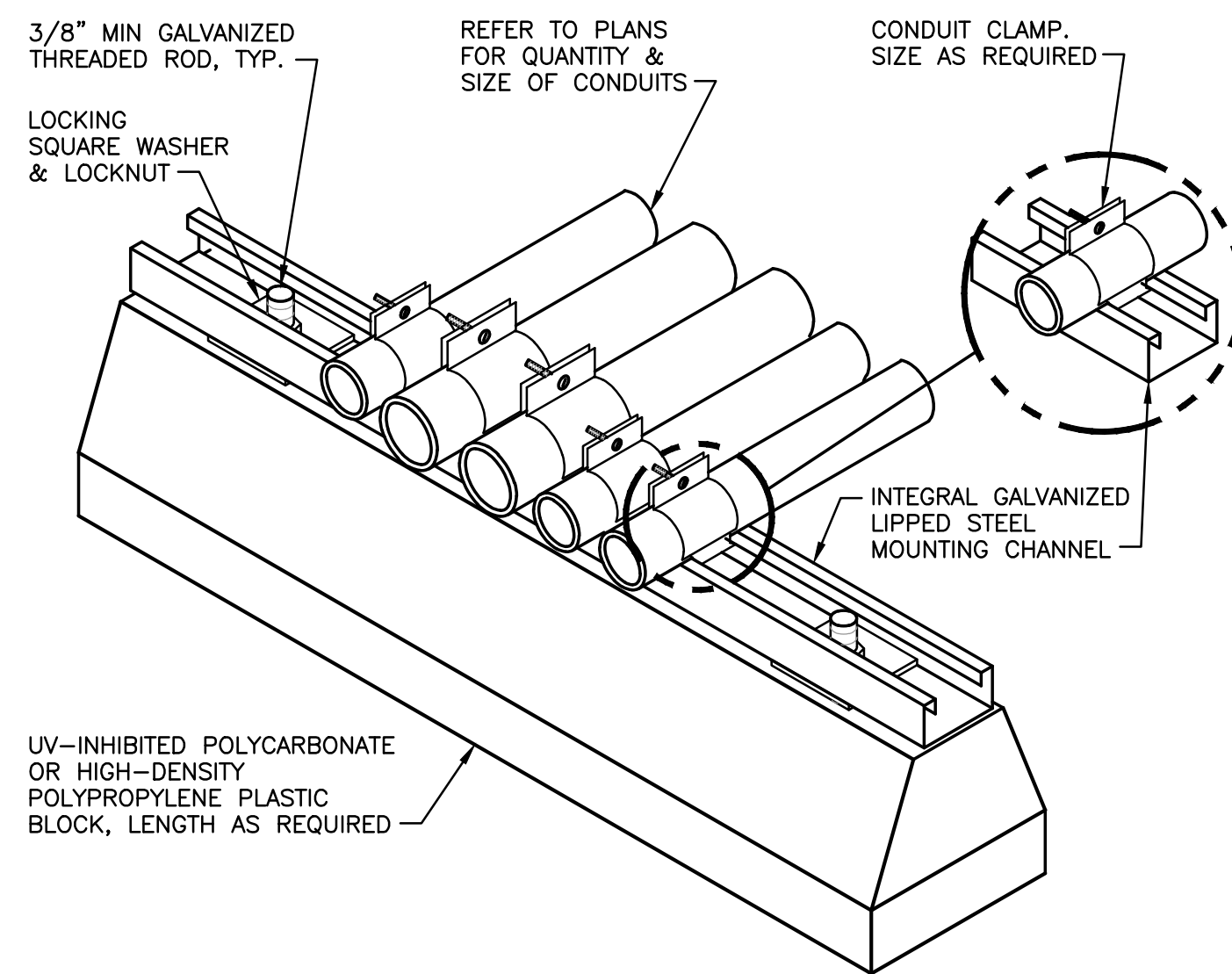
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NOT TO SCALE



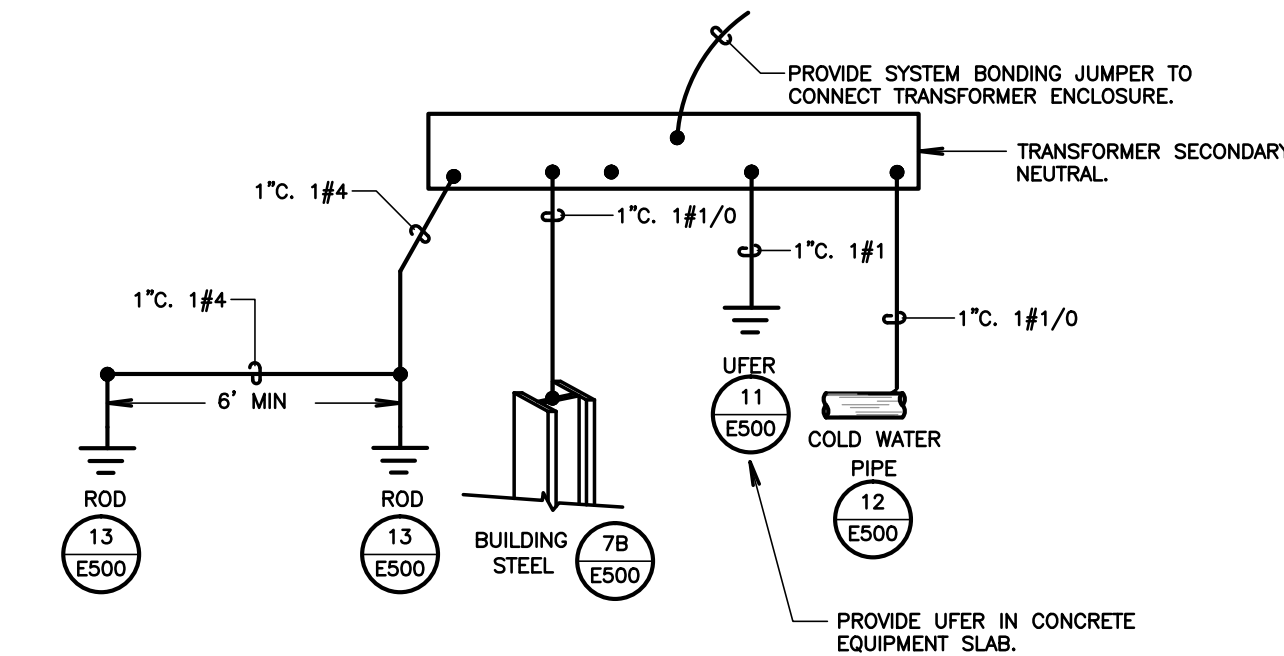
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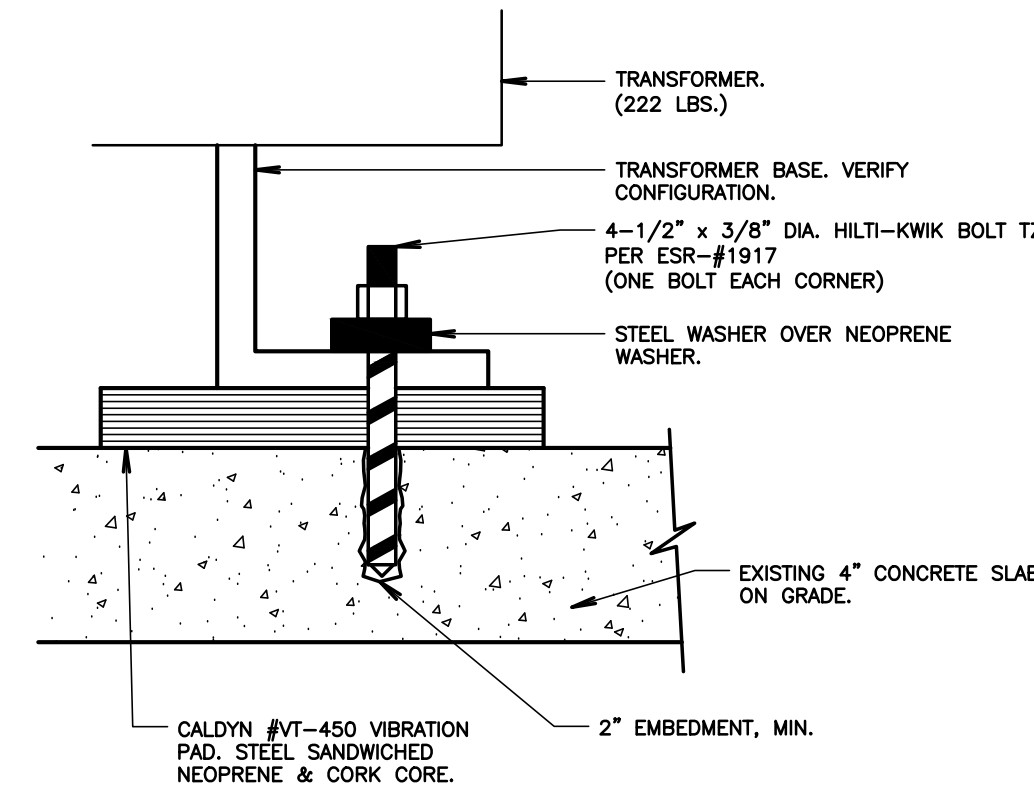
1 ROOF CONDUIT SUPPORT DETAIL

SCALE: NO SCALE



2 SEPARATELY DERIVED SYSTEM GROUNDING & BONDING

SCALE: NOT TO SCALE



2A TRANSFORMER MOUNTING DETAIL

SCALE: NOT TO SCALE

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OPSC or OSHPD PROJ. NO:

PROJECT NO:	118934
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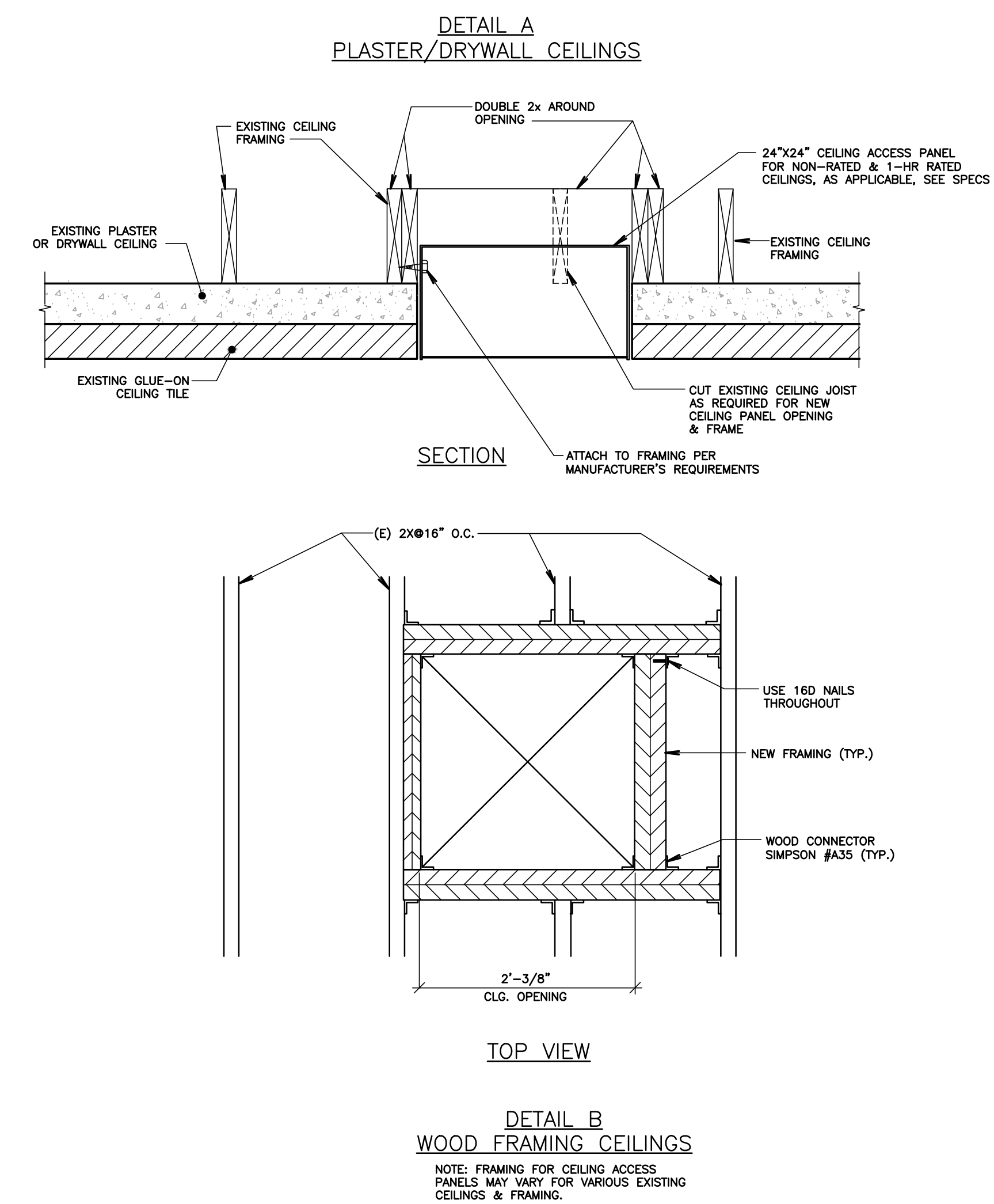
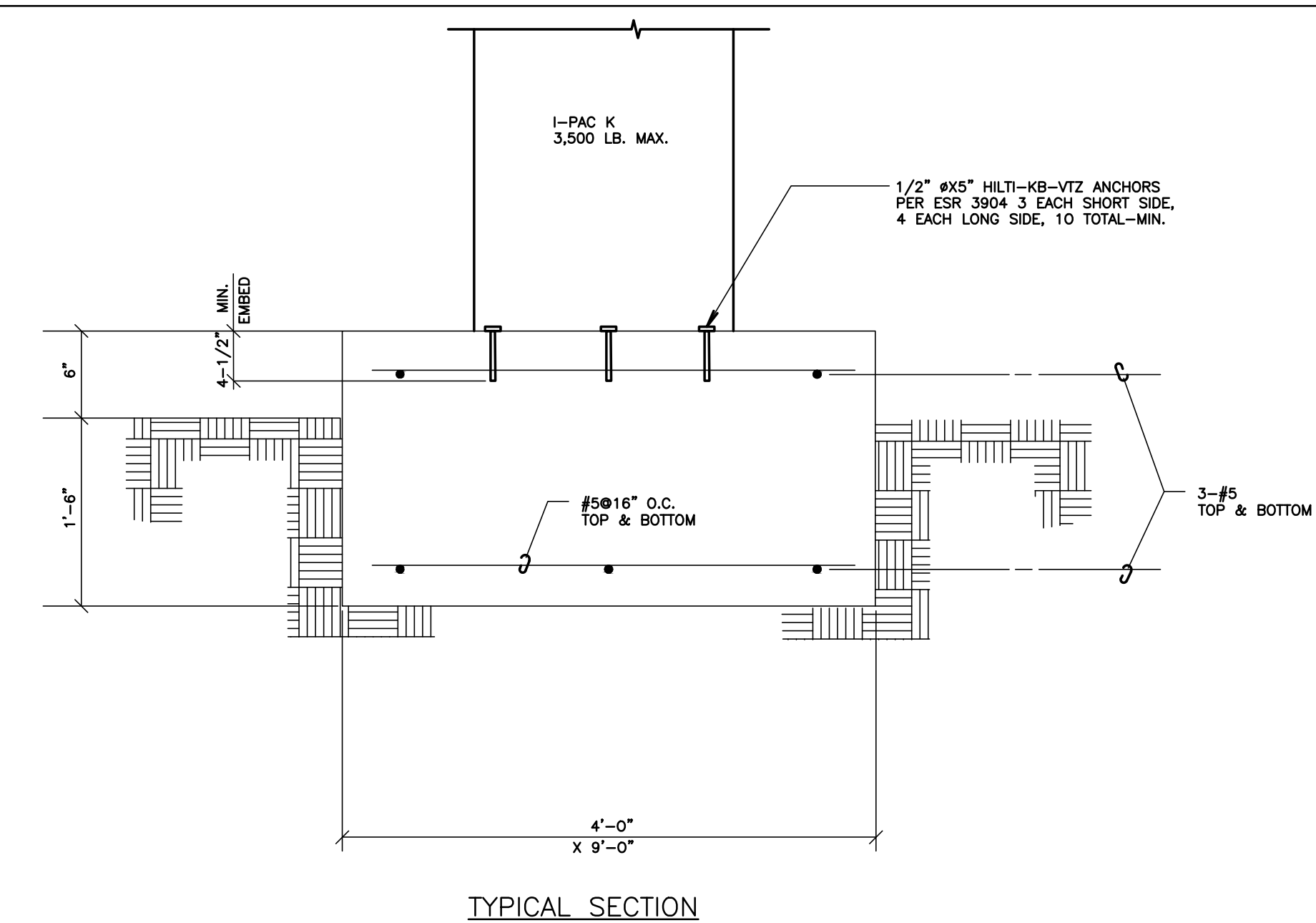
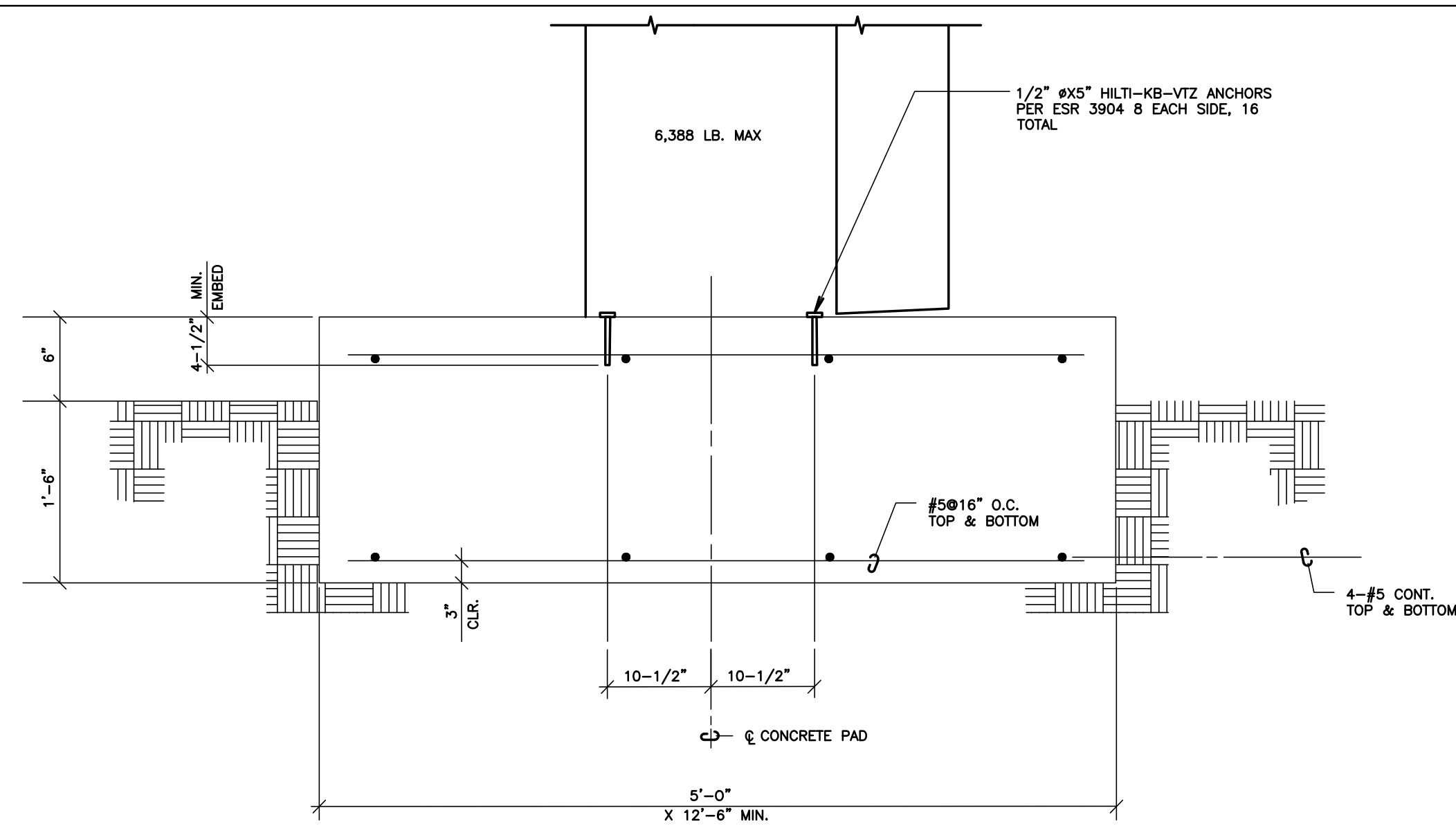
SHEET TITLE

ELECTRICAL DETAILS
SHEET #2

SHEET NUMBER

E501

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OPSC or OSHPD PROJ. NO:

PROJECT NO: 118934

DRAWN BY: VPZ

CHK'D BY:	DF
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ISSUE DATE:	3/3/2020
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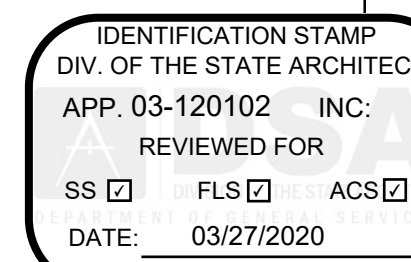
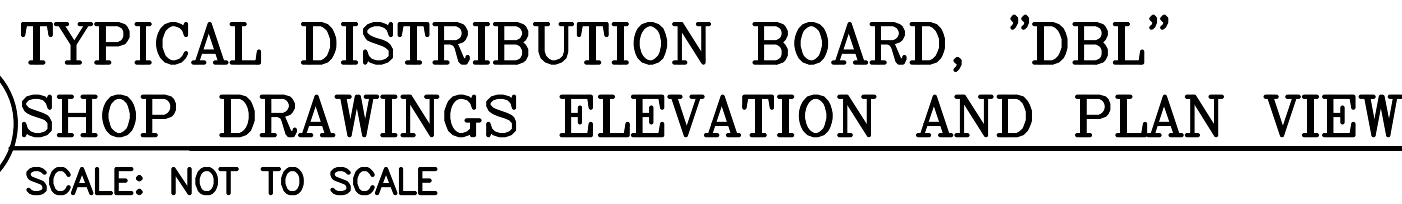
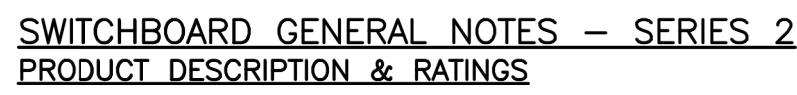
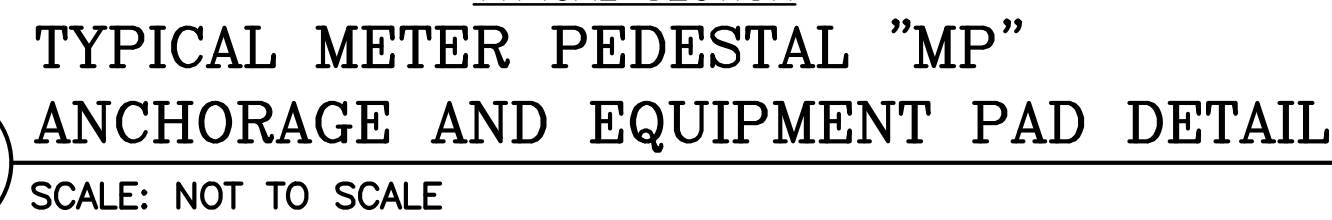
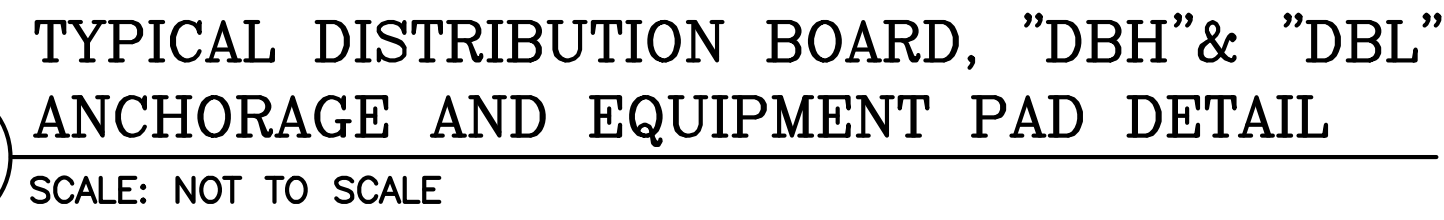
SHEET TITLE

ELECTRICAL DETAILS SHEET #3

SHEET NUMBER

E502

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OPSC or OSHPD PROJ. NO:

PROJECT NO:	11893
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DRAWN BY: VP7

CHK'D BY:	DE
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ISSUE DATE:	3/2/20
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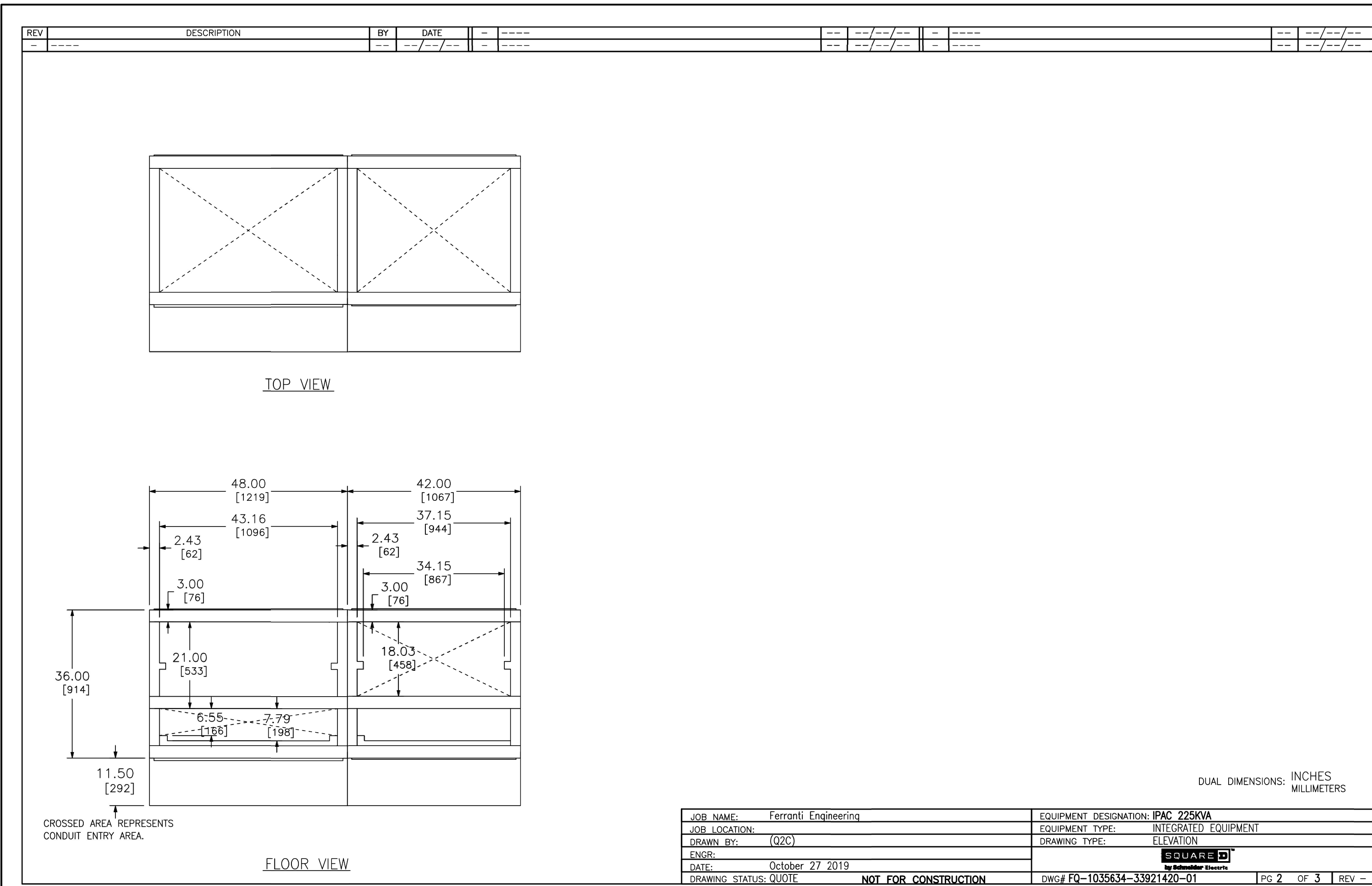
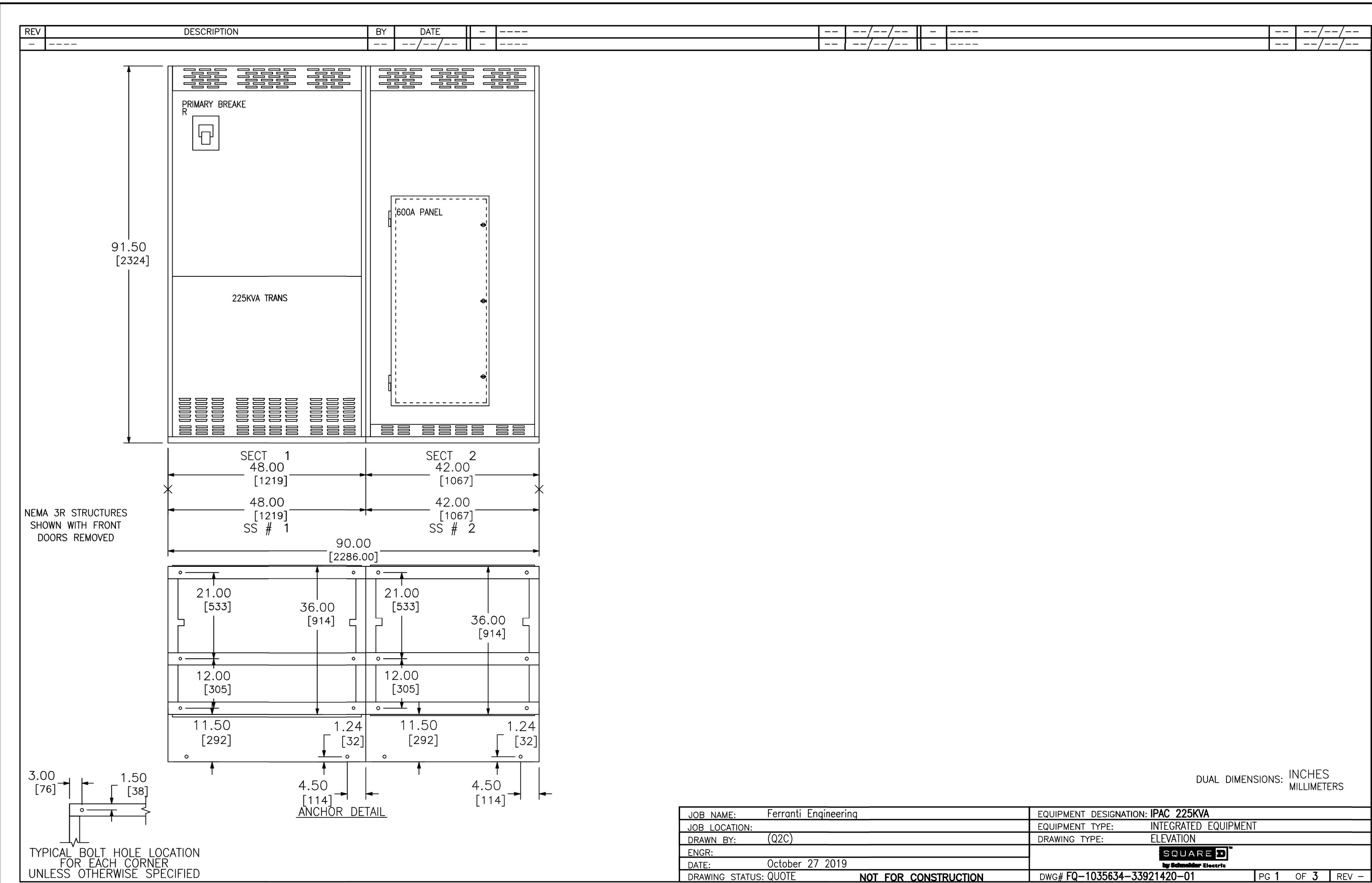
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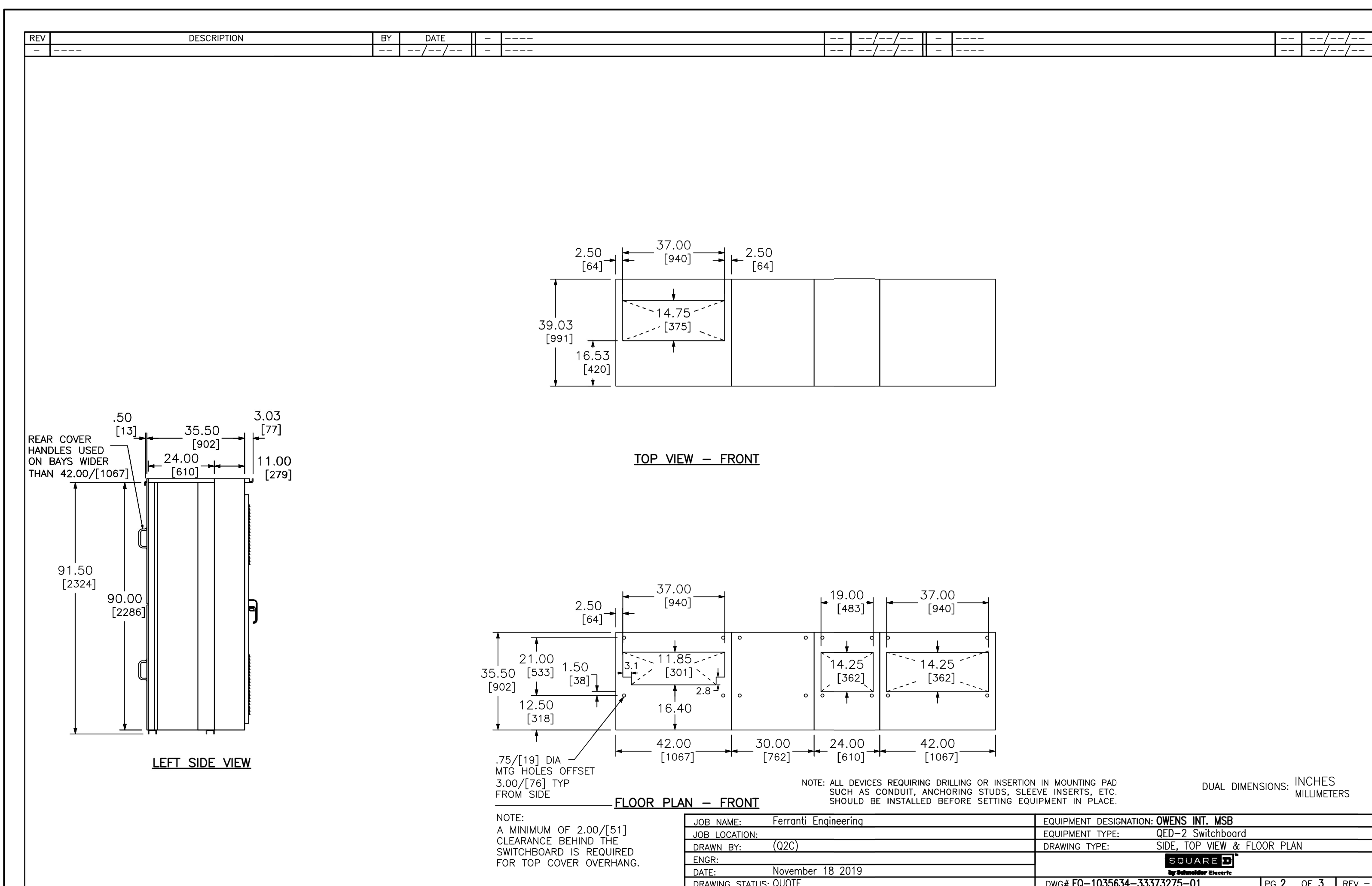
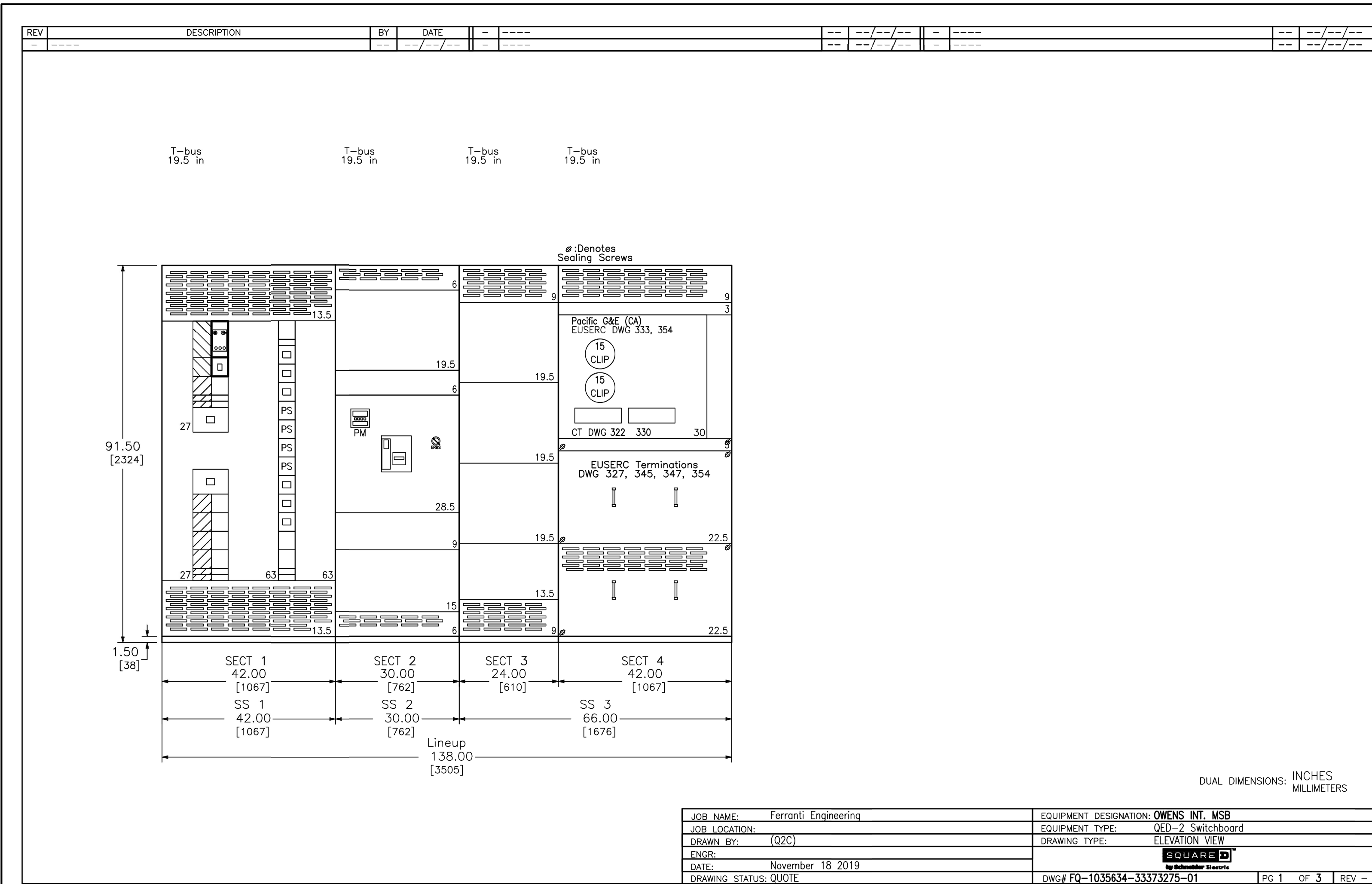
SHEET #4

SHEET NUMBER

E503



2 TYPICAL I-PAC K SHOP DRAWINGS ELEVATION AND PLAN VIEW
SCALE: NOT TO SCALE



1 TYPICAL MAIN SWITCHBOARD "MSB" SHOP DRAWINGS ELEVATION AND PLAN VIEW
SCALE: NOT TO SCALE

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PROJECT NO: 118934

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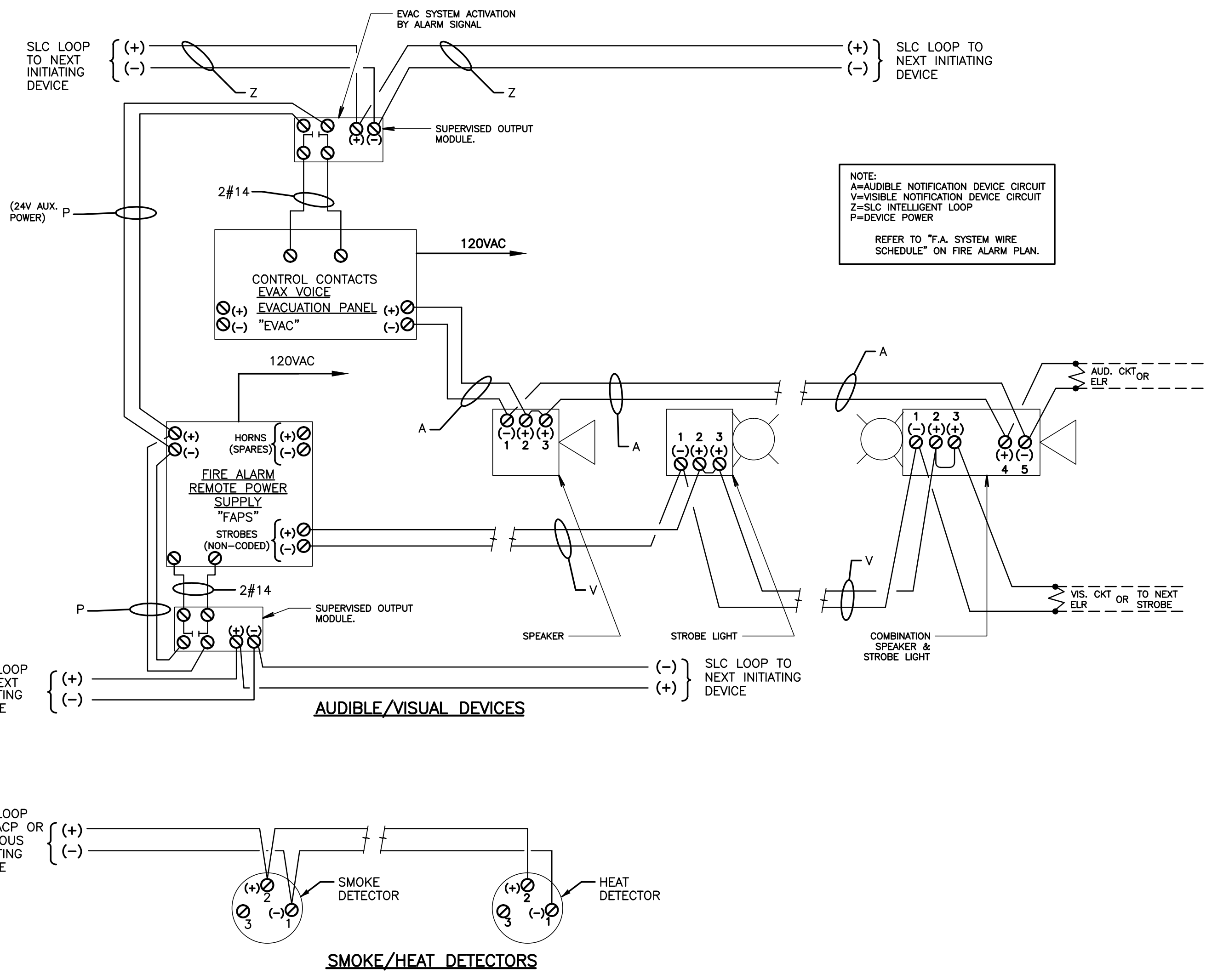
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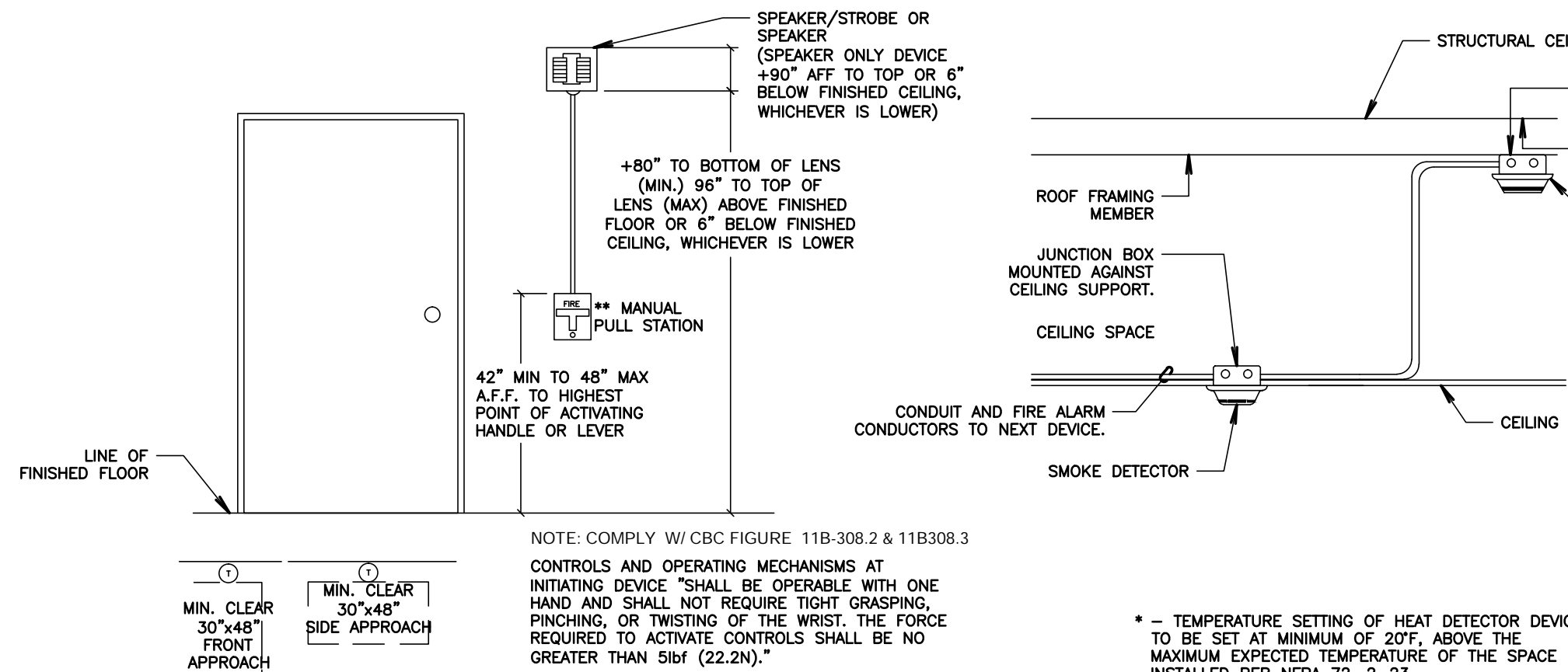
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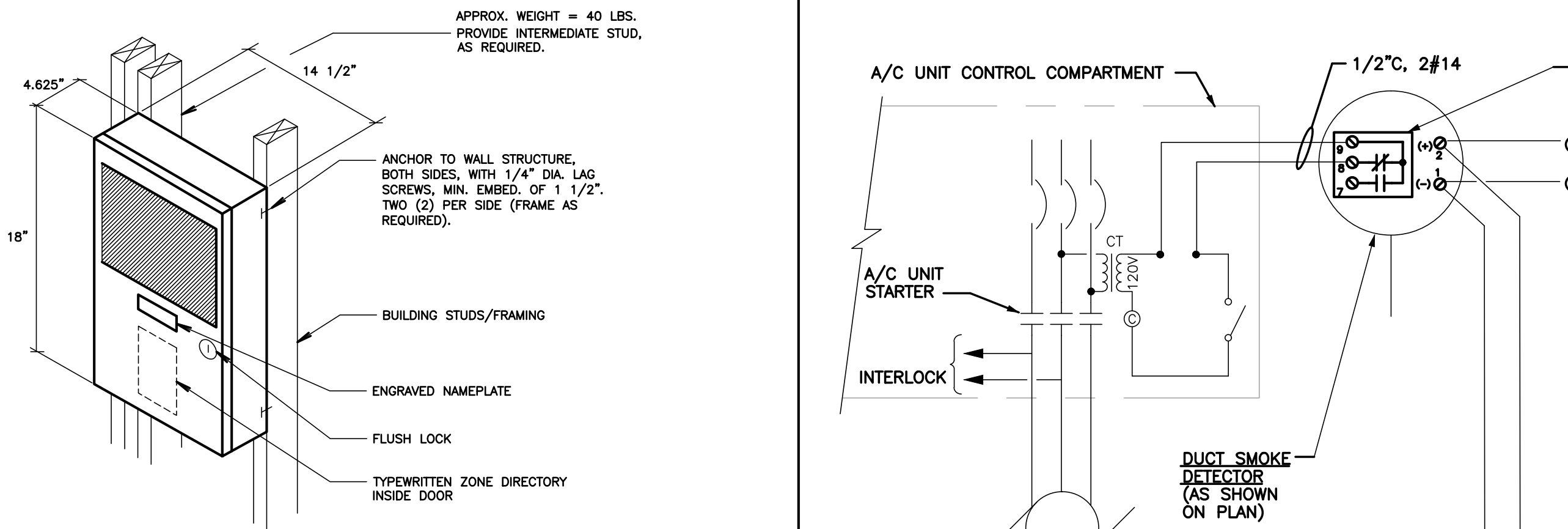
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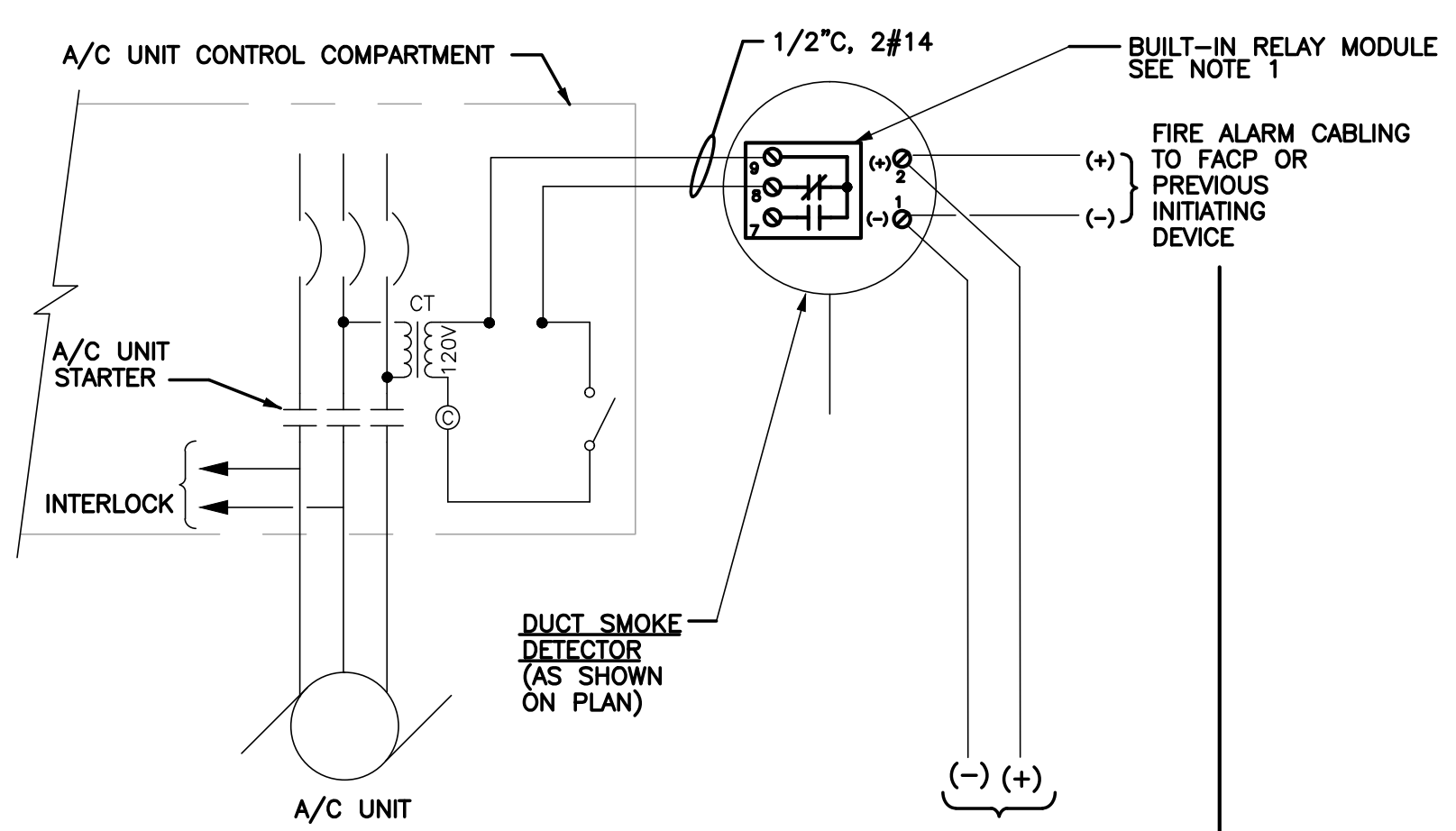
1 TYPICAL DEVICES WIRING DIAGRAMS DETAIL
NOT TO SCALE



2 TYPICAL FIRE ALARM DEVICE MOUNTING DETAILS
SCALE: NOT TO SCALE



3 FIRE ALARM REMOTE POWER SUPPLY (FAPS) MOUNTING DETAIL
NOT TO SCALE



4 TYPICAL HVAC UNIT SHUTDOWN WIRING DIAGRAM
SCALE: NOT TO SCALE

NOTE: ALL WORK & MATERIALS SHALL BE COORDINATED WITH MECHANICAL CONTRACTOR APPROVED SHOP DRAWINGS & FIRE ALARM VENDOR APPROVED SHOP DRAWINGS.

GENERAL NOTES

- SMOKE DETECTORS SHALL BE INSTALLED 3' AWAY FROM SUPPLY AND RETURN AIR GRILLES.
- FINAL FIRE ALARM TEST OF ALL DEVICES SHALL BE WITNESSED BY THE PROJECT INSPECTOR. TEST SHALL INCLUDE ALL INFORMATION PER NFPA 72, FIGURE 14.6.2.4 AND READ OUT VERIFICATION FORM FROM CENTRAL STATION. TEST SHALL ALSO BE WITNESSED BY THE LOCAL AUTHORITY HAVING JURISDICTION (A.H.U.).
- UNDERGROUND AND EXTERIOR CONDUITS WILL HAVE WATER-TIGHT FITTINGS (C.E.C. 110.1.1 AND 300.6).
- AUDIBLE DEVICES(S) SHALL BE AT LEAST 150dB ABOVE AVERAGE AMBIENT SOUND LEVEL, BUT NOT LESS THAN 75dB AT 10' OR MORE THAN 110 dBA IN TOTAL, THROUGHOUT (NFPA 72 18.4.1 AND C.F.C. 907.8.2).
- AUDIBLE DEVICES SHALL SOUND THE CALIFORNIA CODE IN TEMPORAL PATTERN, CODE 3.
- VISUAL DEVICES SHALL NOT EXCEED TWO FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN ONE FLASH PER SECOND. (NFPA 72 18.5.2.1).
- PROVIDE AN ENGRAVED NAMEPLATE INDICATING THE D.S.A. APPLICATION NUMBER, FILE NUMBER AND DATE OF INSTALLATION AT FIRE ALARM POWER EXPANDER PANEL. WHITE LETTERS ON A RED BACKGROUND.
- PROVIDE A COPY OF THE BATTERY CALCULATION AT THE FIRE ALARM POWER EXPANDER PANEL. BATTERY CALCULATION SHALL CONTAIN INFORMATION AS NOTED ON SCHEDULES AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF DOOR.
- MORE THAN TWO VISIBLE NOTIFICATION APPLIANCES OR GROUPS OF SYNCHRONIZED APPLIANCES IN THE SAME ROOM OR ADJACENT SPACE WITHIN THE FIELD OF VIEW SHALL FLASH IN SYNCHRONIZATION (NFPA 72 18.5.4.3.2(4)).
- THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REGULATIONS (C.F.C. 907.9).
- THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 780 OF THE CALIFORNIA ELECTRICAL CODE, CURRENT CALIFORNIA TITLE 24 REQUIREMENTS, CALIFORNIA FIRE CODE, NFPA 72 AND 101 STANDARDS, AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS.
- DRAWINGS DO NOT SHOW ALL THE NECESSARY J-BOXES AND PULL BOXES WHICH WILL BE REQUIRED THROUGHOUT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL THESE BOXES AS NECESSARY TO TERMINATE CONDUITS AND RACEWAYS. PAINT BOXES TO MATCH COLOR OF THE FINISHED BUILDING WALLS.
- ALL JUNCTION BOXES AND DEVICES INDICATED ON BUILDING EXTERIORS SHALL BE WEATHERPROOF TYPE.
- FIRE ALARM WIRES SHALL BE COPPER TYPE THINW/THIN.
- ALL SIGNAL WIRING IN UNDERGROUND CONDUITS SHALL BE WET LOCATION TYPE.
- WHEN ALL FIRE ALARM DEVICES ARE INSTALLED AND PROGRAMMING IS COMPLETE, PROVIDE A FIRE ALARM DEVICE MAP IN THE SCHOOL MAIN OFFICE TO INDICATE TO SCHOOL PERSONNEL THE LOCATIONS OF THE NEW DEVICES.
- CONTRACTOR SHALL FIELD VERIFY ALL DEVICES FOR ACCESSIBILITY. SOME DEVICES MAY NEED SURFACE RACEWAY (WIROMOLD) IF ACCESSIBILITY IS LIMITED.
- CONTRACTOR SHALL PROVIDE ALL WIRE, CABLES, J-BOXES, BACK-BOXES, FITTINGS, CONDUIT, SUPPORTS, WIROMOLD, ETC. FOR A COMPLETE & FUNCTIONING SYSTEM.

NOTES (FIRE ALARM EQUIPMENT SPECIFICATIONS SCHEDULE)

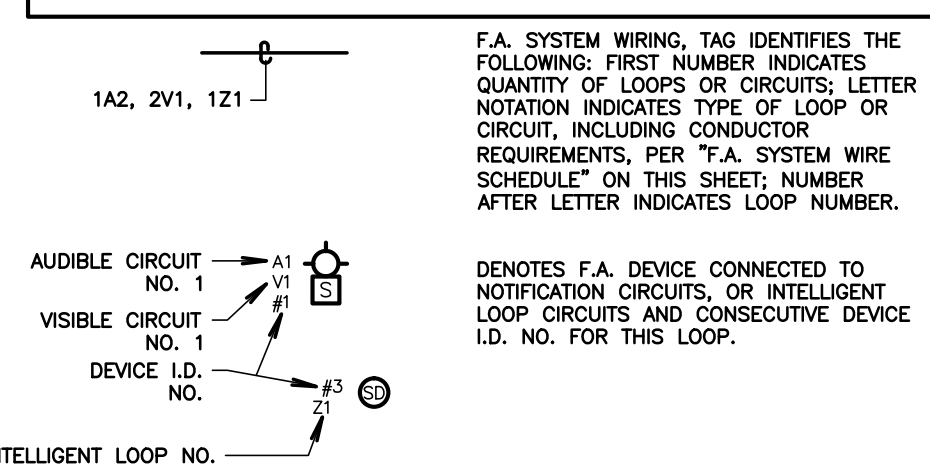
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- END OF LINE RESISTORS SHALL BE 10K FOR NOTIFICATION APPLIANCE CIRCUITS FEEDING FROM FIRE ALARM CONTROL PANEL AND 2.2K FOR NOTIFICATION APPLIANCE CIRCUITS FEEDING FROM FIRE ALARM POWER EXPANDER PANELS.
- SET FOR 190 DEGREES.
- PROVIDE WEATHERPROOF FLUSH WALL PLATE #WFP-R.
- PROVIDE TRANSIENT SUPPRESSORS.
- CONTRACTOR SHALL PROVIDE #OSD-INSTR, #OSP-001, & #OSP-002. VERIFY & PROVIDE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- PANEL SHALL BE 4-SLOT STANDARD RED WITH 4 SLC CIRCUITS, 1 MEDIA GATEWAY CARD (DIALER), & NETWORK CARD.
- USE PROVIDE THIS MODEL FOR FIRE ALARM REMOTE POWER SUPPLY.

F.A. SYSTEM WIRE SCHEDULE

TAG	CONDUCTORS	DEVICE/JUNCTION	INTERIOR INSTALLATION	EXTERIOR INSTALLATION
V	2#12, THINW/THIN	VISIBLE NOTIFICATION DEVICES-STROBE LIGHTS	MIN. 3/4" CONDUIT	MIN. 1" CONDUIT
Z	1-PAIR #16 TWISTED, SHIELDED PAIR WEST PENN AQ2294 (BLDG. EXTERIOR & UNDERGROUND)	CAMPUS/BLDG. SLC INTELLIGENT LOOP WIRING DEVICES (PULL STATIONS, SMOKE AND HEAT DETECTORS, WATER FLOW AND TAMPER SWITCHES, MONITOR AND CONTROL MODULES, ETC.)	MIN. 3/4" CONDUIT	MIN. 1" CONDUIT
P	2#14, THINW/THIN	DEVICE POWER-24VDC	MIN. 3/4" CONDUIT	MIN. 1" CONDUIT
A	1-PAIR #16 TWISTED, SHIELDED PAIR WEST PENN AQ2294 (BLDG. EXTERIOR & UNDERGROUND)	AUDIBLE NOTIFICATION DEVICES-SPEAKERS	MIN. 3/4" CONDUIT	MIN. 1" CONDUIT
	1-PAIR #16 TWISTED, WEST PENN 991 (BLDG. INTERIOR)			

FIRE ALARM LEGEND



CODE, RULES & REGULATIONS

ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST REGULATIONS OF THE STATE FIRE MARSHAL, CALIFORNIA CODE OF REGULATIONS, SERVING UTILITY COMPANIES AND OTHER APPLICABLE STATE ORDINANCES. NOTHING IN THESE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THESE CODES. WHERE WORK OF A HIGHER DEGREE IS INDICATED IN THE PLANS OR SPECIFICATIONS THIS REQUIREMENT SHALL GOVERN.

FIRE ALARM LEVEL OF AUDIBILITY

ALARM INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL BE SO LOCATED AND UNOBSTRUCTED AS TO CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15dB ABOVE AMBIENT NOISE LEVELS MEASURED FOUR FEET ABOVE THE FLOOR INSIDE BUILDING.

AMBIENT NOISE LEVELS SHALL BE CONSTRUED TO MEAN THAT WHICH CAN NORMALLY BE EXPECTED TO EXIST WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATIVE OR WORKING CONDITIONS.

THE FIRE ALARM SIGNAL SHALL COMPLY WITH THE CALIFORNIA EDUCATION CODE, SECTIONS 32000 AND 32004, AND BE A TEMPORAL PATTERN, CODE 3.

FIRE ALARM SYSTEM INSTALLATION NOTES

ALL DRAWINGS ARE DIAGRAMMATIC ONLY, AND SHALL NOT BE USED IN DETERMINING ACTUAL CONDUIT ROUTING. THE CONTRACTOR SHALL VERIFY ALL CONDUIT ROUTING CONDITIONS AT THE PROJECT SITE AS CONSTRUCTION PROGRESSES.

ALL FIRE ALARM DATA COMMUNICATIONS AND INITIATING CIRCUITS SHALL BE INSTALLED UTILIZING SOLID COPPER CONDUCTORS WITH OUTER COVERING COLORS PER THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS. ALL SMOKE, DAMPER AND REMOTE TROUBLE INDICATOR CIRCUITS SHALL BE YELLOW. ALL CIRCUITS SHALL BE INDIVIDUALLY LABELED, BOTH AT THE DEVICE END AND AT THE SIGNAL TERMINAL, CABINET AND/OR FIRE ALARM MASTER PANEL TERMINATION POINT.

ALL FIRE ALARM CIRCUITS SHALL BE CONTINUOUS FROM DEVICE TO DEVICE. SPLICES ARE NOT ALLOWED UNLESS IN COVERED JUNCTION BOXES ON APPROVED TERMINAL BLOCKS. "T" TAPPING IS ALLOWED ONLY UNDER THESE CONDITIONS.

FIRE ALARM EQUIPMENT SPECIFICATIONS SCHEDULE

SYMBOL	MODEL NO	DESCRIPTION	MANUFACTURER	CSFM LISTING #	BACKBOX REQUIREMENTS	MOUNTING HEIGHT (TO CENTER U.O.N.)	REMARKS
LA103K2-10	LA103K2-10	FIRE ALARM CONTROL PANEL W/ DIGITAL ALARM COMMUNICATOR FN-DAC	HOCHIKI	7165-0410:0506		+60"	4 5
FNVM-16-R-120	FNVM-16-R-120	MASTER VOICE PANEL HEAD END CONTROL	HOCHIKI	6911-0410:175		+60"	LOCATED IN BLDG. K
LFCOINC-10	LFCOINC-10	LATITUDE NETWORK VISION ANNUNCIATOR	HOCHIKI	7120-0410:0507			LOCATED IN BLDG. K
FN-642-ULADA	FN-642-ULADA	FIRE ALARM REMOTE POWER SUPPLY	HOCHIKI	7315-0410:0166		+60"	7
ALM-V HSB-NSA-6	ALM-V HSB-NSA-6	ADDRESSABLE SMOKE DETECTOR W/8" BASE	HOCHIKI	7272-0410:0204 7300-0410:0132	4" SQ. X 2 1/8" DP. OUTLET BOX WITH S.G. RAISED RING		
ATJ-EA HSB-NSA-6	ATJ-EA HSB-NSA-6	ADDRESSABLE HEAT DETECTOR W/8" BASE	HOCHIKI	7270-0410:0203 7300-0410:0132	4" SQ. X 2 1/8" DP. OUTLET BOX WITH S.G. RAISED RING		2
DCP-SOM-A	DCP-SOM-A	SUPERVISED OUTPUT MODULE	HOCHIKI	7300-0410:150	4" SQ. X 2 1/8" DP. OUTLET BOX		
WSSPKR	WSSPKR	OUTDOOR WALL MOUNT SPEAKER	GENTEX	7320-0569:0141	GBLP OUTDOOR BACKBOX		
HSSPK24VLP	HSSPK24VLP	WALL MOUNTED COMBINATION SPEAKER & STROBE LIGHT (CANDELA VALUE AS SHOWN ON PLANS)	HOCHIKI	7320-0410:0195	4" SQ. X 2 1/8" DP. OUTLET BOX		
FNVDPS-100-R-120	FNVDPS-100-R-120	DISTRIBUTED VOICE PANEL (100W)	HOCHIKI	6911-0410:175		+60"	LOCATED IN BLDG "K"
END OF LINE RESISTOR	END OF LINE RESISTOR	END OF LINE RESISTOR			4" SQ. X 2 1/8" DP. OUTLET BOX		3
DCP-R2ML	DCP-R2ML	DUAL RELAY MODULE	HOCHIKI	7300-0410:0150	4" SQ. X 2 1/8" DP. OUTLET BOX		
ACD-V HSB-NSA-6	ACD-V HSB-NSA-6	MULTI-CRITERIA FIRE/CO DETECTOR W/BASE	HOCHIKI	7275-0410:0503 7300-0410:0132	4" SQ. X 2 1/8" DP. OUTLET BOX WITH S.G. RAISED RING		
HSSPK24CLPR	HSSPK24CLPR	CEILING MOUNTED COMBINATION SPEAKER & STROBE LIGHT (CANDELA VALUE AS SHOWN ON PLANS)	HOCHIKI	7320-0410:0194	4" SQ. X 2 1/8" DP. OUTLET BOX		
FN-1042-ULADA	FN-1042-ULADA	FIRE ALARM REMOTE POWER SUPPLY	HOCHIKI	7315-0410:0166		+60"	LOCATED IN BLDG "E"
FNVDPS-100-R-120	FNVDPS-100-R-120	DISTRIBUTED VOICE PANEL (100W)	HOCHIKI	6911-0410:175		+60"	LOCATED IN BLDG "E"
FNVDPS-50-R-120	FNVDPS-50-R-120	DISTRIBUTED VOICE PANEL (50W)	HOCHIKI	6911-0410:175		+60"	LOCATED IN BLDG "J"
DH-99-A	DH-99-A	DUCT SMOKE DETECTOR	HOCHIKI	3240-0410:0155			
OSE-SPW	OSE-SPW	OSID-SMOKE IMAGING DETECTION EMITTER	HOCHIKI	7260-1728:0121			5
OSI-90	OSI-90	OSID-SMOKE IMAGING DETECTION IMAGER	HOCHIKI	7260-1728:0121			5
DIMM	DIMM	DUAL INPUT MONITOR MODULE	HOCHIKI	7300-0410:150	4" SQ. X 2 1/8" DP. OUTLET BOX		
HP400ULX	HP400ULX	VESDA SYSTEM POWER SUPPLY	HONEYWELL	7300-1637:101		+60"	
VEP-A00-1P	VEP-A00-1P	INTELLIGENT VESDA-E VEP SERIES ASPIRATION DETECTORS	HOCHIKI	7259-1728:0502		+60"	

SEQUENCE OF OPERATIONS																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	MANUAL PULL STATIONS																
2	SMOKE DETECTORS																
3	FIRE ALARM SYSTEM AC POWER																
4	FIRE ALARM SYSTEM LOW BATTERY																
5	OPEN CIRCUIT																
6	GROUND FAULT																
7	HEAT DETECTORS																
8	NOTIFICATION CIRCUIT SHORT																
9	NOTIFICATION CIRCUIT SHORT																
10																	

FIRE ALARM MONITORING NOTE

AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY ARTICLE 91. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UJFX OR JALIS BY UNDERWRITERS LABORATORY OF SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

COMPLETE AUTOMATIC FIRE ALARM PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.5, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).

SCHOOLS FIRE ALARM REQUIREMENTS

THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE, SECTION 907.2.3.5, CALIFORNIA ELECTRICAL CODE, ARTICLE 780 AND CALIFORNIA FIRE CODE, CHAPTER 9, SECTION 907.

UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION, NFPA 72. IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 15db OVER AMBIENT NOISE LEVELS, ADDITIONAL FIRE ALARM SIGNALING DEVICES MAY BE REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

FIRE ALARM SYSTEM CERTIFICATION AND DESCRIPTION SHALL BE PROVIDED FOR TESTING AND A PLASTIC LAMINATED COPY SHALL REMAIN (WITH INSTRUCTIONS) AT THE FIRE ALARM CONTROL PANEL PER NFPA 72.

THE FIRE ALARM "RECORD OF COMPLETION" FORM, FIGURE 10, 18, 2, 1 IN NFPA 72, SHALL BE COMPLETED, SIGNED AND SUBMITTED TO THE SCHOOL DISTRICT AND THE LOCAL AUTHORITY (C.F.C. 907.2.3.5), HAVING JURISDICTION AT THE COMPLETION OF THE TEST.

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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION
815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:
PROJECT NO: 118934
DRAWN BY: VPZ
CHKD BY: DF
ISSUE DATE: 3/3/2020
SHEET TITLE

FIRE ALARM EQUIPMENT LIST, FIRE ALARM NOTES, FIRE ALARM DETAILS, WIRING DIAGRAMS

SHEET NUMBER

E600

DSA SUBMITTAL SET

STROBE CIRCUIT VOLTAGE DROP CALCULATIONS																			
POWER SUPPLY #	LOCATED IN	LOOP TYPE & No.	DEVICES								WIRE		TOTAL ALARM CURRENT	ONEWAY LOOP LENGTH FROM POWER SUPPLY TO MIDDLE OF	TOTAL VD	VOLTAGE DROP	MINIMUM BATTERY SIZE	BATTERY SELECTED	
			STROBES								SIZE	DC RESIST /1000'							
			75cd	75cd	15cd	30cd	15cd	30cd	75cd	110cd									
			CEILING	CEILING	CLING	CLING	CLING	CLING	CLING	CLING									
			Alarm Current - (a) (Amp)																
RPS-L		V1	0.272	0.272	0.120	0.120	0.078	0.096	0.180	0.224	AWG	OHMS	AMPS	FEET	VOLTS	%	AH	AH	
		V2									12	1.93	0.450	146	0.254	1.08		SEE RPS-L BATTERY CALCS	
		V3									12	1.93	0.540	261	0.544	2.27			
		V4									12	1.93							
											12	1.93							
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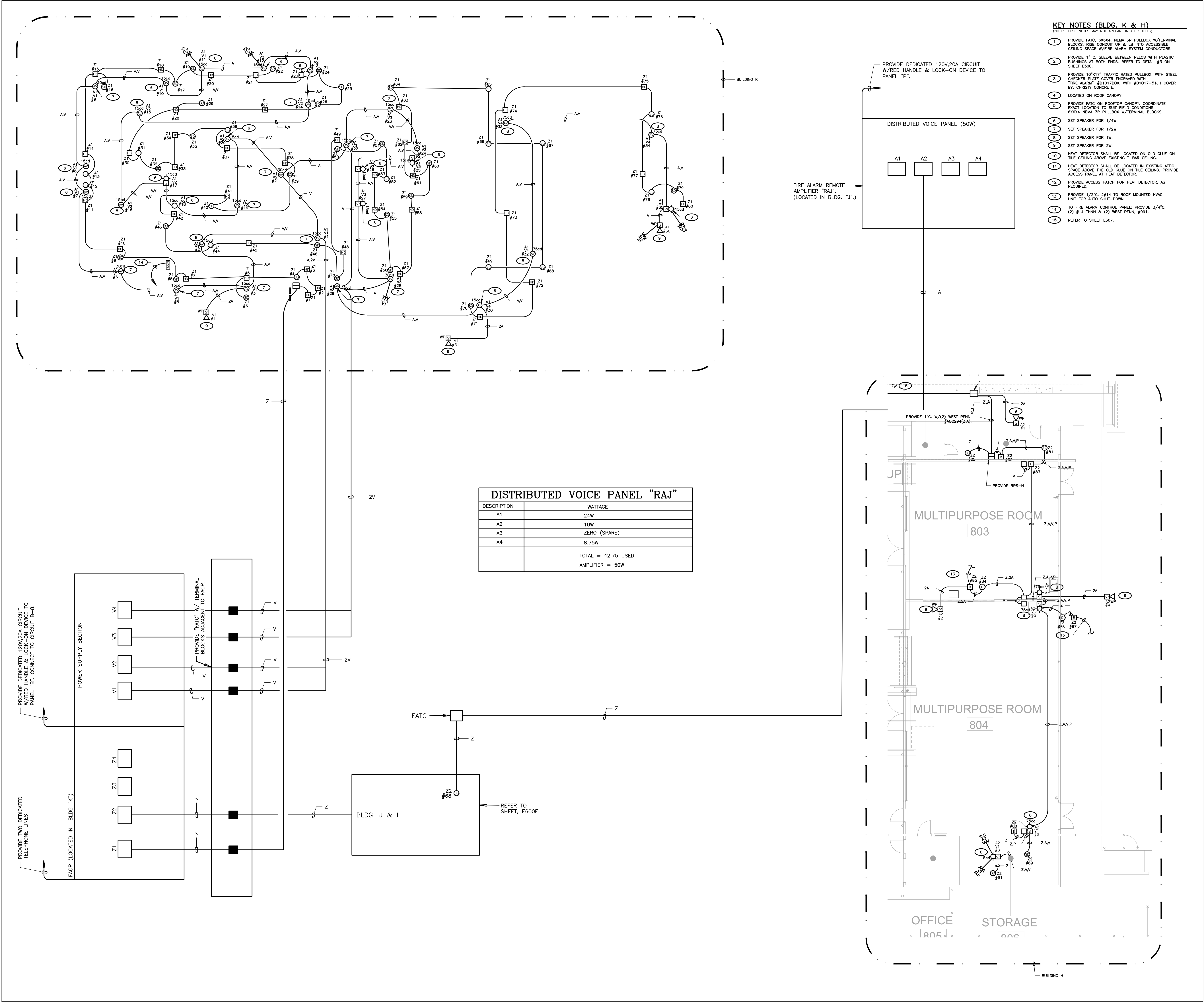
STROBE CIRCUIT VOLTAGE DROP CALCULATIONS																			
POWER SUPPLY #	LOCATED IN	LOOP TYPE & No.	DEVICES								WIRE		TOTAL ALARM CURRENT	ONEWAY LOOP LENGTH FROM POWER SUPPLY TO MIDDLE OF	TOTAL VD	VOLTAGE DROP	MINIMUM BATTERY SIZE	BATTERY SELECTED	
			STROBES								SIZE	DC RESIST /1000'							
			75cd CEILING	75cd CEILING	HORN	HORN	15cd Alarm	30cd Alarm	75cd	110cd									
			Current (A)	Current (A)	Current (A)	Current (A)	Current (A)	Current (A)	Current (A)	Current (A)									
RPS-E		V1	0.272	0.272	0.028	0.022	0.078	0.096	0.180	0.224	AWG	OHMS	AMPS	FEET	VOLTS	%	AH	AH	
		V2									12	1.93							
		V3									12	1.93							
		V4	5								12	1.93	1.584	200	1.231	5.13			
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STROBE CIRCUIT VOLTAGE DROP CALCULATIONS																			
POWER SUPPLY #	LOCATED IN	LOOP TYPE & NO.	DEVICES								WIRE		TOTAL ALARM AMPS	ONE WAY LOOP LENGTH FROM POWER SUPPLY TO MIDDLE OF	TOTAL VOLT	VOLTAGE DROP %	MINIMUM BATTERY SIZE	BATTERY SELECTED	
			STROBES								SIZE	DC RESIST. /1000'							
			75cd	75cd	15cd	30cd	15cd	30cd	75cd	110cd									
			CEILING	CEILING	CLING	CLING	CLING	CLING	CLING	CLING									
			0.272	0.272	0.120	0.120	0.078	0.096	0.180	0.224	AWG	OHMS	AMPS	FEET	VOLTS	%	AH	AH	
RPS-F		V1									12	1.93	0.312	159	0.191	0.80			
		V2							4		12	1.93	0.720	207	0.575	2.40			RPS-F
		V3							3		12	1.93	0.540	312	0.650	2.71			BATTERY CALCS
		V4									12	1.93							
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STROBE CIRCUIT VOLTAGE DROP CALCULATIONS																			
POWER SUPPLY #	LOCATED IN	LOOP TYPE & No.	DEVICES								WIRE		TOTAL ALARM CURRENT	ONEWAY LOOP LENGTH FROM POWER SUPPLY TO MIDDLE OF	TOTAL VD	VOLTAGE DROP	MINIMUM BATTERY SIZE	BATTERY SELECTED	
			STROBES								SIZE	DC RESIST /1000'							
			75cd	75cd	15cd	30cd	15cd	30cd	75cd	110cd									
			CEILING	CEILING	CLING	CLING	CLING	CLING	CLING	CLING									
			0.272	0.272	0.120	0.120	0.078	0.096	0.180	0.224	AWG	OHMS	AMPS	FEET	VOLTS	%	AH	AH	
RPS-G		V1									12	1.93	0.360	315	0.438	1.82			
		V2									12	1.93	0.540	160	0.334	1.39			
		V3									12	1.93	0.672	260	0.674	2.81			
		V4									12	1.93							
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STROBE CIRCUIT VOLTAGE DROP CALCULATIONS																			
POWER SUPPLY #	LOCATED IN	LOOP TYPE & No.	DEVICES								WIRE		TOTAL ALARM CURRENT	ONEWAY LOOP LENGTH FROM POWER SUPPLY TO MIDDLE OF	TOTAL VD	VOLTAGE DROP	MINIMUM BATTERY SIZE	BATTERY SELECTED	
			STROBES								SIZE	DC RESIST. /1000'							
			75cd CEILING	75cd CEILING	15cd CLING	30cd Alarm Current - 1st	15cd Alarm Current - 2nd	30cd Alarm Current - 3rd	75cd Alarm Current - 4th	110cd Alarm Current - 5th									
RPS-H			0.272	0.272	0.120	0.120	0.078	0.096	0.180	0.224	AWG	OHMS	AMPS	FEET	VOLTS	%	AH	AH	
	V1						2		3			12	1.93	0.696	200	0.537	2.24		
	V2											12	1.93						
	V3											12	1.93						
	V4											12	1.93						
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STROBE CIRCUIT VOLTAGE DROP CALCULATIONS																			
POWER SUPPLY #	LOCATED IN	LOOP TYPE & NO.	DEVICES								WIRE		ONE-WAY LOOP LENGTH		TOTAL VOLTAGE DROP	MINIMUM BATTERY SIZE	BATTERY SELECTED		
			STROBES								DC RESIST. /1000'	TOTAL ALARM CURRENT	FROM POWER SUPPLY TO MIDDLE OF	TOTAL VD					
			75c'd CEILING	75c'd CEILING	15c'd CLUNG	30c'd Alarm	15c'd 30c'd	30c'd 15c'd	75c'd 15c'd	110c'd									
			0.272	0.272	0.120	0.120	0.078	0.096	0.180	0.224	AWG	OHMS	AMPS	FEET	VOLTS	%	AH	AH	
RPS-J																			
	V1				6						12	1.93	0.944	261	0.951	3.96			
	V2	1			2		0.3			1	12	1.93	1.055	362	1.476	6.12		SEE RPS-J BATTERY CALCS	
	V3							3	4	12	1.93	0.854	450	1.657	6.90				
	V4						2	1	1	12	1.93	0.816	562	1.770	7.38				
					6						12	1.93							
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BAKERSFIELD CITY SCHOOL DISTRICT

BESSIE OWENS JUNIOR HIGH MODERNIZATION
815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:
PROJECT NO: 118934
DRAWN BY: VPZ
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ISSUE DATE: 3/3/2020

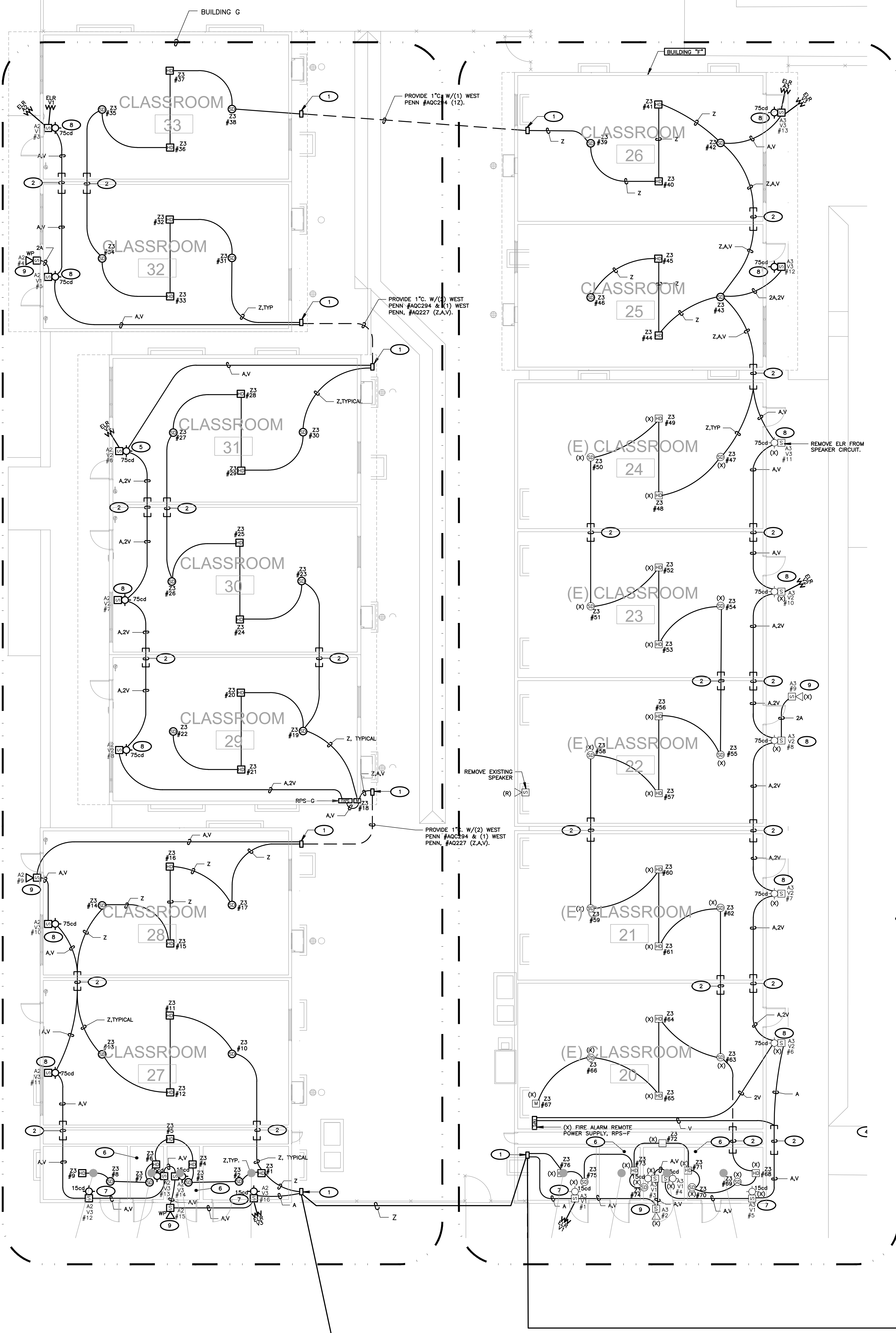
SHEET TITLE

**PARTIAL
FIRE ALARM
RISER DIAGRAM
BLDGS. H & K**

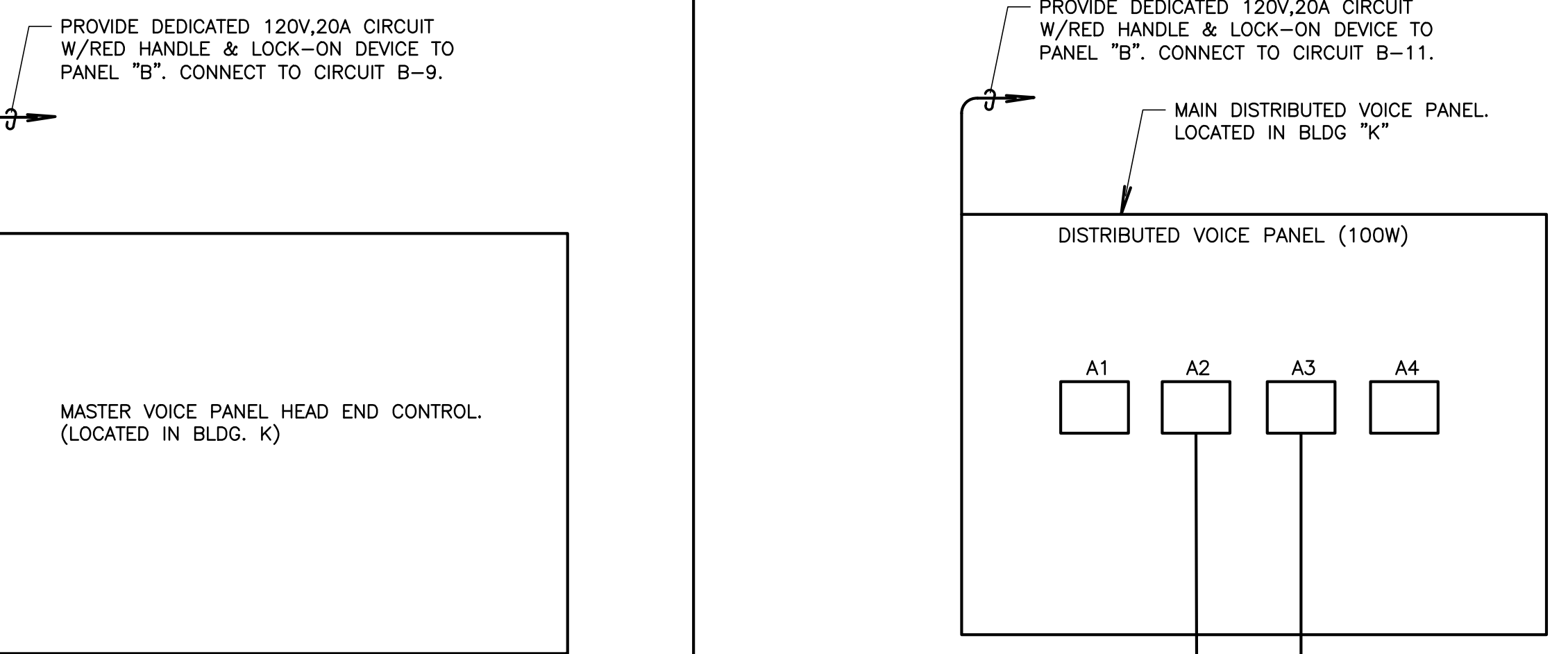
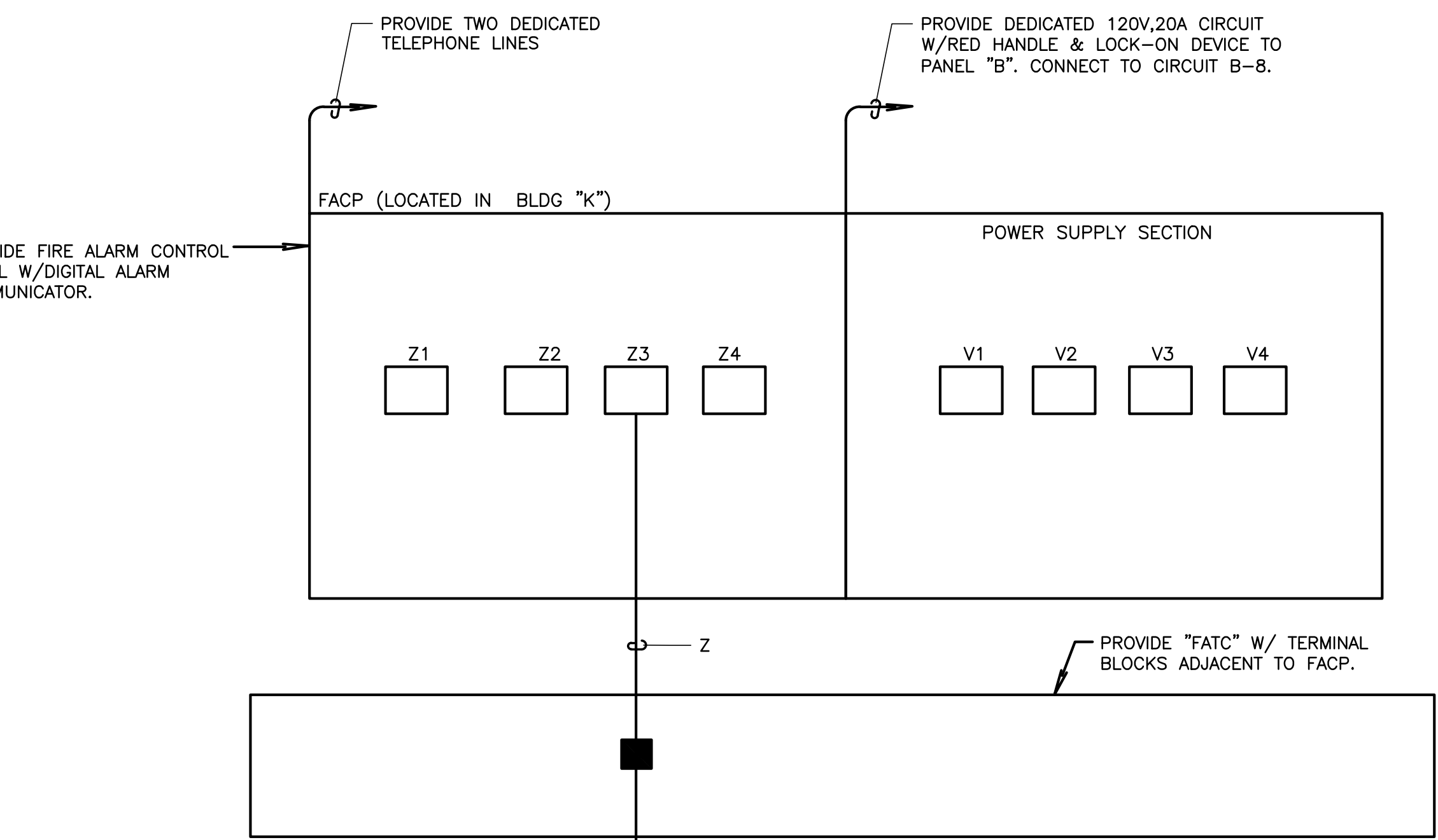
SHEET NUMBER

E600B

DSA SUBMITTAL SET



MAIN DISTRIBUTED VOICE PANEL, AMP	
DESCRIPTION	WATTAGE
A1	21.5W
A2	14.5
A3	15W
A4	ZERO (SPARE)
TOTAL = 51 USED	
AMPLIFIER = 100W	



- KEY NOTES (BLDG. E, F & G)**
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
1. PROVIDE FATC, 6X6X4, NEMA 3R PULLBOX W/TERMINAL BLOCKS. RISE CONDUIT UP & LB INTO ACCESSIBLE CEILING SPACE W/FIRE ALARM SYSTEM CONDUCTORS.
 2. PROVIDE 1" C. SLEEVE BETWEEN RELOS WITH PLASTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E600.
 3. PROVIDE 10"x11" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #8101780X, WITH #81017-51,1H COVER BY, CHRISTY CONCRETE.
 4. LOCATED ON ROOF CANOPY
 5. PROVIDE FATC ON ROOFTOP CANOPY. COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
 6. SET SPEAKER FOR 1/4W.
 7. SET SPEAKER FOR 1/2W.
 8. SET SPEAKER FOR 1W.
 9. SET SPEAKER FOR 2W.
 10. HEAT DETECTOR SHALL BE LOCATED ON OLD GLUE ON TILE CEILING ABOVE EXISTING T-BAR CEILING.
 11. HEAT DETECTOR SHALL BE LOCATED IN EXISTING ATTIC SPACE ABOVE THE OLD GLUE ON TILE CEILING. PROVIDE ACCESS PANEL AT HEAT DETECTOR.
 12. PROVIDE ACCESS HATCH FOR HEAT DETECTOR, AS REQUIRED.
 13. PROVIDE 3/4" C. W/WEST PENN. #AQC294 (2).
 14. PROVIDE 1" C. W/(3) WEST PENN. #AQC227 (3V).
 15. PROVIDE 1-1/4" C. W/(3) WEST PENN. #AQC294 (3A) & (3) WEST PENN. #AQC228 (DNL).
 16. PROVIDE 1-1/2" C. W/(4) WEST PENN. #AQC294 (Z,3A) & 1-1/2" CO (SPARE).
 17. NOT USED.

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BAKERSFIELD CITY SCHOOL DISTRICT

BESSIE OWENS JUNIOR HIGH MODERNIZATION

815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:

PROJECT NO: 118934

DRAWN BY: VPZ

CHK'D BY: DF

ISSUE DATE: 3/3/2020

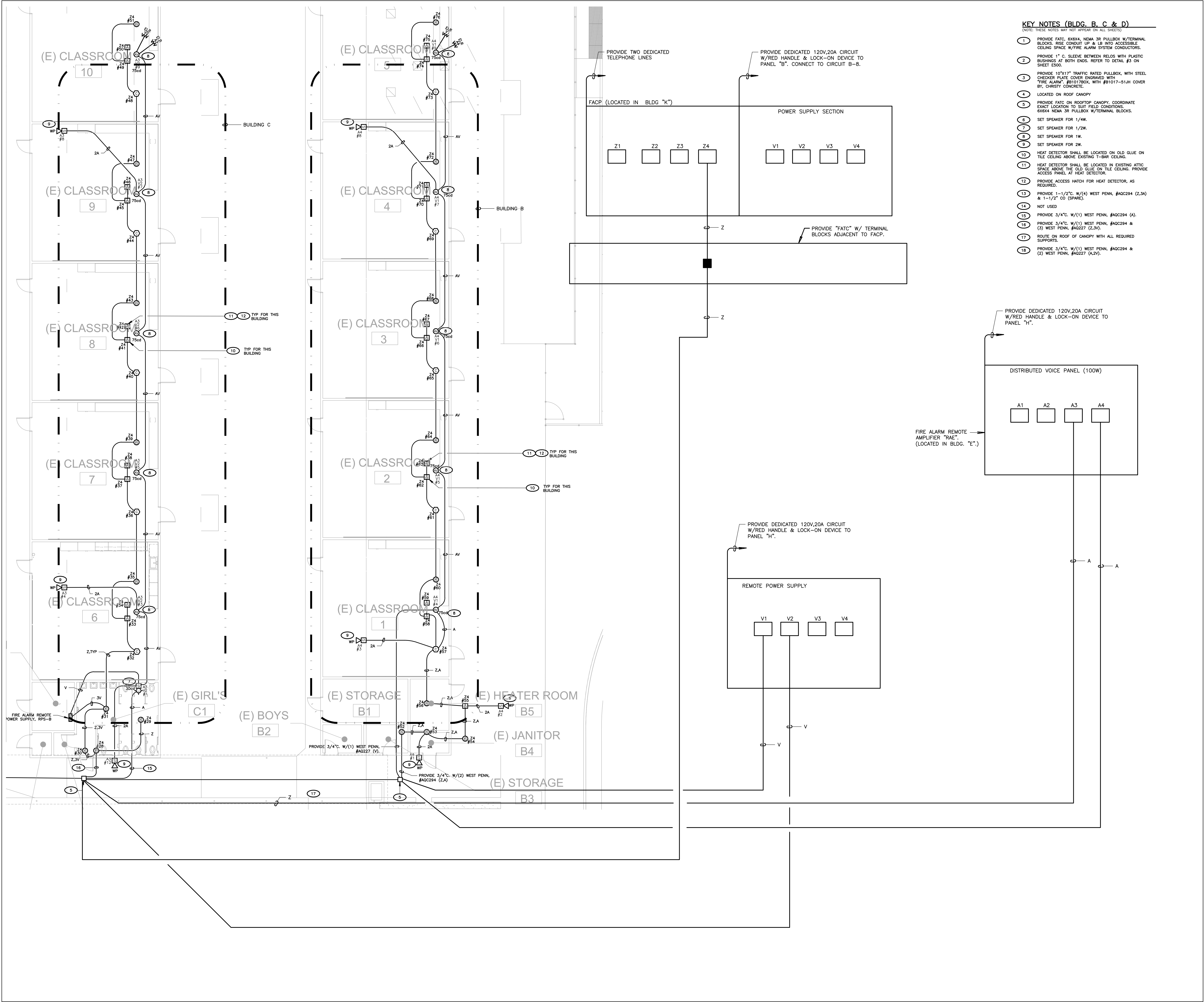
SHEET TITLE

PARTIAL FIRE ALARM RISER DIAGRAM, BLDGS. G & F

SHEET NUMBER

E600C

DSA SUBMITTAL SET



KEY NOTES (BLDG. B, C & D)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

1. PROVIDE FALC, 6X6X4, NEMA 3R PULLBOX W/TERMINAL BLOCKS, RISE CONDUIT UP & LB INTO ACCESSIBLE CEILING SPACE W/FIRE ALARM SYSTEM CONDUCTORS.
2. PROVIDE 1" O.D. SLEEVE BETWEEN RELAYS WITH PLASTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E500.
3. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #81017BOX, WITH #81017-51H COVER BY, CHRISTY CONCRETE.
4. LOCATED ON ROOF CANOPY
5. PROVIDE FALC ON ROOFTOP CANOPY, COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
6. SET SPEAKER FOR 1/4W.
7. SET SPEAKER FOR 1/2W.
8. SET SPEAKER FOR 1W.
9. SET SPEAKER FOR 2W.
10. HEAT DETECTOR SHALL BE LOCATED ON OLD GLUE ON TILE CEILING ABOVE EXISTING 1-BAR CEILING.
11. HEAT DETECTOR SHALL BE LOCATED IN EXISTING ATTIC SPACE ABOVE THE OLD GLUE ON TILE CEILING. PROVIDE ACCESS PANEL AT HEAT DETECTOR.
12. PROVIDE ACCESS HATCH FOR HEAT DETECTOR, AS REQUIRED.
13. PROVIDE 1-1/2" O.D. W/(1) WEST PENN. #AQC294 (Z,3A) & 1-1/2" O.D. (SPARE).
14. NOT USED
15. PROVIDE 3/4" O.D. W/(1) WEST PENN. #AQC294 (A).
16. PROVIDE 3/4" O.D. W/(1) WEST PENN. #AQC294 & (3) WEST PENN. #AQC227 (L,2V).
17. ROUTE ON ROOF OF CANOPY WITH ALL REQUIRED SUPPORTS.
18. PROVIDE 3/4" O.D. W/(1) WEST PENN. #AQC294 & (2) WEST PENN. #AQC227 (A,2V).

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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION

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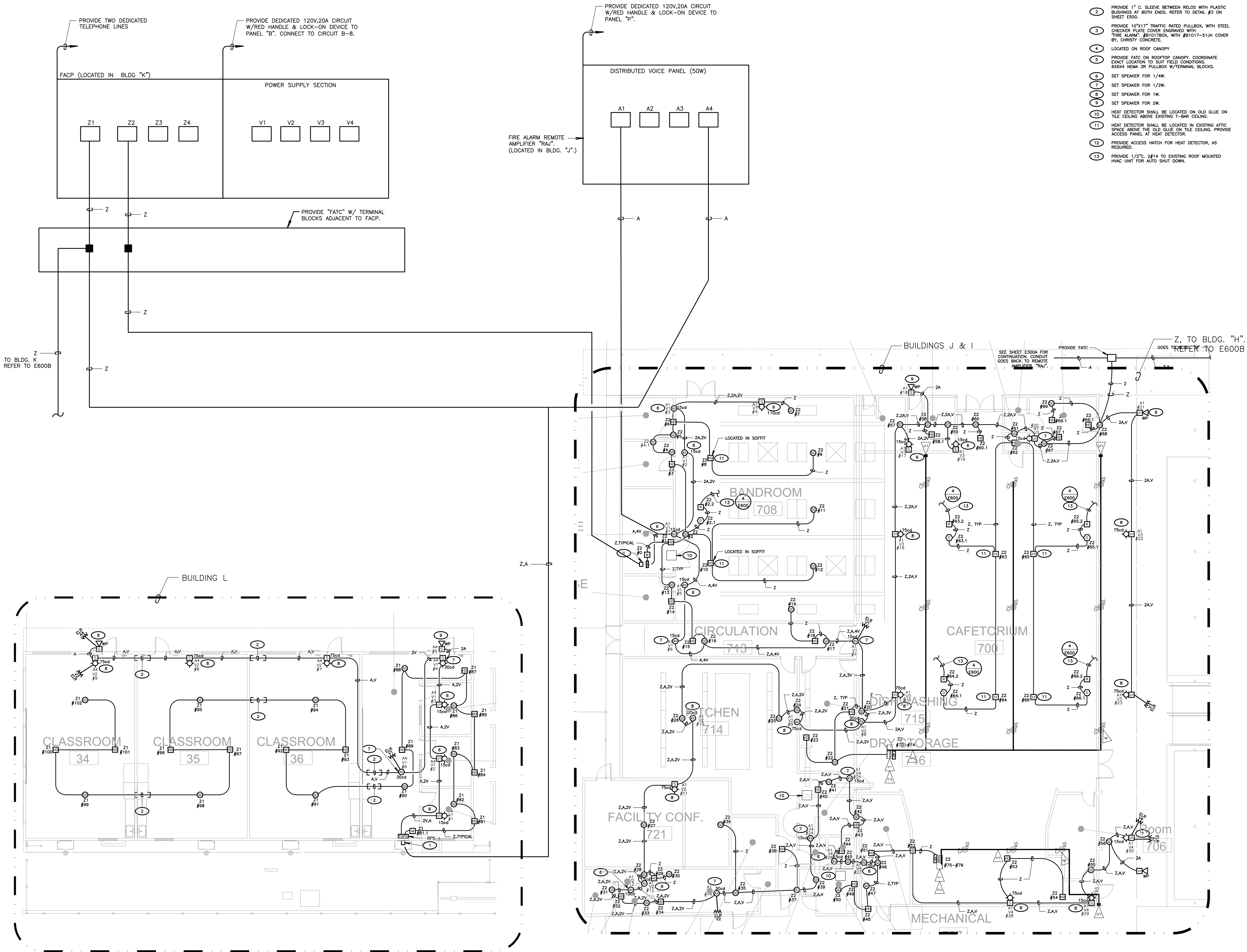
SHEET TITLE

**PARTIAL
FIRE ALARM RISER
DIAGRAM,
BLDG. C & B**

SHEET NUMBER

E600E

DSA SUBMITTAL SET



- KEY NOTES (BLDG. L, J & I)**
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
1. PROVIDE FATC, 6X6X4, NEMA 3R PULLBOX W/THERMAL BLOCKS. RISE CONDUIT UP & 18 INTO ACCESSIBLE CEILING SPACE W/FIRE ALARM SYSTEM CONDUCTORS.
 2. PROVIDE 1" C. SLEEVE BETWEEN RELOS WITH PLASTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E600.
 3. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #8101780X, WITH #81017-51,1H COVER BY, CHRISTY CONCRETE.
 4. LOCATED ON ROOF CANOPY
 5. PROVIDE FATC ON ROOFTOP CANOPY. COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/THERMAL BLOCKS.
 6. SET SPEAKER FOR 1/4W.
 7. SET SPEAKER FOR 1/2W.
 8. SET SPEAKER FOR 1W.
 9. SET SPEAKER FOR 2W.
 10. HEAT DETECTOR SHALL BE LOCATED ON OLD GLUE ON TILE CEILING ABOVE EXISTING T-BAR CEILING.
 11. HEAT DETECTOR SHALL BE LOCATED IN EXISTING ATTIC SPACE ABOVE THE OLD GLUE ON TILE CEILING. PROVIDE ACCESS PANEL AT HEAT DETECTOR.
 12. PROVIDE ACCESS HATCH FOR HEAT DETECTOR, AS REQUIRED.
 13. PROVIDE 1/2" C. 2#14 TO EXISTING ROOF MOUNTED HVAC UNIT FOR AUTO SHUT DOWN.

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Make The Child Count

BESSIE OWENS JUNIOR HIGH MODERNIZATION

815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:

PROJECT NO: 118934

DRAWN BY: VPZ

CHKD BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE

PARTIAL FIRE ALARM RISER DIAGRAM

BLDGS L & J, I

SHEET NUMBER

E600F

DSA SUBMITTAL SET



1. SMOKE DETECTORS SHALL BE INSTALLED 3' AWAY FROM SUPPLY AND RETURN GRILLES.
2. FINAL FIRE ALARM TEST OF ALL DEVICES SHALL BE WITNESSED BY THE SCHOOL DISTRICT. THIS TEST SHALL INCLUDE ALL INFORMATION PER NFPA 72, FIGURE 16.8.2.4 AND READ OUT VERIFICATION FORM FROM CENTRAL STATION. THE TEST SHALL ALSO BE WITNESSED BY THE LOCAL AUTHORITY HAVING JURISDICTION (A.J.U.).
3. UNDERGROUND AND EXTERIOR CONDUITS WILL HAVE WATER-TIGHT FITTINGS (C.E.C. 110.11 and 300.9).
4. AIDABLE DEVICES SHALL NOT EXCEED 15DBA ABOVE AVERAGE AMBIENT SOUND LEVELS, BUT NOT LESS THAN 15DBA AT 10' OR MORE THAN 110 DBA IN TOTAL THROUGHTOUT (NFPA 72 18.4.1 and C.F.C. 907.6.2).
5. AIDABLE DEVICES SHALL SOUND THE CALFALFA CODE IN TEMPORAL PATTERN.
6. VISUAL DEVICES SHALL NOT EXCEED TWO FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN ONE FLASH PER SECOND. (NFPA 72 18.4.2)
7. PROVIDE AN ENGRAVED NAMEPLATE INDICATING THE D.S.A. APPLICATION NUMBER, FIRE NUMBER AND DATE OF INSTALLATION AT FIRE ALARM CONTROL PANEL.
8. PROVIDE A COPY OF THE BATTERY CALCULATION AT THE FIRE ALARM POWER EXPANDER PANEL. BATTERY CALCULATION SHALL CONTAIN THE FOLLOWING INFORMATION: TYPE AND BE PLASTIC LAMINATED. MOUNT OUTSIDE FACE OF DOOR.
9. MORE THAN TWO VISIBLE NOTIFICATION APPLIANCES OR GROUPS OF SYNCHRONIZED APPLIANCES IN THE SAME ROOM OR ADJACENT SPACE SHALL EXCEED THE FIELD OF VIEW SMALL FLASH IN SYNCHRONIZATION (NFPA 72 18.5.4.3.4.2)(f).d.)
10. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REGULATIONS (C.F.C. 907.9).
11. THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 780 OF THE CALIFORNIA ELECTRICAL CODE, CHAPTER 10, DIVISION 24, REQUIREMENTS, CALIFORNIA FIRE CODE, NFPA 72 AND 101 STANDARDS, AND COMPLIANCE WITH ACCESSIBILITY ACT (ADA) REQUIREMENTS.
12. NOT SHOW ANY OPEN WORK AREAS, UNFINISHED SPACES AND PULL BOXES WHICH WILL BE REQUIRED THROUGHOUT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL THE FINISH BOXES AS NECESSARY TO MATCH THE CONDITIONS AND RACKWAYS. PANT BOXES TO MATCH COLOR OF THE FINISHED BUILDING WALLS.
13. ALL JUNCTION BOXES AND DEVICES INDICATED ON BUILDING EXTERIORS SHALL BE WEATHERPROOF.
14. FIRE ALARM WIRING SHALL BE COPPER TYPE THWY/HTH.
15. ALL SIGNAL WIRING IN UNDERGROUND CONDUITS SHALL BE WELL LOCATED TYPE.
16. WHEN ALL FIRE ALARM DEVICES ARE INSTALLED AND PROGRAMMING IS COMPLETED, PROVIDE A FIRE ALARM DISC MAP IN THE SCHOOL MAIN OFFICE TO INDICATE TO SCHOOL PERSONNEL THE LOCATIONS OF THE DEVICES.
17. PUNCHED BOXES SHALL NOT CONTAIN SPLICES. CONDUCTORS SHALL BE LIT THROUGH TERMINATIONS SHALL BE PERFORMED.
18. ALL EXPOSED CONDUITS AND BOXES SHALL BE PAINTED TO MATCH THE SURROUNDING ARCHITECTURAL INTERIOR.
19. CONTRACTOR SHALL FIELD VERIFY ALL DEVICES FOR ACCESSIBILITY. SOME DEVICES MAY NEED SURFACE READING (WIREDMIF) IF ACCESSIBILITY IS LIMITED.
20. CONTRACTOR SHALL PROVIDE ALL FIRE, CABLES--BOXES, BACK-BOXES, FITTINGS, CONDUIT, SUPPORTS, WIREDMIF, ETC. FOR A COMPLETE &

- 1 PROVIDE FACT. 60X64, NEMA 3R PULLBOX W/TERMINAL BLOCKS. RISE CONDUIT UP & LB INTO ACCESSIBLE CEILING SPACE W/7/8" ALARM SYSTEM CONDUCTORS.
- 2 PROVIDE 1" C. SLEEVE BETWEEN RELOS WITH PLASTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E500.
- 3 PROVIDE 10X17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKED PLATE COVER ENGRAVED WITH "FIRE ALARM". #B01700B, WITH #B01701-51JH COVER BY CHESTNUT COMPANY.
- 4 LOCATED ON ROOF CANOPY
- 5 PROVIDE FACT ON ROOFTOP CANOPY, COORDINATE EXACT LOCATION TO SUE FIELD CONDITIONS.
- 6 60X64 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
- 7 SET SPEAKER FOR 1/4W.
- 8 SET SPEAKER FOR 1/2W.
- 9 SET SPEAKER FOR 1W.
- 10 SET SPEAKER FOR 2W.
- 11 HEAT DETECTOR SHALL BE LOCATED IN OLD GLUE ON THE CEILING PANEL INCLUDING 1-INBH GUESS.
- 12 HEAT DETECTOR SHALL BE LOCATED IN EXISTING ATIT SPACE ABOVE THE OLD GLUE ON THE CEILING. PROVIDE ACCESS PANEL AT HEAT DETECTOR.
- 13 PROVIDE ACCESS HATCH FOR HEAT DETECTOR, AS REQUIRED.
- 14 PROVIDE 1/2CT. #214 R FOR MOUNTED HVAC UNIT FOR AUTO SHUT-DOWNING 1-INBH GUESS.
- 15 TO FIRE ALARM CONTROL PANEL: PROVIDE 3/4"CT. #214 THIN & #22 WEST PINK, #991.
- 16 REFER TO SHEET E307.



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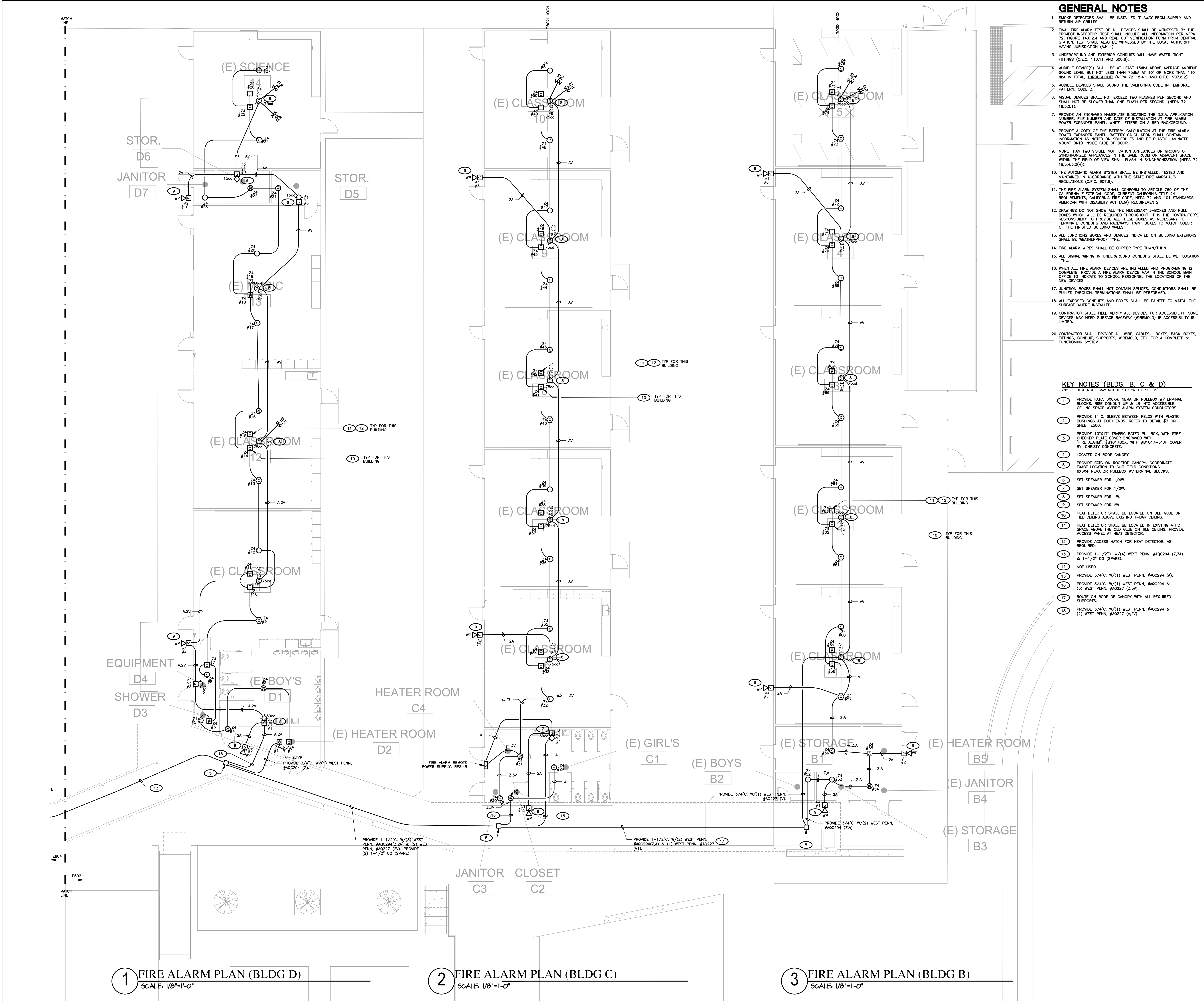
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815 EUREKA ST, BAKERSFIELD, CA 93305

ISSUE DATE:	03/02/20
SHEET TITLE	

SHEET NUMBER

E601



GENERAL NOTES

1. SMOKE DETECTORS SHALL BE INSTALLED 3' AWAY FROM SUPPLY AND RETURN AIR GRILLES.
2. FINAL FIRE ALARM TEST OF ALL DEVICES SHALL BE WITNESSED BY THE PROJECT INSPECTOR. TEST SHALL INCLUDE ALL INFORMATION PER NFPA 72, FIGURE 14.6.2.4 AND READ OUT VERIFICATION FROM CENTRAL STATION. TEST SHALL ALSO BE WITNESSED BY THE LOCAL AUTHORITY HAVING JURISDICTION (A.L.U.).
3. UNDERGROUND AND EXTERIOR CONDUITS WILL HAVE WATER-TIGHT FITTINGS (C.E.C. 110.11 AND 300.6).
4. AUDIBLE DEVICE(S) SHALL BE AT LEAST 150DB ABOVE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75DBA AT 10' OR MORE THAN 110 DBA IN TOTAL THROUGHOUT (NFPA 72 18.4.1 AND C.F.C. 907.6.2).
5. AUDIBLE DEVICES SHALL SOUND THE CALIFORNIA CODE IN TEMPORAL PATTERN, CODE 3.
6. VISUAL DEVICES SHALL NOT EXCEED TWO FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN ONE FLASH PER SECOND. (NFPA 72 18.5.2.1).
7. PROVIDE AN ENGRAVED NAMEPLATE INDICATING THE D.S.A. APPLICATION NUMBER, FILE NUMBER AND DATE OF INSTALLATION AT FIRE ALARM POWER EXPANDER PANEL. WHITE LETTERS ON A RED BACKGROUND.
8. PROVIDE A COPY OF THE BATTERY CALCULATION AT THE FIRE ALARM POWER EXPANDER PANEL. BATTERY CALCULATION SHALL CONTAIN INFORMATION AS NOTED ON SCHEDULES AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF DOOR.
9. MORE THAN TWO VISIBLE NOTIFICATION APPLIANCES OR GROUPS OF SYNCHRONIZED APPLIANCES IN THE SAME ROOM OR ADJACENT SPACE WITHIN THE FIELD OF VIEW SHALL FLASH IN SYNCHRONIZATION (NFPA 72 18.5.4.3.2(c)).
10. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REGULATIONS (C.F.C. 907.8).
11. THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 780 OF THE CALIFORNIA ELECTRICAL CODE, CURRENT CALIFORNIA TITLE 24 REQUIREMENTS, CALIFORNIA FIRE CODE, NFPA 72 AND 101 STANDARDS, AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS.
12. DRAWINGS DO NOT SHOW ALL THE NECESSARY J-BOXES AND PULL BOXES WHICH WILL BE REQUIRED THROUGHOUT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL THESE BOXES AS NECESSARY TO TERMINATE CONDUITS AND RACEWAYS. PAINT BOXES TO MATCH COLOR OF THE FINISHED BUILDING WALLS.
13. ALL JUNCTION BOXES AND DEVICES INDICATED ON BUILDING EXTERIORS SHALL BE WEATHERPROOF TYPE.
14. FIRE ALARM WIRES SHALL BE COPPER TYPE THWN/THHN.
15. ALL SIGNAL WIRING IN UNDERGROUND CONDUITS SHALL BE WET LOCATION TYPE.
16. WHEN ALL FIRE ALARM DEVICES ARE INSTALLED AND PROGRAMMING IS COMPLETE, PROVIDE A FIRE ALARM DEVICE MAP IN THE SCHOOL MAIN OFFICE TO INDICATE TO SCHOOL PERSONNEL THE LOCATIONS OF THE NEW DEVICES.
17. JUNCTION BOXES SHALL NOT CONTAIN SPLICES. CONDUCTORS SHALL BE PULLED THROUGH. TERMINATIONS SHALL BE PERFORMED.
18. ALL EXPOSED CONDUITS AND BOXES SHALL BE PAINTED TO MATCH THE SURFACE WHERE INSTALLED.
19. CONTRACTOR SHALL FIELD VERIFY ALL DEVICES FOR ACCESSIBILITY. SOME DEVICES MAY NEED SURFACE RACEWAY (WIREMOLD) IF ACCESSIBILITY IS LIMITED.
20. CONTRACTOR SHALL PROVIDE ALL WIRE, CABLES, J-BOXES, BACK-BOXES, FITTINGS, CONDUIT, SUPPORTS, WIREMOLD, ETC. FOR A COMPLETE & FUNCTIONING SYSTEM.

KEY NOTES (BLDG. B, C & D)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

1. PROVIDE FATC, 6X6X4, NEMA 3R PULLBOX W/TERMINAL BLOCKS. RISE CONDUIT UP & LB INTO ACCESSIBLE CEILING SPACE W/FIRE ALARM SYSTEM CONDUCTORS.
2. PROVIDE 1" C. SLEEVE BETWEEN RELOS WITH PLASTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E500.
3. PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #81017BOX, WITH #81017-51-H COVER BY, CHRISTY CONCRETE.
4. LOCATED ON ROOF CANOPY.
5. PROVIDE FATC ON ROOFTOP CANOPY, COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
6. SET SPEAKER FOR 1/4W.
7. SET SPEAKER FOR 1/2W.
8. SET SPEAKER FOR 1W.
9. SET SPEAKER FOR 2W.
10. HEAT DETECTOR SHALL BE LOCATED ON OLD GLUE ON TILE CEILING ABOVE EXISTING T-BAR CEILING.
11. HEAT DETECTOR SHALL BE LOCATED IN EXISTING ATTIC SPACE ABOVE THE OLD GLUE ON TILE CEILING. PROVIDE ACCESS PANEL AT HEAT DETECTOR.
12. PROVIDE ACCESS HATCH FOR HEAT DETECTOR, AS REQUIRED.
13. PROVIDE 1-1/2" C. W/(4) WEST PENN. #AQC294 (Z,3A) & 1-1/2" CO (SPARE).
14. NOT USED
15. PROVIDE 3/4" C. W/(1) WEST PENN. #AQC294 (A).
16. PROVIDE 3/4" C. W/(1) WEST PENN. #AQC294 & (3) WEST PENN. #AQC227 (Z,3V).
17. ROUTE ON ROOF OF CANOPY WITH ALL REQUIRED SUPPORTS.
18. PROVIDE 3/4" C. W/(1) WEST PENN. #AQC294 & (2) WEST PENN. #AQC227 (A,2V).

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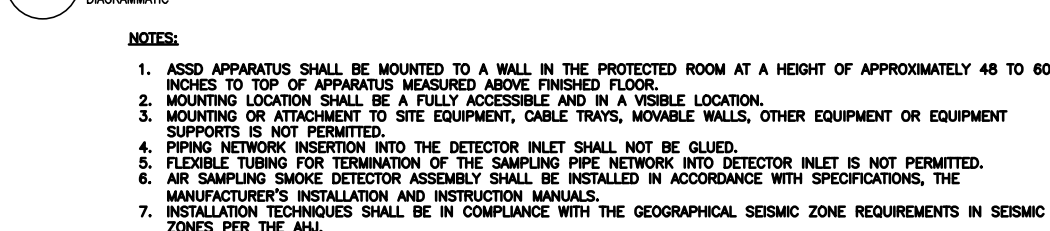
**FIRE ALARM PLAN
(BLDG B,C,&D)**

SHEET NUMBER

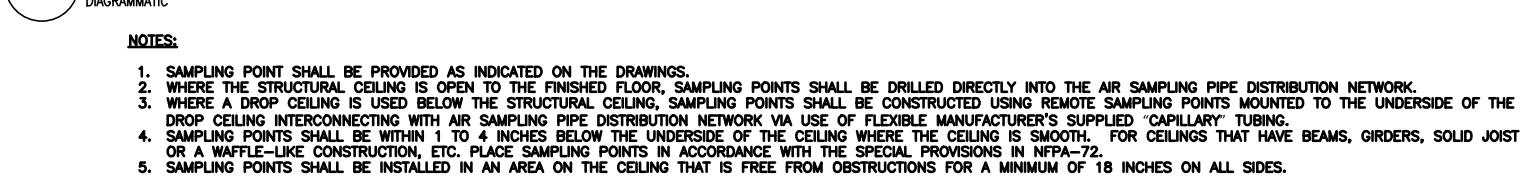
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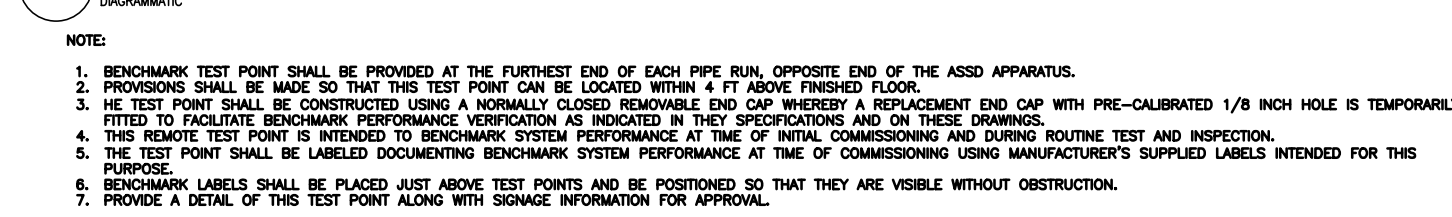
1 TYPICAL DETECTOR MOUNTING DETAIL



2 SINGLE-LEVEL COVERAGE CEILING LEVEL ONLY COVERAGE



10 TYPICAL BENCHMARK TEST POINT MOUNTING DETAIL



FLAG NOTES

- BASES OF DESIGN IS XTRAILS, INC. VESDA AIR SMOKE DETECTION APPARATUS.
- PROVIDE NECESSARY UNITS AND PIPING TO SAMPLE AREAS INDICATED ON THE DRAWINGS. PROVIDE THE FOLLOWING MONITORING PER AIR SMOKE DETECTION APPARATUS AS A MINIMUM TO THE FIRE ALARM CONTROL PANEL: POWER SUPPLY, FAULT, PRE-ALARM AND ALARM CONDITIONS. PROVIDE ADDITIONAL MONITORING AS REQUIRED BASED ON THE MANUFACTURER'S RECOMMENDATIONS.
- MOUNT AIR SMOKE DETECTION APPARATUS 48 INCHES (1.2M) TO 60 INCHES (1.5M) TO TOP OF DETECTOR MEASURED ABOVE FINISHED FLOOR.
- REFER TO VESDA INSTALLATION DETAIL #1.
- PROVIDE LISTED AND APPROVED REGULATED POWER SUPPLY OF NOMINALLY 24VDC.
- POWER SUPPLY SHALL BE PROVIDED WITH APPROPRIATELY SIZED/RATED BATTERIES TO ACCOMMODATE THE SYSTEMED POWER REQUIREMENTS FOR A DURATION OF TIME REQUIRED BY THE LOCAL A.U. IN THE EVENT MAIN AC POWER IS INTERRUPTED.
- AIR SMOKE DETECTION NETWORKS SHALL BE CONSTRUCTED USING RIGID PIPE MOUNTED TO THE UNDERSIDE OF THE STRUCTURAL CEILING. REFER TO VESDA INSTALLATION DETAIL #2.
- SAMPLE POINTS SHALL BE DRILLED DIRECTLY INTO THE AIR SMOKE DETECTION NETWORK. BE ORIENTED DOWNWARD AND BE WITHIN 1" TO 4" INCHES (25 TO 100MM) BELOW THE UNDERSIDE OF THE STRUCTURAL CEILING/ FALSE FLOOR. REFER TO VESDA INSTALLATION DETAIL #3.
- WHERE SHIP CEILING ARE PRESENT, SAMPLE POINTS SHALL BE REMOTELY MOUNTED TO THE UNDERSIDE OF THE SHIP CEILING. BE ORIENTED DOWNWARD AND BE WITHIN 1" TO 4" INCHES (25 TO 100MM) BELOW THE UNDERSIDE OF THE SHIP CEILING. REFER TO VESDA INSTALLATION DETAIL #4.
- SAMPLE POINTS SHALL BE A MINIMUM OF 4 FT AWAY FROM AIR SUPPLY DIFFUSERS AND BE INSTALLED IN AN AREA ON THE CEILING THAT IS FREE FROM OBSTRUCTIONS FOR A MINIMUM OF 18 INCHES ON ALL SIDES.
- PLACEMENT OF SAMPLE POINTS NEAREST TO WALLS SHALL BE GREATER THAN 12 INCHES (304MM) AND NOT EXCEED 1 FT (304MM).
- A BENCHMARK TEST POINT SHALL BE PROVIDED AT THE FURTHEST END OF EACH PIPE RUN, OPPOSITE END OF THE ADDS APPARATUS. PROVISIONS SHALL BE MADE SO THAT THE TEST POINT CAN BE LOCATED WITHIN 4 FT (1.2M) ABOVE FINISHED FLOOR. THE TEST POINT SHALL BE CONSTRUCTED USING A NORMALLY CLOSED BENCHMARK, QUICK CONNECT FITTING WITH AN ORIFICE OF NOMINAL 1/8 INCH (3MM) DIAMETER. BENCHMARK PORTING PERFORMANCE AT THE TEST POINT SHALL BE VERIFIED TO BE WITHIN 10% OF THE BENCHMARK PORTING PERFORMANCE AT THE TEST POINT. THE TEST POINT SHALL BE LABELED SOLELY WITH BENCHMARK PORTING PERFORMANCE OF THE TEST POINT. BENCHMARK LABELS SHALL BE PLACED JUST ABOVE TEST POINTS AND BE POSITIONED SO THAT THEY ARE VISIBLE WITHOUT OBSTRUCTION. REFER TO VESDA INSTALLATION DETAIL #5.

KEY NOTES (BLDG. L, J & I)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- PROVIDE FATC, 6X6X4, NEMA 3R PULLBOX W/TERMINAL BLOCKS. RISE CONDUIT UP & LB INTO ACCESSIBLE CEILING SPACE W/FIRE ALARM SYSTEM CONDUCTORS.
- PROVIDE 1" C. SLEEVE BETWEEN RELOS WITH PLASTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E500.
- PROVIDE 10"x17" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #81017-51JH COVER BY, CHRISTY CONCRETE.
- LOCATED ON ROOF CANOPY
- PROVIDE FATC ON ROOFTOP CANOPY. COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
- SET SPEAKER FOR 1/4W.
- SET SPEAKER FOR 1/2W.
- SET SPEAKER FOR 1W.
- SET SPEAKER FOR 2W.
- HEAT DETECTOR SHALL BE LOCATED ON OLD GLUE ON TILE CEILING ABOVE EXISTING T-BAR CEILING.
- HEAT DETECTOR SHALL BE LOCATED IN EXISTING ATTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E500.
- PROVIDE ACCESS HATCH FOR HEAT DETECTOR, AS REQUIRED.
- PROVIDE 1/2" C. 2414 TO EXISTING ROOF MOUNTED HVAC UNIT FOR AUTO SHUT DOWN.

GENERAL NOTES

- SMOKE DETECTORS SHALL BE INSTALLED 3' AWAY FROM SUPPLY AND RETURN AIR GRILLES.
- FINAL FIRE ALARM TEST OF ALL DEVICES SHALL BE WITNESSED BY THE PROJECT INSPECTOR. TEST SHALL INCLUDE ALL INFORMATION PER NFPA 72, FIGURE 14.6.2.4 AND READ OUT VERIFICATION FROM CENTRAL STATION. TEST SHALL ALSO BE WITNESSED BY THE LOCAL AUTHORITY HAVING JURISDICTION (A.H.J.).
- UNDERGROUND AND EXTERIOR CONDUITS WILL HAVE WATER-TIGHT FITTINGS (C.E.C. 110.1.1 AND 300.6).
- AUDIBLE DEVICE(S) SHALL BE AT LEAST 15dBA ABOVE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75dBA AT 10' OR MORE THAN 110 dBA IN TOTAL, THROUGHOUT (NFPA 72 18.4.1 AND C.F.C. 907.6.2).
- AUDIBLE DEVICES SHALL SOUND THE CALIFORNIA CODE IN TEMPORAL PATTERN, CODE 3.
- VISUAL DEVICES SHALL NOT EXCEED TWO FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN ONE FLASH PER SECOND. (NFPA 72 18.5.2.1).
- PROVIDE AN ENGRAVED NAMEPLATE INDICATING THE U.S.A. APPLICATION NUMBER, FILE NUMBER AND DATE OF INSTALLATION AT FIRE ALARM POWER EXPANDER PANEL. WHITE LETTERS ON A RED BACKGROUND.
- PROVIDE A COPY OF THE BATTERY CALCULATION AT THE FIRE ALARM POWER EXPANDER PANEL. BATTERY CALCULATION SHALL CONTAIN INFORMATION AS NOTED ON SCHEDULES AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF DOOR.
- MORE THAN TWO VISIBLE NOTIFICATION APPLIANCES OR GROUPS OF SYNCHRONIZED APPLIANCES IN THE SAME ROOM OR ADJACENT SPACE WITHIN THE FIELD OF VIEW SHALL FLASH IN SYNCHRONIZATION (NFPA 72 18.5.4.3.2(4)).
- THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REGULATIONS (C.F.C. 907.9).
- THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 780 OF THE CALIFORNIA ELECTRICAL CODE, CURRENT CALIFORNIA TITLE 24 REQUIREMENTS, CALIFORNIA FIRE CODE, NFPA 72 AND 101 STANDARDS, AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS.
- DRAWINGS DO NOT SHOW ALL THE NECESSARY J-BOXES AND PULL BOXES WHICH WILL BE REQUIRED THROUGHOUT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL THESE BOXES AS NECESSARY TO TERMINATE CONDUITS AND RACEWAYS. PAINT BOXES TO MATCH COLOR OF THE FINISHED BUILDING WALLS.
- ALL JUNCTION BOXES AND DEVICES INDICATED ON BUILDING EXTERIORS SHALL BE WEATHERPROOF TYPE.
- FIRE ALARM WIRES SHALL BE COPPER TYPE THIN/THIN.
- ALL SIGNAL WIRING IN UNDERGROUND CONDUITS SHALL BE WET LOCATION TYPE.
- WHEN ALL FIRE ALARM DEVICES ARE INSTALLED AND PROGRAMMING IS COMPLETE, PROVIDE A FIRE ALARM DEVICE MAP IN THE SCHOOL MAIN OFFICE TO INDICATE TO SCHOOL PERSONNEL THE LOCATIONS OF THE NEW DEVICES.
- JUNCTION BOXES SHALL NOT CONTAIN SPLICES. CONDUCTORS SHALL BE PULLED THROUGH. TERMINATIONS SHALL BE PERFORMED.
- ALL EXPOSED CONDUITS AND BOXES SHALL BE PAINTED TO MATCH THE SURFACE WHERE INSTALLED.
- CONTRACTOR SHALL FIELD VERIFY ALL DEVICES FOR ACCESSIBILITY. SOME DEVICES MAY NEED SURFACE RACEWAY (WIREMOLD) IF ACCESSIBILITY IS LIMITED.
- CONTRACTOR SHALL PROVIDE ALL WIRE, CABLES, J-BOXES, BACK-BOXES, FITTINGS, CONDUIT, SUPPORTS, WIREMOLD, ETC. FOR A COMPLETE & FUNCTIONING SYSTEM.

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INST STORAGE
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DRUM STORAGE
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OFFICE
27B

OFFICE
27C

WOMENS
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CLOSET
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STORAGE
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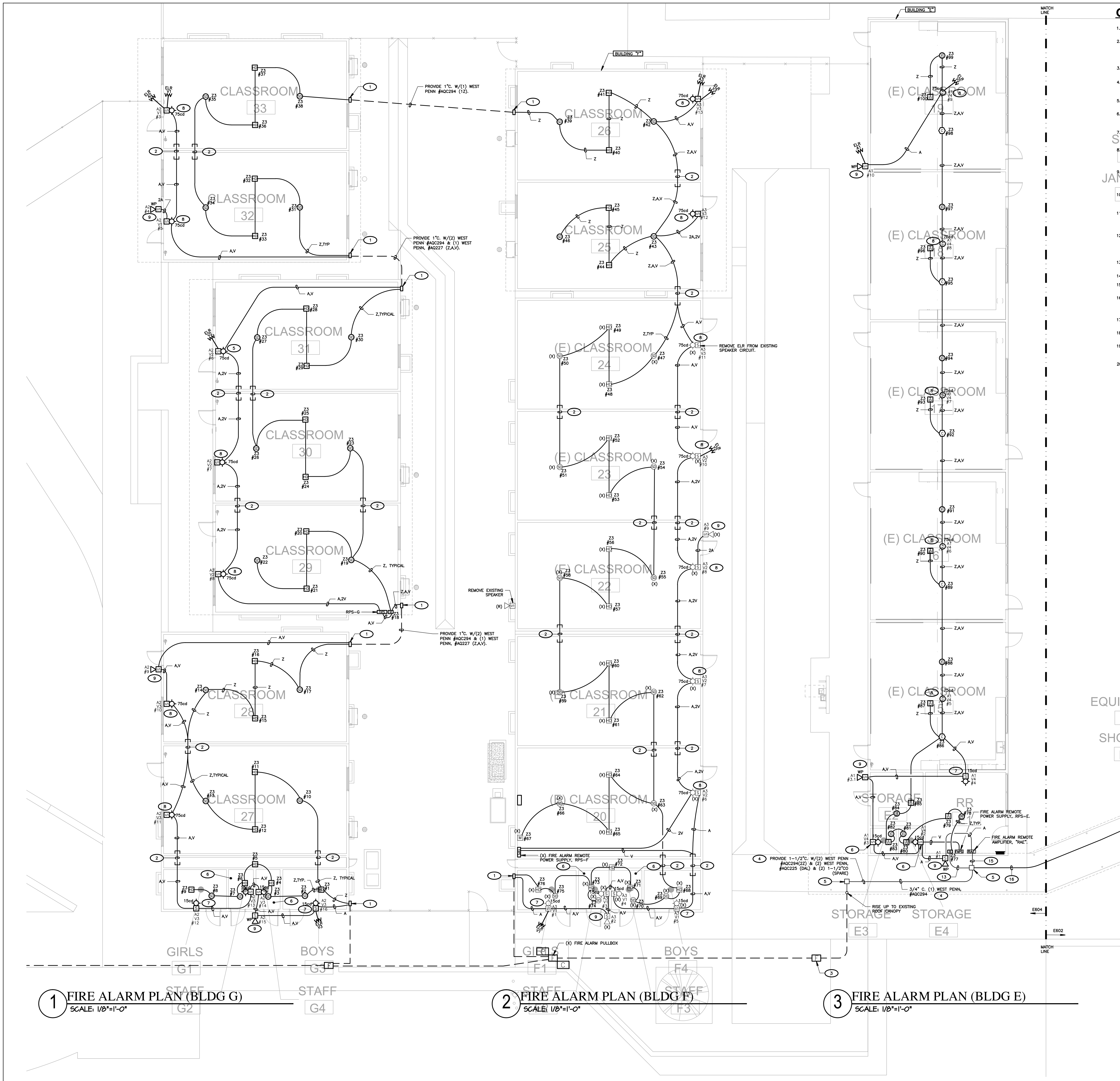
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KEY NOTES (BLDG. E, F & G)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- PROVIDE FATC, 6X6X4, NEMA 3R PULLBOX W/TERMINAL BLOCKS, RISE CONDUIT UP & LB INTO ACCESSIBLE CEILING SPACE W/FIRE ALARM SYSTEM CONDUCTORS.
- PROVIDE 1" C. SLEEVE BETWEEN RELOS WITH PLASTIC BUSHINGS AT BOTH ENDS. REFER TO DETAIL #3 ON SHEET E500.
- PROVIDE 10"x12" TRAFFIC RATED PULLBOX, WITH STEEL CHECKER PLATE COVER ENGRAVED WITH "FIRE ALARM", #8101750X, WITH #81017-51-H COVER BY, CHRISTY CONCRETE.
- LOCATED ON ROOF CANOPY
- PROVIDE FATC ON ROOFTOP CANOPY, COORDINATE EXACT LOCATION TO SUIT FIELD CONDITIONS. 6X6X4 NEMA 3R PULLBOX W/TERMINAL BLOCKS.
- SET SPEAKER FOR 1/4W.
- SET SPEAKER FOR 1/2W.
- SET SPEAKER FOR 1W.
- SET SPEAKER FOR 2W.
- HEAT DETECTOR SHALL BE LOCATED ON OLD GLUE ON TILE CEILING ABOVE EXISTING T-BAR CEILING.
- HEAT DETECTOR SHALL BE LOCATED IN EXISTING ATTIC SPACE ABOVE THE OLD GLUE ON THE CEILING. PROVIDE ACCESS PANEL AT HEAT DETECTOR.
- PROVIDE ACCESS HATCH FOR HEAT DETECTOR, AS REQUIRED.
- PROVIDE 3/4" C. W/WEST PENN. #AQC294 (2).
- PROVIDE 1" C. W/(3) WEST PENN. #AQC227 (3V).
- PROVIDE 1-1/4" C. W/(3) WEST PENN. #AQC294 (3A) & (2) WEST PENN. #AQC225 (DAL).
- PROVIDE 1-1/2" C. W/(4) WEST PENN. #AQC294 (Z,3A) & 1-1/2" CO (SPARE).
- NOT USED.

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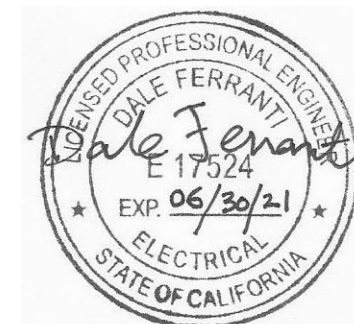
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BAKERSFIELD CITY SCHOOL
DISTRICT



**BESSIE OWENS JUNIOR HIGH
MODERNIZATION**

815 EUREKA ST. BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO.

PROJECT NO: 118934

DRAWN BY: VPZ

CHKD BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE

**FIRE ALARM PLAN
(BLDG. E, F & G)**

SHEET NUMBER

E604

DSA SUBMITTAL SET

BLDG. K CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
102	JANITOR	T-BAR
105	PRINCIPAL	T-BAR
106	OFFICE 3	T-BAR
107	OFFICE 4	T-BAR
108	OFFICE 5	T-BAR
109	OFFICE 6	T-BAR
111	TEACHER'S WORK RM.	T-BAR
112	WORK ROOM	T-BAR
113	NURSE	T-BAR
114	FILES	T-BAR
115	RR	HARD LID W/ATTIC
117	CONF. ROOM	T-BAR
118	DATA	T-BAR
119	ELEC. ROOM	T-BAR
120	LIBRARY	T-BAR
121	OFFICE	T-BAR
122	TEACHER'S LOUNGE	T-BAR
124	GROUP STUDY	T-BAR
125	DATA	T-BAR
126	RR	HARD LID W/ATTIC
127	RR	HARD LID W/ATTIC
128	RR	HARD LID W/ATTIC
129	SUPPLIES	T-BAR
130	RR	HARD LID W/ATTIC
131	PARENT CENTER	T-BAR
101	LOBBY	T-BAR
103	OFFICE 1	T-BAR
104	OFFICE 2	T-BAR

BLDG. L CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
27A	OFFICE	T-BAR
27B	OFFICE	T-BAR
27C	OFFICE	T-BAR
27	SMALL GROUP	T-BAR
34	CLASSROOM	T-BAR
35	CLASSROOM	T-BAR
36	CLASSROOM	T-BAR

BLDG. J/I CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
701	GIRLS	HARD LID W/ATTIC
702	BOYS	HARD LID W/ATTIC
703	JANITOR	HARD LID W/ATTIC
704	CLOSET	HARD LID W/ATTIC
705	STORAGE	HARD LID W/ATTIC
700	CAFETORIUM	HARD LID AT ROOF JOIST, SOFFIT DOWN MIDDLE OF ROOM
706	ROOM	HARD LID AT ROOF JOIST (NO ATTIC)
707	MECHANICAL	HARD LID AT ROOF JOIST (NO ATTIC)
708	BANDROOM	HARD LID AT ROOF JOIST (NO ATTIC)
709	OFFICE	HARD LID W/ATTIC
710	UNI STORAGE	HARD LID W/ATTIC
711	INST STORAGE	HARD LID W/ATTIC
712	DRUM STORAGE	HARD LID W/ATTIC
713	CIRCULATION	HARD LID W/ATTIC
714	KITCHEN	HARD LID AT ROOF JOIST(NO ATTIC) PARTIAL HARD LID W/ATTIC
715	DISHWASHING	HARD LID W/ATTIC
716	DRY STORAGE	HARD LID W/ATTIC
717	TOILET	HARD LID W/ATTIC
718	CAN WASH	HARD LID W/ATTIC
719	MOP	HARD LID W/ATTIC
720	WALK IN	HARD LID W/ATTIC
721	FACULTY CONF.	HARD LID AT ROOF JOIST (NO ATTIC)
722	WOMENS	HARD LID W/ATTIC
723	CLOSET	HARD LID W/ATTIC
724	MENS	HARD LID W/ATTIC
725	STORAGE	HARD LID AT ROOF JOIST (NO ATTIC)
726	CLOSET	HARD LID AT ROOF JOIST (NO ATTIC)

BLDG. F/F1 CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
F1	GIRLS	HARD LID W/ATTIC
F2	STAFF	HARD LID W/ATTIC
F3	STAFF	HARD LID W/ATTIC
F4	BOYS	HARD LID W/ATTIC
20	CLASSROOM	T-BAR
21	CLASSROOM	HARD LID W/ATTIC
22	CLASSROOM	HARD LID W/ATTIC
23	CLASSROOM	HARD LID W/ATTIC
24	CLASSROOM	HARD LID W/ATTIC
25	CLASSROOM	HARD LID W/ATTIC
26	CLASSROOM	HARD LID W/ATTIC

BLDG. G CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
G1	GIRLS	HARD LID W/ATTIC
G2	STAFF	HARD LID W/ATTIC
G3	BOYS	HARD LID W/ATTIC
G4	STAFF	HARD LID W/ATTIC
27	CLASSROOM	T-BAR
28	CLASSROOM	T-BAR
29	CLASSROOM	T-BAR
30	CLASSROOM	T-BAR
31	CLASSROOM	T-BAR
32	CLASSROOM	T-BAR
33	CLASSROOM	T-BAR

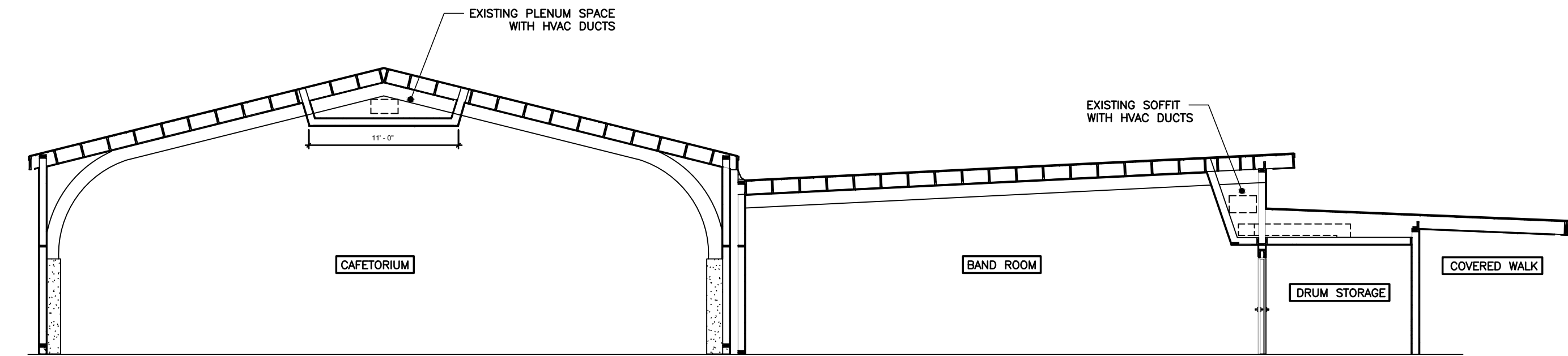
BLDG. H CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
801	BOYS	HARD LID AT ROOF JOIST (NO ATTIC)
802	CUSTODIAN	HARD LID AT ROOF JOIST (NO ATTIC)
803	MULTIPURPOSE ROOM	EXPOSED ROOF JOIST (NO ATTIC)
804	MULTIPURPOSE ROOM	EXPOSED ROOF JOIST (NO ATTIC)
805	OFFICE	HARD LID AT ROOF JOIST (NO ATTIC)
806	STORAGE	HARD LID AT ROOF JOIST (NO ATTIC)

BLDG. B CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
1	CLASSROOM	T-BAR
2	CLASSROOM	T-BAR
3	CLASSROOM	T-BAR
4	CLASSROOM	T-BAR
5	CLASSROOM	T-BAR
B1	STORAGE	HARD LID AT ROOF JOIST (NO ATTIC)
B2	BOYS	HARD LID AT ROOF JOIST (NO ATTIC)
B3	STORAGE	HARD LID AT ROOF JOIST (NO ATTIC)
B4	JANITOR	HARD LID AT ROOF JOIST (NO ATTIC)
B5	HEATER ROOM	HARD LID AT ROOF JOIST (NO ATTIC)

BLDG. C CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
6	CLASSROOM	T-BAR
7	CLASSROOM	T-BAR
8	CLASSROOM	T-BAR
9	CLASSROOM	T-BAR
10	CLASSROOM	T-BAR
C1	GIRLS	HARD LID AT ROOF JOIST (NO ATTIC)
C2	CLOSET	HARD LID AT ROOF JOIST (NO ATTIC)
C3	JANITOR	HARD LID AT ROOF JOIST (NO ATTIC)
C4	HEATER ROOM	HARD LID AT ROOF JOIST (NO ATTIC)

BLDG. D CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
11	CLASSROOM	T-BAR
12	CLASSROOM	T-BAR
13	MUSIC	T-BAR
14	SCIENCE	T-BAR
D1	BOYS	HARD LID AT ROOF JOIST (NO ATTIC)
D2	HEATER ROOM	HARD LID W/ATTIC
D3	SHOWER	HARD LID W/ATTIC
D4	EQUIPMENT	HARD LID AT ROOF JOIST (NO ATTIC)
D5	STORAGE	HARD LID AT ROOF JOIST (NO ATTIC)
D6	STORAGE	HARD LID AT ROOF JOIST (NO ATTIC)
D7	JANITOR	HARD LID AT ROOF JOIST (NO ATTIC)

BLDG. E CEILING TYPE LEGEND		
ROOM NUMBER	ROOM NAME	CEILING TYPE
15	CLASSROOM	T-BAR
16	CLASSROOM	T-BAR
17	CLASSROOM	T-BAR
18	CLASSROOM	T-BAR
19	CLASSROOM	T-BAR
E1	RR	T-BAR
E2	STORAGE	HARD LID W/ATTIC
E3	STORAGE	HARD LID W/ATTIC
E4	STORAGE	HARD LID W/ATTIC



1 BUILDING SECTION (BLDGS J & I)
SCALE: NOT TO SCALE

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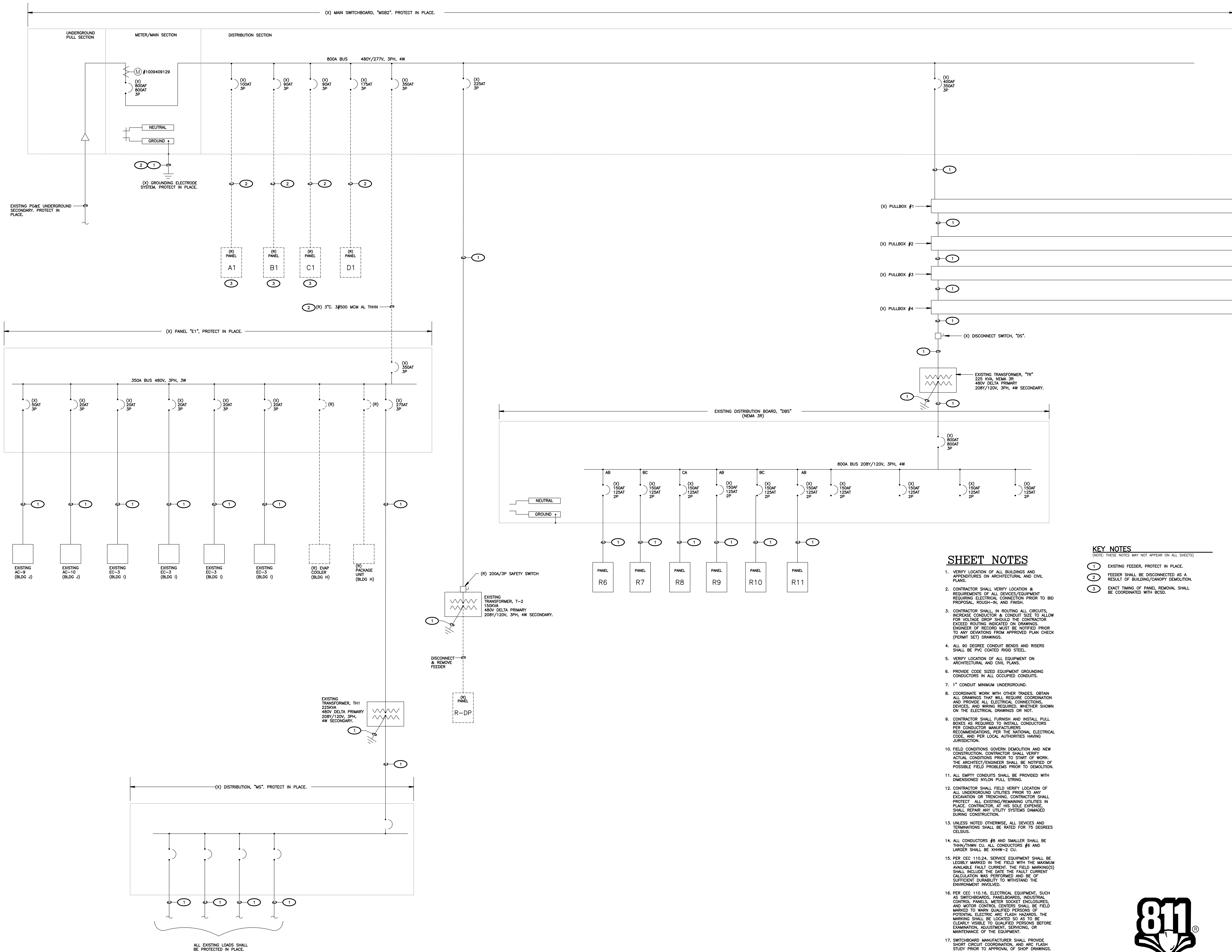
SHEET TITLE

BUILDING CEILING
TYPE LEGENDS,
BUILDING SECTIONS

SHEET NUMBER

E605

DSA SUBMITTAL SET



1 EXISTING SINGLE LINE DIAGRAM
SCALE: NOT TO SCALE

SHEET NOTES

1. VERIFY LOCATION OF ALL BUILDINGS AND APPENDICES ON ARCHITECTURAL AND CIVIL PLANS.
2. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH.
3. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
4. ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
5. VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
6. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
7. 1" CONDUIT MINIMUM UNDERGROUND.
8. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
9. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS' RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
10. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION.
11. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH DIMENSIONED NYLON PULL STRING.
12. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION OR TRENCHING. CONTRACTOR SHALL PROTECT ALL EXISTING/REMAINING UTILITIES IN PLACE. CONTRACTOR, AT HIS SOLE EXPENSE, SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.
13. UNLESS NOTED OTHERWISE, ALL DEVICES AND TERMINATIONS SHALL BE RATED FOR 75 DEGREES CELSIUS.
14. ALL CONDUCTORS #8 AND SMALLER SHALL BE THIN/THIN CU. ALL CONDUCTORS #6 AND LARGER SHALL BE XHHW-2 CU.
15. PER CEC 110.16, SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
16. PER CEC 110.16, ELECTRICAL EQUIPMENT, SUCH AS SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
17. SWITCHBOARD MANUFACTURER SHALL PROVIDE SHORT CIRCUIT COORDINATION, AND ARC FLASH STUDY PRIOR TO APPROVAL OF SHOP DRAWINGS.
18. GROUND FAULT PROTECTION SHALL BE THIRD PARTY TESTED.

- KEY NOTES
- (NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
- 1 EXISTING FEEDER, PROTECT IN PLACE.
 - 2 FEEDER SHALL BE DISCONNECTED AS A RESULT OF BUILDING/CANOPY DEMOLITION.
 - 3 EXACT TIMING OF PANEL REMOVAL SHALL BE COORDINATED WITH BCSO.



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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION

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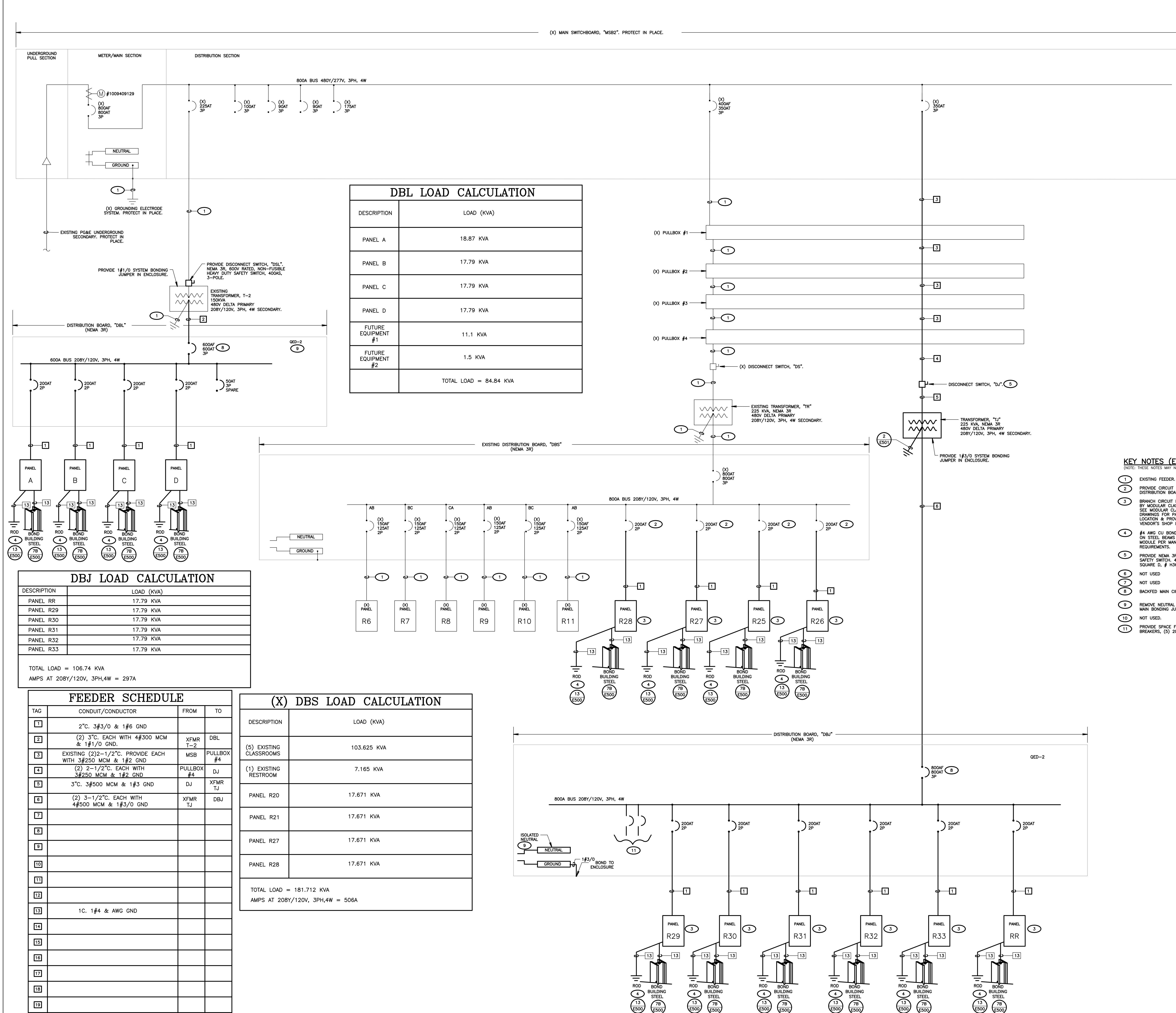
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PROJECT NO: 118934
DRAWN BY: VPZ
CHKD BY: DF
ISSUE DATE: 3/3/2020
SHEET TITLE

EXISTING
SINGLE LINE
DIAGRAM

SHEET NUMBER

E700A

DSA SUBMITTAL SET



SHEET NOTES

1. VERIFY LOCATION OF ALL BUILDINGS AND APPENDICES ON ARCHITECTURAL AND CIVIL PLANS.
2. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH.
3. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
4. ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
5. VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
6. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
7. 1" CONDUIT MINIMUM UNDERGROUND.
8. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED, WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
9. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS RECOMMENDATIONS. PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
10. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION.
11. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH DIMENSIONED NYLON PULL STRING.
12. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION OR TRENCHING. CONTRACTOR SHALL PROTECT ALL EXISTING/REMAINING UTILITIES IN PLACE. CONTRACTOR, AT HIS SOLE EXPENSE, SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.
13. UNLESS NOTED OTHERWISE, ALL DEVICES AND TERMINATIONS SHALL BE RATED FOR 75 DEGREES CELSIUS.
14. ALL CONDUCTORS #8 AND SMALLER SHALL BE THINWALL CU. ALL CONDUCTORS #6 AND LARGER SHALL BE XHHW-2 CU.
15. PER NEC 110.2.4, SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
16. PER NEC 110.1.6, ELECTRICAL EQUIPMENT, SUCH AS SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
17. SWITCHBOARD MANUFACTURER SHALL PROVIDE SHORT CIRCUIT COORDINATION, AND ARC FLASH STUDY PRIOR TO APPROVAL OF SHOP DRAWINGS.
18. GROUND FAULT PROTECTION SHALL BE THIRD PARTY TESTED.

KEY NOTES (E700B)

(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

- 1 EXISTING FEEDER. PROTECT IN PLACE.
- 2 PROVIDE CIRCUIT BREAKER IN EXISTING DISTRIBUTION BOARD.
- 3 BRANCH CIRCUIT LOAD CENTER PROVIDED BY MODULAR CLASSROOM SHOP DRAWINGS FOR PANEL SCHEDULE. VERIFY LOCATION & PROVIDE CONNECTION PER VENDOR'S SHOP DRAWINGS.
- 4 #4 AWG CU BOND TO GROUNDING LUGS ON STEEL BEAMS FOR EACH TRAILER MODULE PER MANUFACTURER'S & THE AHJ REQUIREMENTS.
- 5 PROVIDE NEMA 3R, FUSIBLE, HEAVY DUTY SAFETY SWITCH, 400AS, 300AF, 3-POLE, SQUARE D, # 1300R.
- 6 NOT USED
- 7 NOT USED
- 8 BACKED MAIN CIRCUIT BREAKER.
- 9 REMOVE NEUTRAL DISCONNECT LINK, OR MAIN BONDING JUMPER, IF PRESENT.
- 10 NOT USED.
- 11 PROVIDE SPACE FOR FUTURE CIRCUIT BREAKERS, (5) 200AT/2P.

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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION

815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:

PROJECT NO: 118934

DRAWN BY: VPZ

CHKD BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE

EXISTING
SINGLE LINE
DIAGRAM
(MODIFIED)

SHEET NUMBER

E700B

1 EXISTING SINGLE LINE DIAGRAM (MODIFIED)

SCALE: NOT TO SCALE



Know what's below.

Call before you dig.

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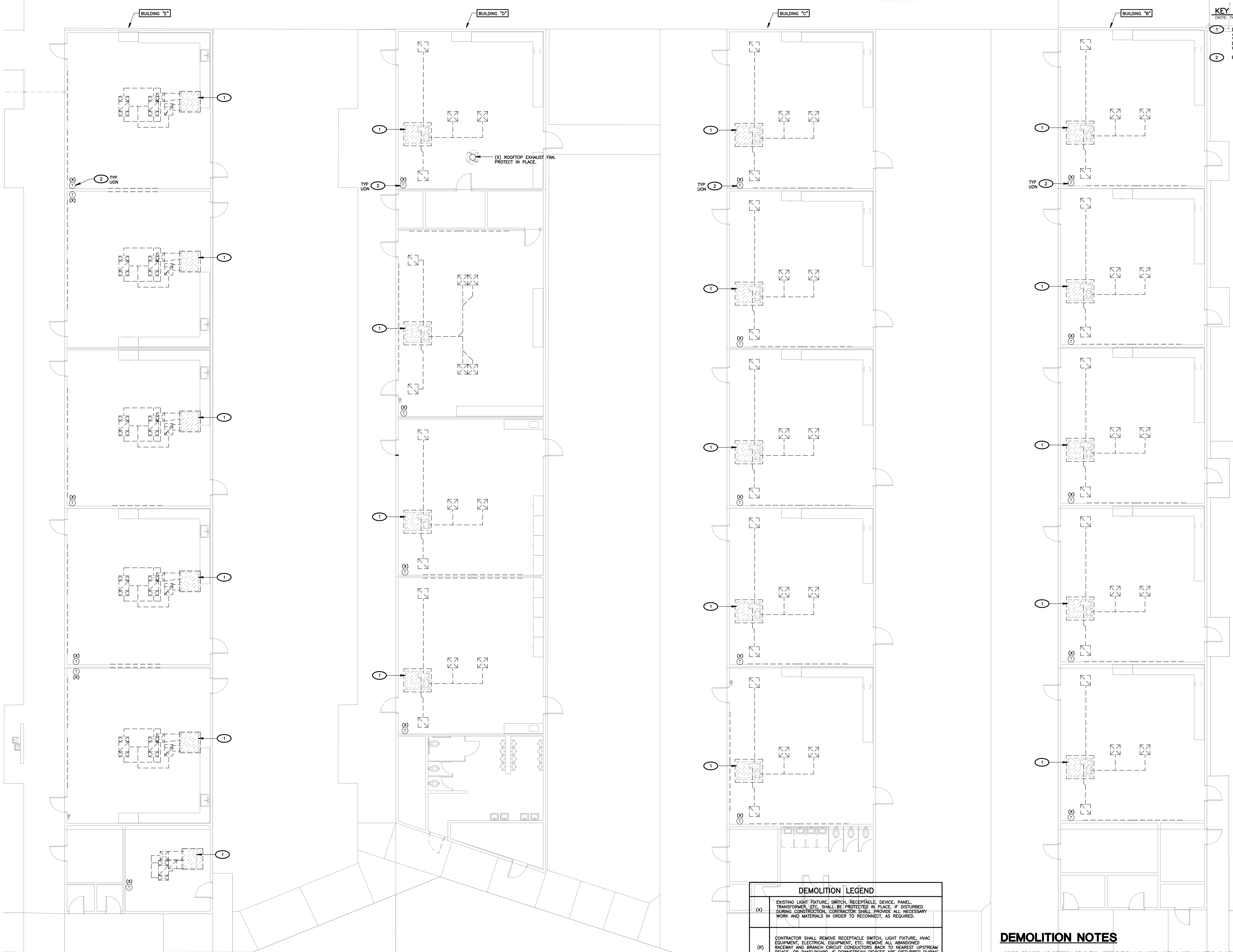


NOTE: EXACT TIMING OF CUT-OVER SHALL BE COORDINATED WITH PG&E COMPANY & BCSD. WORK SHALL BE PERFORMED AFTER HOURS IN ORDER TO MINIMIZE DISRUPTION TO SCHOOL SCHEDULE.

E702

TOTAL LOAD (KVA)	= 913KVA
TOTAL LOAD (AMPS AT 480Y/277, 3PH)	= 1.099A

SCALE: NOT TO SCALE



KEY NOTES
NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS.

1 DISCONNECT & REMOVE ALL ELECTRICAL ASSOCIATED WITH ROOFTOP HVAC UNIT. VERIFY ALL DEMOLITION WITH MECHANICAL DRAWINGS PRIOR TO STARTING CONSTRUCTION.

2 EXISTING T-STAT PROTECT IN PLACE.

DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SWITCH, RECEPTACLE, DEVICE, PANEL, TRANSFORMER, ETC. SHALL BE PROTECTED IN PLACE. IF DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL REMOVE RECEPTACLE, SWITCH, LIGHT FIXTURE, HVAC EQUIPMENT, ELECTRICAL EQUIPMENT, ETC. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUCTORS BACK TO NEAREST UPSTREAM DEVICE OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SWITCH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUCTORS IN PLACE. RECONNECT NEW DEVICE IN SAME LOCATION TO THE EXISTING BRANCH CIRCUIT. SEE POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND RECONNECTION. SEE LIGHTING PLAN FOR WORK & LOCATIONS. REMOVE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUCTORS. REPLACE ANY BROKEN LAMPS IN LIGHT FIXTURE.

DEMOLITION NOTES

SCOPE: PROVIDE AND PERFORM DEMOLITION, PREPARATORY AND MISCELLANEOUS WORK IN AREAS AS INDICATED AND SPECIFIED, COMPLETE.

DEMOLITION AND REMOVAL OF EXISTING ELECTRICAL CONDUIT, WIRING AND EQUIPMENT REQUIRED TO COMPLETE THE PROJECT.

PREPARATION OF THE EXISTING BUILDING TO RECEIVE OR CONNECT THE NEW WORK.

MISCELLANEOUS DEMOLITION, CUTTING, ALTERATION, AND REPAIR WORK ON EXISTING SITE AND IN THE EXISTING BUILDING NECESSARY FOR THE COMPLETION OF THE ENTIRE PROJECT.

DISCONNECTING AND RECONNECTION OF ELECTRICAL EQUIPMENT AS REQUIRED BY THE CONSTRUCTION MODIFICATIONS.

EXISTING CONDITIONS: PRIOR TO BID MAKE A DETAILED SURVEY OF THE EXISTING CONDITIONS PERTAINING TO THE WORK. CHECK THE LOCATIONS OF ALL EXISTING STRUCTURES, EQUIPMENT AND WIRING (BRANCH CIRCUITING AND CONTROLS). CHECK FOR ANY HAZARDOUS MATERIALS WHICH MAY REQUIRE SPECIAL HANDLING.

SALVAGE AND DISPOSAL: ALL REMOVED MATERIAL, OTHER THAN ITEMS TO BE REUSED, SHALL BE RETURNED TO THE OWNER OR DISPOSED OF IN ACCORDANCE WITH INSTRUCTIONS FROM THE OWNER'S REPRESENTATIVE. DISPOSAL SHALL BE DONE IN ACCORDANCE WITH EPA AND GOVERNING BODY REQUIREMENTS AND REGULATIONS. CONTRACTOR SHALL PAY FEES AND CHARGES FOR DISPOSAL.

TWO WEEKS PRIOR TO THE START OF ANY WORK, CONTRACTOR SHALL SCHEDULE ALL WORK AND ELECTRICAL SYSTEM OUTAGES WITH OWNER'S WRITTEN APPROVAL.

PROTECT ALL EXISTING POWER, MOTORS AND RELATED EQUIPMENT, ALARM SYSTEM, LIGHTING AND CONTROL SYSTEMS, AND TELEPHONE EQUIPMENT IN PLACE, UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL LEAVE ALL POWER AND SIGNAL CIRCUITS ENGRAZED, VIA JUNCTION BOX, TO DEVICES IN AREAS OUTSIDE OF DEMOLITION AREA EXCEPT SYSTEMS ARE ROUTED THROUGH DEMOLITION AREA.

1 MECHANICAL EQUIPMENT ELECTRICAL DEMOLITION PLAN (BLDG'S B, C, D, & E)
SCALE: 1/8"=1'-0"

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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION
815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:

PROJECT NO: 118934

DRAWN BY: VPZ

CHK'D BY: DF

ISSUE DATE: 3/3/2020

SHEET TITLE
**MECHANICAL
EQUIPMENT
ELECTRICAL
DEMOLITION
PLAN (BLDG'S
B, C, D, & E)**

SHEET NUMBER

E800

DSA SUBMITTAL SET

5. FIELD VERIFY MECHANICAL EQUIPMENT LOCATIONS.
6. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES.
7. THE COORDINATION OF ALL ROOF PENETRATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
8. PROVIDE ROOF JACKS AND PROTECTIVE FLASHING TO PROVIDE TO A LEAK FREE CONDITION.
9. THE FINAL CONNECTIONS TO EQUIPMENT SHALL BE LIQUID TIGHT FLEXIBLE METAL CONNECT. INSTALL WIRE TO PROVIDE TO PROPERLY SIZED AND RATED TRANSMISSION. SUPPORT SHALL BE PER THE NATIONAL ELECTRICAL CODE.
10. PROVIDE WEATHERPROOF AND EXTERIOR RATED DEVICES IN ALL EXTERIOR AREAS.
11. PROVIDE ALL DEVICES AND CONNECTIONS TO MEET ALL MECHANICAL AND ELECTRICAL SHOP DRAWINGS AND APPROVED SUBMITTALS.
12. ALL DISCONNECTS SHALL BE MOUNTED ON UNEXPOSED WALLS OR CEILING.
13. CONTRACTOR SHALL VERIFY LOCATION AND REQUIREMENTS OF ALL ELECTRICAL DEVICES PRIOR TO INSTALLATION.
14. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR ALL SHORT CIRCUIT, OVERCURRENT AND EXCEED RATING INDICATED ON DRAWINGS.
15. ALL WIRING MUST BE INSTALLED IN ACCORDANCE TO ALL DEVIATIONS FROM APPROVED PLAN CHECK TO PREVENT DAMAGE TO THE BUILDING.
16. EACH DISCONNECT OR STARTER AND A SPARE SET OF FUSES SHALL BE CONTAINER PROVIDED.
17. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AND PULL BOXES TO BE PROVIDED BY THE OWNER PER CONDUCTOR MANUFACTURERS REQUIREMENTS.
18. CONTRACTOR SHALL PERFORM ALL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
19. 3/4" CONDUIT MINIMUM. UON.
20. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDITIONS.
21. VERIFY AND PROVIDE CONTROLS TO ALL UNITS, INCLUDING CONTRACTOR APPROVED SHOP DRAWINGS AND SUBMITTALS.



- 1 PANEL LOCATED ON ROOF. EXACT LOCATION SHALL BE VERIFIED IN THE FIELD.
- 2 SEE ELECTRICAL SCHEDULE FOR MECHANICAL EQUIPMENT SHOP DRAWINGS & SUBMITTALS, ETC. REQUIREMENTS.
- 3 1/2" C. & C. B. CABLE TO HVAC CONTROL VERIFY & PROVIDE MECHANICAL CONTRACTOR'S APPROVED SHOP DRAWINGS & SUBMITTALS.
- 4 PROVIDE AS BOX WITH SINGLE GANGL PLASTER RING & 1/2" C. TO POINT OF CONTROL. VERIFY & PROVIDE MECHANICAL CONTRACTOR'S APPROVED SHOP DRAWINGS & SUBMITTALS. COORDINATE EXACT LOCATION WITH MECHANICAL.
- 5 PROVIDE LIQUIDITE (LMC) 3/4" C.
- 6 PROVIDE ALL REQUIRED CONDUIT & CONDUCTORS TO CONNECT POWER FROM OUTDOOR UNIT TO INDOOR UNIT. VERIFY & PROVIDE MECHANICAL CONTRACTOR'S APPROVED SHOP DRAWINGS & SUBMITTALS.



1. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES REQUIRING ELECTRICAL CONNECTION TO THE BUILDING ELECTRICAL SYSTEM AND FINGER.
2. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCLUDING CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP, PROVIDE CONDUIT SCHEDULES AND FINGER, AS INDICATED ON DRAWINGS. EVIDENCE OF RECORD MUST BE SUBMITTED TO THE ARCHITECT. DEVIATIONS FROM APPROVED BLUE CHECK (PERMIT SET) DRAWINGS.
3. COORDINATE WORK WITH OTHER TRADES, OBTAIN ALL NECESSARY PERMITS, AND VERIFY LOCATION AND WIRING OF ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING DEVICES. VERIFY WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
4. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR SCHEDULES AND CONDUIT SCHEDULES, FOR THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
5. 3/4" CONDUIT MINIMUM, UNLESS.
6. PROVIDE CODE SIZE EQUIPMENT GROUNDING CONDUCTOR IN ALL OCCUPIED CONDUTS.
7. PROVIDE CONTROLS FOR MECHANICAL EQUIPMENT PER MECHANICAL SCHEDULES, INCLUDING LOCATION AND REQUIREMENTS OF MECHANICAL EQUIPMENT ON MECHANICAL SCHEDULES.
8. VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
9. ALL CONDUIT RUNS SHALL BE CONCEALED IN WALLS OR ROUTED ABOVE THE CEILING/ACCESSIBLE CEILING SPACE.
10. ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED BY APPROVED OCCUPANCY PENETRATION RATED MOUNTING FRESTER SYSTEM EQUAL TO OR GREATER THAN THE WALLS THROUGH WHICH THEY PENETRATE.
11. VERIFY LOCATION OF ALL RECEPTACLES AT COUNTER TOPS SHALL BE VERIFIED WITH OWNER/ARCHITECT PRIOR TO INSTALLATION.
12. PROVIDE 60" TYPE RECEPTACLE WITHIN 6 FEET OF ANY SINK.
13. CONTRACTOR SHALL PROVIDE A PERMANENT MARKING IN THE RECEPTACLE IDENTIFYING THE TYPE OF THE RECEPTACLES FROM THE UNCONTROLLED RECEPTABLES. VERIFY ACCEPTABLE MEANS OF PERMANENT MARKING WITH THE ARCHITECT.

DEMOLITION LEGEND	
(X)	EXISTING LIGHT FIXTURE, SMITH, RECEPTACLE DEVICE, PANEL, TRANSFORMER, ETC., SHALL BE REMOVED IN PLACE IF DISTURBED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS IN ORDER TO RECONNECT, AS REQUIRED.
(R)	CONTRACTOR SHALL REMOVE RECEPTACLE, SMITH, LIGHT FIXTURE, HVAC EQUIPMENT, ELECTRICAL EQUIPMENT, ETC. REMOVE ALL ABANDONED RACEWAY AND BRANCH CIRCUIT CONDUITS BACK TO NEAREST UPSTREAM DEVICE OR PANELBOARD. IF DOWNSTREAM DEVICES ARE DISTURBED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO RECONNECT, AS REQUIRED.
(RP)	CONTRACTOR SHALL DISCONNECT AND REMOVE RECEPTACLE, SMITH, OR LIGHT FIXTURE. PROTECT EXISTING OUTLET BOX, RACEWAY AND BRANCH CIRCUIT CONDUITS IN PLACE. RECONNECT NEW DEVICE IN SAME LOCATION. THE EXISTING BRANCH CIRCUIT, POWER AND SIGNAL PLAN OR LIGHTING PLAN FOR MORE INFORMATION.
(RL)	RELOCATE LIGHT FIXTURE, CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. RETAIN LIGHT FIXTURE FOR RELOCATION AND REUSE. SEE LEGEND FOR WORKER LOCATIONS. REPLACE ABANDONED RACEWAY & BRANCH CIRCUIT CONDUITS, REPLACE ANY BROKEN LAMP IN LIGHT FIXTURE.

ELECTRICAL SCHEDULE FOR MECHANICAL EQUIPMENT												
TAG #	DESCRIPTION	H.P.	MCA	MOCP	VOLTAGE	PHASE	NEMA STARTER SIZE	DISCONNECT NEMA 3R	RECOMMENDED FUSE SIZE	REMARKS	PANEL/CIRCUIT NO.	FEEDER
AC 1	ROOFTOP HVAC UNIT		19.4	30	208	1		30A 2P 240V	LPN-RK-30SP		H-23,25	3/4" C. 3#8 & 1#8 GND
AC 2	ROOFTOP HVAC UNIT		26.3	40	208	3		60A 3P 240V	LPN-RK-40SP		SEE PLANS	1" C. 3#6 & 1#8 GND
AC 3	ROOFTOP HVAC UNIT		1.3	15	480	3		30A 3P 600V	LPN-RK-15SP		SEE PLANS	3/4" C. 3#10 & 1#10 GND
AC 4	ROOFTOP HVAC UNIT		25	30	480	3		30A 3P 600V	LPN-RK-30SP		DBH	REFER TO SINGLE LINE DIAGRAM
AC 5	ROOFTOP HVAC UNIT		33.9	45	480	3		60A 3P 600V	LPN-RK-45SP		DBH	REFER TO SINGLE LINE DIAGRAM
HP 1	HEAT PUMP		30	45	208	1		60A 2P 240V	LPN-RK-45SP			
FC 1	FAN COIL		0.2	15	208	1				UNIT POWERED BY HP-1		
FC 2	FAN COIL		0.2	15	208	1				UNIT POWERED BY HP-1		
FC 3	FAN COIL		0.2	15	208	1				UNIT POWERED BY HP-1		
EF 1	EXHAUST FAN (ROOF)				120	1			MOTOR RATED SWITCH			
EF 2	EXHAUST FAN (ROOF)				120	1			MOTOR RATED SWITCH			

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OPSC or OSHPD PROJ. NO.

PROJECT NO: 118934

DRAWN BY: VR7

CHK'D BY:	DE
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ISSUE DATE: 3/3/2011

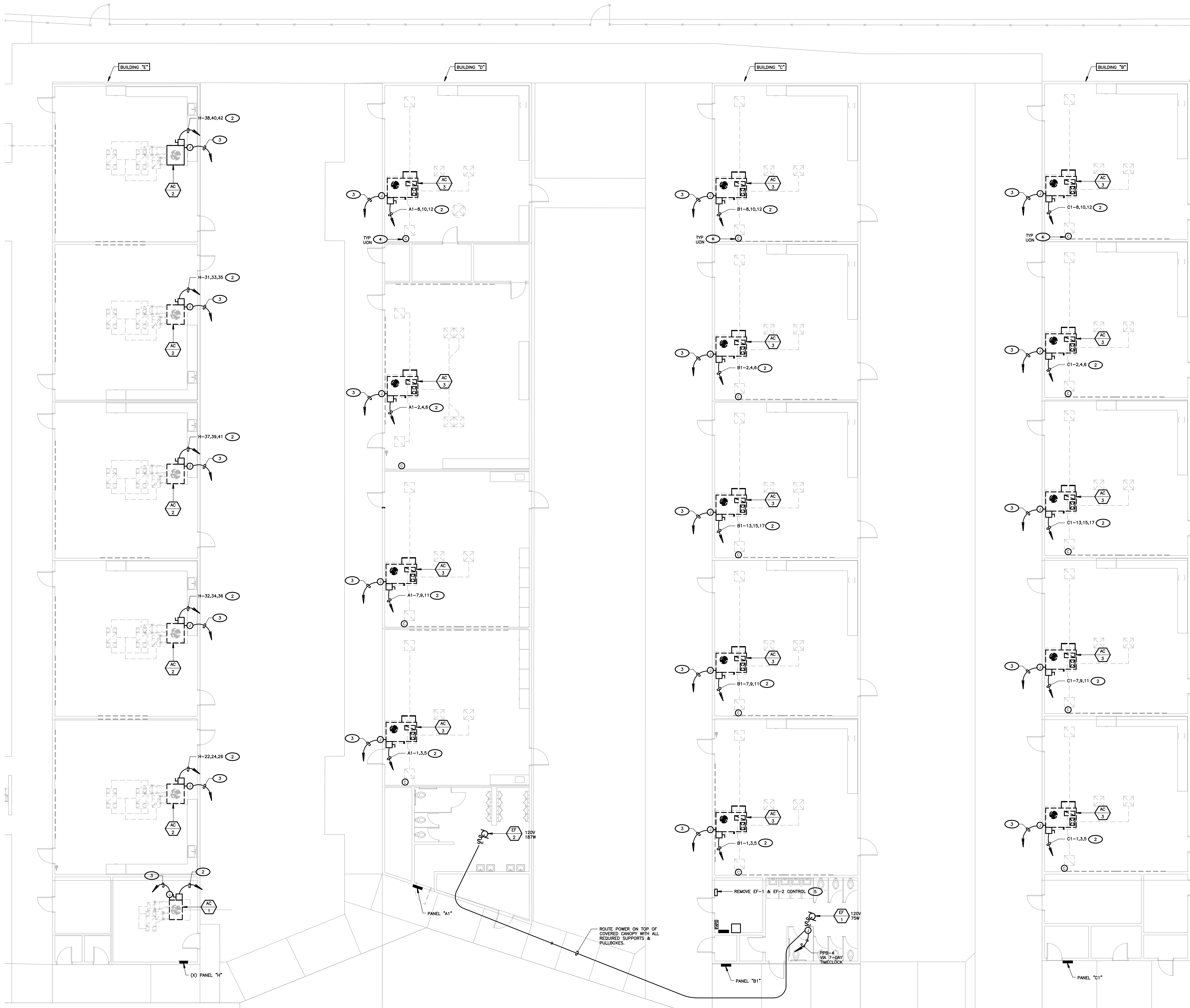
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BLDG. H MECHANICAL EQUIPMENT ELECTRICAL DEMOLITION & POWER PLAN

SHEET NUMBER

E801

DSA SUBMITTAL SET



POWER SHEET NOTES

1. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN AND FINISH.
2. CONTRACTOR SHALL IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
3. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
4. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
5. 3/4" CONDUIT MINIMUM, UON.
6. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
7. PROVIDE CONTROLS FOR MECHANICAL EQUIPMENT PER MECHANICAL DOCUMENTS, VERIFY LOCATION AND REQUIREMENTS OF MECHANICAL EQUIPMENT ON MECHANICAL DOCUMENTS.
8. VERIFY LOCATION OF ALL DEVICES ON ARCHITECTURAL PLANS.
9. ALL CONDUIT RUNS SHALL BE CONCEALED IN WALLS OR ROUTED ABOVE THE CEILING/ACCESSIBLE CEILING SPACE.
10. ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED FROM THE SPREAD OF FIRE WITH AN APPROVED FIRESTOP SYSTEM EQUAL TO OR GREATER THAN THE RATING OF THE WALL.
11. MOUNTING HEIGHT OF ALL RECEPTACLES AT COUNTER TOPS SHALL BE VERIFIED WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
12. PROVIDE GFCI TYPE RECEPTACLE WITHIN 6 FEET OF ANY SINK.
13. CONTRACTOR SHALL PROVIDE A PERMANENT MARKING IN ORDER TO DIFFERENTIATE OCCUPANT CONTROLLED RECEPTACLES FROM THE UNCONTROLLED RECEPTACLES. VERIFY ACCEPTABLE MEANS OF PERMANENT MARKING WITH THE AIA.

MECHANICAL PLAN SHEET NOTES

1. FIELD VERIFY MECHANICAL EQUIPMENT LOCATIONS.
2. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES.
3. THE LOCATION OF ALL ROOF PENETRATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
4. PROVIDE ROOF JACKS AND PROPERLY SEAL ALL ROOF PENETRATIONS TO A LEAK FREE CONDITION.
5. THE FINAL CONNECTIONS TO EQUIPMENT SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT. INSTALL WITH ENOUGH SLACK TO PRECLUDE VIBRATION TRANSMISSION. SUPPORT SHALL BE PER THE NATIONAL ELECTRICAL CODE.
6. PROVIDE WEATHERPROOF AND EXTERIOR RATED DEVICES IN ALL EXTERIOR AREAS.
7. PROVIDE ALL DEVICES AND CONNECTIONS AS REQUIRED ON MECHANICAL CONTRACTOR SHOP DRAWINGS AND APPROVED SUBMITTALS.
8. ALL DISCONNECTS SHALL BE MOUNTED ON UNISTRUT ON MECHANICAL (HVAC) UNIT.
9. CONTRACTOR SHALL VERIFY LOCATION AND REQUIREMENTS OF ALL ELECTRICAL DEVICES PRIOR TO BID, ROUGH-IN, AND INSTALLATION.
10. CONTRACTOR SHALL IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
11. EACH DISCONNECT OR STARTER AND A SPARE SET OF FUSES SHALL BE CONTRACTOR PROVIDED.
12. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
13. 3/4" CONDUIT MINIMUM, UON.
14. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
15. VERIFY AND PROVIDE CONTROLS TO ALL UNITS, PER MECHANICAL CONTRACTOR APPROVED SHOP DRAWINGS AND SUBMITTALS.

KEY NOTES

- (NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)
1. PANEL LOCATED ON ROOF. EXACT LOCATION SHALL BE VERIFIED IN THE FIELD.
 2. SEE ELECTRICAL SCHEDULE FOR MECHANICAL EQUIPMENT FOR DISCONNECT, FEEDER, FUSES, ETC. REQUIREMENTS.
 3. 1/2" C. & CABLE TO HVAC CONTROL. VERIFY & PROVIDE PER MECHANICAL CONTRACTOR'S APPROVED SHOP DRAWINGS & SUBMITTALS.
 4. PROVIDE 45 BOX WITH SINGLE GANG PLASTER RING & 1/2" CO. TO POINT OF CONTROL. VERIFY & PROVIDE PER MECHANICAL CONTRACTOR'S APPROVED SHOP DRAWINGS & SUBMITTALS. COORDINATE EXACT LOCATION WITH MECHANICAL.
 5. PROVIDE 7-DAY TIMECLOCK FOR BATHROOM EXHAUST FAN CONTROL. COORDINATE ALL WORK & LOCATIONS WITH MECHANICAL.

AGENCY INFORMATION:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 03-120102 INC.
REVIEWED FOR
SS ☐ FLS ☐ ACS ☐
DATE: 03/27/2020

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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION
815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:	
PROJECT NO:	118934
DRAWN BY:	VPZ
CHKD BY:	DF
ISSUE DATE:	3/3/2020

SHEET TITLE
MECHANICAL EQUIPMENT POWER PLAN BLDG'S B, C, D, & E

SHEET NUMBER

E802

DSA SUBMITTAL SET

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-02-E

Indoor Lighting - Lighting Controls

(Page 1 of 3)

Project Name: Bessie Owens Junior High Modernization

Date Prepared: 11-18-2019

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
<input type="radio"/>	<input checked="" type="radio"/>	Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
<input type="radio"/>	<input checked="" type="radio"/>	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(f).
<input type="radio"/>	<input checked="" type="radio"/>	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
<input type="radio"/>	<input checked="" type="radio"/>	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
<input checked="" type="radio"/>	<input type="radio"/>	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
<input checked="" type="radio"/>	<input type="radio"/>	All luminaires shall be functionally controlled with manual ON and OFF lighting controls in accordance with Section 130.1(a).
<input type="radio"/>	<input checked="" type="radio"/>	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled in accordance with Section 130.1(a)(4).
<input checked="" type="radio"/>	<input type="radio"/>	The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
<input checked="" type="radio"/>	<input type="radio"/>	All installed indoor lighting shall be equipped with controls that meet the applicable Shut-Off control requirements in Section 130.1(c).
<input checked="" type="radio"/>	<input type="radio"/>	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
<input type="radio"/>	<input checked="" type="radio"/>	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
<input checked="" type="radio"/>	<input type="radio"/>	Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-off controls, and demand responsive controls.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

January 2016

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-02-E

Indoor Lighting - Lighting Controls

(Page 2 of 3)

Project Name: Bessie Owens Junior High Modernization

Date Prepared: 11-18-2019

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:

☒ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule		Standards Complying With ¹ (✓ all that apply, or leave empty if Exempted)								PAF Credit Calculation ²		Test Required		Field Inspection	
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
Location in Building	Type/Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	\$130.1(a)	\$130.0(b)	\$130.1(c)	\$130.1(d)	\$130.1(e)	\$140.6(a)(2)	\$140.6(d)					Pass	Fail
Classrooms	Dimmer	7	•	•								0	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
Classrooms	Switch/scene control	2										0	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
Classrooms	Corner mount Occupancy Sensor	6			•							0	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
												0	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
												0	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
Control Credit PAGE TOTAL (Sum of Column 13):										0					

IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 13):

Enter Control Credit total into NRCC-LTI-01-E, Page 1.

1. \$130.1(a) = Manual area controls; \$130.0(b) = Multi Level; \$130.1(c) = Auto Shut-Off; \$130.1(d) = Mandatory Daylight; \$130.1(e) = Demand Responsive; \$140.6(d) = Additional lighting controls installed to earn a PAF; \$140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

January 2016

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-02-E

Indoor Lighting - Lighting Controls

(Page 3 of 3)

Project Name: Bessie Owens Junior High Modernization

Date Prepared: 11-18-2019

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Dale Ferranti	Documentation Author Signature: Dale Ferranti
Company: Ferranti Engineering	Signature Date: 10-17-2019
Address: 1211 Maricopa Hwy #250	CEA Certification Identification (if applicable):
City/State/Zip: Ojai/CA/93023	Phone: (805) 705-4772

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Dale Ferranti	Responsible Designer Signature: Dale Ferranti
Company: Ferranti Engineering	Signature Date: 10-17-2019
Address: 1211 Maricopa Hwy #250	License#: E17524
City/State/Zip: Ojai/CA/93023	Phone: (805) 705-4772

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

January 2016

STATE OF CALIFORNIA
INDOOR LIGHTING

CEC-NRCC-LTI-01-E (Revised 04/16)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-01-E

Indoor Lighting

(Page 4 of 6)

Project Name: Bessie Owens Junior High Modernization

Date Prepared: 11-18-2019

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

- This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
- This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
- Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule		Office Installed Portable Luminaire W/ft ²				Office Location		Field Inspector	
01	02	03	04	05	06	07	08	09	10
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Installed portable luminaire watts in this office (G02 x G03)	Number of Luminaires in this office (G04 / G05)	Square Feet of this office (G06 x G07)	Watts per square foot (G06 / G05)	If G06 < 0.3, enter zero; If G06 > 0.3, (G06-0.3)	(G05 x G07)	Identify Office area in which these portable luminaires are installed	Pass Fail
		0					0		<input type="radio"/> <input type="radio"/>
		0					0		<input type="radio"/> <input type="radio"/>
		0					0		<input type="radio"/> <input type="radio"/>
		0					0		<input type="radio"/> <input type="radio"/>
		0					0		<input type="radio"/> <input type="radio"/>
Total installed portable luminaire watts that are greater than 0.3 W/ft ² per office:							Enter sum total of all pages into NRCC-LTI-01-E, Page 2		

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING

CEC-NRCC-LTI-01-E (Revised 04/16)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-01-E

Indoor Lighting

(Page 5 of 6)

Project Name: Bessie Owens Junior High Modernization

Date Prepared: 11-18-2019

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

☒ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts				Location		Field Inspector ¹	
01	02	03	04	05	06	07	08	09	10
Name or Tag	Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32TR, one dimmable electronic ballast)	Watts per Luminaire	How wattage was determined		Number of Luminaires	Total Installed Watts in this area (Watts x No.)	Primary Function area in which these luminaires are installed	Pass	Fail
			CCC-Exempt from Title 24	According to §130.1(b)					
P	PENDANT LED, ONE DRIVER	107	<input type="checkbox"/>	<input checked="" type="checkbox"/>	24	2568	multi-purpose 803, 804	<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>		0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>		0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>		0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>		0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>		0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>		0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>		0		<input type="radio"/>	<input type="radio"/>
INSTALLED WATTS PAGE TOTAL:						2568	Enter sum total of all pages into NRCC-LTI-01-E, Page 2		

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING

CEC-NRCC-LTI-01-E (Revised 04/16)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-01-E

Indoor Lighting

(Page 2 of 6)

Project Name: Bessie Owens Junior High Modernization

Date Prepared: 11-18-2019

A. General Information

Climate Zone:	6	Conditioned Floor Area:	2977 sq. ft.
Unconditioned Floor Area:			
Building Type:	<input checked="" type="checkbox"/> Schools	<input checked="" type="checkbox"/> Nonresidential	<input type="checkbox"/> High-Rise Residential
	<input type="checkbox"/> Relocatable Public Schools	<input checked="" type="checkbox"/> Conditioned Spaces	<input type="checkbox"/> Hotel/Motel
Phase of Construction:	<input type="checkbox"/> New Construction	<input type="checkbox"/> Addition	<input checked="" type="checkbox"/> Alteration
Method of Compliance:	<input type="checkbox"/> Complete Building	<input checked="" type="checkbox"/> Area Category	<input type="checkbox"/> Tailored
Project Address: 815 Potomac Ave, Bakersfield, CA 93307			

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
<input type="radio"/>	<input type="radio"/>	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
<input type="radio"/>	<input type="radio"/>	NRCC-LTI-03-E	Indoor Lighting Power Allowance
<input type="radio"/>	<input type="radio"/>	NRCC-LTI-04-E	Tailored Method Worksheets
<input type="radio"/>	<input type="radio"/>	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
<input type="radio"/>	<input type="radio"/>	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

April 2016

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

Indoor Lighting Power for Conditioned Spaces		Indoor Lighting Power for Unconditioned Spaces	
	Watts		Watts
01	Installed Lighting NRCC-LTI-01-E, Table H, page 5	Installed Lighting NRCC-LTI-01-E, Table H, page 5	
02	Portable Only for Offices		
03	Minus Lighting Control Credits	Minus Lighting Control Credits	
04	Adjusted Installed Lighting Power (row 1 plus row 2 minus row 3)	Adjusted Installed Lighting Power (row 1 minus row 3)	
Complies ONLY if Installed < Allowed (Box 04 < Box 05)		Complies ONLY if Installed < Allowed (Box 04 < Box 05)	
Allowed Lighting Power Conditioned NRCC-LTI-03-E, page 1		Allowed Lighting Power Unconditioned NRCC-LTI-03-E, page 1	
Alterations with replacement luminaires that have at least 50/55% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		Alterations with replacement luminaires that have at least 50/55% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2	

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-01-E - Must be submitted for all buildings	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	<input type="checkbox"/> Field Inspector

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

April 2016

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	FORM/TITLE	
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	<input type="checkbox"/> Field Inspector
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	<input type="checkbox"/> Field Inspector

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

☒ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

- The actual Indoor Lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
- When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
- When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
- Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

April 2016

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BAKERSFIELD CITY SCHOOL DISTRICT



BESSIE OWENS JUNIOR HIGH MODERNIZATION



815 EUREKA ST, BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:	
PROJECT NO:	118934
DRAWN BY:	VPZ
CHKD BY:	DF
ISSUE DATE:	3/3

STATE OF CALIFORNIA INDOOR LIGHTING POWER ALLOWANCE <small>CEC/ARTC-170-5 (Revised 04/15)</small>		CALIFORNIA ENERGY COMMISSION 	
CERTIFICATE OF COMPLIANCE		NRCC-LTI-03-E	
Certificate of Compliance - Indoor Lighting Power Allowance		(Page 4 of 4)	
Project Name: <u>Bessie Owens Junior High Intermediate</u>		Date Prepared: <u>11-18-2019</u>	

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: <u>Dale Ferranti</u> Company: <u>Ferranti Engineering</u> Address: <u>1211 Maricopa Hwy #750</u> City/State/Zip: <u>Cajal/CA/93023</u>	Documentation Author Signature: <u>Dale Ferranti</u> Signature Date: <u>10-17-2019</u> CEA Certification Identification (if applicable): Phone: <u>(805) 705-4772</u>
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer). 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.	
Responsible Designer Name: <u>Dale Ferranti</u> Company: <u>Ferranti Engineering</u> Address: <u>1211 Maricopa Hwy #750</u> City/State/Zip: <u>Cajal/CA/93023</u>	Responsible Designer Signature: <u>Dale Ferranti</u> Date Signed: <u>10-17-2019</u> License: <u>E17524</u> Phone: <u>(805) 705-4772</u>

CERTIFICATE OF COMPLIANCE Certificate of Compliance - Indoor Lighting Power Allowance <small>(Print Name) Besse Owens Junior High Modernization</small>		NRCCLTI-03-E (Page 2 of 4)		
A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for: <input checked="" type="checkbox"/> CONDITIONED spaces <input type="checkbox"/> UNCONDITIONED spaces				
C-2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE				
Do not include portable lighting for offices. Portable lighting for offices shall be documented only in Section G of NRCCLTI-01-E. Separately list lighting for each primary function area as defined in §100.1 of the Standards.				
01		X	02	
AREA CATEGORY (From §140.6 Table 140.6-C)	Primary Function Area per Table 140.6-C		WATTS PER ft²	AREA (ft²)
MULTI-PURPOSE 803 (BLDG H)	MULTI-PURPOSE AREA	1.2	1109	1330.8
MULTI-PURPOSE 804 (BLDG H)	MULTI-PURPOSE AREA	1.2	1868	2241.6
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
TOTALS			2977	
WATTS				

AGENCY INFORMATION:		<div>IDENTIFICATION STAMP DIV. OF THE STATE ARCHIVES APP. 03-120102 INC REVIEWED FOR SS <input type="checkbox"/> FLS <input type="checkbox"/> AC <input type="checkbox"/> DATE: 03/27/2020</div>	
SEAL			
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REVISONS			
NO.	DATE SUBMITTED	DATE APPROVED	DESCRIPTION
CONSULTANT			
<div>FERRANTI ENGINEERING CONSULTING ELECTRICAL ENGINEERS 1211 MARICOPA HWY, SUITE 250 OJAI, CA 93023 (805) 705-4772 DALEFERRANTI@LIVE.COM</div> <div></div>			
PRIME CONSULTANT			
<div><div>IBI</div><div>ARCHITECTURE PLANNING San Luis Obispo 4119 Broad Street, Suite 210 San Luis Obispo, CA 93401 805.546.0433 fax: 805.546.0504 ibigroup.com</div></div>			
<div>BAKERSFIELD CITY SCHOOL DISTRICT</div> <div></div> <div>BESSIE OWENS JUNIOR HIGH MODERNIZATION 815 EUREKA ST. BAKERSFIELD, CA 93305</div>			
OPSC or OSHPD PROJ. NO:			
PROJECT NO:		118934	
DRAWN BY:		VPZ	
CHKD BY:		DF	
ISSUE DATE:		3/3/2020	
SHEET TITLE			
INDOOR TITLE 24 DOCUMENTS BLDG H			
SHEET NUMBER			
E901			

STATE OF CALIFORNIA OUTDOOR LIGHTING <small>DEC-2013/CA TOC 11-15 (Revised 04-18)</small>	CALIFORNIA ENERGY COMMISSION NRCC-LTO-01 NRCC Certification of Compliance Outdoor Lighting
Project Name: Bessie Owens Junior High Modernization	
Date Prepared: 11-18-2019	
Page 4 of 4	

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Dale Ferranti	Documentation Author Signature: Dale Ferranti
Company: Ferranti Engineering	Signature Date: 10-17-2019
Address: 1211 Maricopa Hwy #250	(EA Certification Identification [if applicable])
City/State/Zip: Ojai/CA/93023	Phone: (805) 705-4772

RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California:	
1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer). 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building provides to the building owner at occupancy.	
Responsible Designer Name: Dale Ferranti	Responsible Designer Signature: Dale Ferranti
Company: Ferranti Engineering	Date Signed: 10-17-2019
Address: 1211 Maricopa Hwy #250	License: E17524
City/State/Zip: Ojai/CA/93023	Phone: (805) 705-4772

[illegible]

DSA SUBMITTAL SET

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRCC-LTO-01-E
Outdoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance
April 2016

1. Outdoor Lighting Schedule and Field Inspection Energy Checklist								
Luminaire Schedule		Installed Watts		Location		Cutoff	Field Inspector	
01	02	03	04	05	06	07	08	09
Name or Item Tag	Complete Luminaire Description	Watts per Luminaire	How wattage was determined CEC Default from NAB According to §130.0(c)	Number of Luminaires	Total Installed Watts in this area (§130.0)	Primary Function area in which these luminaires are installed (Outdoor Lighting Zone)	BUG Rating	Pass Fail
P1	Parking lot pole light	270	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	270	UH: UL: FVH: BVH: FH: BH:	<input type="radio"/> <input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>	0	0	UH: UL: FVH: BVH: FH: BH:	<input type="radio"/> <input type="radio"/>
			<input type="checkbox"/>	<input type="checkbox"/>	0	0	UH: UL: FVH: BVH: FH: BH:	<input type="radio"/> <input type="radio"/>
INSTALLED WATTS PAGE TOTAL:						270	Enter sum total of all pages (Sum Total INSTALLED Outdoor lighting wattage) into NRCC-LTO-01-E, Page 1	270

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRCC-LTO-01-E
Outdoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance
April 2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I certify that this Certificate of Compliance documentation is accurate and complete.
Documentation Author Name: Dale Ferranti
Signature Date: 10-17-2019
Address: 1211 Maricopa Hwy #250
City/State/Zip: Ojai/CA/93023
Phone: (805) 705-4772

RESPONSIBLE PERSON'S DECLARATION STATEMENT
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3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.
Responsible Designer Name: Dale Ferranti
Signature Date: 10-17-2019
Address: 1211 Maricopa Hwy #250
City/State/Zip: Ojai/CA/93023
Phone: (805) 705-4772

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRCC-LTO-01-E
Outdoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance
April 2016

A. General Information
Project Address: 815 Eureka St. Bakersfield, CA 93305
Total Illuminated Hardscape Area: 13,355 SQ. FT.
Phase of Construction: ☐ New Construction ☐ Addition ☒ Alteration
Outdoor Lighting Zone (LZ) ☐ LZ-1 ☐ LZ-2 ☒ LZ-3 ☐ LZ-4
I have confirmed with the AHJ which LZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114.

B. Lighting Compliance Documents (check box for each document included)
For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.
☒ NRCC-LTO-01-E Certificate of Compliance
☒ NRCC-LTO-02-E Outdoor Lighting Controls Certificate of Compliance
☒ NRCC-LTO-03-E Outdoor Lighting Power Allowance Certificate of Compliance
☐ NRCC-LTO-04-E Outdoor Lighting Existing Conditions Certificate of Compliance

C. Summary of Allowed Outdoor Lighting Power
01 Sum Total ALLOWED Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1
Alterations with NO increase of connected lighting load may instead use the allowed wattage from NRCC-LTO-04, page 2.
Complies ONLY if Installed (Box 02) ≤ Allowed (Box 01)
02 Sum Total INSTALLED Outdoor Lighting Wattage from NRCC-LTO-01-E, page 3. 702

D. Declaration of Required Installation Certificates
Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify compliance documents are completed and signed.)
☒ NRCC-LTO-01-E - Must be submitted for all buildings ☐ Field Inspector
☒ NRCC-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance. ☐ Field Inspector

E. Declaration of Required Certificates of Acceptance
Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify compliance documents are completed and signed.)
☒ NRCC-LTO-02-A - Must be submitted for outdoor lighting controls. ☐ Field Inspector

F. Schedule of Luminaires Exempt from the Outdoor Lighting Power Requirements in §140.7
01 Name or Symbol
02 Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRCC-LTO-01-E
Outdoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance
April 2016

G. Schedule of Luminaires Exempt from the Cutoff Requirements in §130.2(b)
01 Name or Symbol
02 Description of exempt luminaire in accordance with the exemptions

H. Schedule of Luminaires Exempt from the Outdoor Lighting Control Requirements in §130.2(c)
01 Name or Symbol
02 Description of exempt luminaire in accordance with the exemptions

AGENCY INFORMATION:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 03-120102 INC.
REVIEWED FOR
SS ☐ FLS ☐ ACS ☐
DATE: 03/27/2020

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REVISIONS

NO.	DATE SUBMITTED	DATE APPROVED	DESCRIPTION
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CONSULTANT

FERRANTI ENGINEERING
CONSULTING
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1211 MARICOPA HWY,
SUITE 250
OJAI, CA 93023
(805) 705-4772
DALEFERRANTI@LIVE.COM

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IBI ARCHITECTURE PLANNING
San Luis Obispo
4119 Broad Street, Suite 210
San Luis Obispo, CA 93401
805.546.0433 fax: 805.546.0504
ibigroup.com

BAKERSFIELD CITY SCHOOL DISTRICT

BESSIE OWENS JUNIOR HIGH MODERNIZATION
815 EUREKA ST. BAKERSFIELD, CA 93305

OPSC or OSHPD PROJ. NO:
PROJECT NO: 118934
DRAWN BY: VPZ
CHKD BY: DF
ISSUE DATE: 3/3/2020

SHEET TITLE

OUTDOOR TITLE 24 DOCUMENTS EXISTING PARKING

SHEET NUMBER

E903

DSA SUBMITTAL SET

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2017CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

DSA SUBMITTAL SET

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance August 2016

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance August 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 4 of 6)

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

- This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.

- This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office

- Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/R ²						Office Location	Field Inspector		
01	02	03	04	05	06	07	08	09	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of Luminaires	Installed portable luminaire watts in this office (G02 x G03)	Square feet of this office	Watts per square foot (G04 / G05)	If G06 ≤ 0.3, enter zero; If G06 > 0.3, (G06 ÷ 0.3)	(G05 x G07)	Identify Office area in which these portable luminaires are installed	Pass	Fail
			0				0		<input type="radio"/>	<input type="radio"/>
			0				0		<input type="radio"/>	<input type="radio"/>
			0				0		<input type="radio"/>	<input type="radio"/>
			0				0		<input type="radio"/>	<input type="radio"/>
			0				0		<input type="radio"/>	<input type="radio"/>
Total installed portable luminaire watts that are greater than 0.3 W/R ² per office:								Enter sum total of all pages into NRCC-LTI-01-E, Page 2		

CA Building Energy Efficiency Standards - 2016 Nonresidential ComplianceApril 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 5 of 6)

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

☒ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts				Location	Field Inspector ²	
01	02	03	04	05	06	07	08	
Name or Item Tag	Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32TR, one dimmable electronic ballast)	Watts per Luminaire	How wattage was determined	Number Luminaires	Total Installed Watts in this area (H03 x H05)	Primary Function area in which these luminaires are installed	Pass	Fail
L1	2x4 LED, ONE DRIVER	53	<input type="checkbox"/> CEC Default from M48 <input checked="" type="checkbox"/> According to Manufacturer	228	12084	Classrooms	<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
			<input type="checkbox"/>	0	0		<input type="radio"/>	<input type="radio"/>
INSTALLED WATTS PAGE TOTAL:					12084	Enter sum total of all pages into NRCC-LTI-01-E, Page 2	12084	

CA Building Energy Efficiency Standards - 2016 Nonresidential ComplianceApril 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 6 of 6)

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I, _____, certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Dale Ferranti	Documentation Author Signature: Dale Ferranti
Company: Ferranti Engineering	Signature Date: 10-17-2019
Address: 1211 Maricopa Hwy #250	CEA Certification Identification (if applicable):
City/State/Zip: Ojai/CA/93023	Phone: (805) 705-4772

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
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- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
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Responsible Designer Name: Dale Ferranti	Responsible Designer Signature: Dale Ferranti
Company: Ferranti Engineering	Date Signed: 10-17-2019
Address: 1211 Maricopa Hwy #250	License: C17524
City/State/Zip: Ojai/CA/93023	Phone: (805) 705-4772

CA Building Energy Efficiency Standards - 2016 Nonresidential ComplianceApril 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 1 of 6)

A. General Information

Climate Zone: 6 Conditioned Floor Area: 17380 sq. ft. Unconditioned Floor Area:

Building Type: ☒ Nonresidential ☐ High-Rise Residential ☐ Hotel/Motel

☒ Schools ☐ Relocatable Public Schools ☒ Conditioned Spaces ☐ Unconditioned Spaces

Phase of Construction: ☐ New Construction ☐ Addition ☐ Alteration

Method of Compliance: ☐ Complete Building ☒ Area Category ☐ Tailored

Project Address: 815 Potomac Ave. Bakersfield, CA 93307

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-03-E	Indoor Lighting Power Allowance
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-04-E	Tailored Method Worksheets
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

CA Building Energy Efficiency Standards - 2016 Nonresidential ComplianceApril 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 2 of 6)

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

Indoor Lighting Power for Conditioned Spaces		Indoor Lighting Power for Unconditioned Spaces	
	Watts		Watts
01	Installed Lighting NRCC-LTI-01-E, Table H, page 5 Portable Only for Offices NRCC-LTI-01-E, Table G, page 4 Minus Lighting Control Credits NRCC-LTI-02-E, page 2	+	12084
02		+	0
03		-	0
04	Adjusted Installed Lighting Power (row 1 minus row 2 minus row 3)	=	12084
Complies ONLY if Installed ≤ Allowed (Box 04 < Box 05)		Complies ONLY if Installed ≤ Allowed (Box 04 < Box 05)	
05	Allowed Lighting Power Conditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/55% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2	20856	Unconditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/55% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-01-E - Must be submitted for all buildings	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	<input type="checkbox"/> Field Inspector

CA Building Energy Efficiency Standards - 2016 Nonresidential ComplianceApril 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: Bessie Owens Junior High Modernization
Date Prepared: 11-18-2019

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-01-E
(Page 3 of 6)

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	FORM/TITLE	
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	<input type="checkbox"/> Field Inspector
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	<input type="checkbox"/> Field Inspector
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	<input type="checkbox"/> Field Inspector

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

☒ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

☐ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.

☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.

☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines

☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

CA Building Energy Efficiency Standards - 2016 Nonresidential ComplianceApril 2016

AGENCY INFORMATION:

SEAL

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