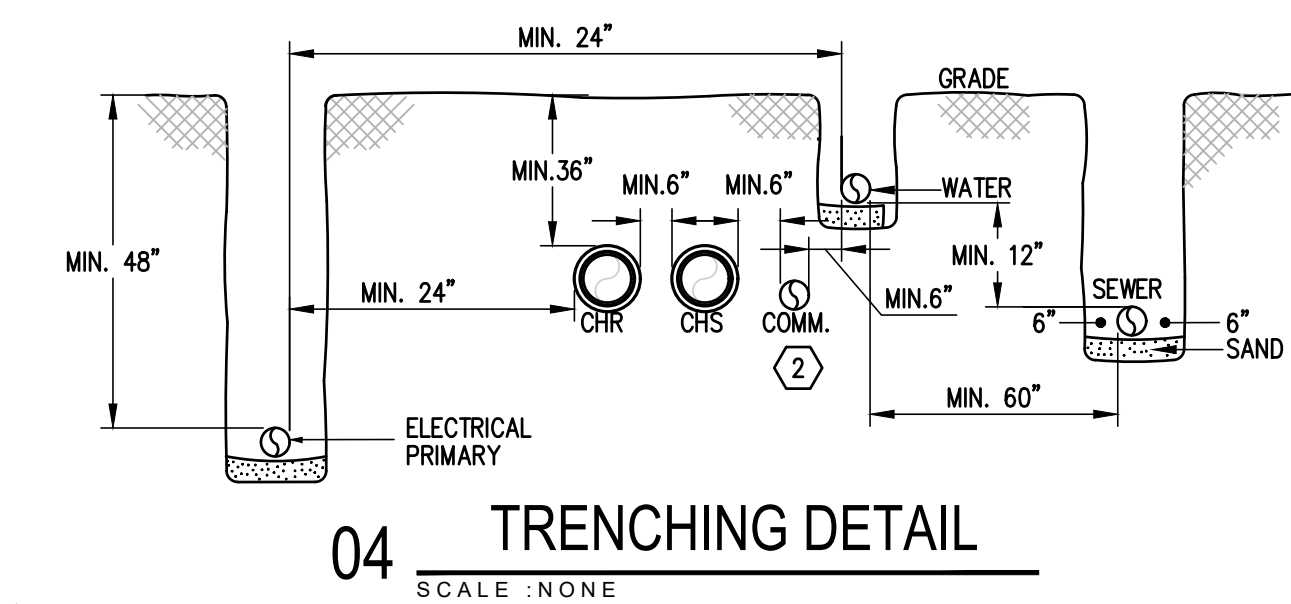
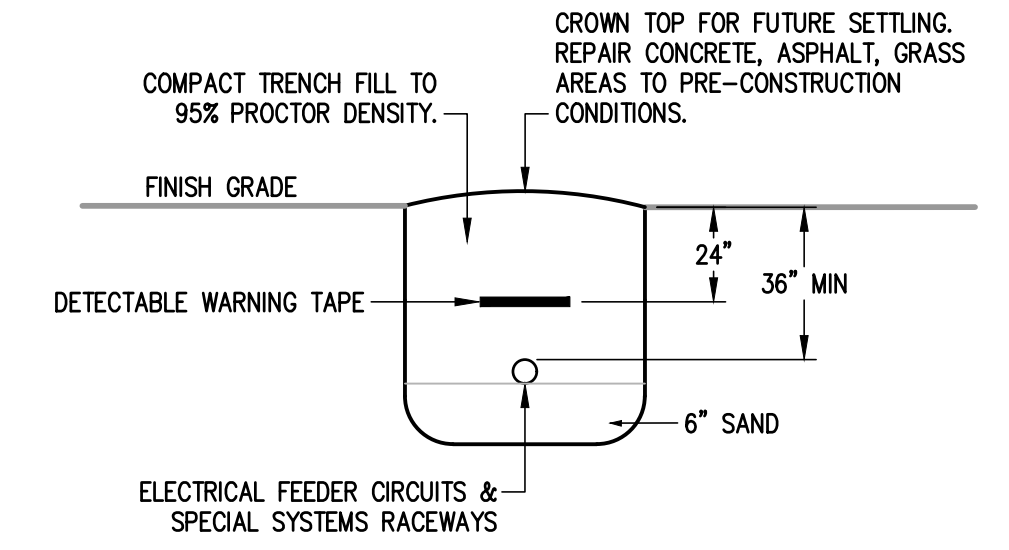


CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.
COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.
MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.
MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIMUM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.



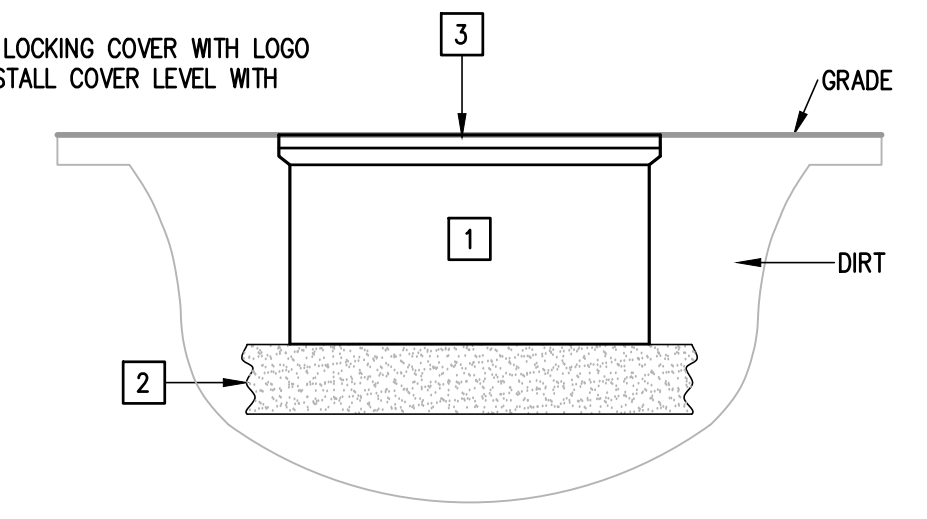
04 TRENCHING DETAIL
SCALE: NONE



03 BURIAL DETAIL FOR ELECTRICAL RACEWAYS
SCALE: NONE

KEYED NOTES:

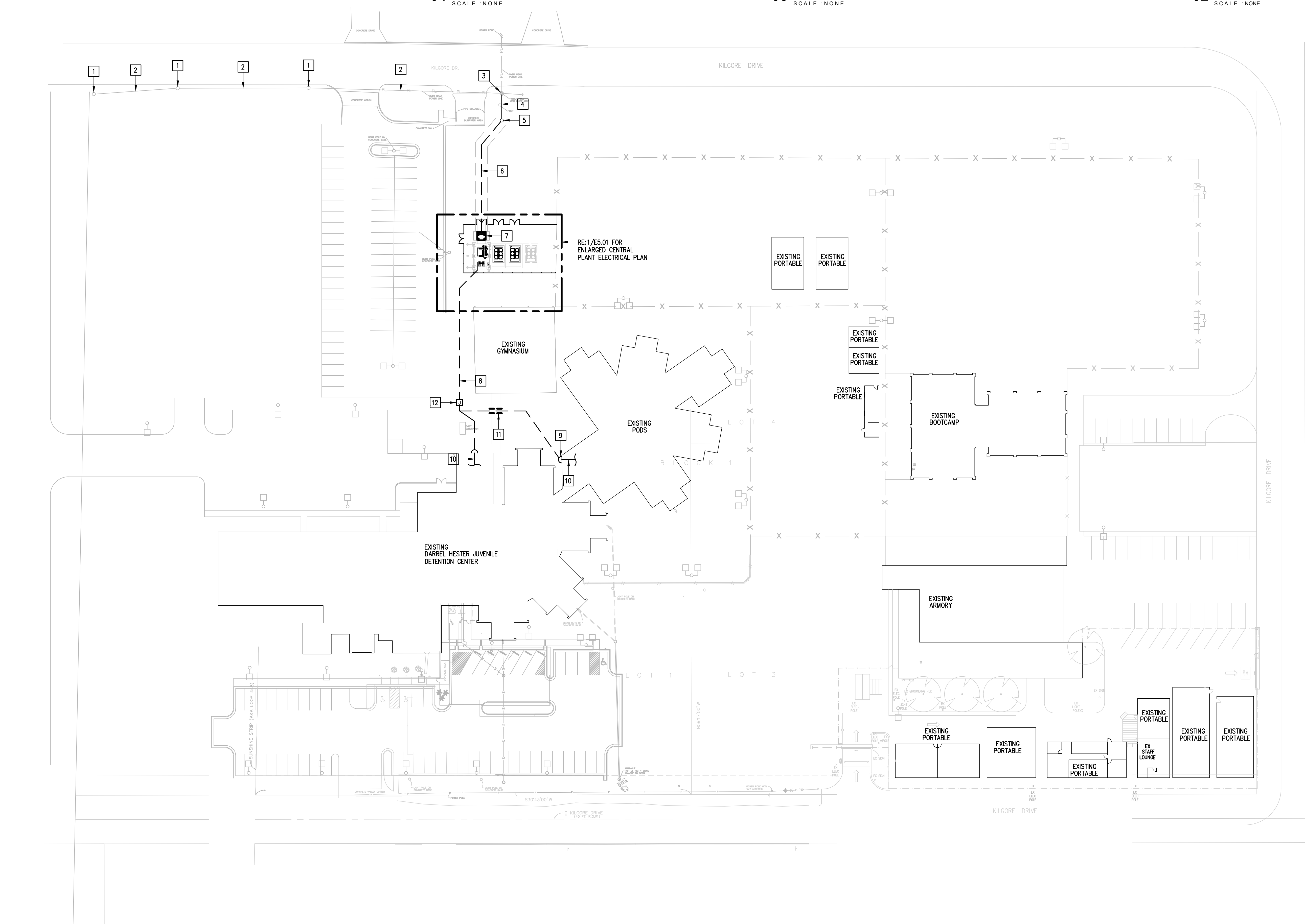
- 1 PROVIDE POLYMER CONCRETE PULL BOX TIER 22 RATED, COMPLYING WITH ANSI/SCTE 77 AND NEC 314.30.
- 2 PROVIDE 8" OF GRAVEL OR CRUSHED ROCK.
- 3 PROVIDE ONE PIECE LOCKING COVER WITH LOGO TIER 22 RATED. INSTALL COVER LEVEL WITH GRADE.



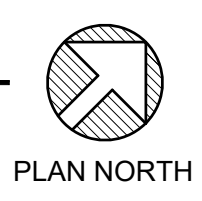
02 POLYMER CONCRETE PULLBOX DETAIL
SCALE: NONE

ELECTRICAL KEYED NOTES:

- 1 APPROXIMATE LOCATION OF EXISTING ELECTRIC UTILITY POWER POLE TO REMAIN.
- 2 EXISTING ELECTRIC 3Ø UTILITY OVERHEAD SERVICE LINES TO REMAIN.
- 3 APPROXIMATE LOCATION OF EXISTING ELECTRIC UTILITY TRANSFORMER POWER POLE TO REMAIN.
- 4 EXTEND ELECTRIC 3Ø UTILITY OVERHEAD SERVICE LINES.
- 5 PROPOSED LOCATION OF NEW ELECTRIC UTILITY POWER POLE WITH RISER DIP POLE.
- 6 PROVIDE NEW UNDERGROUND PRIMARY ELECTRIC CONDUITS. CONDUCTORS PROVIDED BY ELECTRICAL UTILITY COMPANY.
- 7 PROPOSED LOCATION OF NEW PAD MOUNTED UTILITY TRANSFORMER. PROVIDE NEW ELECTRIC UTILITY PAD MOUNT TRANSFORMER CONCRETE PAD. SEE DETAIL.
- 8 PROVIDE UNDERGROUND BRANCH CIRCUITS. REFER TO EQUIPMENT CONNECTION SCHEDULE.
- 9 RISE UP RACEWAY ALONG EXTERIOR WALL AND PENETRATE EXISTING BUILDING AT AN ACCESSIBLE LOCATION ABOVE CEILING - TYPICAL.
- 10 CONTINUE ABOVE CEILING TO CORRESPONDING ROOF MOUNTED EQUIPMENT LOCATION AND ROUTE BRANCH CIRCUIT THROUGH ROOF CURB. REFER TO DETAIL 04/E8.01.
- 11 BORE UNDER EXISTING SIDEWALK.
- 12 PROVIDE NEW 36"x36" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "ELECTRICAL" COVER LOGO - SEE DETAIL. DON'T SPLICE WIRING.



01 DARRELL HESTER ELECTRICAL SITE PLAN
SCALE: 1" = 40'-0"



PLAN NORTH

ABBREVIATIONS:

A	AMPS	EXT.	EXTERNAL OR EXTERIOR	NTS	NOT TO SCALE
ABC	ABOVE CEILING LINE	FACP	FIRE ALARM CONTROL PANEL	OA	OUTSIDE AIR
ACCU	AIR COOLED CONDENSING UNIT	FCU	FAN COIL UNIT	OAU	OUTSIDE AIR UNIT
AHU	AIR HANDLING UNIT	G	GROUND	P	POLE(S)
AFF	ABOVE FINISHED FLOOR	GA.	GAGE	PH	PHASE
B.	BOTTOM	GALV.	GALVANIZED	RM.	ROOM
B.C.	BELOW CEILING LINE	GRND.	GROUND	SS	STAINLESS STEEL
C.	CONDUIT OR COMMON	HP	HORSEPOWER	TSTAT	THERMOSTAT
CLG.	CEILING	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	UG	UNDERGROUND
COMB.	COMBINATION			UNO	UNLESS OTHERWISE NOTED
COND.	CONDUIT	IG	ISOLATED GROUND	V	VOLTS
CU.	COPPER	MECH	MECHANICAL	W	WIRE
DISC.	DISCONNECT	MS	MOTOR STARTER		
EF	EXHAUST FAN	MOCP	MAX. OVERCURRENT PROTECTION		

FIRE ALARM SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED - EXISTING.	CLG.
	FIRE ALARM H.V.A.C. DUCT SMOKE DETECTOR W/ SHUNT TRIP RELAY - PROVIDE BACKBOX WITH 1/2" C. AND PULLWIRE. PROVIDE A REMOTE TEST SWITCH.	----
	NEW FIRE ALARM RELAY MODULE.	----
	NEW FIRE ALARM MONITOR MODULE.	----
	FIRE ALARM CONTROL PANEL - EXISTING.	----
	FIREFIGHTER SMOKE CONTROL PANEL.	----

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GROUND FAULT INTERRUPTING TYPE - HUBBELL MODEL #FTMRST20W AND WHILE IN USE WEATHERPROOF COVER - HUBBELL MODEL #MP26EH	18" AFF
	JUNCTION BOX W/ BLANK STAINLESS STEEL COVERPLATE	AS REQUIRED

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
AC INDICATES 4" ABOVE COUNTER TO BOTTOM OF DEVICE.
U.N.O. INDICATES UNLESS NOTED OTHERWISE.

SPECIAL SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DATA CONNECTION - PROVIDE DATA CABLING AND 1" RACEWAY BACK TO DATA RACK LOCATION. NUMBER INDICATES AMOUNT OF DATA DROPS.	AS REQUIRED

LIGHTING SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	SURFACE/WRAPAROUND LIGHT FIXTURE	----

NOTES:
1.) REFERENCE LIGHT FIXTURE SCHEDULE FOR ALL MOUNTING HEIGHTS.

LIGHTING WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	SINGLE POLE TOGGLE SWITCH - HUBBELL MODEL #HBL1221X WITH WEATHERPROOF COVER PLATE - HUBBELL MODEL #HBL7420	48" AFF

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

GENERAL SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DISCONNECT SWITCH - NON FUSED	AS REQUIRED
	EQUIPMENT CONNECTION	AS REQUIRED
	ELECTRICAL PANELBOARD - SURFACE MOUNTED	AS REQUIRED
	ELECTRICAL PANELBOARD - RECESSED/FLUSH MOUNTED	AS REQUIRED
	SURGE PROTECTION DEVICE	----
	UNDERGROUND RACEWAY	AS REQUIRED
	CONCEALED RACEWAY	AS REQUIRED
	CONDUIT OR EMT HOMERUN TO PANELBOARD CONCEALED IN WALLS OR ABOVE CEILING. LONG CROSSMARKS DENOTE NUMBER OF "HOT" CONDUCTORS SHORT CROSSMARKS INDICATE NEUTRALS AND DOTS INDICATE NUMBER OF GROUND CONDUCTORS. ARROW INDICATES HOME RUN TO ELECTRICAL PANEL.	AS REQUIRED

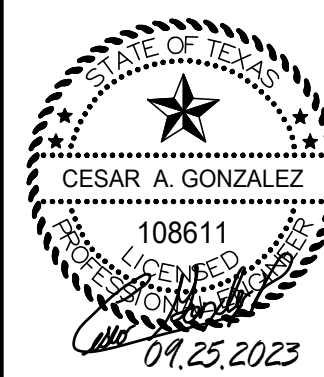
GENERAL NOTES (CONTINUED):

- ALL EXISTING ID NAMETAGS AND CIRCUIT IDENTIFICATION MUST BE REVISED TO REFLECT CURRENT CONDITIONS FOR ALL EQUIPMENT WHICH IS NEW, REPLACED, OR DEMOLISHED. REMOVE ID NAMETAGS FOR DEMOLISHED EQUIPMENT. REPLACE EXISTING NAMETAGS WITH NEW FOR REPLACED EQUIPMENT. IF REPLACEMENT EQUIPMENT HAS DIFFERENT NAME, PROVIDE NEW NAMETAGS FOR ALL NEW EQUIPMENT. ALL CIRCUIT BREAKER DIRECTORIES FOR PANELS IN WHICH NEW WORK TAKES PLACE ARE TO BE REPLACED WITH NEW DIRECTORIES WHICH LIST EXISTING CIRCUITS AND NEW. ALL UNUSED CIRCUITS ARE TO BE MARKED AS "SPARE" IN THE DIRECTORIES. DIRECTORIES ARE TO BE COMPUTER GENERATED; NO HAND WRITTEN DIRECTORIES ARE ACCEPTABLE.
- PRIOR TO ANY DEMOLITION, CONTRACTOR SHALL CONDUCT A DETAILED INSPECTION OF EXISTING CONDITIONS AND COMPARE AGAINST DEMOLITION DRAWINGS. CONTRACTOR SHALL REQUEST CLARIFICATION AS TO THE REMOVAL OF ANY ELECTRICAL COMPONENTS FOUND IN THE FIELD THAT ARE NOT SPECIFICALLY NOTED TO BE DEMOLISHED.
- THE DESIGN INTENT IS TO REUSE TO EXTENT POSSIBLE EXISTING ELECTRICAL AND SAFETY SYSTEMS INCLUDING CIRCUIT BREAKERS, WIRING AND CONDUITS, SAFETY AND OTHER HARD WIRED INTERLOCKS, ETC. EXISTING SYSTEMS TO BE REUSED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. SEE PLANS.
- COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
- VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
- COORDINATE ELECTRICAL, MECHANICAL AND PLUMBING WITH GENERAL CONSTRUCTION.
- PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER DRAWINGS AND SPECIFICATIONS.
- FIELD VERIFY/SPOT EXACT LOCATIONS AND EXISTING CONDITIONS OF EXISTING PLUMBING, MECHANICAL AND ELECTRICAL. IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE AND WORKABLE SYSTEMS. SHOULD BIDDER FIND OMISSIONS OR DISCREPANCIES IN THE PLANS, BIDDER SHALL NOTIFY THE ENGINEER PRIOR TO THE BID DATE AND A WRITTEN CLARIFICATION WILL BE ISSUED.
- DAMAGED ITEMS SHALL BE REPAIRED AT NO ADDITIONAL COST TO OWNER. CONTRACTORS ARE REQUIRED TO SEARCH AND INVESTIGATE FOR EXISTING UTILITIES BEFORE EXCAVATING.
- ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
- PROVIDE J-BOXES (POLYMER CONCRETE) AS REQUIRED FOR PULL WIRING.
- ELECTRICAL WIRING SHALL NOT BE SPLICED BELOW GRADE.
- PERFORM ALL WORK PER LATEST VERSION OF NATIONAL ELECTRICAL CODE, AND APPLICABLE LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
- CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
- NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
- COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
- SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
- TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING PHASE.
- CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
- MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
- AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
- FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
- ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
- EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
- WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
- SLEEVE ALL EXTERIOR WALL PENETRATIONS.
- CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY EXCAVATION, TRENCHING, COMPACTION AND BACKFILLING REQUIRED TO INSTALL ALL UNDERGROUND UTILITIES.
- AFTER COMPLETION OF UNDERGROUND WORK, CONTRACTOR SHALL RETURN SITE TO ITS ORIGINAL CONDITIONS INCLUDING BUT NOT LIMITED TO GRASS, ASPHALT, CONCRETE, SIDEWALKS CALICHE, ETC.
- LOCATE EXISTING UTILITIES PRIOR TO TRENCHING. COORDINATE WITH OWNERS PERSONNEL AND UTILITY COMPANIES. ALL EXPENSES INCURRED TO REPAIR DAMAGE CAUSED TO KNOWN UTILITIES AS A RESULT OF CONTRACTOR'S WORK SHALL BE BORNE BY THE CONTRACTOR. OWNER WILL NOT BE RESPONSIBLE FOR SUCH COSTS.
- PROVIDE ADDITIONAL SPARE MATERIALS DESCRIBED BELOW. PROVIDE PROTECTIVE COVERING FOR STORAGE & IDENTIFIED WITH LABELS DESCRIBING THE CONTENTS. INCLUDE THE INSTALLATION COST, FITTINGS AND SUPPORTS IN THE BASE BID PROPOSAL:
A. 50 LINEAR FEET - 1.25" - 3/8" & #6
B. 50 LINEAR FEET - 1.5" - 3/16" & #6
C. 100 LINEAR FEET - 1/2" - 2#12 & #12G
D. 100 LINEAR FEET - 3/4" - 4#10 & #10G
E. 50 LINEAR FEET - 1" - 4#8 & #10G
F. 50 LINEAR FEET - 1.25" - 4#6 & #6G
G. 50 LINEAR FEET - 1.5" - 4#1 & #6G

GENERAL NOTES:

NO. REVISION: BY:

RFP #231001



TEXAS

DARRELL HESTER JUVENILE DETENTION CENTER
SMOKE EVACUATION AND HVAC SYSTEMS UPGRADES

SAN BENITO



DATE: SEPTEMBER 25, 2023

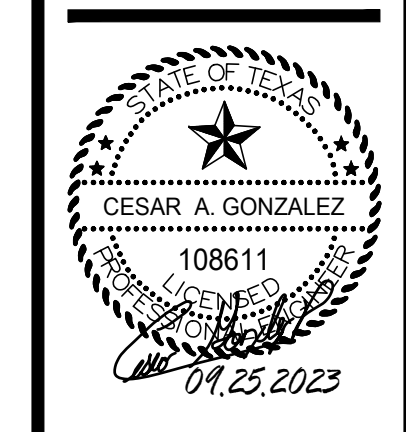
CHECKED BY: G.O.

DRAWN BY: J.P.

PROJECT NO.: 23040

CAD FILE SHEET:

E2.01



GENERAL NOTES:

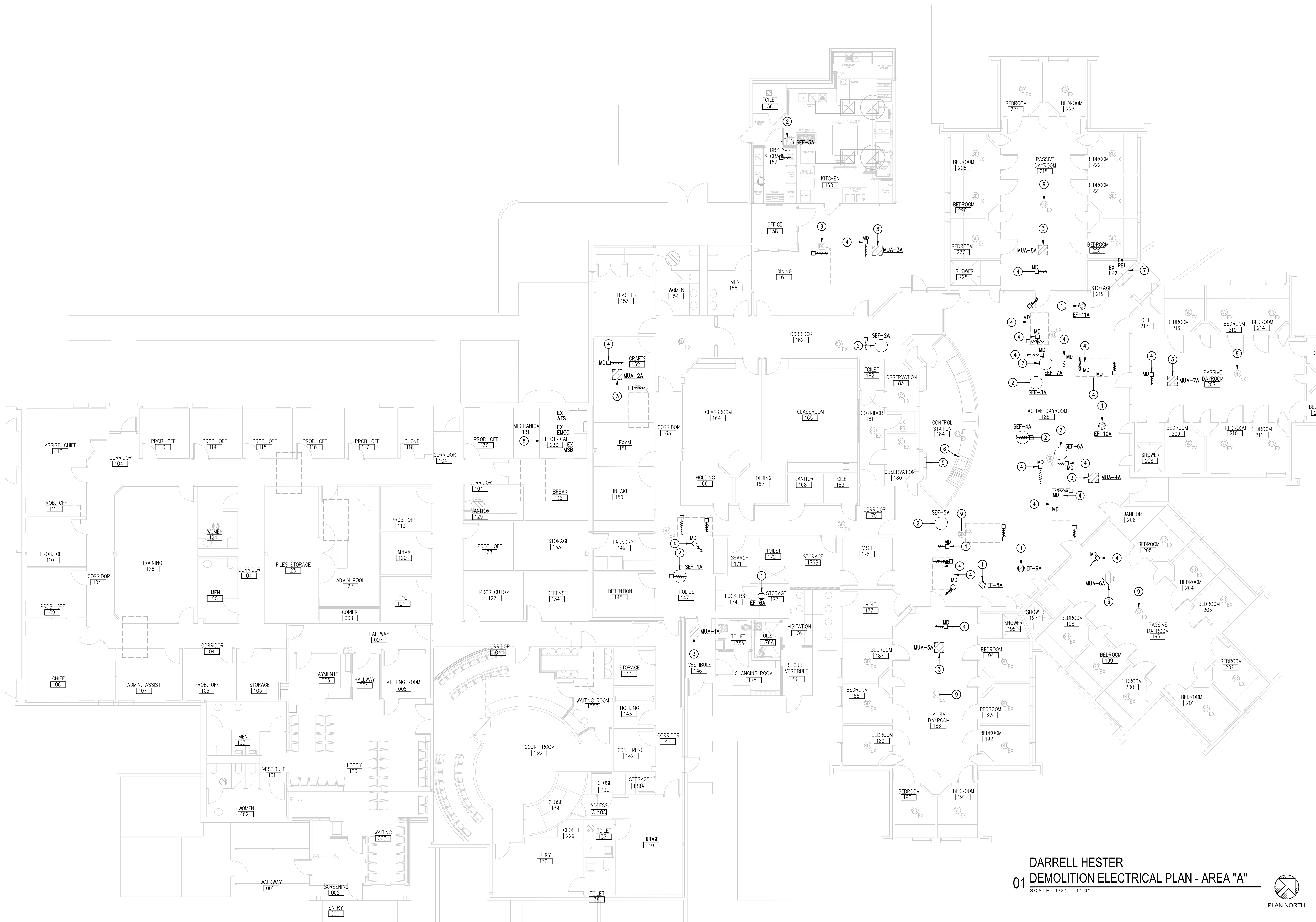
1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS REMOVES EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE. PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. ITEMS DESIGNATED WITH AN "EX" ARE EXISTING TO REMAIN AS IS.
5. PROVIDE BLANK COVERPLATE FOR UNUSED BOXES.

CEILING DEMO GENERAL NOTES:

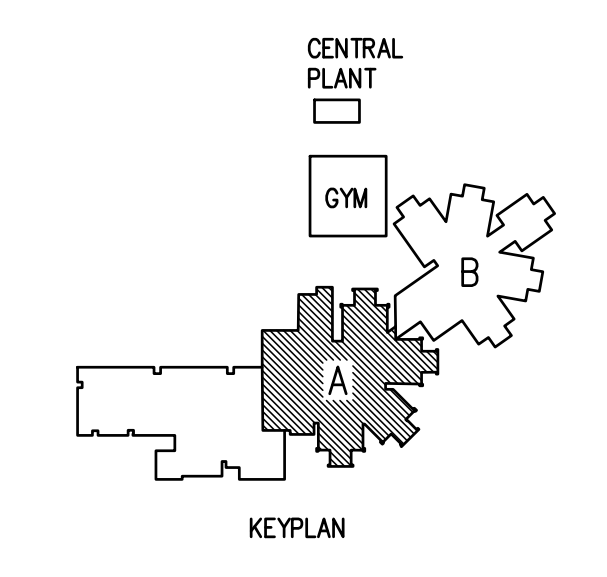
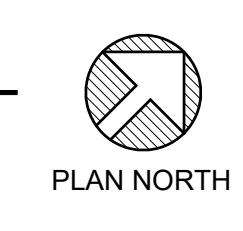
1. PRIOR TO DEMOLITION OF CEILING REQUIRED FOR NEW ELECTRICAL WORK PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO: EXISTING LIGHT FIXTURES, SPEAKERS, FIRE ALARM DEVICES, EMERGENCY LIGHTING, ETC. IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ENGINEER.
2. CONTRACTOR TO EVALUATE CEILING GRID PRIOR TO DEMOLITION AND DOCUMENT ALL BROKEN, CRACKED, MISSING TILES, ETC. AND PROVIDE REPORT TO OWNER AND ENGINEER.
3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THEIR OWN ROUTES FROM POWER SOURCE TO EQUIPMENT.

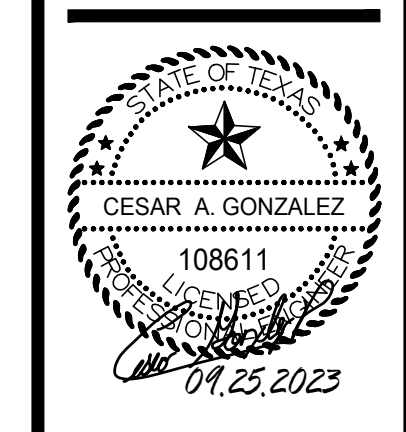
DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING EXHAUST FAN ALONG WITH RELATED SAFETY SWITCH AND MOUNTING HARDWARE FOR REPLACEMENT. REFER TO EXHAUST FAN CONNECTION SCHEDULE FOR MORE DETAILS.
- 2 DISCONNECT AND REMOVE EXISTING SMOKE EVACUATION FAN LOCATED ON ROOF ALONG WITH RELATED SAFETY SWITCH AND MOUNTING HARDWARE FOR REPLACEMENT. REFER TO EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS.
- 3 DISCONNECT AND REMOVE EXISTING MAKE-UP AIR FAN LOCATED ABOVE CEILING ALONG WITH RELATED SAFETY SWITCH AND MOUNTING HARDWARE FOR REPLACEMENT. REFER TO EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS.
- 4 DISCONNECT AND REMOVE EXISTING MOTORIZED DAMPER FOR REPLACEMENT. EXISTING BRANCH CIRCUIT RACEWAY AND WIRING TO BE REUSED.
- 5 EXISTING SIEMENS FIRE ALARM POWER SUPPLY AND REMOTE ANNUNCIATOR TO REMAIN.
- 6 DISCONNECT AND REMOVE EXISTING FIREFIGHTER SMOKE CONTROL PANEL FOR REPLACEMENT.
- 7 LOCATION OF EXISTING SQUARE D 225A, 120/208V, 3φ, 4-WIRE PANELBOARD "PE1" THAT FEEDS HVAC EQUIPMENT.
- 8 LOCATION OF EXISTING SQUARE D MODEL 5, 600A, 120/208V, 3φ, 4-WIRE MOTOR CONTROL CENTER "EMCO" THAT FEEDS HVAC EQUIPMENT.
- 9 TEMPORARILY DISCONNECT EXISTING SMOKE DETECTORS IN SMOKE EVACUATION ZONES FOR REWIRING - TYPICAL.



DARRELL HESTER
01 DEMOLITION ELECTRICAL PLAN - AREA "A"
SCALE: 1/8" = 1'-0"





GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS REMOVS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. ITEMS DESIGNATED WITH AN "EX" ARE EXISTING TO REMAIN AS IS.
5. PROVIDE BLANK COVERPLATE FOR UNUSED BOXES.

CEILING DEMO GENERAL NOTES:

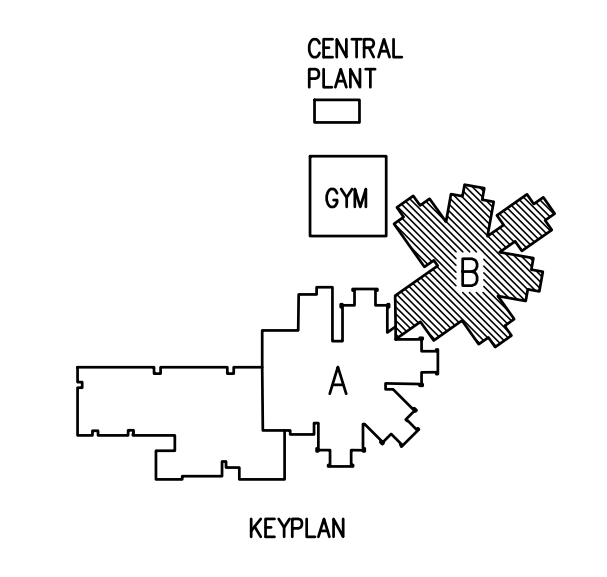
1. PRIOR TO DEMOLITION OF CEILINGS REQUIRED FOR NEW ELECTRICAL WORK PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO: EXISTING LIGHT FIXTURES, SPEAKERS, FIRE ALARM DEVICES, EMERGENCY LIGHTING, ETC. IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ENGINEER.
2. CONTRACTOR TO EVALUATE CEILING GRID PRIOR TO DEMOLITION AND DOCUMENT ALL BROKEN, CRACKED, MISSING TILES, ETC. AND PROVIDE REPORT TO OWNER AND ENGINEER.
3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THEIR OWN ROUTES FROM POWER SOURCE TO EQUIPMENT.

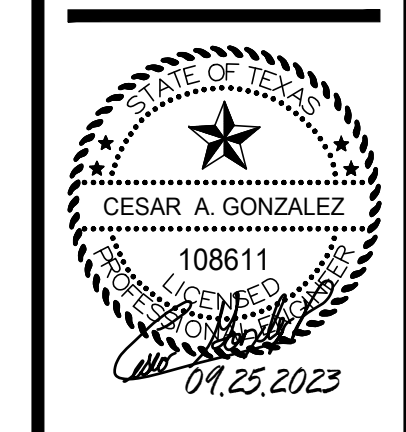
DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING EXHAUST FAN ALONG WITH RELATED SAFETY SWITCH AND MOUNTING HARDWARE FOR REPLACEMENT. REFER TO EXHAUST FAN CONNECTION SCHEDULE FOR MORE DETAILS.
- 2 DISCONNECT AND REMOVE EXISTING SMOKE EVACUATION FAN LOCATED ON ROOF ALONG WITH RELATED SAFETY SWITCH AND MOUNTING HARDWARE FOR REPLACEMENT. REFER TO EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS.
- 3 DISCONNECT AND REMOVE EXISTING MAKE-UP AIR FAN LOCATED ABOVE CEILING ALONG WITH RELATED SAFETY SWITCH AND MOUNTING HARDWARE FOR REPLACEMENT. REFER TO EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS.
- 4 DISCONNECT AND REMOVE EXISTING MOTORIZED DAMPER FOR REPLACEMENT. EXISTING BRANCH CIRCUIT RACEWAY AND WIRING TO BE REUSED.
- 5 EXISTING SIEMENS CERBERUS PRO FIRE ALARM CONTROL PANEL TO REMAIN.
- 6 DISCONNECT AND REMOVE EXISTING FIREFIGHTER SMOKE CONTROL PANEL FOR REPLACEMENT.
- 7 LOCATION OF EXISTING SQUARE D 100A, 120/208V, 3Ø, 4-WIRE PANELBOARD "PE2" THAT FEEDS HVAC EQUIPMENT.
- 8 LOCATION OF EXISTING SQUARE D MODEL 6, 600A, 120/208V, 3Ø, 4-WIRE MOTOR CONTROL CENTER "EMCC2" THAT FEEDS HVAC EQUIPMENT.
- 9 TEMPORARILY DISCONNECT EXISTING SMOKE DETECTORS IN SMOKE EVACUATION ZONES FOR REWIRING - TYPICAL.



01 DARRELL HESTER
DEMOLITION ELECTRICAL PLAN - AREA "B"
SCALE: 1/8" = 1'-0"
PLAN NORTH





GENERAL NOTES:

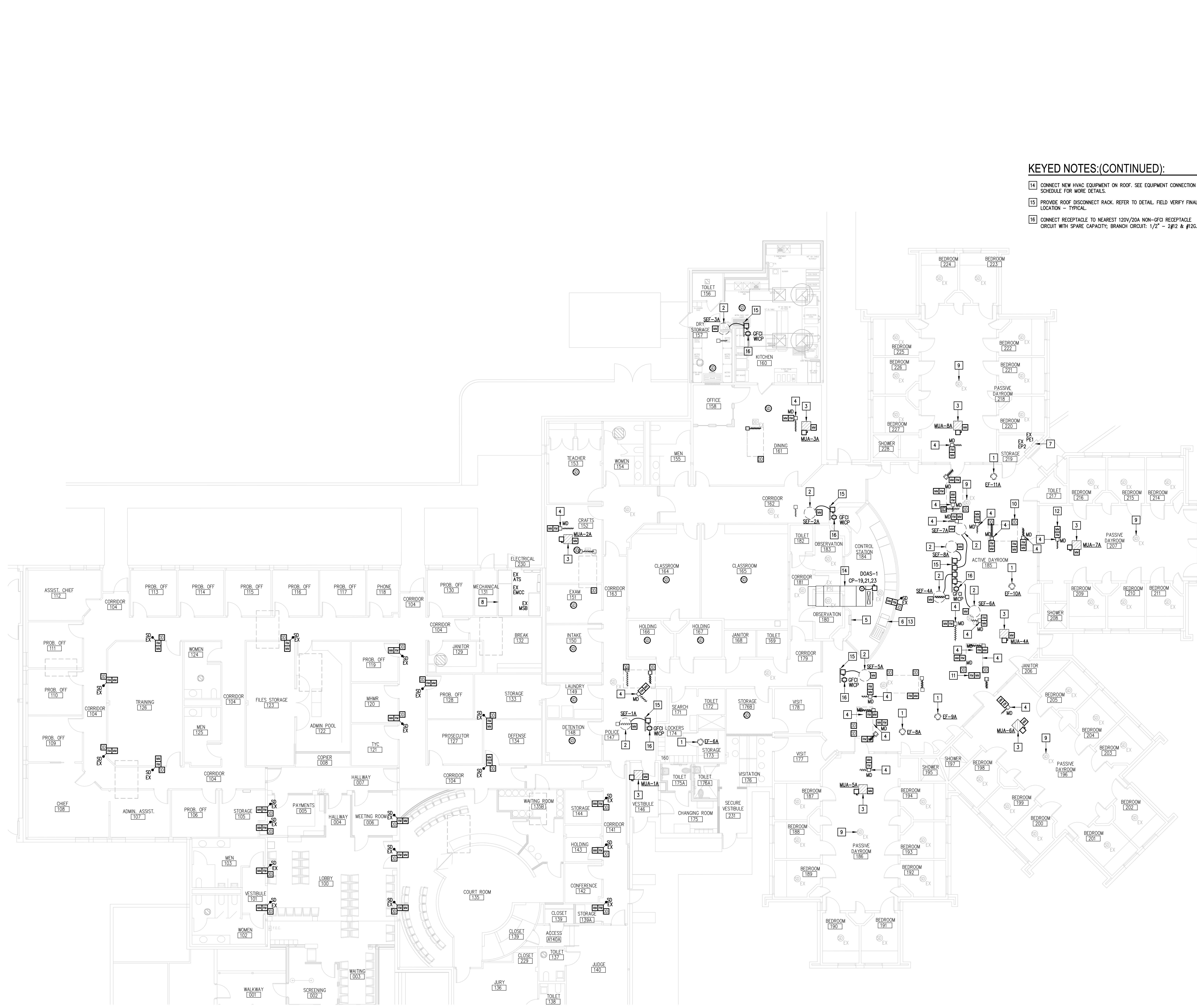
- ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
- EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
- IF NEW DEVICES ARE TO BE INSTALLED ON EXISTING WALLS, PROVIDE SURFACE MOUNTED METAL RACEWAYS AND BOXES (WIREMOLD).
- PROVIDE ALL CONDUIT IN WALL CAVITY WHERE POSSIBLE.
- PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
- HOMERUNS - INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS), 3 INSULATED "HOT", 3 INSULATED "NEUTRAL" AND 1 SHARED "GROUND".
- ALL SMOKE EVACUATION SYSTEM CONTROL WIRING TO BE CONCEALED IN RACEWAY.

KEYED NOTES:(CONTINUED):

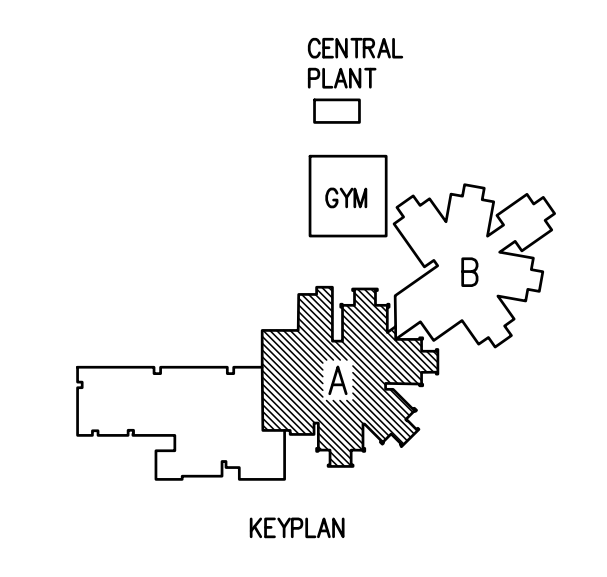
- CONNECT NEW HVAC EQUIPMENT ON ROOF. SEE EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS.
- PROVIDE ROOF DISCONNECT RACK. REFER TO DETAIL. FIELD VERIFY FINAL LOCATION - TYPICAL.
- CONNECT RECEPTACLE TO NEAREST 120V/20A NON-GFCI RECEPTACLE CIRCUIT WITH SPARE CAPACITY; BRANCH CIRCUIT: 1/2" - 2#12 & #12G.

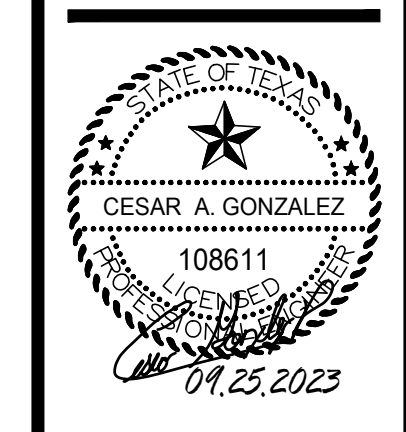
KEYED NOTES:

- CONNECT NEW EXHAUST FAN. SEE EXHAUST FAN CONNECTION SCHEDULE FOR MORE DETAILS.
- CONNECT NEW SMOKE EVACUATION FAN ON ROOF. SEE EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS - TYPICAL.
- CONNECT NEW MAKE-UP AIR FAN ABOVE CEILING. SEE EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS - TYPICAL.
- CONNECT NEW MOTORIZED DAMPER. REUSE EXISTING BRANCH CIRCUIT - TYPICAL.
- LOCATION OF EXISTING SIEMENS FIRE ALARM POWER SUPPLY AND REMOTE ANNUNCIATOR. CONTRACTOR TO DO BATTERY CALCULATIONS ACCOUNTING FOR NEW DEVICES AND REPLACE/ADD BATTERIES AS REQUIRED.
- PROVIDE NEW FIREFIGHTER SMOKE CONTROL PANEL TO REPLACE EXISTING. REFER TO SPECIFICATIONS. PROVIDE NEW 120V/20A DEDICATED CIRCUIT FROM EXISTING PANELBOARD "EP2". PROVIDE NEW 20A/1P CIRCUIT BREAKER TO MATCH EXISTING IN AVAILABLE SPACE. BRANCH CIRCUIT: 1/2" - 2#12 & #12G. LOCATE IN SAME ROOM AND WITHIN 20 FEET FROM FIRE ALARM CONTROL PANEL AND PROVIDE 3/4" RACEWAY WITH PULLWIRE FROM FACP FOR COMMUNICATION WIRING.
- LOCATION OF EXISTING SQUARE D 225A, 120/208V, 3φ, 4-WIRE PANELBOARD "PE1" THAT FEEDS HVAC EQUIPMENT.
- LOCATION OF EXISTING SQUARE D MODEL 5, 60A, 120/208V, 3φ, 4-WIRE MOTOR CONTROL CENTER "EMCC" THAT FEEDS HVAC EQUIPMENT.
- REPROGRAM AND RECONNECT EXISTING FIRE ALARM SMOKE DETECTORS IN SMOKE EVACUATION ZONES. PROVIDE CONTINUOUS E.M.T. RACEWAY ABOVE CEILING FOR REWIRING OF EXISTING TO REMAIN SMOKE DETECTORS BACK TO CORRESPONDING FIRE ALARM CONTROL PANEL OR POWER SUPPLY. FIELD VERIFY EXACT LOCATION AND TYPE OF SMOKE DETECTOR (CEILING OR DUCT MOUNTED) - TYPICAL.
- PROVIDE NEW HVAC DUCT MOUNTED SMOKE DETECTOR ABOVE CEILING. PROVIDE REMOTE TEST SWITCH AT AN ACCESSIBLE CEILING LOCATION - TYPICAL. REFER TO DETAIL 06/EB.01 FOR MORE DETAILS.
- PROVIDE NEW FIRE ALARM RELAY MODULE - TYPICAL. REFER TO DETAIL 06/EB.01 FOR MORE DETAILS.
- PROVIDE NEW FIRE ALARM MONITOR MODULE - TYPICAL. REFER TO DETAIL 06/EB.01 FOR MORE DETAILS.
- PROVIDE NEW SYSTEM PRINTER ADJACENT TO NEW FIREFIGHTER SMOKE CONTROL PANEL. REFER TO SPECIFICATIONS. PROVIDE NEW 120V/20A DEDICATED CIRCUIT FROM EXISTING PANELBOARD "EP2". PROVIDE NEW 20A/1P CIRCUIT BREAKER TO MATCH EXISTING IN AVAILABLE SPACE. BRANCH CIRCUIT: 1/2" - 2#12 & #12G.



DARRELL HESTER
01 NEW ELECTRICAL PLAN - AREA "A"
SCALE: 1/8" = 1'-0"
PLAN NORTH





DARRELL HESTER JUVENILE DETENTION CENTER
SMOKE EVACUATION AND HVAC SYSTEMS UPGRADES

GENERAL NOTES:

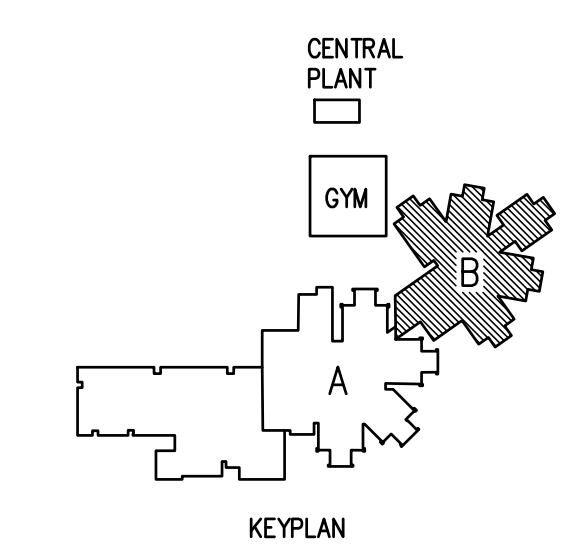
- ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
- EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
- IF NEW DEVICES ARE TO BE INSTALLED ON EXISTING WALLS, PROVIDE SURFACE MOUNTED METAL RACEWAYS AND BOXES (WIREMOLD).
- PROVIDE ALL CONDUIT IN WALL CAVITY WHERE POSSIBLE.
- PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
- HOMERUNS - INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS). 3 INSULATED "HOT", 3 INSULATED "NEUTRAL" AND 1 SHARED "GROUND".
- ALL SMOKE EVACUATION SYSTEM CONTROL WIRING TO BE CONCEALED IN RACEWAY.

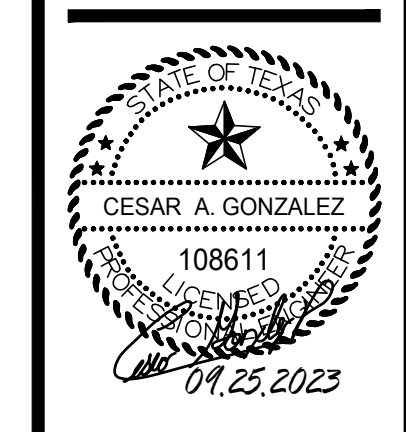
KEYED NOTES:

- CONNECT NEW EXHAUST FAN. SEE EXHAUST FAN CONNECTION SCHEDULE FOR MORE DETAILS.
- CONNECT NEW SMOKE EVACUATION FAN ON ROOF. SEE EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS - TYPICAL.
- CONNECT NEW MAKE-UP AIR FAN ABOVE CEILING. SEE EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS - TYPICAL.
- CONNECT NEW MOTORIZED DAMPER. REUSE EXISTING BRANCH CIRCUIT - TYPICAL.
- LOCATION OF EXISTING SIEMENS CERBERUS PRO FIRE ALARM CONTROL PANEL. CONTRACTOR TO DO BATTERY CALCULATIONS ACCOUNTING FOR NEW DEVICES AND REPLACE/ADD BATTERIES AS REQUIRED.
- PROVIDE NEW FIREFIGHTER SMOKE CONTROL PANEL TO REPLACE EXISTING. REFER TO SPECIFICATIONS. PROVIDE NEW 120V/20A DEDICATED CIRCUIT FROM EXISTING PANELBOARD "EP3". PROVIDE NEW 20A/1P CIRCUIT BREAKER TO MATCH EXISTING IN AVAILABLE SPACE; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. LOCATE IN SAME ROOM AND WITHIN 20 FEET FROM FIRE ALARM CONTROL PANEL AND PROVIDE 3/4" RACEWAY WITH PULLWIRE FROM FAC FOR COMMUNICATION WIRING.
- LOCATION OF EXISTING SQUARE D 100A, 120/208V, 3# 4-WIRE PANELBOARD "PE2" THAT FEEDS HVAC EQUIPMENT.
- LOCATION OF EXISTING SQUARE D MODEL 6, 600A, 120/208V, 3# 4-WIRE MOTOR CONTROL CENTER "EMCC2" THAT FEEDS HVAC EQUIPMENT.
- REPROGRAM AND RECONNECT EXISTING FIRE ALARM SMOKE DETECTORS IN SMOKE EVACUATION ZONES. PROVIDE CONTINUOUS E.M.T. RACEWAY ABOVE CEILING FOR REWIRING OF EXISTING TO REMAIN SMOKE DETECTORS BACK TO CORRESPONDING FIRE ALARM CONTROL PANEL OR POWER SUPPLY. FIELD VERIFY EXACT LOCATION AND TYPE OF SMOKE DETECTOR (CEILING OR DUCT MOUNTED) - TYPICAL.
- PROVIDE NEW HVAC DUCT MOUNTED SMOKE DETECTOR ABOVE CEILING. PROVIDE REMOTE TEST SWITCH AT AN ACCESSIBLE CEILING LOCATION - TYPICAL. REFER TO DETAIL 06/EB.01 FOR MORE DETAILS.
- PROVIDE NEW FIRE ALARM RELAY MODULE - TYPICAL. REFER TO DETAIL 06/EB.01 FOR MORE DETAILS.
- PROVIDE NEW FIRE ALARM MONITOR MODULE - TYPICAL. REFER TO DETAIL 06/EB.01 FOR MORE DETAILS.
- PROVIDE NEW SYSTEM PRINTER ADJACENT TO NEW FIREFIGHTER SMOKE CONTROL PANEL. REFER TO SPECIFICATIONS. PROVIDE NEW 120V/20A DEDICATED CIRCUIT FROM EXISTING PANELBOARD "EP3". PROVIDE NEW 20A/1P CIRCUIT BREAKER TO MATCH EXISTING IN AVAILABLE SPACE; BRANCH CIRCUIT: 1/2" - 2#12 & #12G.
- CONNECT NEW HVAC EQUIPMENT ON ROOF. SEE EQUIPMENT CONNECTION SCHEDULE FOR MORE DETAILS.
- PROVIDE ROOF DISCONNECT RACK. REFER TO DETAIL. FIELD VERIFY FINAL LOCATION - TYPICAL.
- CONNECT RECEPTACLE TO NEAREST 120V/20A NON-GFCI RECEPTACLE CIRCUIT WITH SPARE CAPACITY; BRANCH CIRCUIT: 1/2" - 2#12 & #12G.



DARRELL HESTER
01 NEW ELECTRICAL PLAN - AREA "B"
SCALE: 1/8" = 1'-0"





GENERAL NOTES:

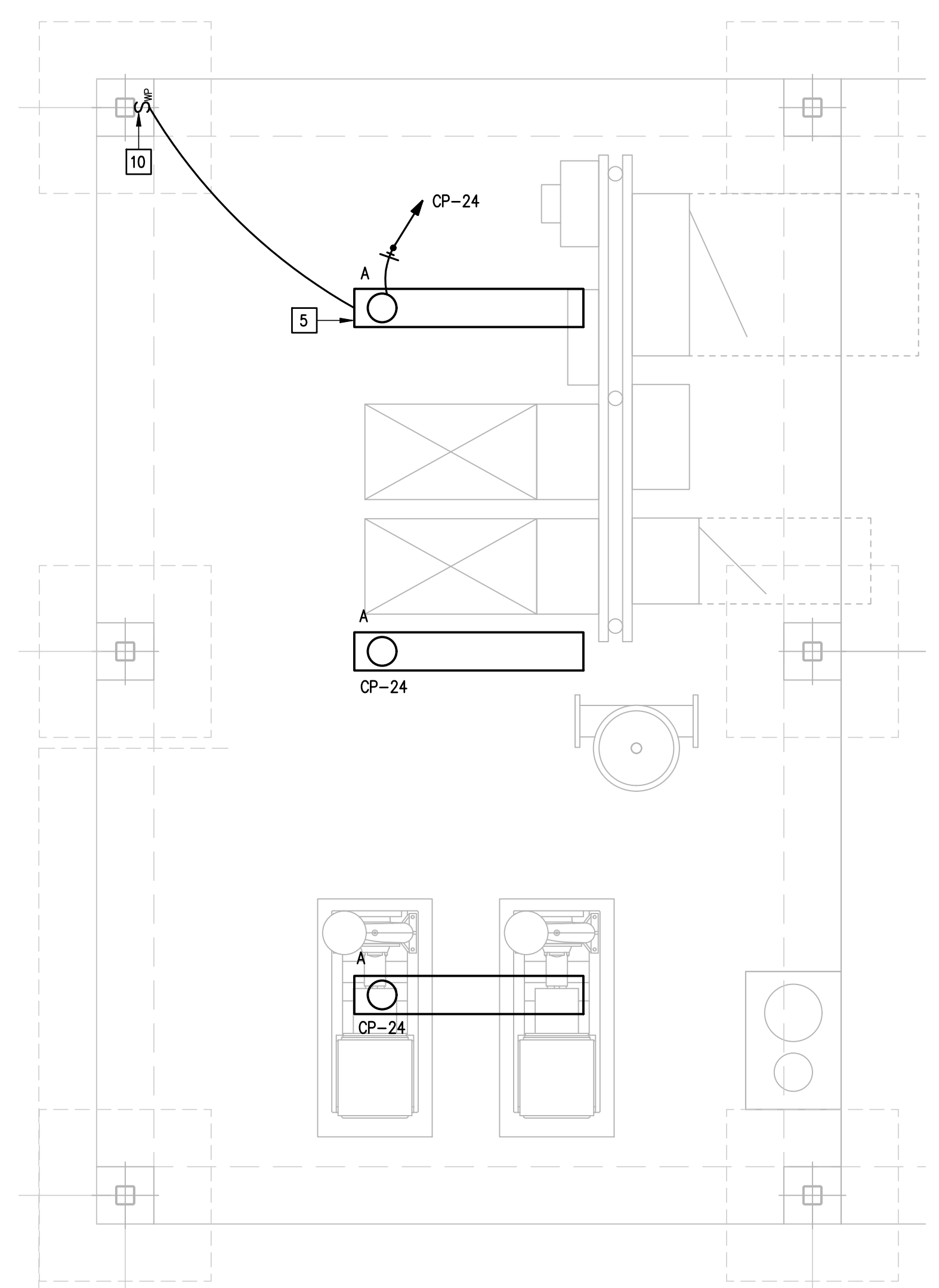
1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
3. PROVIDE ALL CONDUIT IN WALL CAVITY WHERE POSSIBLE.
4. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
5. PROVIDE J-HOOKS TO SUPPORT DATA CABLING ABOVE CEILING.
6. HOMERUNS - INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL" AND 1 SHARED "GROUND".

ELECTRICAL KEYED NOTES:

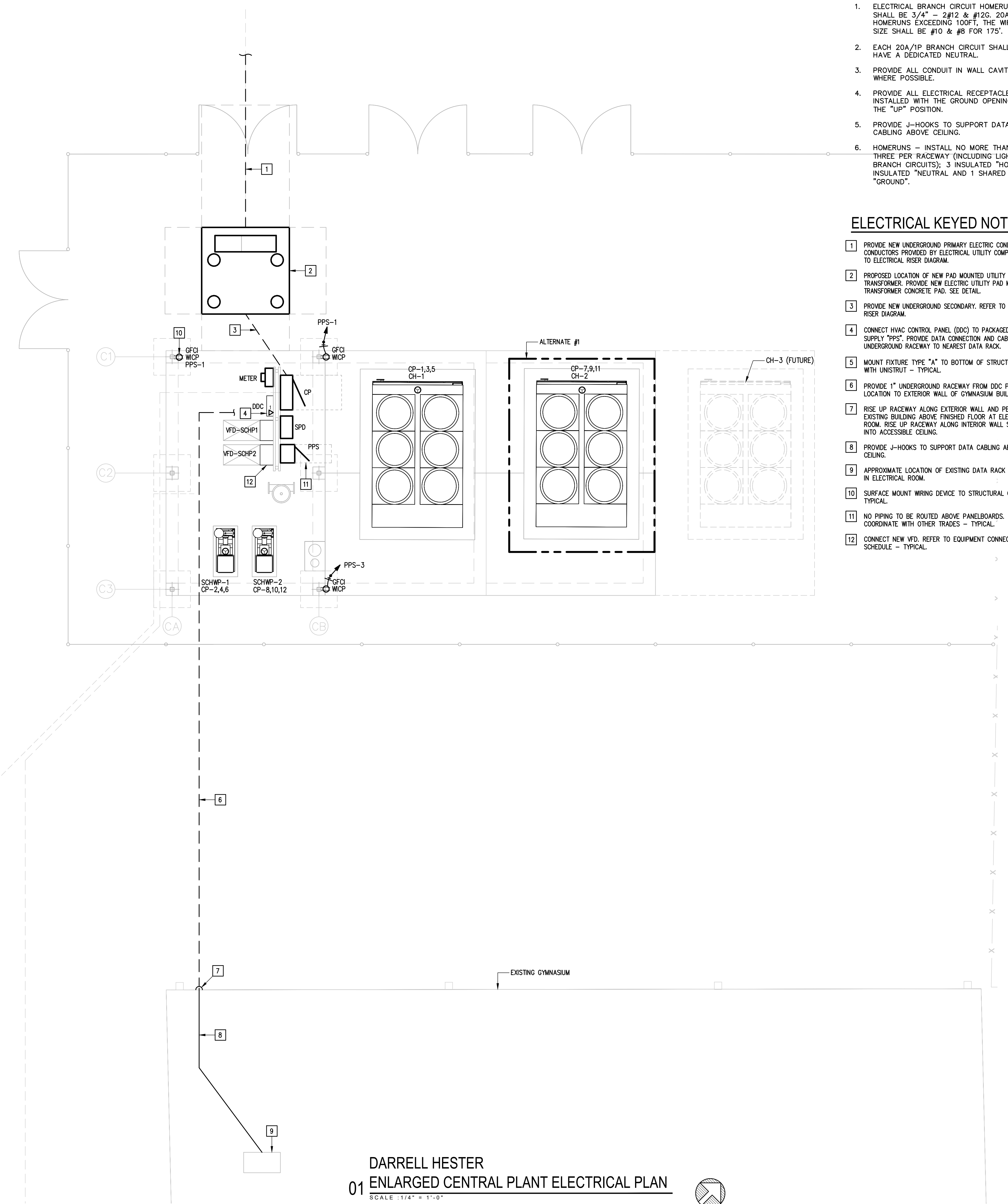
- 1 PROVIDE NEW UNDERGROUND PRIMARY ELECTRIC CONDUITS. CONDUCTORS PROVIDED BY ELECTRICAL UTILITY COMPANY. REFER TO ELECTRICAL RISER DIAGRAM.
- 2 PROPOSED LOCATION OF NEW PAD MOUNTED UTILITY TRANSFORMER. PROVIDE NEW ELECTRIC UTILITY PAD MOUNT TRANSFORMER CONCRETE PAD. SEE DETAIL.
- 3 PROVIDE NEW UNDERGROUND SECONDARY. REFER TO ELECTRICAL RISER DIAGRAM.
- 4 CONNECT HVAC CONTROL PANEL (DDC) TO PACKAGED POWER SUPPLY "PPS". PROVIDE DATA CONNECTION AND CABLING IN 1" UNDERGROUND RACEWAY TO NEAREST DATA RACK.
- 5 MOUNT FIXTURE TYPE "A" TO BOTTOM OF STRUCTURE STEEL WITH UNISTRUT - TYPICAL.
- 6 PROVIDE 1" UNDERGROUND RACEWAY FROM DDC PANEL LOCATION TO EXTERIOR WALL OF GYMNASIUM BUILDING.
- 7 RISE UP RACEWAY ALONG EXTERIOR WALL AND PENETRATE EXISTING BUILDING ABOVE FINISHED FLOOR AT ELECTRICAL ROOM. RISE UP RACEWAY ALONG INTERIOR WALL STUBBED INTO ACCESSIBLE CEILING.
- 8 PROVIDE J-HOOKS TO SUPPORT DATA CABLING ABOVE CEILING.
- 9 APPROXIMATE LOCATION OF EXISTING DATA RACK LOCATED IN ELECTRICAL ROOM.
- 10 SURFACE MOUNT WIRING DEVICE TO STRUCTURAL COLUMN - TYPICAL.
- 11 NO PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES - TYPICAL.
- 12 CONNECT NEW VFD. REFER TO EQUIPMENT CONNECTION SCHEDULE - TYPICAL.



03 LIGHT FIXTURE IMAGE TYPE A
SCALE: NOT TO SCALE



02 DARRELL HESTER ENLARGED CENTRAL PLANT LIGHTING PLAN
SCALE: 1/12" = 1'-0"

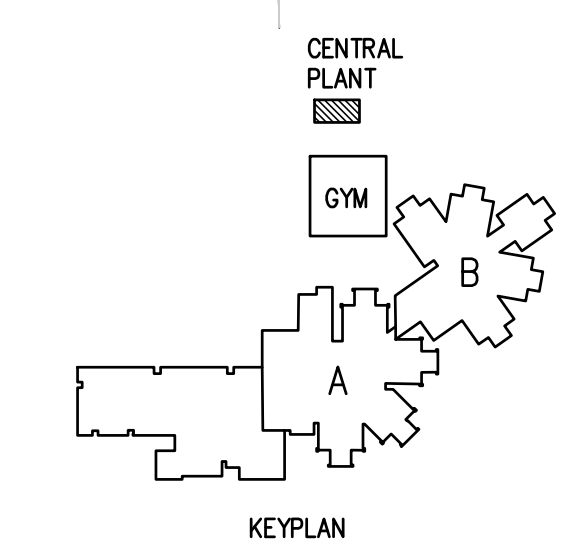


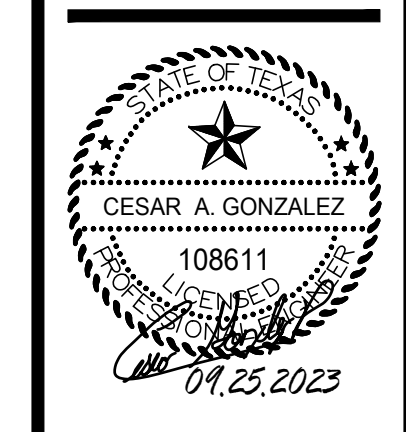
01 DARRELL HESTER ENLARGED CENTRAL PLANT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



CALLOUT	LAMP	DESCRIPTION	DRIVER	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTE	LUMENS	LUMEN MAINTENANCE	HOURS
A	LED	WRAPAROUND	0-10V	SURFACE	VENTURE: VP4-40NA-BF1 BECHTEL: B510LED 4 HT LQ WT40 120-277V SS TFS TRITONPRO: VTSS1 4 B15 UNV FD 8CS4K LPPG HW SP	40	277V 1P 2W	PROVIDE UL LISTED FOR DAMP LOCATIONS.	6536	L70	100,000

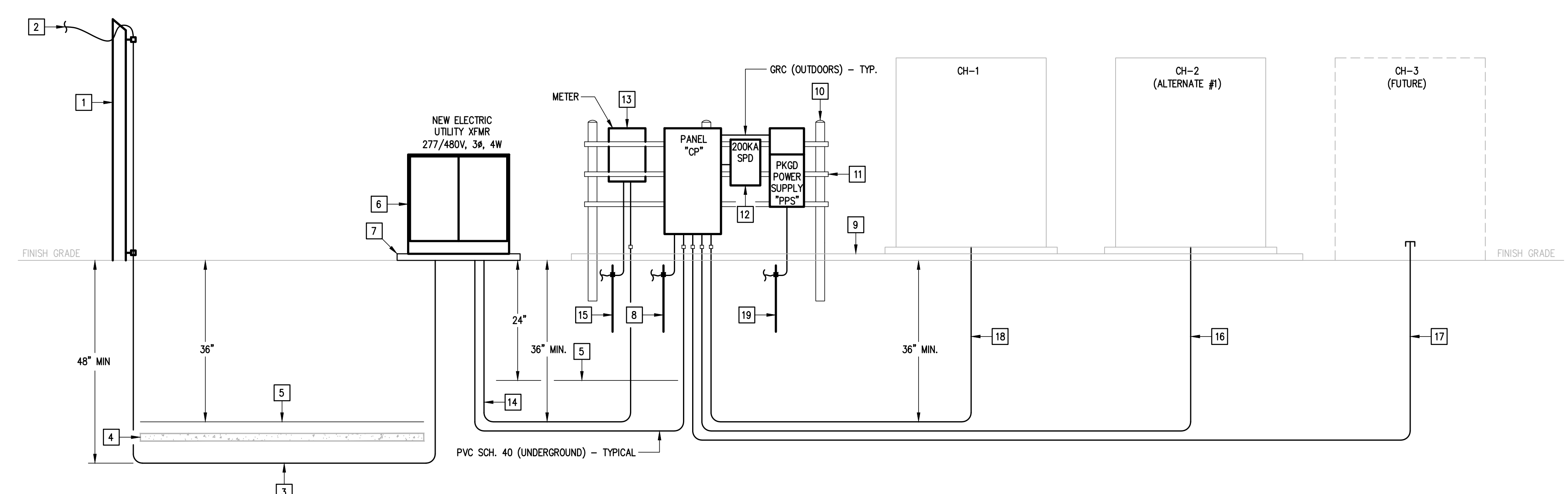
GENERAL NOTES:
1. OTHER LIGHT FIXTURE MANUFACTURERS THAN THOSE LISTED ON THIS SCHEDULE ARE REQUIRED TO OBTAIN PRIOR APPROVAL BY SUBMITTING CUT SHEETS OF THEIR SUBSTITUTIONS AT LEAST (10) BUSINESS DAYS PRIOR TO BID. CUT SHEETS SHALL INDICATE/HIGHLIGHT PHOTOMETRIC CURVE, EFFICIENCY & CONSTRUCTION FOR DIRECT COMPARISON WITH SPECIFIED FIXTURES.
2. EXTRA MATERIALS: SEE SPECIFICATIONS.





**ELECTRICAL RISER DIAGRAM
KEYED NOTES:**

- 1 NEW ELECTRIC UTILITY RISER DIP POLE.
- 2 NEW ELECTRIC UTILITY OVERHEAD PRIMARY SERVICE LINES.
- 3 PROVIDE (2) 4" PVC RACEWAYS. PROVIDE LONG SWEEP RADIUS ELBOWS. CONDUCTORS BY UTILITY COMPANY.
- 4 PROVIDE 2" RED CONCRETE TOPPING.
- 5 PROVIDE CONTINUOUS DETECTABLE UNDERGROUND WARNING TAPE.
- 6 ELECTRIC UTILITY PAD MOUNTED TRANSFORMER.
- 7 PROVIDE UTILITY TRANSFORMER CONCRETE PAD - SEE DETAIL.
- 8 PROVIDE 3/4" - #3/0 COPPER GROUNDING ELECTRODE CONDUCTOR AND 3/4" X 10' COPPER CLAD GROUND ROD. PROVIDE CADWELD CONNECTION TO FOUNDATION REBAR AND STRUCTURAL STEEL.
- 9 CONCRETE SLAB, SEE STRUCTURAL PLANS.
- 10 4" DIA. (6" ABOVE GROUND AND MINIMUM 30" BELOW GRADE) HOT DIP GALV. STEEL PIPE WITH CAP (TOTAL OF 3).
- 11 3-1/4" X 1-5/8", 12 GAUGE UNISTRUT, HOT DIP GALV. AFTER FABRICATION. PROVIDE ON BOTH SIDES OF RACK.
- 12 PROVIDE 200KA EXTERNALLY MOUNTED SPD CURRENT TECHNOLOGY #SL3-200-480-5Y-MNB-M0-F2 (480V/277, 36, 4W). SURFACE MOUNTED ON SUPPORT STRUCTURE.
- 13 PROVIDE FOR ELECTRIC UTILITY METER OTHER SIDE OF EQUIPMENT RACK.
- 14 PROVIDE 2" RACEWAY AS PER ELECTRICAL UTILITY STANDARDS.
- 15 PROVIDE 3/4" - #6 COPPER GROUNDING ELECTRODE CONDUCTOR AND 3/4" X 10' COPPER CLAD GROUND ROD. PROVIDE CADWELD CONNECTION TO FOUNDATION REBAR AND STRUCTURAL STEEL.
- 16 REFER TO EQUIPMENT CONNECTION SCHEDULE FOR BRANCH CIRCUIT SIZE. IF ALTERNATE IS NOT ACCEPTED; STUP-UP RACEWAY(S) AND CAP ENDS. PROVIDE GALVANIZED PULLWIRE.
- 17 PROVIDE 4" UNDERGROUND RACEWAY TO FUTURE CHILLER (CH-3) LOCATION. STUP-UP RACEWAYS AND CAP ENDS. PROVIDE GALVANIZED PULLWIRE.
- 18 REFER TO EQUIPMENT CONNECTION SCHEDULE FOR BRANCH CIRCUIT SIZE.
- 19 PROVIDE 3/4" - #6 COPPER GROUNDING ELECTRODE CONDUCTOR AND 3/4" X 10' COPPER CLAD GROUND ROD. PROVIDE CADWELD CONNECTION TO FOUNDATION REBAR AND STRUCTURAL STEEL.

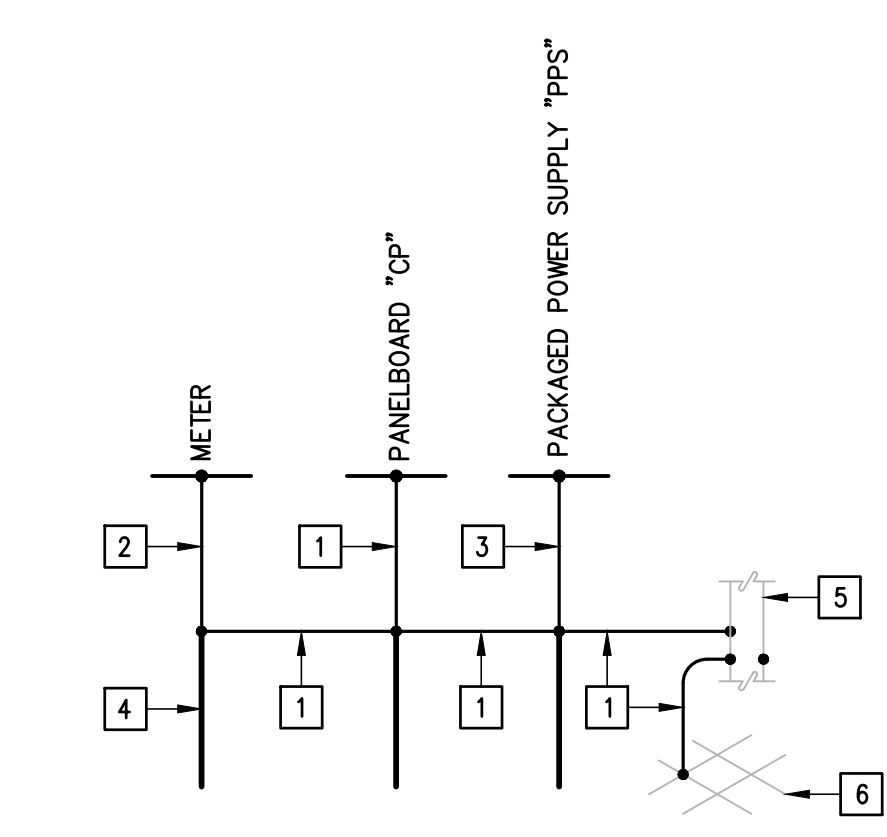


01 ELECTRICAL RISER DIAGRAM
SCALE: NONE

FEEDER SCHEDULE:

FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
30	3/4" - 2#10 & #10G	PPS
60	1" - 4#6 & #10G	SPD
800	(2-RUNS) 4" - 4#600KCMIL	CP

SIZING METHOD: COPPER 75°C



**GROUNDING RISER
KEYED NOTES:**

- 1 #3/0 BARE COPPER GROUNDING ELECTRODE CONDUCTOR.
- 2 #6 BARE COPPER GROUNDING ELECTRODE CONDUCTOR.
- 3 #8 BARE COPPER GROUNDING ELECTRODE CONDUCTOR.
- 4 PROVIDE 3/4" X 10' COPPER CLAD GROUND ROD - TYP.
- 5 CADWELD CONNECT TO STRUCTURE STEEL.
- 6 CADWELD CONNECT TO FOUNDATION REBAR.

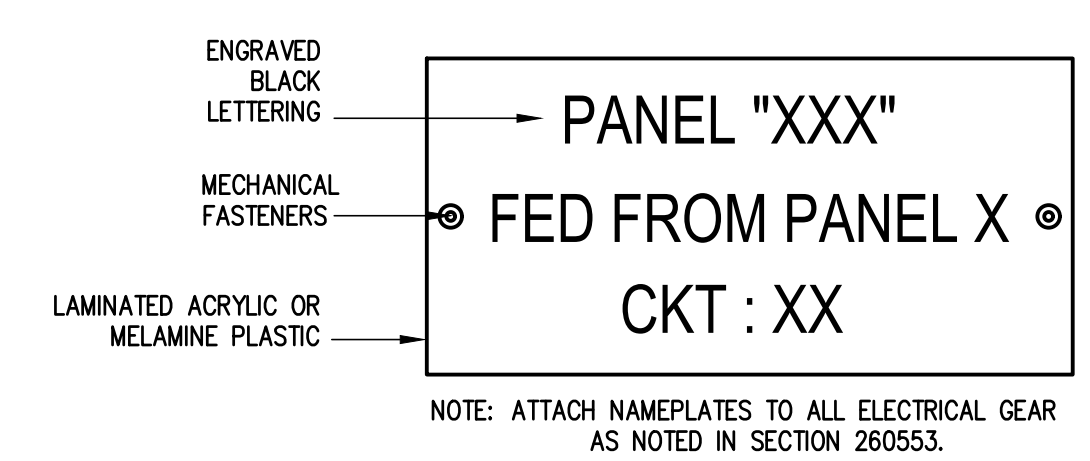
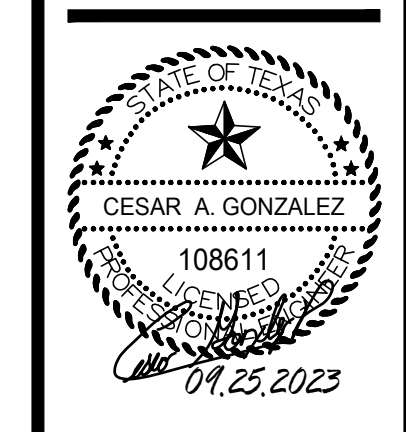
02 GROUNDING RISER DIAGRAM
SCALE: NONE

CP															
ROOM		CENTRAL PLANT		VOLTS			480Y/277V 3P 4W			AIC			65,000		
MOUNTING		SURFACE		BUS AMPS			800			MAIN BKR			800		
FED FROM		UTILITY		NEUTRAL			100%			LUGS			STANDARD		
NOTE: PROVIDE A TYPE WRITTEN AS BUILT CIRCUIT DIRECTORY.															
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA						
			A	B	C				A	B	C				
1	225/3	CH-1	48.5			2	30/3	SCHWP-1	3.05						
3				48.5		4				3.05					
5					48.5	6					3.05				
7	225/3	* CH-2 (ALT. #1)	48.5			8	30/3	SCHWP-2	3.05						
9				48.5		10				3.05					
11					48.5	12					3.05				
13	-/3	SPACE (FUTURE CH-3)	48.5			14	60/3	SPD	0						
15				48.5		16				0					
17					48.5	18					0				
19	60/3	DOAS-1	13.9			20	30/2	PANEL PPS	0.96						
21				13.9		22				0.18					
23					13.9	24	20/1	LIGHTING			0.12				
25	100/3	DOAS-2	23.4			26	20/1	SPARE	0						
27				23.4		28	20/1	SPARE	0						
29					23.4	30	20/1	SPARE	0						
31	20/3	SPACE	0			32	20/1	SPARE	0						
33				0		34	20/1	SPARE	0						
35					0	36	20/1	SPARE	0						
37	20/1	SPACE	0			38	20/1	SPACE	0						
39	20/1	SPACE	0			40	20/1	SPACE	0						
41	20/1	SPACE	0			42	20/1	SPACE	0						
TOTAL CONNECTED KVA BY PHASE									190	189	189				
			CONN KVA	CALC KVA					CONN KVA	CALC KVA					
LIGHTING			0.12	0.15	(125%)	RECEPTACLES			0.54	0.54	(50%>10)				
LARGEST MOTOR			27.4	6.86	(25%)	CONTINUOUS			0.6	0.75	(125%)				
MOTORS			18.3	18.3	(100%)	HEATING			112	0	(0%)				
						COOLING			471	471	(100%)				
						TOTAL LOAD			498						
						BALANCED 3-PHASE LOAD			599 A						

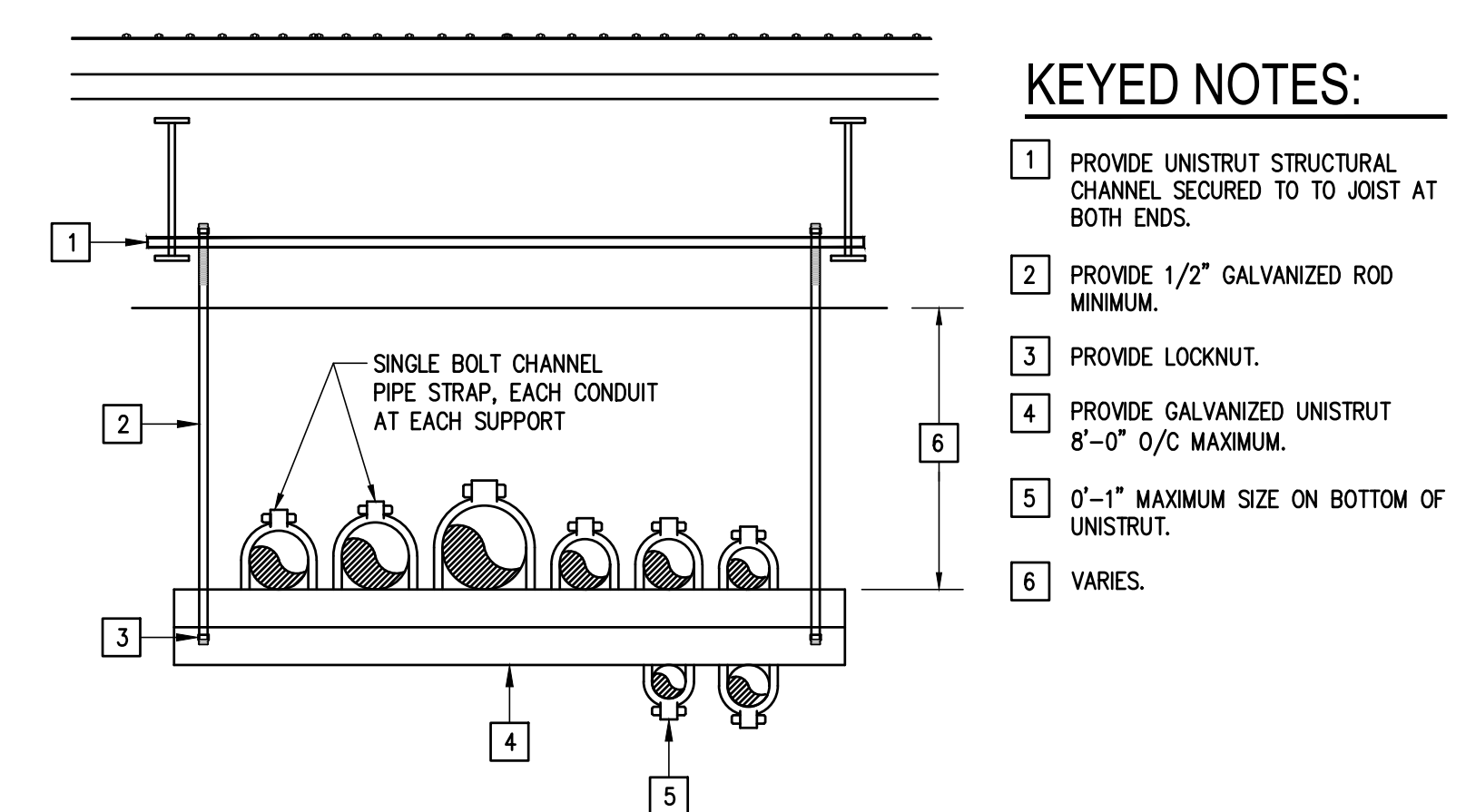
1. PROVIDE N3R STAINLESS STEEL ENCLOSURE. * IF ALTERNATE IS NOT ACCEPTED, LEAVE CIRCUIT BREAKER AS SPARE.

PPS															
ROOM		CENTRAL PLANT		VOLTS			240/120V 2P 3W			AIC			18,000		
MOUNTING		SURFACE		BUS AMPS			100			MAIN BKR			40		
FED FROM		XFMR PPS		NEUTRAL			100%			LUGS			STANDARD		
NOTE: PROVIDE A TYPE WRITTEN AS BUILT CIRCUIT DIRECTORY.															
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA						
			A	B	C				A	B	C				
1	20/1	RECEPT.	0.36			2	20/1	DDC PANEL	0.6						
3	20/1	RECEPT.			0.18	4	20/1	SPARE			0				
5	20/1	SPARE			0	6	20/1	SPARE			0				
7	20/1	SPARE			0	8	20/1	SPARE			0				
TOTAL CONNECTED KVA BY PHASE									0.96		0.18				
			CONN KVA	CALC KVA					CONN KVA	CALC KVA					
RECEPTACLES			0.54	0.54	(50%>10)	TOTAL LOAD			1.29						
CONTINUOUS			0.6	0.75	(125%)	BALANCED LOAD			5.38 A						

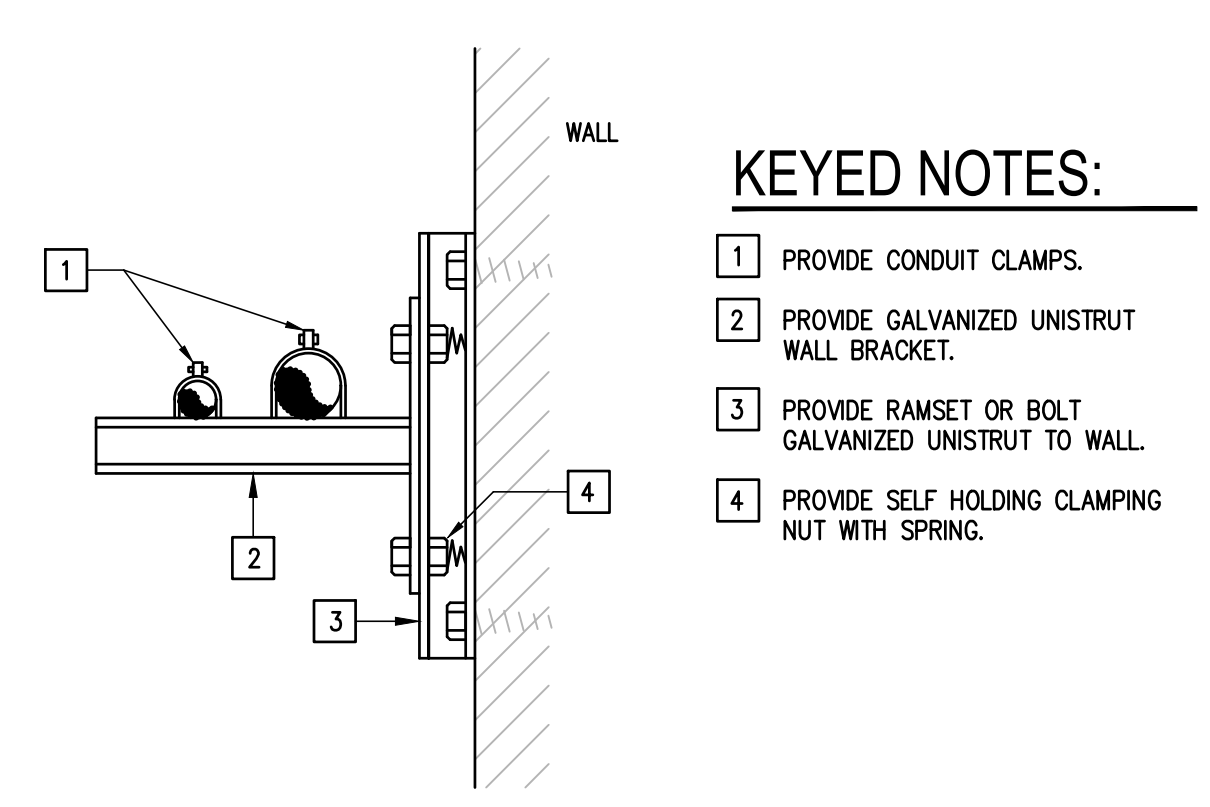
1. PROVIDE N3R ENCLOSURE.
2. PROVIDE PACKAGED POWER SUPPLY WITH INTEGRAL 7.5KVA TRANSFORMER, 30A/2P 480V PRIMARY MCB, AND 40A/2P 240V SECONDARY MCB.



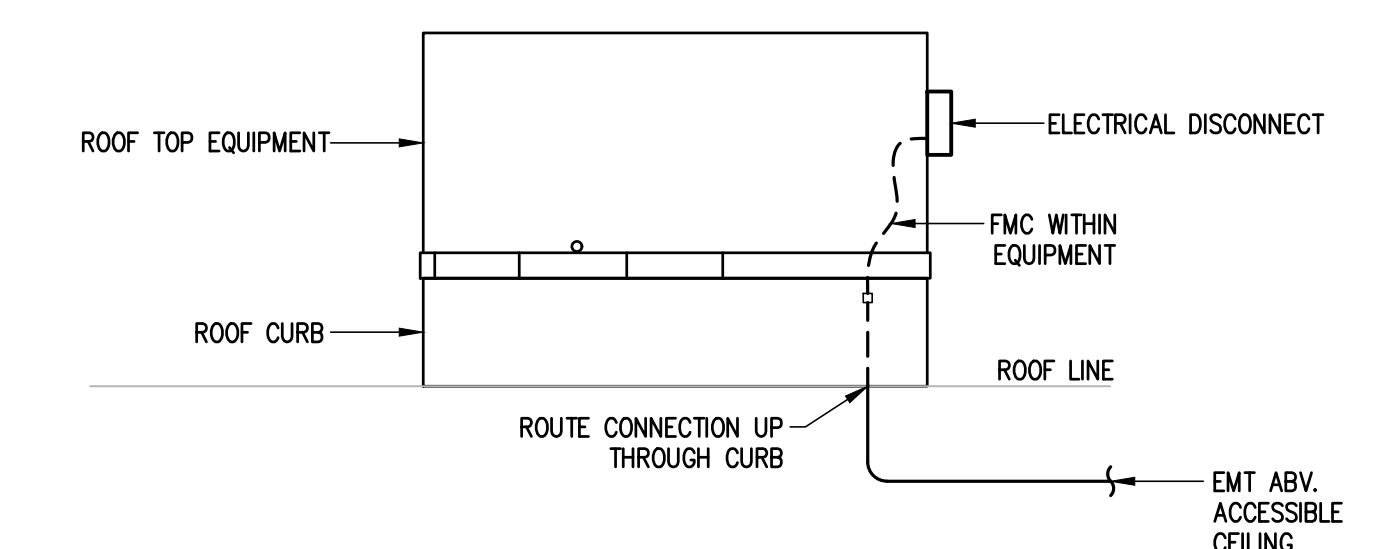
01 EQUIPMENT IDENTIFICATION LABEL DETAIL SCALE: NOT TO SCALE



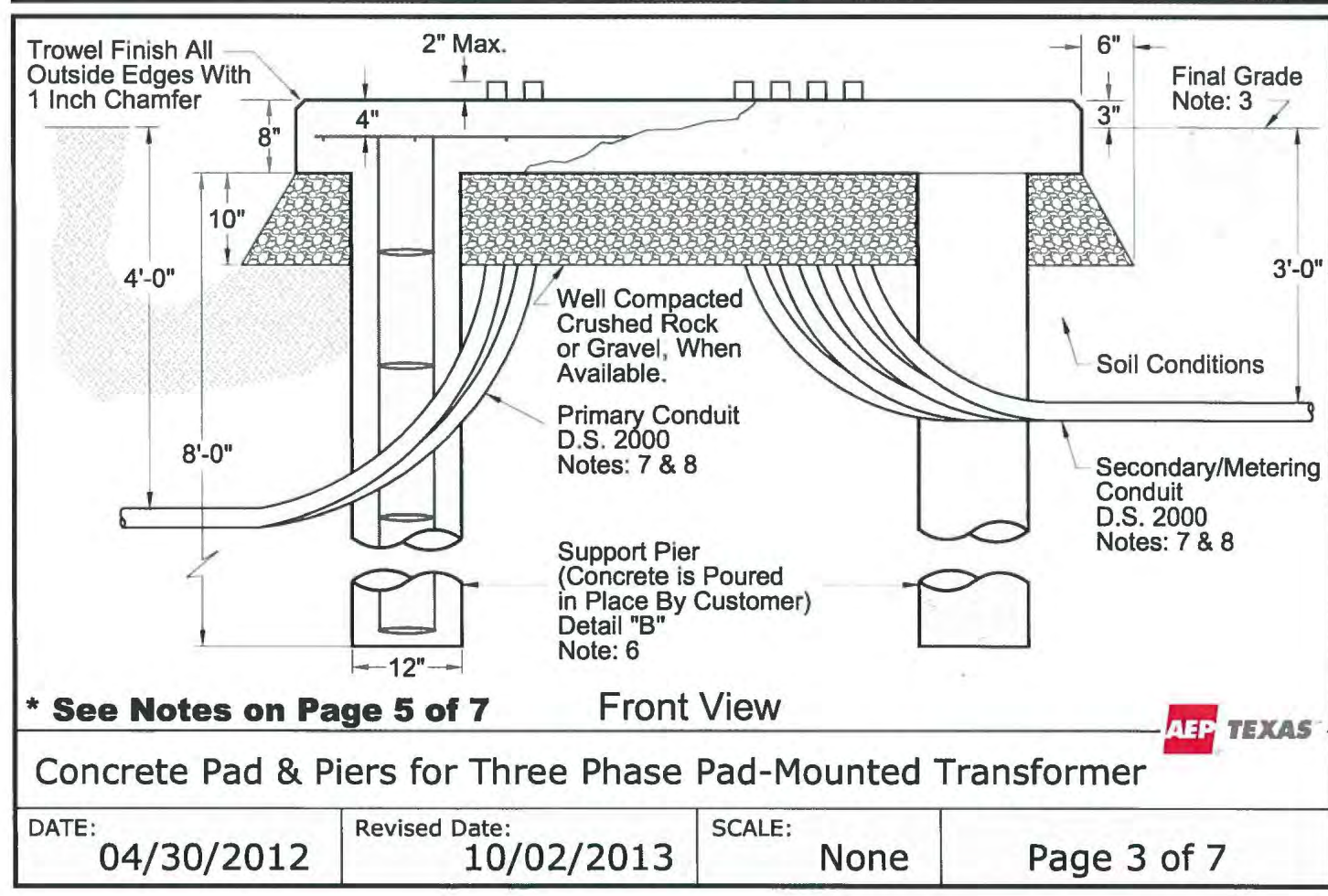
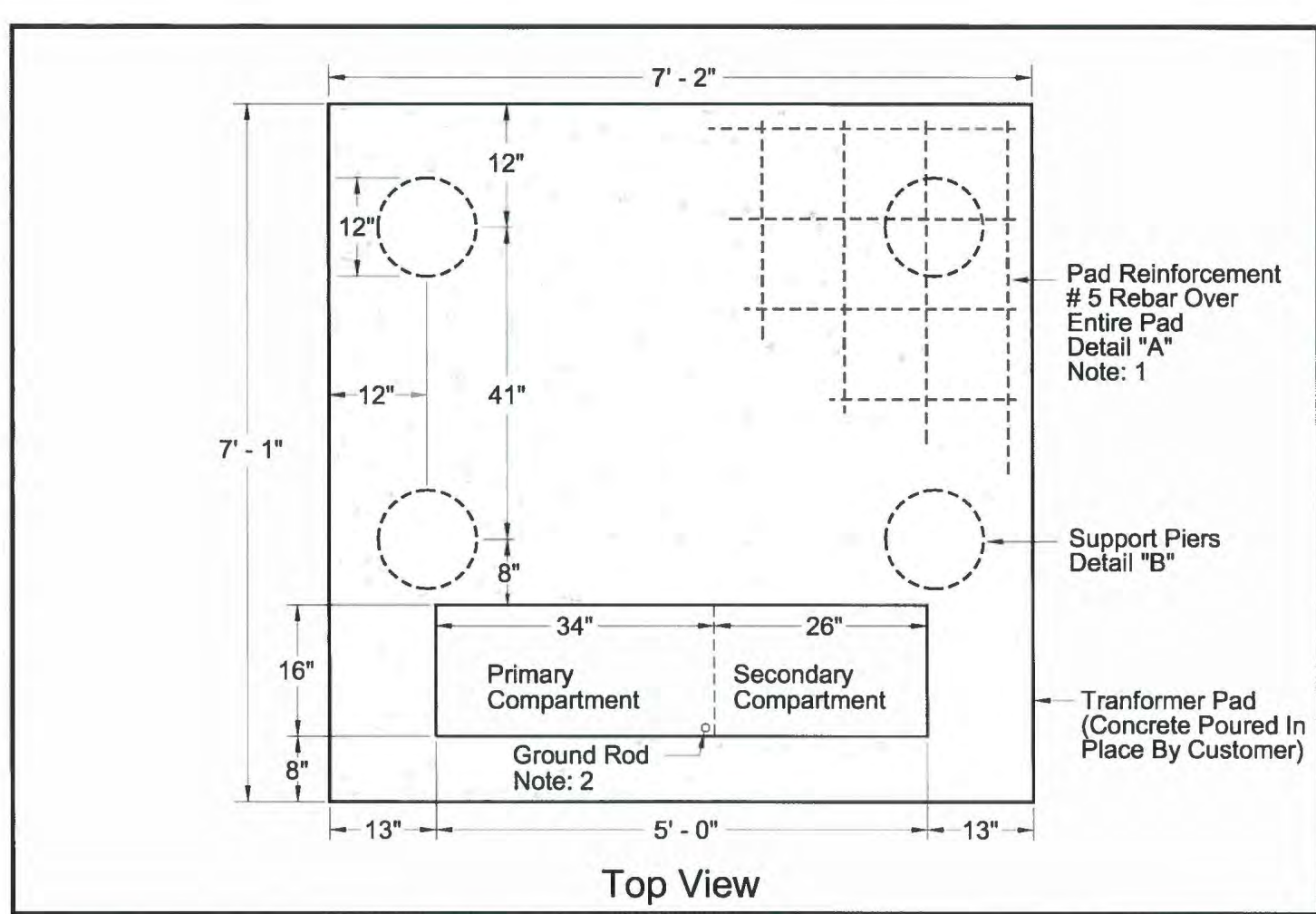
02 HORIZONTAL RACEWAYS SUPPORT DETAIL SCALE: NOT TO SCALE



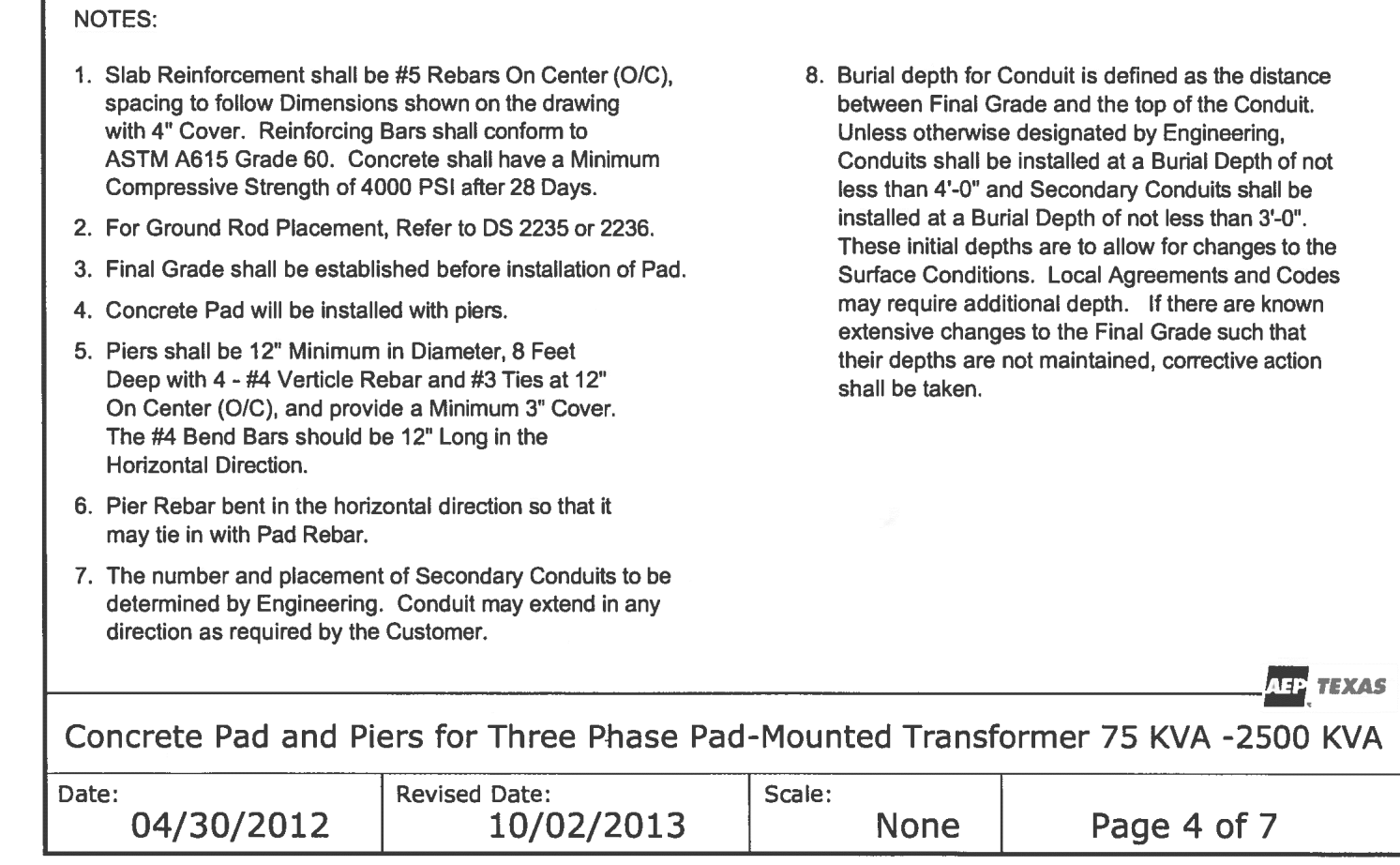
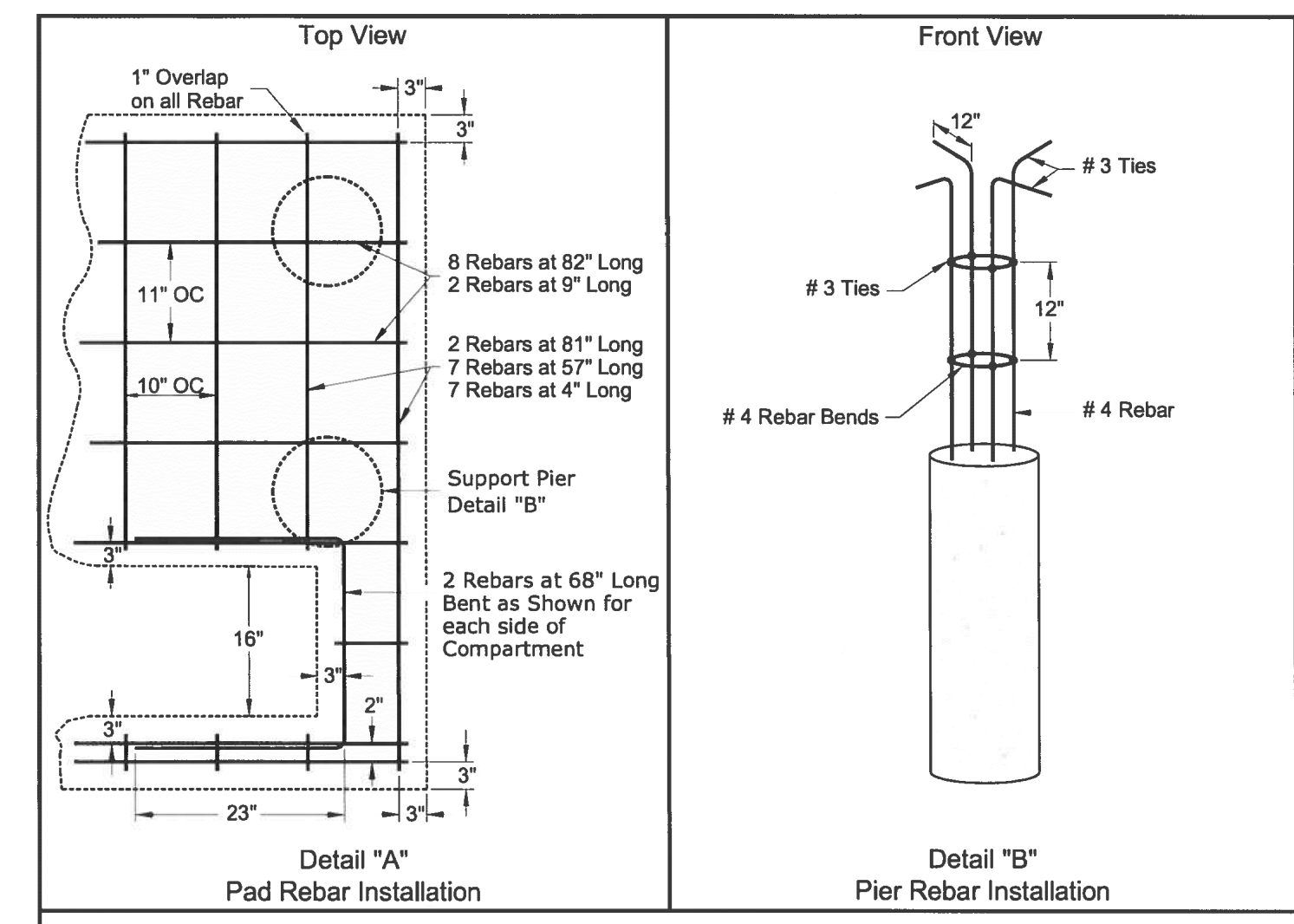
03 RACEWAY RUNS SUPPORT DETAIL SCALE: NOT TO SCALE



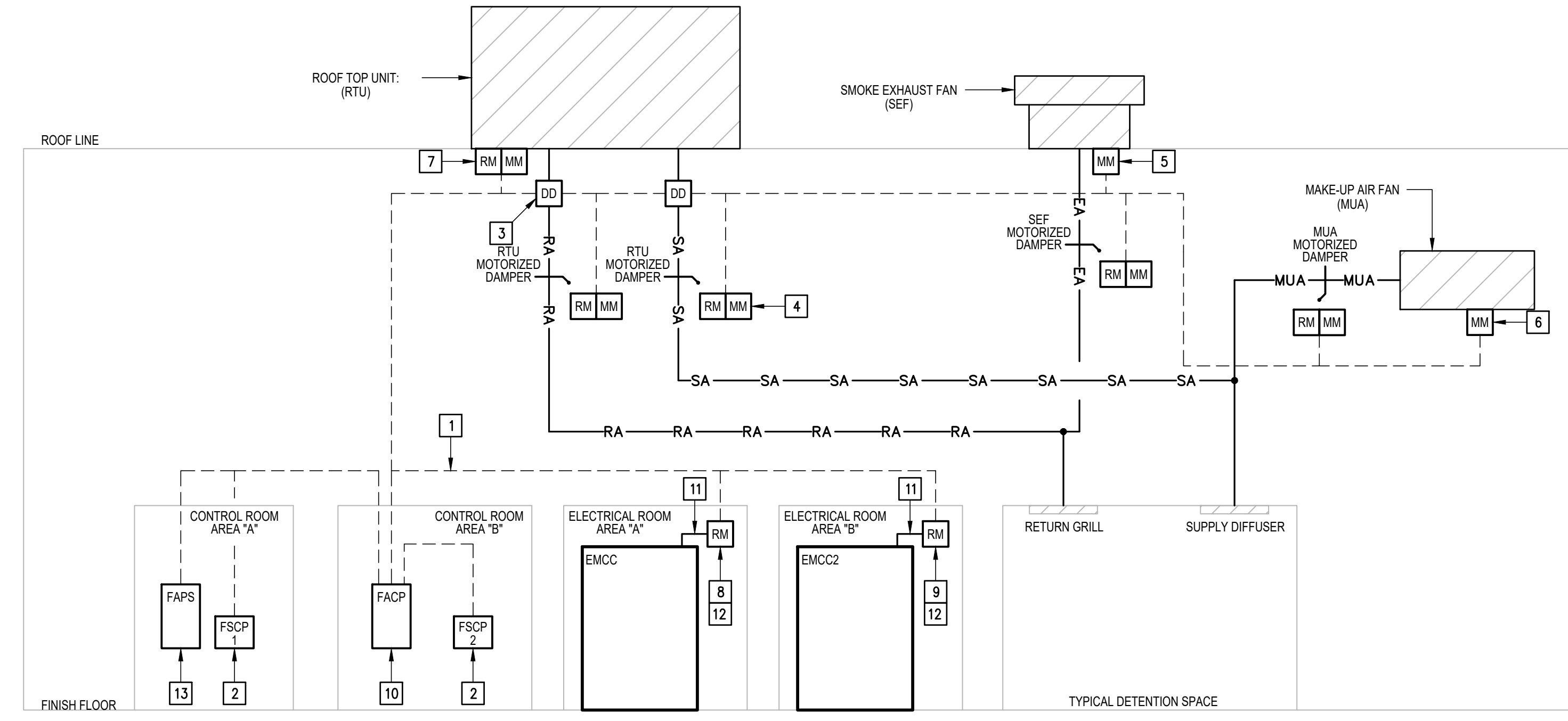
04 ROOF TOP UNIT CONNECTION DETAIL SCALE: NOT TO SCALE



05 AEP TRANSFORMER CONCRETE PAD DETAIL SCALE: NOT TO SCALE



06 CONCRETE PAD AND PIERS FOR THREE PHASE PAD-MOUNTED TRANSFORMER 75 KVA -2500 KVA DATE: 04/30/2012 REVISED DATE: 10/02/2013 SCALE: NONE PAGE 4 OF 7

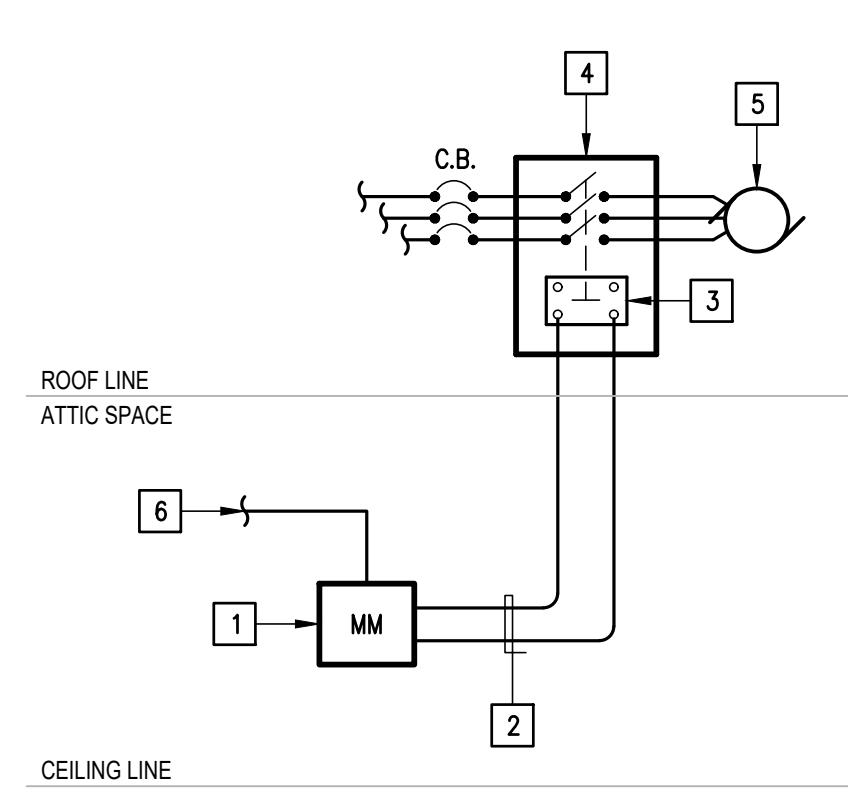


06 SMOKE EVACUATION SYSTEM DIAGRAM SCALE: NOT TO SCALE

LINE TYPE LEGEND

—SA—	SUPPLY AIR DUCT
—RA—	RETURN AIR DUCT
—MUA—	MAKE-UP AIR DUCT
—EA—	EXHAUST AIR DUCT
---	FIRE ALARM CIRCUIT

- KEYED NOTES:
- 1. ALL FIRE ALARM WIRING FOR SMOKE EVACUATION SYSTEM RELATED EQUIPMENT AND DEVICES TO BE ENCLOSED WITHIN CONTINUOUS RACEWAYS - TYPICAL.
 - 2. PROVIDE FIREFIGHTER SMOKE CONTROL PANEL TO COMPLY WITH IFC 909.16. REFER TO SPECIFICATIONS.
 - 3. PROVIDE DUCT SMOKE DETECTORS ON THE SUPPLY AND RETURN DUCTWORK OF ALL RTUs THAT ARE PART OF THE SMOKE EVACUATION SYSTEM - TYPICAL.
 - 4. PROVIDE FIRE ALARM RELAY AND MONITOR MODULES FOR MOTORIZED DAMPERS. ENSURE COMPATIBILITY WITH DAMPER ACTUATOR - TYPICAL.
 - 5. PROVIDE MONITOR MODULE FOR MONITORING OF SEF BELT(S) - TYPICAL.
 - 6. PROVIDE MONITOR MODULE FOR MONITORING OF MAKE UP AIR UNITS - TYPICAL.
 - 7. PROVIDE FIRE ALARM RELAY AND MONITOR MODULES FOR INTERFACING WITH RTUs - TYPICAL.
 - 8. PROVIDE FIRE ALARM RELAY MODULES FOR INTERFACING WITH SEF AND MUA MOTOR STARTERS IN MOTOR CONTROL CENTER. ENSURE COMPATIBILITY - TYPICAL OF 16.
 - 9. PROVIDE FIRE ALARM RELAY MODULES FOR INTERFACING WITH SEF AND MUA MOTOR STARTERS IN MOTOR CONTROL CENTER. ENSURE COMPATIBILITY - TYPICAL OF 9.
 - 10. EXISTING SIEMENS FIRE ALARM CONTROL PANEL. FIRE ALARM CONTRACTOR TO PROVIDE NEW BATTERY CALCULATIONS FOR SYSTEM MODIFICATIONS. PROVIDE NEW BATTERIES AS PER CALCULATION RESULTS.
 - 11. PROVIDE CONTROL WIRING IN 1/2" RACEWAY TO EACH SEF/MAU MOTOR STARTER - TYPICAL.
 - 12. FIRE ALARM CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY RELAYS, TRANSFORMERS, OR ANY REQUIRED DEVICES NEEDED TO INTERFACE THE FIRE ALARM RELAY MODULE WITH THE MOTOR STARTER COILS (120V).
 - 13. EXISTING SIEMENS FIRE ALARM REMOTE POWER SUPPLY. FIRE ALARM CONTRACTOR TO PROVIDE NEW BATTERY CALCULATIONS FOR SYSTEM MODIFICATIONS. PROVIDE NEW BATTERIES AS PER CALCULATION RESULTS.



07 SEF DISCONNECT WIRING DIAGRAM DETAIL SCALE: NOT TO SCALE

- KEYED NOTES:
- 1. PROVIDE FIRE ALARM SYSTEM MONITOR MODULE FOR INTERFACING THE EQUIPMENT DISCONNECT STATUS WITH THE FIRE ALARM SYSTEM.
 - 2. 1/2" RACEWAY WITH 2#8 AWG THWN.
 - 3. PROVIDE ELECTRICAL DRY CONTACT INTERLOCK KIT FOR DISCONNECT TO BREAK CONTROL CIRCUIT BEFORE MAIN SWITCH BLADES BREAK.
 - 4. NEW DISCONNECT.
 - 5. SMOKE EXHAUST FAN.
 - 6. TO FIRE ALARM CONTROL PANEL PROVIDE CABLING.

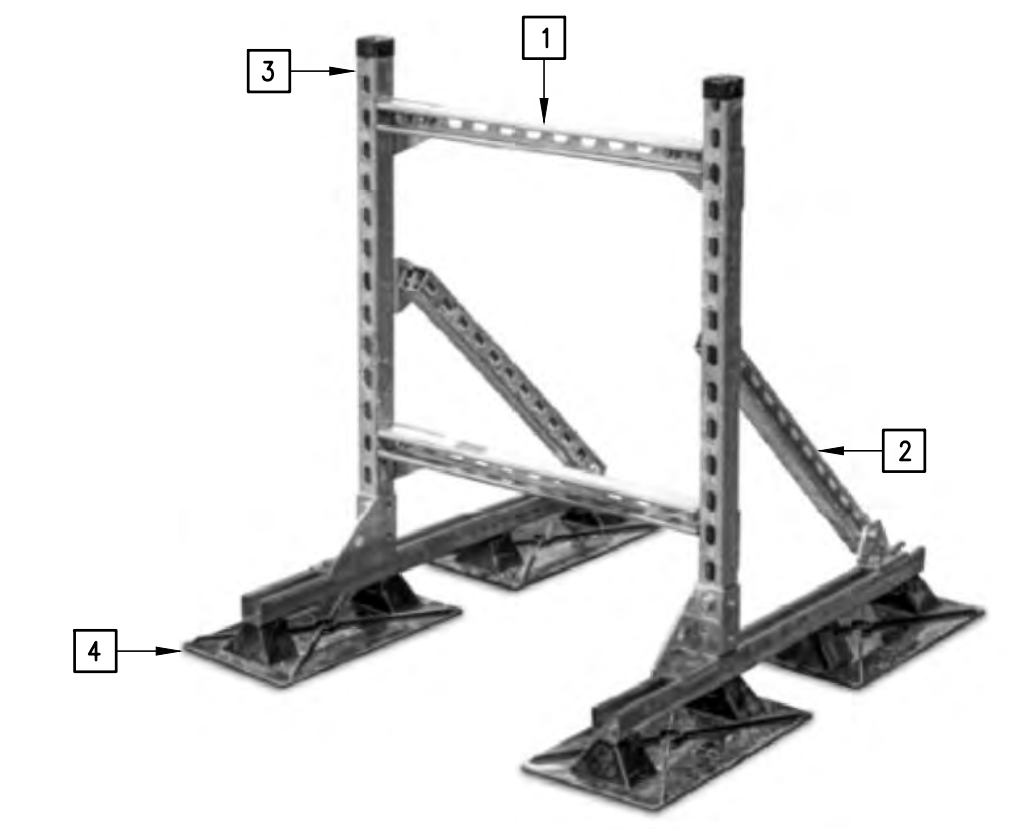
System Outputs

Activate common alarm signal indicator	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Activate audible alarm signal																	
Activate common trouble signal indicator																	
Activate audible trouble signal																	
Activate common trouble signal indicator																	
Activate audible trouble signal																	
Display change of status																	
Transmit trouble signal to supervising station																	
Transmit trouble signal to supervising station																	
Stop RTU wiring associated zone																	
Stop RTU wiring associated zone																	
One associated RTU supply and return air exhausted damper to 100%																	
One associated RTU supply and return air exhausted damper to 100%																	
Stop associated SEF and MUA fans																	

System Inputs

Existing Smoke Detector	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Existing Manual Pullstation																	
Existing Duct Detector																	
Existing Flow Switch																	
Existing Tamper Switch																	
Fire Alarm AC Power Failure																	
Fire Alarm System Low Battery																	
Open Circuit																	
Ground Fault																	
NAC Wire to Wire Short																	
Existing Smoke Detectors in Smoke Evac Zones																	
New RTU Duct Smoke Detectors																	
SEF belt monitoring																	
SEF Disconnect state (on/off) monitoring																	
Motorized damper monitoring																	
Smoke damper monitoring																	
Fire damper monitoring																	

08 FIRE ALARM SEQUENCE OF OPERATION INPUT/OUTPUT MATRIX SCALE: NOT TO SCALE



09 ROOF DISCONNECT SUPPORT DETAIL SCALE: NOT TO SCALE

- KEYED NOTES:
- 1. PROVIDE DISCONNECT SECURED TO HORIZONTAL UNISTRUT SUPPORTS.
 - 2. PROVIDE SUPPORT BRACE.
 - 3. PROVIDE UNISTRUT SUPPORT. PAINT CUT ENDS WITH COLD GALVANIZED COMPOUND.
 - 4. PROVIDE UV STABLE POLYCARBONATE BASE. ANCHOR TO NEW CURBS.
- GENERAL NOTE:
PROVIDE ALL HARDWARE AND SUPPORTS HOT-DIPPED GALVANIZED STEEL.