

# **INDEX OF DRAWINGS**

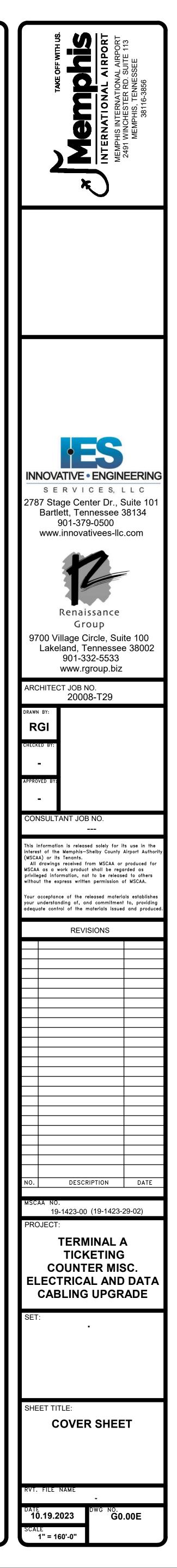
GENERAL G0.00E COVER SHEET

ELECTRICAL				
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**PROJECT NOTES** 

- CONFORM TO THE REQUIREMENTS OF ALL APPLICA
- PROTECTION AND LIFE SAFETY CODE ENFORCED BY LOCAL AUTHORITY. DESIGN BUILD CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS APPROVALS, LICENSES, ETC., FOR ALL TRADES. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL LOCAL CODES, ORDINANCES, AND
- OTHERWISE USED AS ROUTES FOR MATERIAL TRANSPORTATION IN ORDER TO REACH REMAINING WORK. SCHEDULE ANY PREPARATION WORK TO
- ) THE PROPERTY DUE TO UNFINISHED OPEN WOR
- COORDINATE THE COMPATIBILITY OF THE PREPARATION WORK WITH THE REQUIREMENTS OF THE MATERIALS AND PROCEDURES SPECIFIED FOR
- ANY DAMAGE TO EXISTING FINISH. INCLUDING BUT NOT LIMITED TO WALL FINISHES. FLOORING ETC., USED AS HAUL ROUTES OR ACCESS ROUTES TO THE SATISFACTION OF THE OWNER AND ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER.
- 7. CONTRACTOR MUST FOLLOW THE AIRPORT REQUIREMENTS OF ID BADGING AND ACCESS TO WORK AREA THAT REQUIRE SECURITY CREDENTIALS. VERIFY JOB CONDITIONS PRIOR TO BEGINNING WORK. REPORT TO ENGINEER ANY DISCREPANCIES OR OMISSIONS WHICH MAY INTERFERE WITH 8. SATISFACTORY COMPLETION OF WORK. RESOLVE ANY DISCREPANCIES PRIOR TO BEGINNING WORK. VERIFY ALL FIELD MEASUREMENTS, FIELD CONSTRUCTION, INSTALLATION CRITERIA. COORDINATE ALL TRADES AND THE METHODS OF CONSTRUCTION. ALL WORK IS TO CONFORM WITH DRAWINGS AND SPECS. DRAWINGS ARE NOT TO BE SCALED FOR INFORMATION. CONTRACTOR TO VERIFY THE ACTUAL SIZE FOR PROPER INSTALLATION.
- ENSURE THE PREMISES ARE MAINTAINED CLEAN AND FREE OF DEBRIS DURING WORK. COORDINATE THE FREQUENCY OF REMOVAL WITH OWNER. FINAL CLEANUP IS THE RESPONSIBILITY OF THE CONTRACTOR. REPAIR, PATCH, TOUCH-UP AND MAINTAIN CLEANING THROUGHOUT THE PROJECT. REMOVE AND DISPOSE OF ALL DEMOLISHED MATERIAL AND OTHER CONSTRUCTION DEBRIS. OWNER'S DUMPSTER(S) OR TRASH CAN(S) SHALL NOT BE FOR DISPOSAL OF ANY CONSTRUCTION WASTE. REPAIR GROUND DAMAGE CAUSED BY TRUCK TRAFFIC.
- CONTRACTOR TO OVERSEE CLEANING AND ENSURE THAT THE PREMISES ARE MAINTAINED AND SECURED DURING CONSTRUCTION. DAILY CLEANUP 10. AND FINAL CLEANUP IS THE RESPONSIBILITY OF THE CONTRACTOR. REPAIR, PATCH, TOUCH-UP AND MAINTAIN CLEANING UNTIL ACCEPTANCE BY OWNER OWNER RESERVES THE RIGHT TO REJECT ANY COMPLETED WORK THAT HAS NOT BEEN PROPERLY PROTECTED FROM CONSTRUCTION MATERIAL, UNPROTECTED FOOT TRAFFIC OR ANY CONSTRUCTION ACTIVITY HAS POTENTIALLY COMPROMISED THE INTEGRITY OF THE NEW **INSTALLATION.**
- 11. COORDINATE AND OBTAIN APPROVAL FROM OWNER FOR LOCATION OF DUMPSTER, MATERIAL STAGING, ETC.
- 12. ALL MATERIAL STORED ON SITE SHALL BE PROPERLY PROTECTED TO PREVENT DAMAGE. FAILURE TO PROTECT MATERIAL MAY BE CAUSE FOR REJECTION OF WORK.
- 13. REMOVE CONSTRUCTION AND GENERAL DEBRIS FROM THE WORK AREA. DISCARD ANY SCREWS, METAL SCRAPS, FOOD, WATER BOTTLES AND MISCELLANEOUS GARBAGE.
- CONTRACTOR'S FIELD SUPERINTENDENT MUST BE PRESENT AND RESPONSIBLE FOR OVERSEEING THE WORK PROGRESS WHEN ANY WORK IS 14. PERFORMED. FOR THE DURATION OF THE REPAIR PROJECT, CONTRACTOR MUST MAINTAIN AND FURNISH ELECTRONIC DAILY LOG TO PROJECT TEAM AND OWNER DESIGNATED PERSONNEL DAILY. THE LOG DOCUMENTATION SHALL INCLUDE INFORMATION SUCH AS AMOUNT OF WORK COMPLETED, PROGRESS PICTURES, FIELD CHANGES, CONCEALED CONDITIONS, TRANSITION OF MATERIAL, UNFORESEEN DAMAGES, INCIDENTS ETC. THIS INFORMATION SHALL BE INCLUDED AS PART OF THE CLOSEOUT DOCUMENT AT THE END OF THE PROJECT.
- 15. ALL WORK IS TO CONFORM WITH DRAWINGS AND SPECS. DRAWINGS ARE APPROXIMATE ONLY AND NOT TO BE SCALED FOR INFORMATION. PAYMENT WILL NOT BE MADE TO GENERAL CONTRACTOR ON CHANGES OR EXTRAS UNLESS THEY ARE VERIFIED AND APPROVED BY OWNER.
- 16. SHOULD CONFLICT OCCUR IN OR BETWEEN DRAWINGS OR WHERE DETAIL REFERENCES OR CONTRACT DRAWINGS HAVE BEEN OMITTED, CONTRACTOR IS DEEMED TO HAVE ESTIMATED THE MOST EXPENSIVE MATERIALS AND CONSTRUCTION INVOLVED UNLESS THEY HAVE ASKED FOR AND OBTAINED WRITTEN PERMISSION FROM ARCHITECT AS TO WHICH MATERIAL OR METHOD WILL BE REQUIRED.
- 17. NO PORTION OF THE WORK REQUIRING A SHOP DRAWING OR SAMPLE SUBMISSION SHALL BE COMMENCED UNTIL THE SUBMISSION HAS BEEN APPROVED BY THE AIRPORT. ALL SUCH PORTIONS OF THE WORK SHALL BE IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS AND SAMPLES.
- 18 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING JOB CONDITIONS AND SHALL REPORT TO ENGINEER ANY DISCREPANCIES OR OMISSIONS WHICH WOULD INTERFERE WITH SATISFACTORY COMPLETION OF WORK. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL FIELD MEASUREMENTS, FIELD CONSTRUCTION, INSTALLATION CRITERIA, COORDINATION OF ALL TRADES AND THE METHODS OF CONSTRUCTION.
- 19. CONTRACTOR SHALL PROVIDE A SCHEDULE OF SHOP DRAWINGS, SAMPLES AND CUT SHEETS TO ENGINEER/OWNER'S APPROVAL PRIOR TO ORDERING OR FABRICATION. CONTRACTOR'S RESPONSIBILITY FOR ERROR OR OMISSIONS IN SUBMITTAL IS NOT RELIEVED BY A/E REVIEW OF SUBMITTAL. DISRUPTION SHALL BE MINIMAL OUTSIDE PROJECT LIMIT AT ALL TIMES DURING CONSTRUCTION.
- 20. THE EXACT LIMITS OF THE CONTRACTOR'S STAGING AND STORAGE AREA SHALL BE ESTABLISHED BY THE CONTRACTOR WITH THE APPROVAL OF MSCAA.
- 21. CONTRACTOR SHALL EXERCISE ALL SAFETY PRECAUTION DURING WORK. DO NOT ALLOW WASTE MATERIAL TO COLLECT IN CONCENTRATED BUILDUPS AROUND THE WORK AREA. FURNISH PROTECTION OF THE BUILDINGS CONTENTS AND PERSONNEL AT ALL TIMES. COLLECT AND REMOVE DEMOLITION AND WASTE MATERIAL FROM THE WORK AREA IN AN ORDERLY MANNER . THE PROJECT AREA WILL BE IN USE DURING THE CONSTRUCTION ; THEREFORE, IT IS OF UTMOST IMPORTANCE FOR SAFETY DURING THE WORK. 22.
- COORDINATE ALL MATERIAL, WORKMEN ACCESS, WITH THE OWNER'S REPRESENTATIVE TO MINIMIZE DISRUPTION OF THE OWNER'S USE OF THE FACILITY AND TO MINIMIZE THE THREAT OF LOSS OR DAMAGE TO THE EXISTING FACILITY, ITS CONTENTS, AND OCCUPANTS. THE CONSTRUCTION SHALL NOT COMPROMISE SECURITY, LIFE SAFETY OR FIRE SAFETY REQUIREMENTS. ANY WORK AFFECTING CODE REQUIREMENTS SHALL BE COMPLETED IN THE SAME WORK DAY OR TEMPORARY MEASURES SHALL BE TAKEN TO ASSURE SAFETY COMPLIANCE AT ALL TIMES.
- 23. SEE TERMS AND CONDITIONS IN PROCUREMENT REQUIREMENT FOR INFORMATION ABOUT LIQUIDATED DAMAGES.
- ALL WORK THAT WOULD GENERATE EXCESSIVE NOISE SUCH AS DEMOLITION JACK HAMMERING, SAW CUTTING ETC MUST OCCUR AT NIGHT FROM 24 2200-0500 TO AVOID DISTURBANCE OF THE DAY TIME OPERATION OF THE AIRPORT. SHOULD THERE BE A NEED FOR MASONRY OR CONCRETE CUTTING OR DRILLING, IT IS THE RESPONSIBILITY FOR OF THE CONTRACTOR TO PROTECT
- 25. BOTH CONSTRUCTION WORKERS AND AIRPORT WORKERS FROM SILICA DUST. CONTRACTORS CAN USE TOOLS FROM TABLE 1 OF THE SILICA STANDARD THAT INVOLVE HEPA VACUUMS OR WET METHODS TO PREVENT SILICA DUST FROM BECOMING AIRBORNE.



SYMBOL	
ο	LIGHTING RECESSED CAN DOV
A	CHAIN MOUNT LED F
	RECESSED MOUNT (
	LINEAR SUSPENDED
	SERVICE AND DISTR SWITCHBOARD DISTRIBUTION PANE BRANCH CIRCUIT PA TRANSFORMER MOTOR CONNECTIO GENERATOR CONNE DISCONNECT SWITC MOTOR CONTROLLE
	COMMUNICATIONS DATA OUTLET WITH TELEPHONE OUTLET 4 PORT DTAT OUTLE CABLE TV OUTLET

## ELECTRICAL LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	
		BASIC MATERIALS	
OWNLIGHT	1	BRANCH CIRCUIT WIRE & CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING, HOME RUN TO PANELBOARD. A NUMERAL, IF PRESENT AT ARROW HEAD, INDICATES	
D FIXTURE (LETTER REFERENCES FIXTURE SCHEDULE)		CIRCUIT NUMBER. ANY BRANCH CIRCUIT SHOWN WITHOUT SLASH MARKS INDICATES A CONDUIT CONTAINING (3) #12 AWG CONDUCTORS (HOT, NEUTRAL & GROUND). SLASH MARKS, IF PRESENT, INDICATE THE FOLLOWING: HOT (ENERGIZED) CONDUCTOR, NEUTRAL CONDUCTOR, GROUND CONDUCTOR	
T CEILING LED LIGHTING FIXTURE		CUNDUCTOR, NEUTRAL CUNDUCTOR, GROUND CUNDUCTOR	
		WIRE & CONDUIT RUN EXPOSED	
ED LED LIGHTING FIXTURE		WIRE & CONDUIT RUN IN OR UNDER FLOOR	
TRIBUTION		EXISTING LIGHT FIXTURE OR ELECTRICAL DEVICE MAY BE REMOVED AND/OR RELOCATED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED. UNO, LINE TYPE TYPICAL FOR ALL DEVICES TO BE REMOVED AND/OR RELOCATED.	
NEL		DISCONNECT SWITCH	
PANEL	J	JUNCTION BOX	
	•	PUSHBUTTON	
ION	Sm	MANUAL MOTOR STARTER SWITCH	
NECTION	S	SINGLE-POLE, SINGLE-THROW (S.P.S.T.) WALL SWITCH	
TCH (FUSED AS REQUIRED)	Sĸ	KEYED WALL SWITCH	
LER (SPECIFIED IN OTHER THAN DIV. 26)	Sø	WALL BOX DIMMER CONTROL	
	S3	SINGLE-POLE, DOUBLE-THROW (S.P.D.T.) WALL SWITCH	
	$\ominus$	SINGLE RECEPTACLE IN WALL (NEMA 5-20R)	
8	$\ominus$	DUPLEX RECEPTACLE IN WALL (NEMA 5-20R)	
H 3/4" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE	GFCI	G.F.I. TYPE DUPLEX RECEPTACLE IN WALL 44" A.F.F. (NEMA 5-20R)	
ET WITH 3/4" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE	•	DUPLEX RECEPTACLE IN WALL, EMERGENCY CIRCUIT (NEMA 5-20R)	
LET, 2 DATA, 2 PHONE		DUPLEX RECEPTACLE IN FLOOR (NEMA 5-20R)	
	<b>⊕</b> −	DOUBLE DUPLEX RECEPTACLE IN WALL (NEMA 5-20R)	
	⊖	G.F.I. TYPE DUPLEX RECEPTACLE OUTDOORS (WEATHERPROOF)	
	<b>⊖</b> =	SINGLE 240V RECEPTACLE FOR APPLIANCE OR EQUIPMENT (PER APPLIANCE RATING)	

⊖<sub>x</sub>

X = TR (TAMPER RESISTANT) OR AF (ARC FAULT)

## ELECTRICAL ABBREVIATIONS

## SYMBOL DESCRIPTION AMPERE AFF AFG AIC ANN AUX

A

AWG

C CB CKT CLP CT

CU DISC EDF

FAAP

FACP

FLA

G GFI HP

HZ

KVA

KW LED MCC MLO

N NEC

SOWB

UGW

PF

V

VA

3P

3PH 4W 30/3

VFD WP

XFMR

KCMIL

ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AMPERES INTERRUPTING CURRENT

ANNUNCIATOR AUXILIARY

AMERICAN WIRE GAUGE CONDUIT CIRCUIT BREAKER CIRCUIT

CURRENT LIMITING PANEL CURRENT TRANSFORMER COPPER

DISCONNECT ELECTRIC DRINKING FOUNTAIN FIRE ALARM ANNUMNICATOR PANEL

FIRE ALARM CONTROL PANEL FULL LOAD AMPS GROUND GROUND FAULT CURRENT INTERRUPTER

HORSEPOWER HERTZ THOUSAND CIRCULAR MILS

KILOVOLT-AMPERE KILOWATT LIGHT EMITTING DIODE MOTOR CONTROL CENTER

MAIN LUGS ONLY NEUTRAL NATIONAL ELECTRIC CODE POWER FACTOR

SPACE ONLY WITH BUS UNDERGROUND ELECTRICAL VOLT

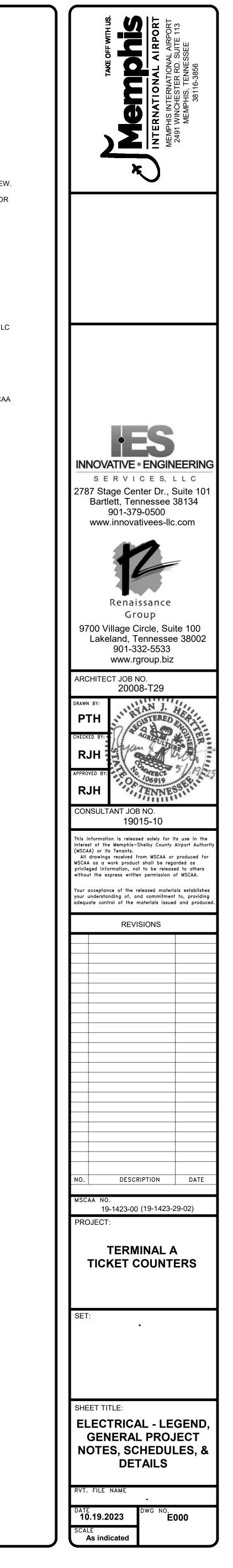
VOLT-AMPERE VARIABLE FREQUENCY DRIVE WEATHER PROOF

TRNASFORMER THREE POLE

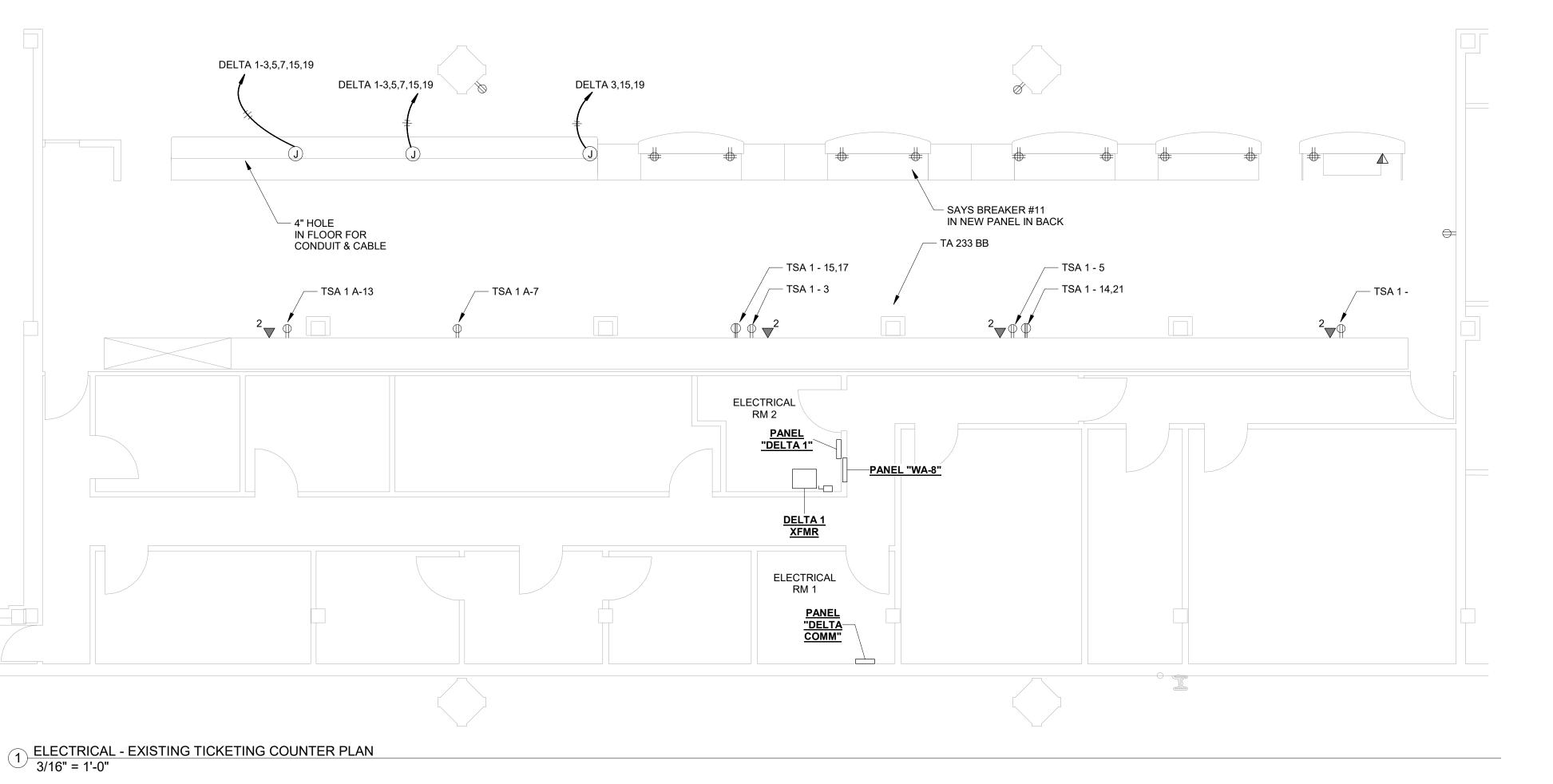
THREE PHASE FOUR WIRE 30 AMPERE, 3-POLE

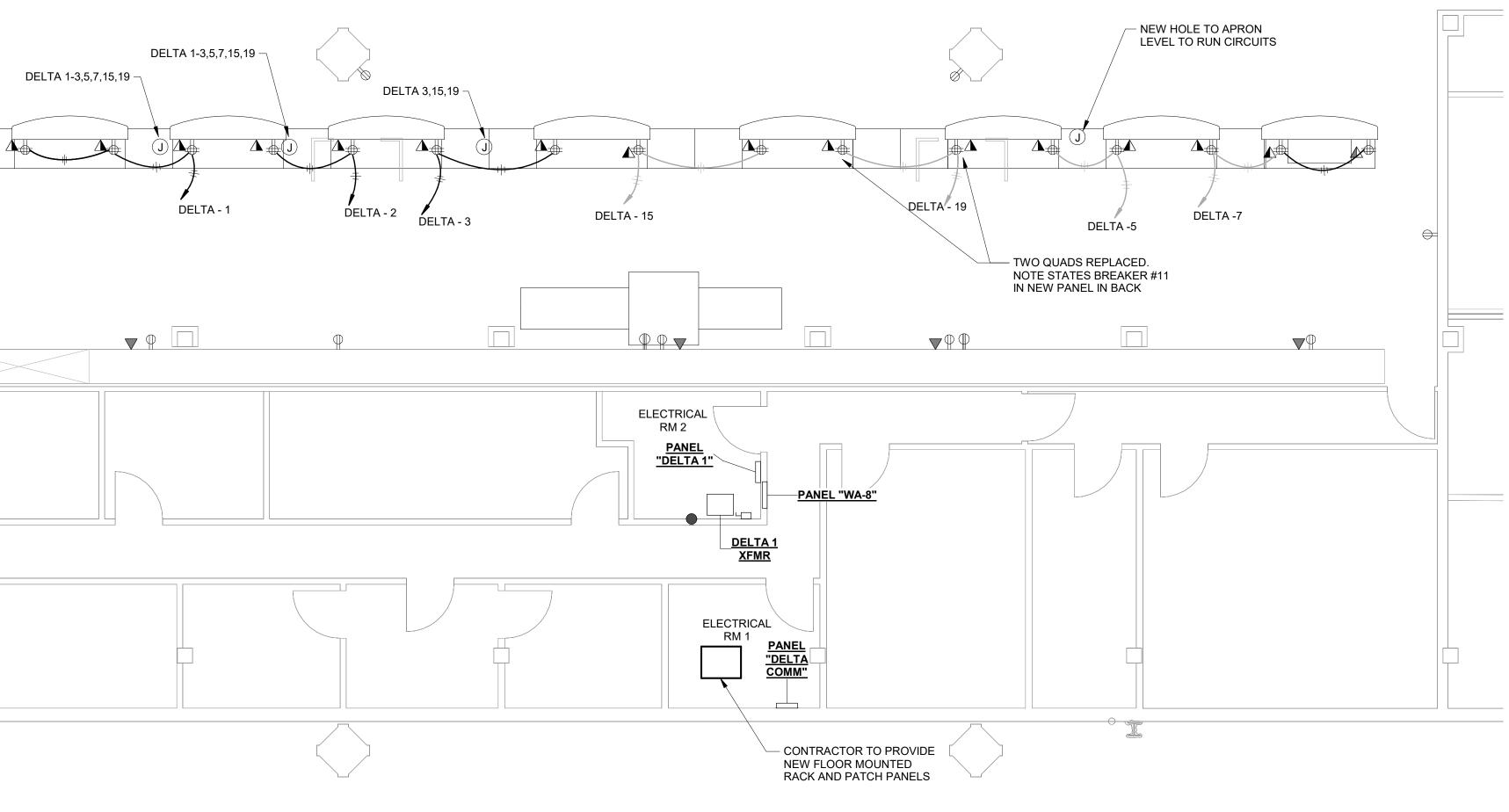
#### **GENERAL PROJECT NOTES:**

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AIRPORT SPECIFICATIONS, NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE STANDARDS AND REGULATIONS ENFORCED BY THE AUTHORITY HAVING JURISDICTION. ALL DATA/COMM CABLE SHALL BE IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.
- 2. ALL ABOVE GROUND EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT WITH CORROSION RESISTANT FITTINGS, CLAMPS AND SUPPORT. INTERIOR EXPOSED CONDUIT ABOVE GROUND SHALL BE EMT.
- IN THE EVENT OF CONFLICTS BETWEEN THE DRAWINGS, SPECIFICATIONS, CODES AND REGULATIONS, NOTIFY 3. THE ARCHITECT IN WRITING FOR ENGINEER OF RECORD'S OPINION PRIOR TO INSTALLATION.
- 4. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL AND TO THE ENGINEER FOR REVIEW.
- SMACNA SEISMIC RESTRAINT MANUAL, THIRD EDITION 2008, OR LATEST REVISION MAY BE USED AS A GUIDE FOR 5 GENERAL SEISMIC SUPPORT DETAIL AND SUPPORT SPACING RECOMMENDATIONS.
- COORDINATE LOCATION OF ALL LIGHTING FIXTURES, MECHANICAL EQUIPMENT AND ACCESS PANELS WITH 6. OTHER DISCIPLINES PRIOR TO ROUGH-IN.
- 7. WHILE GREAT EFFORT HAS BEEN MADE TO IDENTIFY EXISTING CIRCUITS THAT ARE TO BE REMOVED OR REPLACED, THE INFORMATION MAY NOT BE ACCURATE.
- 8. ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE AND AMP DRAW FOR ALL NEW EQUIPMENT.
- 9. CONTRACTOR SHALL PROVIDE AN ARC-FLASH STUDY FOR NEW EQUIPMENT SUCH AS TRANSFORMER, DISCONNECTS, AND PANELBOARDS.
- 10. ALL LOW VOLTAGE CABLING SHALL BE TESTED PER ANSI/TIA-568-C AND MSCAA STANDARDS. 11. ALL COPPPER DATA CABLING SHALL BE CATEGORY 6A. ALL FIBER SHALL BE SINGLE MODE TERMINATED WITH LC CONNECTORS.
- 12. ANSI/TIA-1152A TESTING STANDARDS MUST BE FOLLOWED FOR ALL DATA CABLING INSTALLATIONS.
- 13. ALL FIBER TESTING SHOULD INCLUDE BOTH OLTS AND OTDR AND ALL STRANDS SHALL PASS BOTH TESTS.
- 14. IN GENERAL, ITEMS IN GREY ARE EXISTING. DARKER ITEMS ARE NEW. 15. BIDDING CONTRACTOR SHALL COVER ALL ELECTRICAL AND LOW VOLTAGE WORK SHOWN IN THE PLANS. MSCAA IT WON'T BE PERFORMING ANY WORK OTHER THAN REMOVING NETWORK EQUIPMENT AND GENERAL COORDINATION.



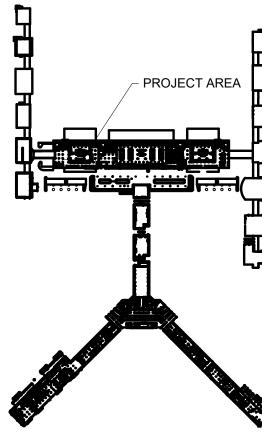
2 ELECTRICAL - NEW TICKETING COUNTER LAYOUT PLAN 3/16" = 1'-0"

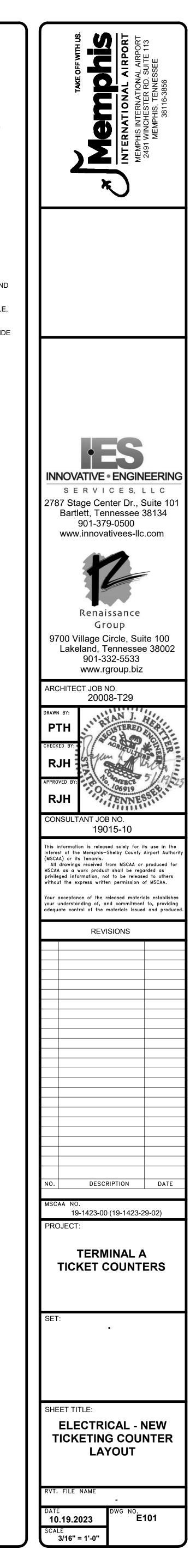


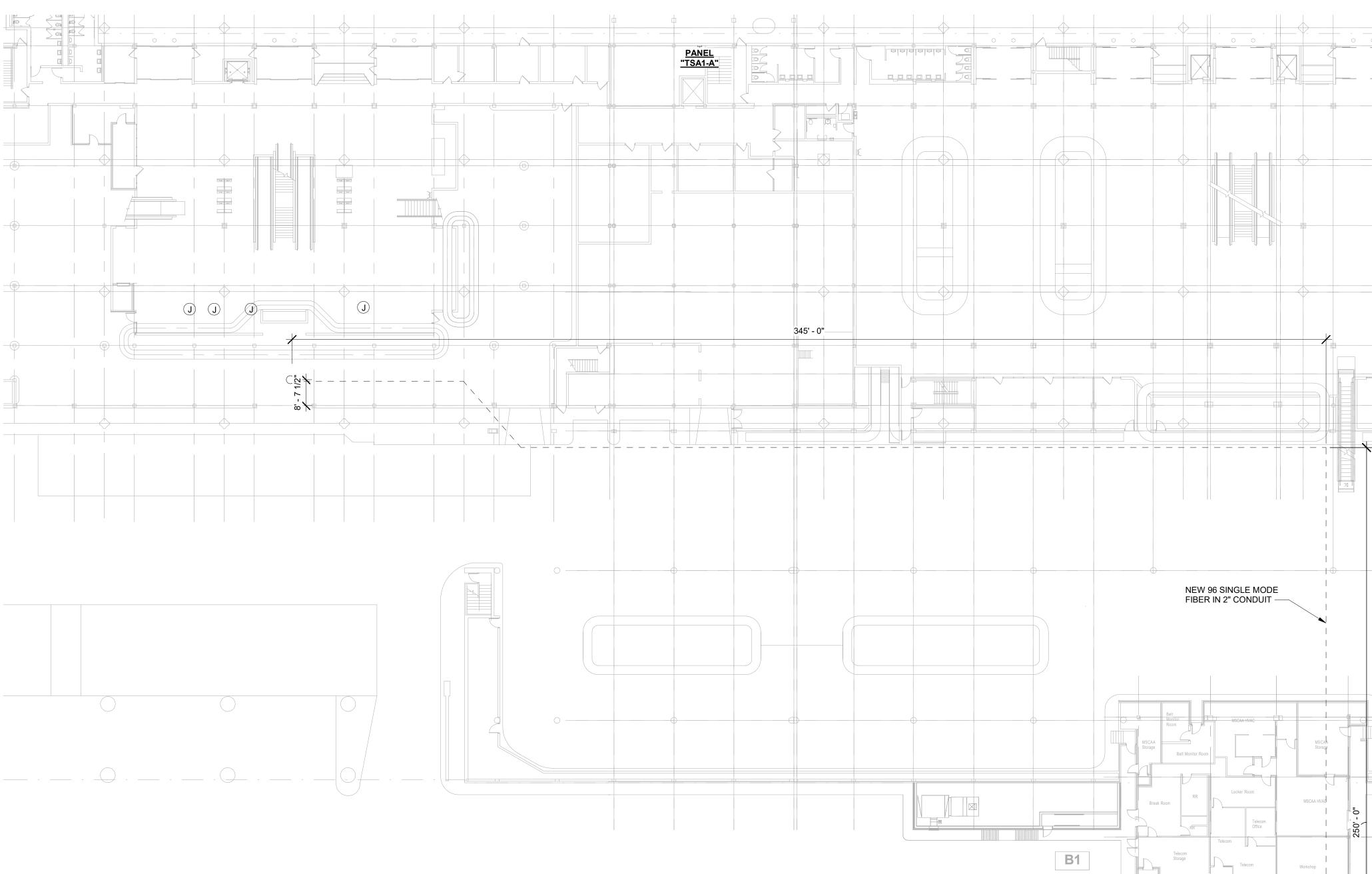


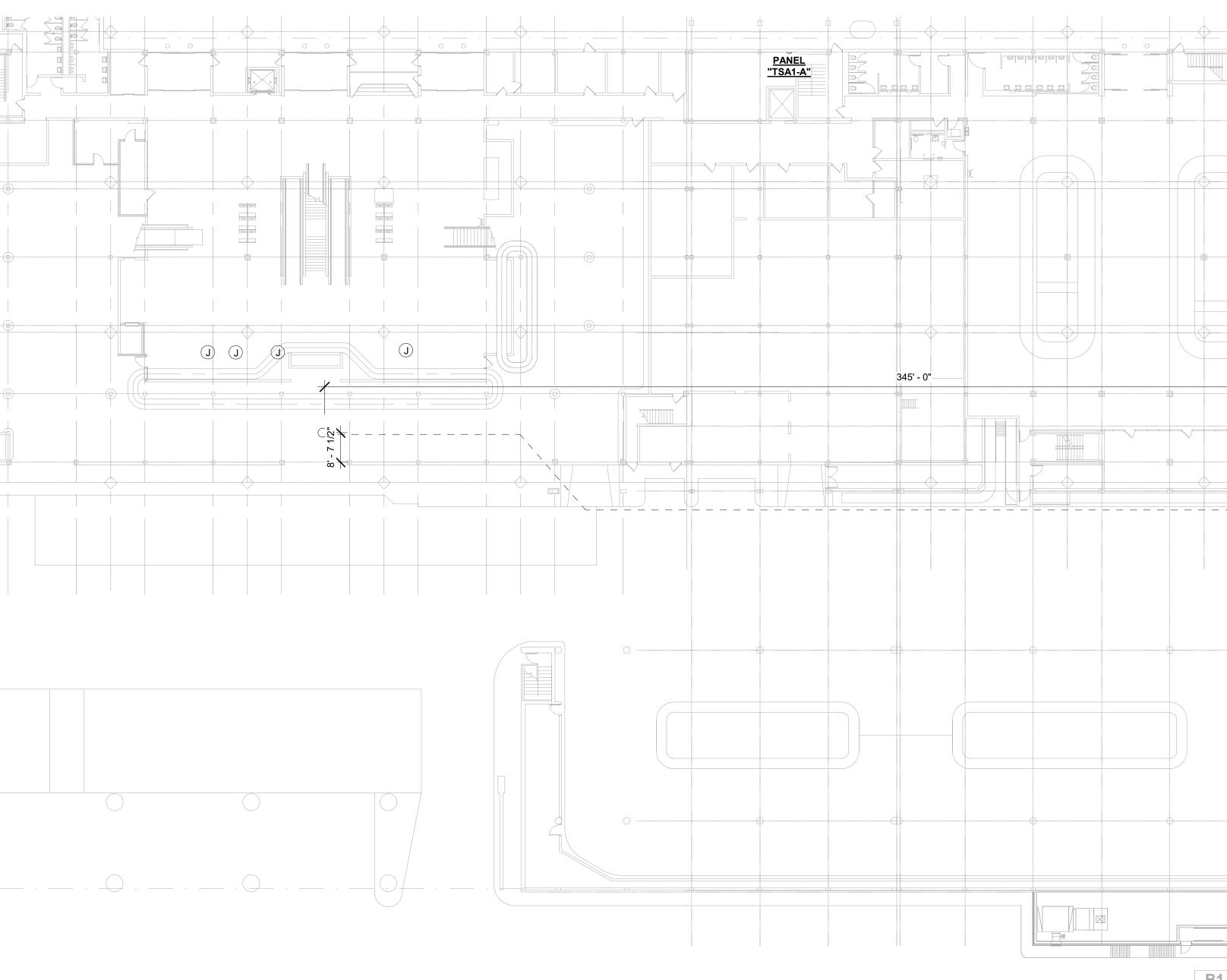
### GENERAL DRAWING NOTES

- A. RE-USE EXISTING CIRCUITS.
- B. SPREAD OUT EXISTING CIRCUITS DELTA 1-3, 5,7, 15,19. CIRCUITS ARE ALREADY TO THE JUNCTION BOXES IN THE COUNTER ROW. CIRCUITS NEED TO BE RE-DISTRIBUTED TO THE COUNTERS AS SHOWN IN NEW LAYOUT PLAN.
- C. NEW QUAD OUTLETS ARE SHOWN WHERE A WHIP WILL ENTER THE OWNER FURNISHED COUNTER. A QUAD OUTLET SHALL BE INSTALLED INSIDE THE COUNTER.
- D. RUN NEW DATA BACK TO ELECTRICAL RM 1. ALL DATA CABLES TO BE TERMINATED BY CONTRACTOR INTO NEW IT ROOM PATCH PANELS. WHERE A NEW DATA OUTLET IS SHOWN IN TICKET COUNTER, THERE E. SHALL BE FOUR PORTS ORIGINATING FROM ELECTRICAL RM 1. ALL CABLING WILL BE CAT 6A. EACH STATION HAS A TOTAL OF (8) DATA
- PORTS. PHONE WILL BE VOIP. PROVIDE NEW 96 SMF FROM CBA-MCR ROOM TO NEW TERMINAL A F.
- TICKET COUNTER IT ROOM (ELECTRICAL RM 1). G. ALL RECEPTACLE CONDUCTORS SHALL BE THHN #12 STRANDED
- INSTALED IN EMT. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL INACTIVE Н. CABLING (TO SOURCE) AND INFRASTRUCTURE AS WELL AS GENERAL CLEANUP OF THE EXISTING IT/COMM ROOM. CONTRACTOR SHALL REMOVE OLD AND INACTIVE CABLING TO THE CURRENT COUNTERS AND
- REPLACE AS SHOWN IN THE NEW LAYOUT PLAN. CONTRACTOR IS RESPONSIBLE FOR ALL DATA RACEWAY, CAT6A CABLE, Ι. FIBER OPTIC CABLE, STAINLESS STEEL WALL PLATES, AND TERMINATIONS TO WALL PLATES AND SWITCHES. ONLY A QUALIFIED LOW VOLTAGE CONTRACTOR APPROVED BY THE AIRPORT MAY PROVIDE THIS WORK: PROTEC, PROSCAN, OR MIDE-SOUTH FIBER.



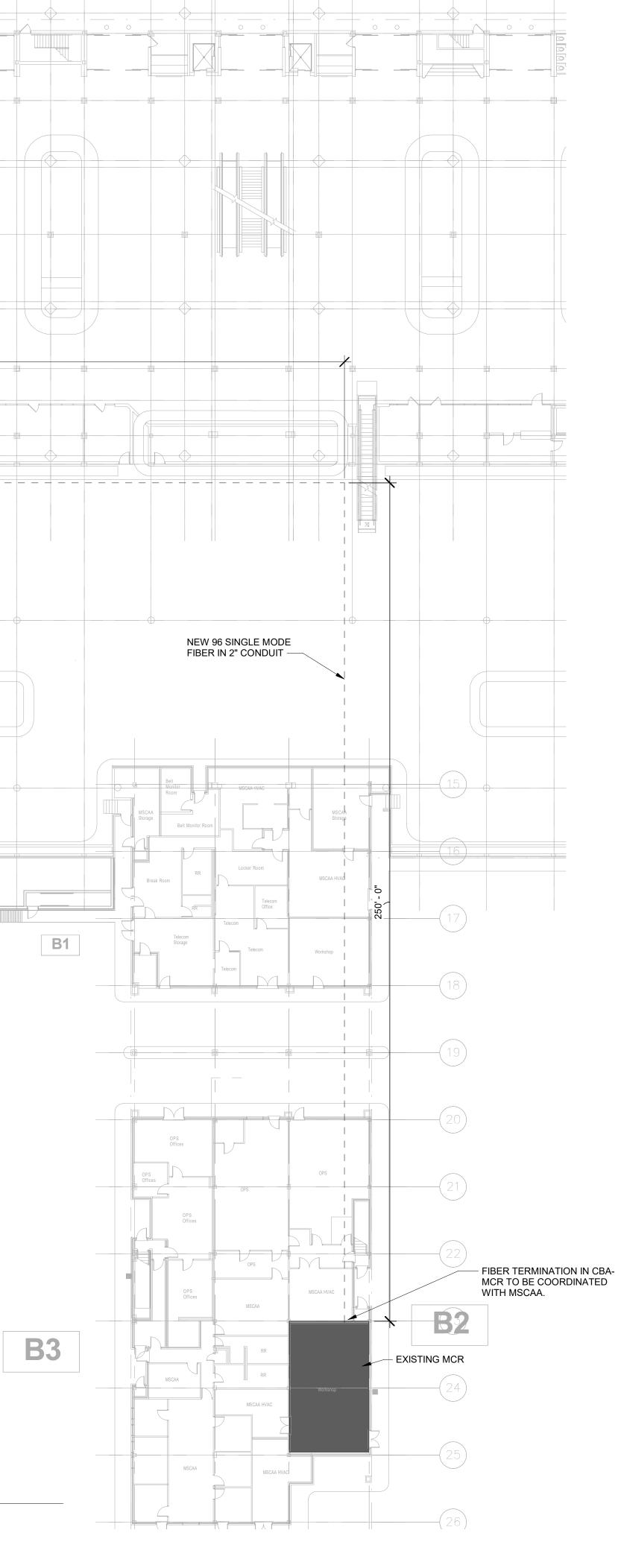


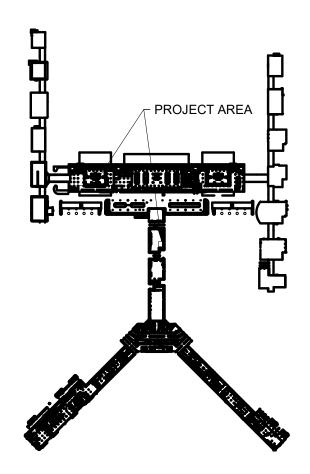




1 ELECTRICAL - APRON LEVEL 3/64" = 1'-0"

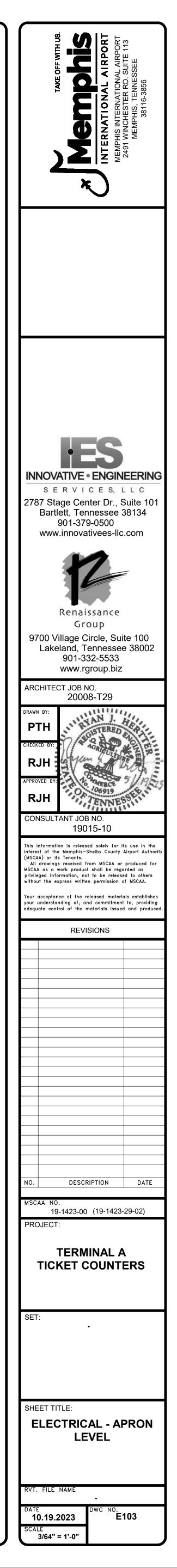
**B**3





PROVIDE NEW 96 SMF FROM CBA-MCR ROOM TO NEW TERMINAL A TICKET COUNTER IT ROOM (ELECTRICAL RM 1). В.

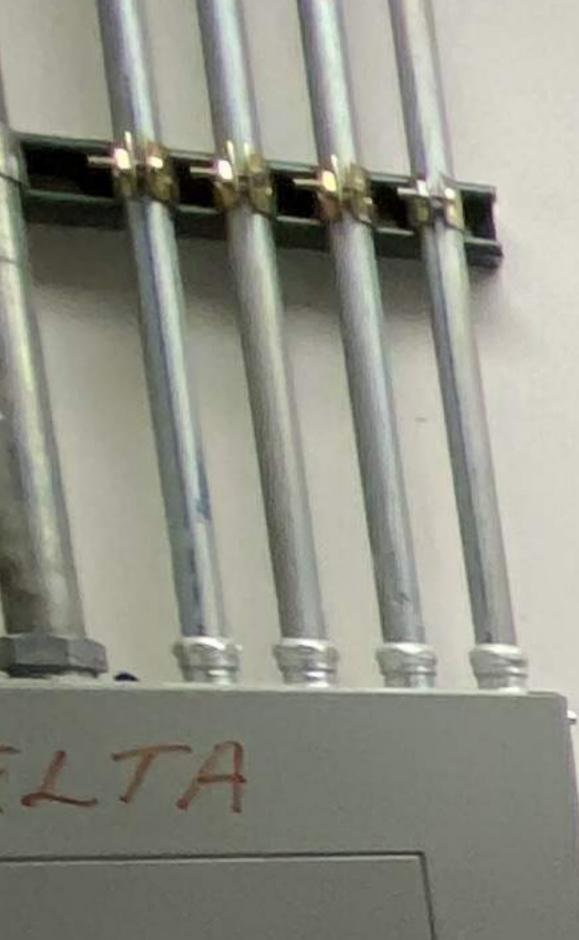
GENERAL DRAWING NOTES A. REFER TO SHEET E000 FOR PROJECT NOTES, LEGEND, SCHEDULES, & DETAILS.



**EXISTING AC TO REMAIN AND GET** SERVICED BY CONTRACTOR

> **EXISTING PHONE** LINES TO BE **REMOVED BY** CONTRACTOR





AND REPLACED WITH NEW





EXISTING PHONE LINES AND EQUIPMENT TO REMAIN TO BE REMOVED BY CONTRACTOR



