ELECTRICAL NOTES

1. GENERAL:

   A. DURING EACH SHIFT, CONTRACTOR SHALL ONLY REPLACE THE AMOUNT OF CABLE THAT CAN BE ENERGIZED AT THE END OF EACH SHIFT. ALL OF THE LIGHT FIXTURES AND/OR CIRCUITS SHALL BE ENERGIZED AND TESTED AT THE END OF EACH SHIFT.
   B. AS-BUILT INFORMATION
      a. BUTTERFLIES. CONTRACTOR SHALL PROVIDE AS PART OF AS-BUILT INFORMATION, THE SIZE, DEPTH, AND DIMENSION OF EACH HANDHOLE ACCESSED OR ENTERED DURING THE PROJECT INCLUDING LOCATION AND SIZE OF EACH CONDUIT ENTERING/LEAVING HANDHOLE AS WELL AS ALL CIRCUITS/CABLES INSIDE THE HANDHOLE. ADDITIONALLY, CONTRACTOR SHALL PROVIDE A COLOR PICTURE AND LOCATION OF EACH HANDHOLE ON CADD DRAWING. FOR ANY HANDHOLE OR MANHOLE REQUIRING ENTRY FOR THIS WORK THAT IS NOT SHOWN ON THE DRAWINGS, CONTRACTOR SHALL PROVIDE AS-BUILT INFORMATION AS WELL AS A SURVEYED LOCATION SHOWN ON A CADD DRAWING.
      b. CONTRACTOR SHALL PROVIDE AS-BUILTS EVERY WEEK INCLUDING MANHOLE/HANDHOLE BUTTERFLY DRAWINGS AND AS PART OF PAYMENT REQUESTS. PAYMENT REQUESTS WILL NOT BE ACCEPTED UNLESS ACCOMPANIED WITH AS-BUILTS. THE COST FOR AS-BUILTS SHALL BE BID UNDER BID ITEM L-128.
   C. SALVAGED EQUIPMENT:
      a. TRANSFORMERS AND CABLE: ALL TRANSFORMERS AND CABLE SHALL BE THE PROPERTY OF THE CONTRACTOR AND DISPOSED OFF AIRPORT PROPERTY AT CONTRACTOR'S COST.
   D. ENVIRONMENTAL - PUMP SHALL BE PLACED ON THE GROUND AWAY FROM CLOSEST STORM DRAIN. CONTRACTOR SHALL NOT PUMP WATER INTO THE STORM DRAIN. WHEN PUMPING OUT THE EXCESS WATER CONTRACTOR SHALL PLACE THE HOSE OVER THE NATIVE SOIL.
   E. QUANTITIES SHALL BE REVIEWED AND RECONCILED BETWEEN THE CONTRACTOR AND ENGINEER/INSPECTOR EACH WEEK AT A MINIMUM.
   F. MANHOLE/HANDHOLES TO BE CLOSED UP AT THE END OF THE SHIFT.

2. NOTES FOR TEMPORARY ELECTRICAL WORK:

   A. ALL RUNWAY AND TAXIWAY LIGHTING, INCLUDING LIGHTED SIGNS, SHALL BE MAINTAINED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
   B. TEMPORARY CABLING MAY BE USED TO MAINTAIN CIRCUIT CONTINUITY, IN ACCORDANCE WITH SPECIFICATIONS. TEMPORARY CABLE INSTALLED ABOVE GROUND SHALL BE PROTECTED BY BARRICADES AND APPROVED BY AIRPORT OPERATIONS. CONTRACTOR SHALL PROVIDE A DRAWING OF THE ABOVE-GROUND TEMPORARY WIRE THE DAY THE CABLE IS PLACED. FOR TEMPORARY CABLE WITHIN THE TAXIWAY SAFETY AREA, CABLE SHALL BE PROTECTED WITH A LOW-PROFILE WATER-FILLED BARRICADE. CABLE OUTSIDE THE TSA SHALL BE PROTECTED BY FLAT PANELS AT 10' SPACING. CABLE ACROSS SURFACES SHALL BE PLACED BEHIND BARRICADES USED TO CLOSE PORTIONS OF TAXIWAYS OR OTHER SURFACES.
   C. TEMPORARY CABLE CONNECTIONS SHALL BE MADE AT LIGHT BASES OR HANDHOLES AS REQUIRED BY A PARTICULAR CONSTRUCTION PHASE OR SEQUENCE. THE PLAN FOR TEMPORARY CONNECTIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INTERRUPTING A LIGHTING CIRCUIT OR POWER SERVICE. ALL CONNECTIONS FOR AIRFIELD LIGHTING CIRCUITS SHALL BE MADE WITH APPROPRIATE SIZE L-823 CONNECTORS.
   D. CONTRACTOR SHALL CONFIGURE TEMPORARY MODIFICATIONS TO AIRFIELD LIGHTING CIRCUITS AND POWER FEEDERS AS REQUIRED BY CONTRACTORS WORK AREA AND FOR MAINTAINING LIGHTING FOR ACTIVE SURFACES AND POWER TO FACILITIES.
      a. IDENTIFY THE CABLE FOR THE CIRCUIT TO BE MODIFIED IN A NEARBY LIGHT BASE, JUNCTION BOX, OR HANDHOLE.
      b. SUBMIT A SKETCH FOR EACH PROPOSED TEMPORARY MODIFICATION OR CIRCUIT RECONFIGURATION FOR ENGINEER APPROVAL PRIOR TO MODIFYING A CIRCUIT.
      c. TEST TO VERIFY THAT EACH TEMPORARY MODIFICATION IS AS INTENDED. CONTRACTOR SHALL CARRY WITH HIM APPROPRIATE CABLE, CONNECTORS, AND OTHER ITEMS NEEDED TO COMPLETE THE MODIFICATION AND TO MAKE ANY REPAIRS REQUIRED BY HIS ACTION.
   E. IN TRANSITIONING FROM ONE AREA OF WORK TO THE NEXT, TEMPORARY CIRCUIT CONNECTIONS SHALL BE REMOVED IF NO LONGER REQUIRED, CIRCUITS SHALL BE RESTORED IN ACCORDANCE WITH REQUIREMENTS FOR THE NEXT PHASE OR FOR PERMANENT INSTALLATION, AS APPROPRIATE.
   F. TEMPORARY ELECTRICAL WORK FOR MAINTAINING AIRFIELD LIGHTING CIRCUITS AND POWER SERVICE DURING CONSTRUCTION SHALL BE INCIDENTAL TO CONSTRUCTION WITH NO SEPARATE PAYMENT. CONTRACTOR SHALL DE-ENERGIZE LIGHTS TEMPORARILY BY DISCONNECTING THE TRANSFORMER ON THE PRIMARY SIDE AND PROVIDING TEMPORARY SPLICE CONNECTIONS TO ENSURE HOME-RUN CABLE CONTINUITY. CONTRACTOR SHALL NOT DE-ENERGIZE THE LIGHT BY DISCONNECTING THE FIXTURE ON THE SECONDARY SIDE WHILE THE PRIMARY IS CONNECTED.
   G. COORDINATE WITH MAINTENANCE AND OPERATIONS PERSONNEL TO VERIFY PROPER OPERATION OF AIRFIELD LIGHTING CIRCUITS AT THE END OF EACH SHIFT.
   H. CONTRACTOR SHALL MAINTAIN ON HAND SUFFICIENT MATERIAL AND EQUIPMENT REQUIRED TO PROVIDE TEMPORARY LIGHTING AND CIRCUIT EXTENSIONS. MATERIAL AND EQUIPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, FIXTURES, TRANSFORMERS, BASES, CONDUIT, L-824 CABLE AND L-823 SPLICE KITS. THESE ITEMS WILL NOT BE AVAILABLE FROM THE MAINTENANCE SHOP.
   I. LABEL AND TAG TEMPORARY CABLE. TEMPORARY CABLE SHALL BE REMOVED WHEN NO LONGER NEEDED. TEMPORARY CABLE SHALL NOT BE REUSED.

3. DEMOLITION AND REMOVAL NOTES:

   A. PRIOR TO WORK START IN ANY NEW AREA, CONTRACTOR MUST PERFORM A SITE WALK WITH MAINTENANCE TO DETERMINE ANY CRACKS OR DEFICIENCIES IN THE EXISTING FIXTURES. ANY DEFICIENT FIXTURE NOT NOTED AND AGREED UPON DURING THE SITE WALK WILL BE ASSUMED TO HAVE BEEN DAMAGED BY THE CONTRACTOR. THE CONTRACTOR SHALL REPLACE ANY DAMAGED FIXTURE, FURNISHING NEW FIXTURE AT NO ADDITIONAL COST TO AIRPORT.
   B. CONTRACTOR SHALL REMOVE AND REINSTALL FIXTURES AS DETAILED IN THE DRAWINGS.
   C. DUCTBANK TO BE ABANDONED SHALL HAVE ALL CABLE REMOVED FROM INSIDE EACH CONDUIT WITH EACH CONDUIT CAPPED.
   D. CONTRACTOR SHALL ASSUME THAT CABLE LENGTH TO BE REMOVED EQUALS THE QUANTITY OF NEW CABLE TO BE INSTALLED UNDER THE APPROPRIATE L-108 BID ITEMS.
   E. EXISTING GROUND WIRE LOCATED IN EXISTING BASE CANS WHERE NEW CABLE IS BEING INSTALLED SHALL BE REPLACED.
   F. PRIOR TO DEMOLITION OF ANY CABLE IN A MANHOLE OR HANDHOLE. THE CONTRACTOR IS REQUIRED TO POSITIVELY IDENTIFY THAT ALL CIRCUITS AND CONNECTIONS IN THE MANHOLE ARE CORRECTLY IDENTIFIED. ANY MIS-IDENTIFIED CIRCUITS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND SHALL BE PROPERLY IDENTIFIED PRIOR TO DEMOLITION.

4. DUCTBANK AND CONDUIT:

   A. TRENCHES SHALL NOT BE LEFT OPEN WHEN A TAXIWAY IS OPERATIONAL, AND CONDUCTOR ENDS SHALL NOT REMAIN EXPOSED TO THE WEATHER.
   B. ANY UNPROTECTED CABLE (DIRECT-BURIED) ENCOUNTERED THAT IS VERIFIED AS NOT ABANDONED IN PLACE SHALL BE PLACED IN SPLIT DUCT OF APPROPRIATE SIZE AND CONCRETE-ENCASED FOR ITS UNPROTECTED LENGTH THROUGH THE AREA OF CONSTRUCTION. CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO AVOID HAVING TO CUT AND SPLICE DIRECT-BURIED CABLE. BE SURE TO NOTE SPLIT DUCT PORTIONS ON AS-BUILTS.
   C. CONDUIT SYSTEMS UNLESS OTHERWISE NOTED SHALL BE:
      a. ALL UNDERGROUND CONDUITS TO BE SCHEDULE 40 PVC.
      b. ALL CONTROL AND POWER CONDUITS INSIDE THE VAULTS TO BE GALVANIZED RIGID STEEL CONDUIT JOINED AND TERMINATED WITH THREADED TYPE STEEL FITTINGS. OUTLET BOXES TO BE CAST. MINIMUM CONDUIT SIZE FOR RACEWAYS TO BE 3/4" RGS, UNLESS OTHERWISE NOTED.
      c. ALL FLEX CONDUIT SHALL BE LIQUID TIGHT METALLIC UL-RATED WITH SUITABLE FITTINGS.
      d. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A NEW 3/8 PULL STRING.
      e. PVC CONDUIT SHALL NOT BE USED FOR ANY EXPOSED APPLICATION.
      f. CONNECTIONS TO THE WIREWAYS FROM CCRS AND CIRCUIT SELECTOR SWITCHES TO BE LIQUID TIGHT FLEXIBLE METAL CONDUIT.

5. UTILITY NOTES:

   A. THE LOCATIONS OF UNDERGROUND UTILITIES, CABLES, DUCTS, CONDUITS, ETC. AS INDICATED ON PLANS HAVE BEEN OBTAINED FROM EXISTING RECORDS AND ARE APPROXIMATE. NEITHER THE AIRPORT NOR THE ARCHITECT/ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION SHOWN. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIALS OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF HIS OPERATIONAL PLANS. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE.
   B. THE CONTRACTOR SHALL USE HAND EXCAVATION TO PROVIDE INVESTIGATIVE PITS TO IDENTIFY LOCATION OF EXISTING UTILITIES PRIOR TO ANY OTHER EXCAVATION ACTIVITIES. ANY DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE AIRPORT.
   C. DISTURBED AREAS AND RUTS OUTSIDE OF PAVEMENT AREAS SHALL BE RESTORED TO ORIGINAL SURFACE ELEVATIONS AND CONDITION. THIS WORK SHALL BE ACCOMPLISHED AT THE END OF EACH PHASE OF WORK OR AS APPROVED BY AIRPORT OPERATIONS.

6. MANHOLE/ HANDHOLE:

   A. FOR MANHOLES AND HANDHOLES ENTERED FOR WORK; PUMP OUT ALL WATER, CLEAN BOTTOM OF DEBRIS UTILIZING A VACUUM TRUCK AND POWER WASH THE WALLS. REPAIR ALL CHIPS AND CRACKS IN THE WALL AND REPLACE DAMAGED CABLE RACKS.
   B. VERIFY ALL GROUND CONNECTIONS IN MANHOLE/HANDHOLE.
   C. ALL MANHOLES AND HANDHOLES ENTERED UNDER THIS WORK SHALL BE PHOTOGRAPHED PRIOR TO RECONFIGURATION AND/OR CLEANING AND AFTER RECONFIGURATION AND/OR CLEANING. ALL NEW MANHOLES AND HANDHOLES SHALL BE PHOTOGRAPHED AFTER ALL CIRCUITS HAVE BEEN PULLED.
   D. EACH WALL, FLOOR AND CEILING SHALL BE INDIVIDUALLY PHOTOGRAPHED WITH IDENTIFICATION OF THE NORTH, SOUTH, EAST AND WEST WALLS.
   E. AFTER RECONFIGURATION AND/OR CLEANING OF EXISTING MANHOLES AND HANDHOLES PROVIDE BUTTERFLY TYPE DETAILS OF EACH INDICATING CONDUIT ENTRANCES AND CABLES INSTALLED IN EACH RESPECTIVE CONDUIT.
   F. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A SAFETY PLAN DETAILING HOW THE WORK INSIDE THE HANDHOLE WILL BE PERFORMED TO ENSURE SAFETY. CONTRACTOR IS RESPONSIBLE FOR SAFETY PLAN. AT A MINIMUM THE SAFETY PLAN SHALL INCLUDE THE FOLLOWING:
      a. FOLLOW ALL SAFETY AND LOCKOUT AND TAG OUT PROCEDURES AND THE NATIONAL ELECTRICAL SAFETY CODE (NESC).
      b. PRIOR TO WORK WITHIN THE STRUCTURE, COORDINATE A SHUTDOWN OF ALL CIRCUITS WITH WITHIN STRUCTURE.
      c. LIGHTING CIRCUITS, HOME RUN CABLES AND POWER SERVICE CABLES SHALL BE MARKED AND IDENTIFIED AT ALL POINTS ACCESSIBLE TO THESE CIRCUITS. LOCATIONS WHERE THIS IS NECESSARY ARE MANHOLES AND HANDHOLES, ENTRANCES INTO DUCTS, AND CONNECTIONS TO EVERY LIGHT FIXTURE. THE MARKING SHALL BE PERMANENT AND OF MATERIAL WHICH WILL NOT DETERIORATE DURING THE LIFE OF THE CABLE. THE MARKERS SHALL BE PERMANENTLY ATTACHED TO THE CABLE AND SHOULD NOT DAMAGE OR BE TORN FROM THE CABLE.
      d. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONFINED SPACE PERMIT FOR ENTERING HANDHOLES/MANHOLES IN ACCORDANCE WITH CALIFORNIA AND AIRPORT REGULATIONS. THE COST FOR THIS SHALL BE INCIDENTAL TO THE PROJECT WITH NO SEPARATE PAYMENT.
      e. PRIOR TO BEGINNING WORK IN EACH MANHOLE OR HANDHOLE, CONTRACTOR SHALL IDENTIFY IN THE FIELD ALL CIRCUITS IN THE MANHOLE OR HANDHOLE, DETERMINING THE CIRCUIT DESIGNATION FOR EACH CABLE AND WHETHER THE CABLE IS PART OF AN ACTIVE CIRCUIT.

7. GROUND WIRE:

   A. ONE WAY, 2 INCH CONDUIT:
      a. CONTRACTOR SHALL INSTALL ONE NEW GROUND WIRE 600V, #6 GREEN IN ALL 2" CONDUITS BETWEEN BASE CANS AND HANDHOLES WHERE NEW CABLE IS INSTALLED. INSTALL ONE GROUND WIRE PER EACH CONDUIT.
   B. DUCTBANK:
      a. CONTRACTOR SHALL INSTALL ONE NEW #6, 600V GREEN GROUND WIRE IN THE LOWEST CONDUIT IN EACH DUCTBANK WHERE NEW CABLE IS INSTALLED. FOR EXAMPLE, IF NEW CABLE IS INSTALLED IN A SIX WAY, 3 INCH, CONTRACTOR SHALL INSTALL ONE GROUND WIRE IN THE LOWEST CONDUIT IN ONE OF THE 6 WAY CONDUITS. ONLY ONE GROUND WIRE IS REQUIRED IN EACH DUCTBANK.
   C. GROUND WIRE IS NOT SHOWN ON THE AREA PLANS BUT IS ACCOUNTED FOR IN THE BID SCHEDULE.

8. ALL THREADED COMPONENTS, SUCH AS BOLTS/COUPLINGS SHALL BE COATED WITH NON-METALLIC, MARINE GRADE ANTI-SEIZE DURING ASSEMBLY AND INSTALLATION. BOLTS SHALL BE SAE J429 GRADE 5 CARBON STEEL (MFG. BY GBA COMPONENTS OR APPROVED EQUAL) WITH 2-PIECE CEC, LOCK WASHER.

9. CABLE INSTALLATION NOTES:

   A. CLEANING CONDUIT: PRIOR TO THE INSTALLATION OF NEW CABLE THE EXISTING DUCT/CONDUIT SHALL BE CLEANED. THE EMPTY DUCT SHALL BE CLEANED IN THE FOLLOWING STEPS:
      a. A CONE SHAPE STEEL WIRE BRUSH SHALL BE PULLED THROUGH THE DUCT/CONDUIT FIRST TO LOOSEN UP SCALE BUILD UP AND DIRT.
      b. VARIOUS SIZED MANDRELS ATTACHED TO A PULL CHAIN SHALL THEN BE PULLED THROUGH THE DUCT/CONDUIT TO REMOVE DEBRIS.
      c. THE FINAL CLEANING SHALL CONSIST OF A CLEAN RAG PULLED THROUGH THE DUCT/CONDUIT. THE THREE STEPS MAY HAVE TO BE REPEATED ON A DUCT DEPENDING ON ITS CONDITION.
   B. THE CONTRACTOR SHALL REMOVE ALL SPARE AND/OR ABANDONED CABLES FROM DUCTBANK WITHIN EACH STRUCTURE. THE CONTRACTOR SHALL TEST WITH AN AMP METER AND TAG EACH CABLE TO BE REMOVED TO ENSURE IT IS NOT PART OF AN OPERATIONAL CIRCUIT.
   C. THE CONTRACTOR SHALL PROVIDE CABLE PULLING CALCULATIONS BASED ON FIELD CABLE INSTALLATION AND SET-UP. PULLING TENSIONS SHALL NOT EXCEED CABLE MANUFACTURER'S GUIDELINES. THE CONTRACTOR SHALL PROVIDE A CABLE INSTALLATION PLAN INCLUDING CABLE PULLING CALCULATIONS, CABLE ROUTING PLANS, TENSION METER SPECIFICATIONS AND CABLE PULLING PROCEDURE AND METHOD.
   D. CONNECTORS
      a. FOR CONNECTIONS MADE INSIDE A HANDHOLE/MANHOLE OR PULLBOX CONTRACTOR SHALL UTILIZE THE FOLLOWING KIT: 3M 5KV AIRFIELD LIGHTING KIT OR APPROVED EQUAL.
      b. FOR CONNECTIONS MADE INSIDE A BASE CAN WHERE THE PRIMARY CABLE IS CONNECTED TO A TRANSFORMER, THE CONTRACTOR SHALL USE AN L823 CLASSIC KIT OR APPROVED EQUAL.
   E. CONTRACTOR SHALL BE REQUIRED TO WORK INSIDE HANDHOLES OR MANHOLES WITH ENERGIZED CIRCUITS. SPECIFICALLY, ONLY ONE OF THE ERGL CIRCUIT OR IRGL/ISBL SHALL BE TURNED OFF AT A TIME. THIS WORK SHALL BE COORDINATED WITH AIRPORT OPERATIONS.
   F. CONTRACTOR SHALL ACQUIRE CABLE THAT IS STAMPED WITH CABLE FOOTAGE. THIS SHALL BE USED TO DETERMINE CABLE LENGTH IN THE FIELD.

10. THE CONTRACTOR SHALL INSTALL NEW CONDUIT BELL ENDS ON CONDUIT WHICH DOES NOT CURRENTLY HAVE A BELL ENDS FOR ALL DUCTBANK OR CONDUIT ENTERING A HANDHOLE, MANHOLE OR BASE CAN. FOR BIDDING PURPOSES ASSUME THAT EACH SIDE OF A HANDHOLE HAS 4 CONDUIT ENTRANCES. AT EXISTING CONDUIT LOCATIONS WHERE NEW CABLE IS INSTALLED, CONTRACTOR SHALL VERIFY THAT THE LENGTH OF CONDUIT PROTRUSION INTO THE BASE CAN OR HANDHOLE IS A MAXIMUM OF 1.5". IF CONDUIT IS MORE THAN 1.5", CUT CONDUIT AS REQUIRED.

11. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DAMAGED CONDUIT BELL HOUSINGS ON CONDUIT FOR ALL DUCTBANK ENTERING A HANDHOLE, MANHOLE OR BASE CAN ENTERED FOR WORK.

12. CONTRACTOR SHALL PROVIDE 4' OF SLACK ABOVE FINISHED GRADE AT EACH BASE CAN.

13. CONTRACTOR SHALL PROVIDE SLACK SUCH THAT THE WIRE CAN REST IN DRAPING LOOPS BETWEEN ENTRANCE AND EXIT PER AIRPORT DIRECTION AT EACH MANHOLE.

14. CONTRACTOR SHALL REPAIR AND/OR REPLACE DAMAGED CONDUITS WITHIN THE WORK AREA. REFER TO L-110 FOR ASSOCIATED BID ITEM.

15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THE FOLLOWING ACTIVITIES BY THE END OF EACH WORK SHIFT:

   A. VERIFY CONTINUITY OF EACH CIRCUIT PULLED DURING THAT SHIFT'S WORK.
   B. MEGGER TESTING OF ALL NEW CABLE PULLED DURING THAT SHIFT.
   C. VERIFY THAT ALL LIGHT FIXTURES AND COVER PLATES ARE PROPERLY BOLTED DOWN AND MANHOLE/HANDHOLE COVERS ARE PROPERLY REPLACED.
   D. VERIFY THAT ALL LIGHTS ON AFFECTED CIRCUITS ARE ENERGIZED AND FUNCTIONING PROPERLY.
   E. THE CONTRACTOR SHALL ALLOW FOR UP TO 2 HOURS AFTER THE END OF EACH SHIFT TO PERFORM THESE VERIFICATION ACTIVITIES.
   F. EACH WORK SHIFT, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER THE NAME OF A DESIGNATED QUALITY CONTROL (QC) REPRESENTATIVE WHO IS RESPONSIBLE FOR COMPLETING AND VERIFYING THE PROPER TORQUE OF ALL BOLTS ON ALL FIXTURES OPENED DURING THAT NIGHT'S SHIFT. THE CONTRACTOR'S QC REPRESENTATIVE SHALL BE RESPONSIBLE FOR MAINTAINING A LIST OF BROKEN BOLT LOCATIONS THAT WILL NEED TO BE FIXED AT A LATER DATE.

16. INSULATION RESISTANCE:

   A. INSULATION RESISTANCE: FOR NEW CABLE CONTRACTOR SHALL ENSURE A RESISTANCE OF 300 MEGA-OHMS IS PROVIDED AS MEASURED WHENEVER NEW CABLE IS SPLICED INTO EXISTING AND THAT THIS INSULATION RESISTANCE IS MET FOR THE ENTIRE NEW CABLE PATH. TESTS SHALL BE PERFORMED WITH THE TRANSFORMERS CONNECTED.
   B. THE CONTRACTOR SHALL PERFORM INSULATION RESISTANCE TESTS OF INSTALLED CABLE AFTER EACH WORK SHIFT. THE TEST REPORT SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL AND ACCEPTANCE OF COMPLETION OF CABLE INSTALLATION.
   C. CONTRACTOR SHALL PERFORM THESE INSULATION TESTS BEFORE FINAL ACCEPTANCE TESTING IS PERFORMED AND PROVIDE TEST RESULTS TO ENGINEER. RESISTANCE SHALL THEN BE MEASURED AGAIN AS PART OF FINAL ACCEPTANCE TESTING.
   D. CONTRACTOR SHALL SUBMIT A LIST OF PERSONNEL WHO WILL BE RESPONSIBLE FOR PERFORMING SPLICES ON THIS PROJECT. THESE PERSONNEL WILL BE REQUIRED TO ATTEND A 30 MINUTE CLASS CONDUCTED BY A REPRESENTATIVE OF THE SPLICE KIT MANUFACTURER TO RECEIVE INSTRUCTIONS ON THE PROPER INSTALLATION OF A TYPICAL SPLICE KIT. ONLY PERSONNEL WHO HAVE PERFORMED THIS CLASS SHALL BE ALLOWED TO MAKE SPLICES. THE COST FOR THIS TRAINING SHALL BE INCIDENTAL TO THE PROJECT WITH NO SEPARATE PAYMENT.
   E. COST FOR CABLE INSTALLATION SHALL BE BID SEPARATELY WITH THE APPROPRIATE BID ITEM IN L-108.
   F. COST FOR OPENING/CLOSING EXISTING MANHOLES OR HANDHOLES (INCLUDING CONFINED SPACE PERMIT AND SAFETY PRECAUTIONS) TO INSTALL NEW CABLE OR REMOVE EXISTING CABLE SHALL BE INCIDENTAL TO THE PROJECT WITH NO SEPARATE PAYMENT. DUE TO PHASING REQUIREMENTS, CONTRACTOR MAY HAVE TO OPEN THE SAME MANHOLE MULTIPLE TIMES. CONTRACTOR SHALL ASSUME THAT ALL EXISTING MANHOLES/HANDHOLES SHOWN ON THE DRAWINGS REQUIRE ACCESS FOR CIRCUITING.

17. CABLE TAGS

   A. THE CONTRACTOR SHALL REMOVE EXISTING AND INSTALL NEW CIRCUIT CABLE TAGS AS FOLLOWS:
      a. BASE CAN - ONE ON ENTERING CABLE AND ONE ON EXITING CABLE FOR EACH CABLE WITHIN THE BASE CAN.
      b. HANDHOLES - ONE ON ENTERING CABLE AND ONE ON EXITING CABLE AND ONE ON EACH SIDE OF THE SPLICE FOR EACH CABLE IN THE HANDHOLE.
      c. MANHOLES - ONE ON ENTERING CABLE AND ONE ON EXITING CABLE AND ONE ON EACH SIDE OF THE SPLICE FOR EACH CABLE IN THE MANHOLE.
   B. THE CONTRACTOR SHALL PROCURE AND HAVE ON-HAND PRIOR TO WORK START 150% OF THE ESTIMATED NUMBER OF CABLE TAGS REQUIRED TO PERFORM THE WORK. NO CABLE TAGS WILL BE AVAILABLE FROM AIRPORT MAINTENANCE. ANY CABLE TAGS UNUSED AT THE END OF THE PROJECT WILL BE TURNED OVER TO AIRFIELD MAINTENANCE.
   C. FOR 3M SPLICE KITS IN MANHOLES AND HANDHOLES, CONTRACTOR SHALL IDENTIFY THE CIRCUIT ID ON THE SPLICE UTILIZING A PAINT PEN OR APPROVED EQUAL.

18. FOR ANY SECTION OF LIGHTS WHICH REQUIRES BOTH THE SUPPLY AND RETURN CABLE TO RUN THROUGH FIXTURES (DOUBLE-PULLED), THE SUPPLY CABLE SHALL BE BLACK IN COLOR AND THE RETURN CABLE LEAVING THE LAST LIGHT SHALL BE RED OR YELLOW BACK TO THE NEAREST HANDHOLE OR MANHOLE. NO CURRENT TRANSFORMERS OR DEVICES SHALL BE CONNECTED TO THE RETURN CABLE.

19. CONFIRMATION OF CABLE ROUTING AND QUANTITIES: CONTRACTOR SHALL VERIFY IN THE FIELD CABLE ROUTING AS SHOWN ON THE PLANS AND SHALL MAINTAIN DAILY AS-BUILTS. AS-BUILTS SHALL INCLUDE MARKUPS OF AREA PLANS AND CIRCUIT MAPS, AND BUTTERFLY TYPE DETAILS OF EACH HANDHOLE AND MANHOLE ENTERED. CONTRACTOR SHALL PROVIDE AS-BUILTS AS PART OF THE MONTHLY PAY REQUEST AND SHALL PROVIDE AS-BUILTS ON A WEEKLY BASIS TO THE ENGINEER AS A SHOP DRAWING. CONTRACTOR SHALL ATTEND A WEEKLY ONE-HOUR MEETING TO RECONCILE QUANTITIES WITH AIRPORT INSPECTOR.

20. LIGHT FIXTURES:

   A. CONTRACTOR SHALL FURNISH AND INSTALL LIGHTS AS SHOWN ON PLANS. PROVIDE NEW BOLTS, WASHERS, AND OTHER APPURTENANCES REQUIRED TO COMPLETE THE INSTALLATION.
   B. CONTRACTOR SHALL FURNISH AND INSTALL NEW STAINLESS STEEL BOLTS 18-8 WITH TWO PIECE LOCK WASHERS FOR ALL NEW OR REINSTALLED INPAVEMENT LIGHT FIXTURES.
   C. CONTRACTOR SHALL FURNISH AND INSTALL NEW STAINLEES STEEL BOLTS 18-8 FOR ALL NEW OR REINSTALLED ELEVATED LIGHT FIXTURES.
   D. THE CONTRACTOR SHALL INSTALL THE FIXTURE MOUNTING BOLTS BY HAND AND SHALL USE A CALIBRATED TORQUE WRENCH FOR FINAL TIGHTENING. TORQUE VALUES SHALL BE AS RECOMMENDED BY FAA ENGINEERING BRIEF NO. 83A, PROVIDE TORQUE RECOMMENDATION AS PART OF SHOP DRAWINGS.
   E. CONTRACTOR SHALL ASSUME THAT 10% OF EXISTING BOLTS WILL BREAK AND REQUIRE RETAPPING. CONTRACTOR SHALL EXTRACT EXISTING BOLTS AND USE AN APPROVED JAQUITH DRILL/TAP FIXTURE ALIGNMENT TOOL (MFG. PART# AW7013 OR APPROVED EQUAL)
   F. CONTRACTOR SHALL PROVIDE ALL NEW L-823 CONNECTORS FOR ALL LIGHTS TO BE REMOVED AND REINSTALLED.
   G. ALL CONTRACTOR PERSONNEL WHO WILL BE RESPONSIBLE FOR REMOVING AND REINSTALLING LIGHT FIXTURES ARE REQUIRED TO WATCH A TRAINING VIDEO PROVIDED BY MANUFACTURER AND COMPLY WITH THE BEST PRACTICES PRESCRIBED IN THE VIDEO. CONTRACTOR SHALL SUBMIT A LIST OF ALL PERSONNEL WHO HAVE MET THIS REQUIREMENT.
   H. CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS OF FAA ENGINEERING BRIEF NO. 83A. THIS INCLUDES BUT IS NOT LIMITED TO:
      a. USE OF NON-METALLIC MARINE GRADE ANTI-SEIZE (LOCTITE OR APPROVED EQUAL.)
      b. ENSURING BOTH THE BOLT THREADS AND BOLT HOLES ARE CLEAN, DRY AND FREE OF ANY DIRT OR DEBRIS PRIOR TO INSTALLATION OF THE BOLT. THIS CAN BE ACHIEVED BY UTILIZING A COMBINATION OF COMPRESSED AIR, METAL BRUSH DRILL BITS AND/OR RE-TAPPING THE BOLT HOLES. NEW BOLTS SHALL NEVER BE INSTALLED IN AN EXISTING BOLT HOLES THAT HAVE NOT BEEN CLEANED PRIOR TO INSTALLATION.
      c. ALWAYS PROVIDE NEW TWO-PIECE LOCKING WASHERS WHENEVER A BOLT IS REMOVED.

21. FOR ALL BASE CANS AND HANDHOLES, PUMP OUT WATER AND CLEAN DEBRIS UTILIZING A VACUUM TRUCK AND POWER WASH THE WALLS. THIS WORK SHALL BE PERFORMED PRIOR TO INSTALLATION OF THE NEW WIRE AND NEW TRANSFORMERS.

22. FINAL ACCEPTANCE:

   A. ALL WORK ASSOCIATED WITH FINAL ACCEPTANCE TESTING AND INSPECTION SHALL BE COMPLETED AS DESCRIBED IN THE CONSTRUCTION SPECIFICATIONS L-100 AND L-108,.
   B. CONTRACTOR SHALL SEQUENCE THE WORK SO THAT EACH BASE CAN IS OPENED AND INSPECTED ONCE IT IS COMPLETED TO INCLUDE: FIXTURE TAGS, CIRCUIT TAGS, BOLTS, WASHERS, TRANSFORMERS SIZE AND NUMBER, ETC.
   C. CONTRACTOR SHALL SUBMIT A TESTING PLAN FOR TESTING THE INSULATION RESISTANCE OF ALL NEW CABLES. THE PLAN SHOULD AT A MINIMUM DETAIL THE LOCATION OF THE TEST, TESTING DEVICE, TESTING PERSONNEL, DATES/TIMES, AND REQUIRED CLOSURES. THE LOCATION OF THE TEST SHALL BE SHOWN ON THE CIRCUIT MAPS.
   D. SUBSTANTIAL COMPLETION: SUBSTANTIAL COMPLETION SHALL BE AWARDED BY OWNER WHEN ALL CIRCUITS IN THE PROJECT SCOPE SHALL PASS THE INSULATION RESISTANCE TEST AND TESTING RESULTS ARE SUBMITTED TO AND APPROVED BY THE AIRPORT.

23. THE AUTHORITY RESERVES THE RIGHT TO DELAY THE START OF WORK SHOULD IT BE DETERMINED TO HAVE SIGNIFICANT OPERATIONAL IMPACTS.

24.

25. THE CONTRACTOR IS REQUIRED TO CONTACT THE ADR UPON ENTERING AND EXITING THE WORK SITE. THE ADR WILL NOTIFY THE AIRPORT'S COMMUNICATION CENTER OF THE CONTRACTOR'S LOCATION AND ACTIVITIES WHILE ON SITE.

26. STAGING AREA:

26.1. CONTRACTOR STAGING AREAS MAY OR MAY NOT HAVE UTILITIES. ANY UTILITIES REQUIRED BY THE CONTRACTOR

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AIRFIELD ELECTRICAL NOTES 1 OF 2

Sheet: E0.01

ELECTRICAL NOTES (CONT.):

SHALL BE COORDINATED WITH THE UTILITY COMPANIES AND SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

26.2. CONTRACTOR CONSTRUCTION EQUIPMENT SHALL BE STORED IN THE DESIGNATED CONTRACTOR'S OPERATIONS AND STAGING AREA, WHICH SHALL BE THE FENCED PARKING LOT AREA ADJACENT TO NEW ALV LOCATION.

27. JOB SITE MAINTENANCE, CONDITIONS, AND SAFETY:

27.1. THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

27.2. APPROVED OPEN TRENCHES AND EXCAVATIONS ON AIRPORT PROPERTY SHALL BE PROPERLY BARRICADED WITH LIGHTED ADR APPROVED BARRICADES AND TEMPORARY FENCING, OR WITH TRENCH PLATES, AS DIRECTED BY THE ADR.

27.3. THE CONTRACTOR SHALL CONDUCT A SAFETY MEETING PRIOR TO THE START OF EACH SHIFT DISCUSSING, AT A MINIMUM ALL TOPICS SPECIFIED BY THE ADR AND CONFORMING TO CALIFORNIA BUILDING/OSHA CODES AND REGULATIONS.

27.4. THROUGHOUT THE CONSTRUCTION PROCESS THE FOLLOWING SAFETY AND OPERATIONAL PRACTICES SHALL BE OBSERVED:

E. OPERATIONAL SAFETY WILL BE A STANDING AGENDA ITEM DURING WEEKLY SAFETY AND PROGRESS MEETINGS.
F. THE CONTRACTOR SHALL PERFORM DAILY WORKSITE INSPECTIONS.
G. COMPLIANCE WITH OSHA REQUIREMENTS FOR SAFETY AND PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE FOR THE TASK, AS DEFINED BY OSHA.
H. ALL CONTRACTOR VEHICLES AND TRAFFIC SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES.
I. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR DESIGNATED CONSTRUCTION STAGING LOCATIONS, STORAGE AREAS, AND CONSTRUCTION SEQUENCING.
J. POST SIGNAGE ADJACENT TO GATE THAT TOBACCO SMOKING IS PROHIBITED WITHIN 25' OF THE FACILITY.
K. THE CONSTRUCTION SHALL NOT RESTRICT A FIVE-FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL-BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES, WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.
L. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. THE OWNER DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.
M. CONTRACTOR SHALL PROVIDE TEMPORARY ON-SITE TOILET FACILITIES AND HAND-WASHING FACILITIES AS REQUIRED.
N. NO STOCKPILED MATERIAL IS ALLOWED ON PROPERTY (UNLESS APPROVED BY THE ADR). ALL SPOILS SHALL BE REMOVED FROM JOB SITE.
O. CONTRACTOR SHALL KEEP WORK AND ADJACENT AREAS CLEAN AT ALL TIMES. ALL RUBBISH AND DEBRIS RESULTING FROM WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AS NEEDED THROUGHOUT THE DAY AND A MINIMUM OF ONCE DAILY. THE USE OF A WATER, VACUUM SWEEPER SHALL BE EMPLOYED DURING WORKING HOURS.WORK ON CONTRACTOR'S EQUIPMENT, REPAIRS, CLEANING, FUELING, ETC. SHALL COMPLY WITH THE BEST MANAGEMENT PRACTICES ACCORDING TO EITHER THE APPROVED SWPPP PROVIDED BY THE CONTRACTOR OR THE AUTHORITY'S GENERAL STORMWATER PERMIT.

P. 5.5 THE CONTRACTOR MUST COMPLY WITH THE MOST RECENT UPDATES AND MANDATES AS ISSUED EITHER BY THE HUMBOLDT COUNTY DEPARTMENT OF PUBLIC HEALTH OR THE STATE OF CALIFORNIA, WHICHEVER IS MORE STRINGENT.

28. TRENCHING AND EXCAVATION:

Q. CONTRACTOR SHALL FIELD VERIFY PATH AND LOCATION WITH THE ADR PRIOR TO TRENCHING AND/OR DIGGING.
R. CONTRACTOR MUST CONTACT DIG ALERT TWO WORKING DAYS BEFORE START OF CONSTRUCTION AND, UNLESS OTHERWISE SPECIFIED, MAINTAIN ALL UTILITY LINES IN OPERATION. CONTRACTOR MUST COMPLY WITH GUIDELINES FOR RENEWING DIG ALERT STATUS AND PROVIDE EVIDENCE OF SUCH TO THE ADR.
S. ALL TRENCHES SHALL COMPLY WITH APPLICABLE OSHA REQUIREMENTS.

29. CONTRACTOR SHALL OBTAIN AND PAY ALL APPLICABLE PERMITS INCLUDING, BUT NOT LIMITED TO, A HAUL ROUTE PERMIT, IF REQUIRED.

30. CONTRACTOR MUST ALSO OBTAIN A WATER METER FROM THE CITY OF BURBANK FOR ANY HYDRANT USE IF REQUIRED. WITHIN THE CITY OF BURBANK ONLY PURPLE HYDRANTS SHALL BE USED FOR WATER.

31. CONTRACTOR SHALL COORDINATE WITH FAA THROUGH THE AIRPORT ADR.

32. CONTRACTOR SHALL BADGE A MINIMUM OF 6 EMPLOYEES INCLUDING PROJECT MANAGER AND SUPERINTENDENT.

33. LOCATION OF HAUL ROUTES ON THE AIRPORT SITE SHALL BE AS SPECIFIED WITHIN THIS DRAWING SET OR AS APPROVED BY THE ADR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF THE ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ADR. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE ADR PRIOR TO THE START OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE HAUL ROUTES RESULTING FROM CONSTRUCTION ACTIVITY, INCLUDING STRIPING.

34. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE GENERAL NATURE OF ORIGINAL GROUND AND/OR THE EXISTING GRADES IN THE VICINITY OF THE PROPOSED CONSTRUCTION AREA PRIOR TO BIDDING.

35. THE CONTRACTOR SHALL FURNISH ALL PLANT, LABOR, MATERIAL, EQUIPMENT, AND TRANSPORTATION NECESSARY TO CONSTRUCT ALL ELEMENTS OF THIS PROJECT AS DESCRIBED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. THE PROJECT PAY ITEMS ARE INTENDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOW IN THESE PLANS. ALL INCIDENTAL WORK TO COMPLETE THE PROJECT SHALL BE INCLUDED IN THE COST OF PERFORMING THE VARIOUS ITEMS OF WORK.

36. THE CONTRACTOR SHALL PROVIDE AND APPLY DUST CONTROL AT ALL TIMES, AS REQUIRED, TO ABATE NUISANCE DUST WHICH IS A DIRECT RESULT OF CONSTRUCTION ACTIVITIES ON AND ABOUT THE CONSTRUCTION AREA.

37. FOR WORK INSIDE THE AOA, THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FAA ADVISORY CIRCULAR'S (LATEST EDITIONS) AND RELATED MATERIALS. PARTICULAR ATTENTION TO BE APPLIED TO THE FOLLOWING LIST OF AC'S:

T. 250/5200-18C "AIRPORT SAFETY SELF INSPECTION"
U. 150/5210-5D "PAINTING, MARKING, AND LIGHTING OF VEHICLES USED ON AN AIRPORT"
V. 150/5210-24 "AIRPORT FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT"
W. 150/5370-2G "OPERATIONAL SAFETY ON AIRPORT'S DURING CONSTRUCTION"
X. 150/5370-13A "OFF-PEAK CONSTRUCTION OF AIRPORT PAVEMENTS USING HOT-MIX ASPHALT"

38. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH MANUAL UNIFORM TRAFFIC CONTROL DEVICE (WWW.MUTCD.INFO)

39. THE CONTRACTOR SHALL PROTECT-IN-PLACE ALL FEATURES LOCATED WITHIN THE CONSTRUCTION AREAS, UNLESS OTHERWISE NOTED. THE CONTRACTOR MAY, AT ITS OWN EXPENSE AND WRITTEN APPROVAL OF THE ADR, REMOVE FEATURES OR ADDITIONAL PAVEMENT BEYOND REPAIR LIMITS TO ASSIST CONSTRUCTION. ALL HARDSCAPE DAMAGED BY CONSTRUCTION MUST BE REPLACED IN KIND.

40. DISCREPANCIES AND ORDER OF PRECEDENCE:

Y. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD AND, IN THE EVENT OF DISCREPANCY, REPORT SUCH DISCREPANCY TO THE ADR.
Z. DIMENSIONS SHALL GOVERN. DETAILS SHALL GOVERN OVER PLANS AND ELEVATIONS. LARGE SCALE DETAILS OR PLANS SHALL GOVERN OVER SMALL SCALE DETAILS OR PLANS. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL CONSIDER THE PROJECT SPECIFICATIONS A PART OF THE CONTRACT DOCUMENTS. WHERE INFORMATION IS CONFLICTING, SPECIFIC DETAILS SHALL GOVERN OVER TYPICAL DETAILS WHICH SHALL GOVERN OVER THESE NOTES WHICH SHALL GOVERN OVER SPECIFICATIONS.
AA. CHECK ALL DIMENSIONS ON EACH DISCIPLINE DRAWINGS SUCH AS STRUCTURAL AND ELECTRICAL AGAINST ARCHITECTURAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL PENETRATIONS IN THE STRUCTURE FOR THE PROPER INSTALLATION OF THE WORK. REFER TO STRUCTURAL DRAWINGS FOR SECONDARY FRAMING AND OR REINFORCING REQUIRED AT PENETRATIONS IN STEEL, CONCRETE OR MASONRY. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL DIMENSIONS. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE OMITTED OR NOT CLEAR, CONTACT THE ADR. ALL DIMENSIONS RELATED TO EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR. DIMENSIONS ARE TO THE FACE OF STUDS, AND TO CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED.
AB. THE CONTRACTOR SHALL BECOME FULLY ACQUAINTED WITH CONDITIONS RELATED TO THE WORK. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS SHALL BE REPORTED TO THE DESIGN PROFESSIONALS FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY NOTIFY THE ADR OF ANY CONFLICTS BETWEEN THE DRAWINGS; OR EXISTING CONDITIONS NOT SHOWN OR DIFFERENT FROM THOSE SHOWN ON DRAWINGS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE BUILDING THAT IS IN CONFLICT UNTIL THE CONFLICT IS RESOLVED WITH THE AFFECTED PARTIES.

41. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH CALIFORNIA STATE WATER RESOURCES CONTROL BOARD ORDER NO 2009-009-DWQ (AS AMENDED BY ORDER NO. 2010-0014-DWQ); NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PREVENTION PLAN (SWPPP) FOR CONSTRUCTION ACTIVITIES PREPARED BY THE AIRPORT AUTHORITY.

42. FOR SMALL CONSTRUCTION PROJECTS OR PROJECTS DISTURBING LESS THAN ONE ACRE OF SOIL, PROVIDE A PLAN THAT DEMONSTRATES, AT A MINIMUM, THE INSTALLATION AND MAINTENANCE OF THE APPROPRIATE BMPS FOR THE SPECIFIC WORK BEING PERFORMED. THESE MEASURES SHALL BE CONTINUOUS THROUGHOUT THE PROJECT WHERE THE TYPE OF WORK REQUIRES IT. BASED ON THE PROJECT SCOPE, THE MINIMUM BMPS SHOULD INCLUDE DETAILS ON THE IMPLEMENTATION AND DEPLOYMENT OF THE FOLLOWING TYPES: TEMPORARY SOIL STABILIZATION, TEMPORARY SEDIMENT CONTROL, WIND EROSION CONTROL, TRACKING CONTROL, NON-STORMWATER MANAGEMENT, WASTE MANAGEMENT AND MATERIAL POLLUTION CONTROL. AT THE DISCRETION OF THE ADR, THE CONTRACTOR MAY BE REQUIRED TO INCREASE THE LEVEL OF BMPS DURING THE COURSE OF THE WORK. THE ADR RESERVES THE RIGHT TO STOP THE CONTRACTOR'S WORK SHOULD THE NECESSARY BMPS NOT SUFFICIENTLY BE IN PLACE AND/OR MAINTAINED.

43. THE CONTRACTOR SHALL COMPLY WITH THE AIRPORT'S "CLEAN CONSTRUCTION PROGRAM. REFER TO CONTRACT GENERAL CONDITIONS FOR ADDITIONAL INFORMATION.

44. FUEL SUPPORT: ANY TYPE OF FUELING SUPPORT FACILITY OR DEVICE USED TO REFUEL CONSTRUCTION EQUIPMENT IS SUBJECT TO SAFETY INSPECTION. LOCAL FIRE CODES AND SAFETY STANDARDS SHALL BE MET PRIOR TO COMMENCEMENT OF WORK. NO FUELING IS PERMITTED WITHIN THE AOA.

45. ALL WORK IS NEW NEW UNLESS INDICATED AS EXISTING.

46. ANY WORK PERFORMED WITHOUT WRITTEN APPROVAL OF THE ADR AND/OR ALL WORK AND MATERIAL NOT IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE.

47. EMERGENCY VEHICLES SHALL HAVE THE RIGHT-OF-WAY AT ALL TIMES. DURING ANY EMERGENCY (FIRE FIGHTING, RESCUE, MEDICAL TRANSPORT, ETC.) THE CONTRACTOR MAY BE INSTRUCTED TO CEASE WORK OR VACATE SPECIFIC AREAS OF THE AIRPORT. ANY DELAYS CAUSED BY ORDERED CESSATION OF WORK SHALL BE GROUNDS FOR TIME EXTENSIONS, AS APPROVED BY THE ADR.

48. EQUIPMENT AND MATERIAL:

AC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MANUFACTURER'S RECOMMENDED MAINTENANCE PROCEDURES AND SCHEDULES TO OWNER.
AD. ANY MANUFACTURER'S OR BRAND NAME PRODUCTS INDICATED OR SPECIFIED ARE DONE SO TO ESTABLISH A MINIMUM LEVEL OF QUALITY.
AE. THE CONTRACTOR SHALL REVIEW THE DIMENSIONS OF ALL EQUIPMENT IN THE PROJECT REGARDLESS OF THE SOURCE AND COORDINATE ACCESS TO THE SPACE AND VERIFY CLEAR FLOOR SPACE IS PROVIDED AS REQUIRED TO ENSURE EASE OF INSTALLATION.
AF. PROVIDE GALVANIC PROTECTION BETWEEN DISSIMILAR MATERIALS, WHERE REQUIRED.
AG. ANY APPLIANCE REGULATED BY THE APPLIANCE EFFICIENCY REGULATIONS, TITLE 20 CALIFORNIA CODE OF REGULATIONS, SECTION 1601 ET SEQ., MAY BE INSTALLED ONLY IF THE APPLIANCE FULLY COMPLIES WITH SECTION 1608(A) OF THOSE REGULATIONS. [110.1(A)].
AH. SPACE CONDITIONING SYSTEMS SHALL MEET THE EFFICIENCY STANDARDS SPECIFIED SECTION 120.2.
AI. EXTERIOR DOORS SHALL HAVE AIR INFILTRATION RATES NOT EXCEEDING: 0.3 CFM/FT 2 OF NONRESIDENTIAL SINGLE DOOR AREA, AND 1.0 CFM/FT 2 OF NONRESIDENTIAL DOUBLE DOOR AREA. [110.6(A)1].
AJ. INSULATION SHALL BE CERTIFIED BY DEPARTMENT OF CONSUMER AFFAIRS, BUREAU OF HOME FURNISHING AND THERMAL INSULATION THAT THE INSULATION CONDUCTIVE THERMAL PERFORMANCE IS APPROVED PURSUANT TO THE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 12, CHAPTER 12-13, ARTICLE 3, "STANDARDS FOR INSULATING MATERIAL." [110.8(A)].
AK. INSULATING MATERIAL SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF THE CBC. [110.8(C)].

49. ALL CONSTRUCTION SHALL MEET OR EXCEED LOCAL INDUSTRY STANDARDS. DETAILS ARE PROVIDED TO INDICATE MINIMUM QUALITY AND TO GIVE STANDARDS OF CONSTRUCTION. IF A CONDITION IS NOT SPECIFICALLY DETAILED, SUBMIT A SIMILAR DETAIL FOR GUIDE AND APPROVAL.

50. ALL WORK MUST BE OF GOOD QUALITY, FREE FROM DEFECTS, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

51. PROVIDE ALL HVAC, PLUMBING, GAS OR ELECTRIC SERVICE CONNECTIONS TO CASEWORK, FIXTURES, SIGNAGE, OR EQUIPMENT INDICATED (WHETHER UNITS ARE INSTALLED BY CONTRACTOR OR BY OTHERS).

52. DRAWINGS CONTAINED IN THIS SET SHALL NOT BE REPRODUCED FOR SHOP DRAWINGS. COPIES OF THESE DRAWINGS SUBMITTED AS SHOP DRAWINGS WILL BE REJECTED AND RETURNED TO THE CONTRACTOR.

53. EACH INSTALLER MUST EXAMINE SUBSTRATE AND/OR CONDITIONS UNDER WHICH THE WORK WILL BE INSTALLED AND REPORT TO THE CONTRACTOR IN WRITING ANY CONDITIONS DETRIMENTAL TO THE PROPER AND TIMELY EXECUTION OF THE INSTALLERS WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED. INSTALLATION SHALL CONSTITUTE ACCEPTANCE OF THE SUBSTRATE AND/OR CONDITIONS.

54. ABBREVIATIONS THROUGHOUT THE DOCUMENTS COMPLY WITH ABBREVIATIONS ON DRAWINGS E003.

55.

56. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65 PERCENT OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE. CONTRACTOR TO PROVIDE WASTE MANAGEMENT PLAN.

57. REFER TO THE SPECIFICATIONS FOR GENERAL CONDITIONS, SUPPLEMENTARY AND SPECIAL CONDITIONS, AND OTHER REQUIREMENTS. VERIFY POINTS OF CONNECTION, INCLUDING SIZES AND LOCATIONS, AND ALL OTHER REQUIRED OPERATING CRITERIA WITH EQUIPMENT MANUFACTURER. CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACKING PLATES AND SUPPORTING BRACKETS FOR ALL CONDITIONS WHERE PANELING, CASEWORK, EQUIPMENT AND DEVICES ARE ATTACHED TO A WALL FOR SUPPORT.

58. DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE OF SAME NATURE AS THOSE SHOWN FOR SIMILAR CONDITIONS. REFER TO THE TYPICAL DETAIL SHEETS FOR TYPICAL DETAILS OF CONSTRUCTION. TYPICAL DETAILS APPLY TO ALL CONSTRUCTION UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE. WHERE CONDITIONS REQUIRE MODIFICATIONS OF A TYPICAL DETAIL, THE CONTRACTOR SHALL SUBMIT MODIFIED DETAIL FOR APPROVAL BY THE ENGINEER OF RECORD PRIOR TO FABRICATION AND INSTALLATION. DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE OF SAME NATURE AS THOSE SHOWN FOR SIMILAR CONSTRUCTION.

59. CONSTRUCTION MATERIALS SHALL BE DISTRIBUTED WHEN PLACED ON THE STRUCTURE SUCH THAT LOADS DO NOT EXCEED DESIGN LIVE LOADS OR RESULT IN AN UNBALANCED CONDITION.

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TWY A LIGHTING AND VAULT REHAB
AIP No. 3-06-0010-053-2022

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AIRFIELD ELECTRICAL NOTES 2 OF 2

Sheet: E0.02

ABBREVIATIONS

A	AMPERE
ACAMS	ACCESS CONTROL AND MONITORING SYSTEM
ADR	AIRPORT DESIGNATED REPRESENTATIVE
AF	AMPERE FRAME, AMPERE FUSE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFL	AIRFIELD LIGHTING
ALCMS	AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM
ALV	AIRFIELD LIGHTING VAULT
AS	AMPERE SWITCH
ASC	AVAILABLE SHORT CIRCUIT
ASDE	AIRPORT SURFACE DETECTION EQUIPMENT
ASOS	AIRPORT SURFACE OBSERVATION SYSTEM
ASR	AIRPORT SURVEILLANCE RADAR
AT	AMPERE TRIP
ATCT	AIR TRAFFIC CONTROL TOWER
ATS	AUTOMATIC TRANSFER SWITCH
BLDG	BUILDING
BOB	BREAK OUT BOX CONDUIT
CANDM	CONSTRUCTION AND MAINTENANCE
CB, C/B	CIRCUIT BREAKER
CCD	CHARGED COUPLED DEVICE
CCR	CONSTANT CURRENT REGULATOR
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CONN	CONNECTION, CONNECT
CO	CONDUIT ONLY W/PULL WIRE
CU	COPPER
DWG	DRAWING
D/U	DISTRIBUTION BOX
DME	DISTANCE MEASURING EQUIPMENT
(E),E	EXISTING, EXIST
EIA	ELECTRONIC INDUSTRY ALLIANCE
EMERG	EMERGENCY
ELEC	ELECTRIC
(F)	FUTURE
FAA	FEDERAL AVIATION ADMINISTRATION
FDR	FEEDER
FDU	FIBER DISTRIBUTION UNIT
FFM	FAR FIELD MONITOR
FIXT	FIXTURE
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
G, GND	GROUND
GEN	GENERATOR
GRC	GALVANIZED RIGID CONDUIT
GRS	GALVANIZED RIGID STEEL
GRSC	GALVANIZED RIGID STEEL CONDUIT
GS	GLIDE SLOPE
GRN	GREEN
HDPE	HIGH DENSITY POLYETHYLENE
HH	HAND HOLE
HV	HIGH VOLTAGE
ILC	INDIVIDUAL LIGHT CONTROL
ILS	INSTRUMENT LANDING SYSTEM
IM	INFORMATION TECHNOLOGY DIVISION
ITD	INNER MARKER
JB	JUNCTION BOX
JC	JUNCTION CAN
JCT	JUNCTION
JETA	JET AVIATION FUEL LINE
KVA	KILOVOLT AMPERES
KW	KILOWATT
LOC	LOCALIZER
LLWAS	LOW LEVEL WIND ADVISORY SYSTEM
LST	CORNING STYLE P/N (PART OF CORNING P/N)
LTS	LIGHTS
LTG	LIGHTING
MALS	MEDIUM INTENSITY APPROACH LIGHTING SYSTEM
MFG	MANUFACTURER
MH	MANHOLE
MLO	MAIN LUG ONLY PANEL
MM	MIDDLE MARKER, MULTIMODE
MTD	MOUNTED
(N),N	NEW
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NF	NON FUSED
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OCC	OPTICAL CABLE CORP.
OD	OUTSIDE DIAMETER
OFL	OPTICAL FIBER LOSS (dB/kM)
OFNR CABLE	OPTICAL FIBER NON-CONDUCTIVE RISER
OTDR	OPTICAL TIME DOMAIN REFLECTOMETER
P	POLE
(P)	PROPOSED
PAPI	PRECISION APPROACH PATH INDICATOR
PB	PULL BOX
PCC	PORTLAND CEMENT CONCRETE
PE	POLYETHELENE CABLE JACKET
Ø, PH	PHASE
PNL CONNECT,	PANEL PROVIDE FURNISH, INSTALL, TEST AND PUT INTO OPERATION
PTT CARD I.D.	RACAL CARD PART NUMBER, RACAL 5000
PWR	POWER
PVC	POLYVINYL CHLORIDE CONDUIT
PVMT	PAVEMENT
(Q)	REMOVE
RDRS	RUNWAY DISTANCE REMAINING SIGN
RECP	RECEPTACLE
RE	RELOCATED
REF	REFERENCE, REFER
REL	RUNWAY ENTRANCE LIGHT
RELOC	RELOCATE
REQD	REQUIRED
RF	RADIO FREQUENCY
RM	ROOM
RLIM	RUNWAY LIGHT INTENSITY MONITOR
RGS	RIGID GALVANIZED STEEL
RSA	RUNWAY SAFETY AREA
RSC	RIGID STEEL CONDUIT
RVR	RUNWAY VISUAL RANGE
RWY	RUNWAY
RWSL	RUNWAY STATUS LIGHT
RX	RELOCATED LOCATION
SM	SINGLE MODE
SMFO	SINGLE MODE FIBER OPTIC
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TEL	TELEPHONE
THL	TAKEOFF HOLD LIGHT
TIA	TELECOMMUNICATIONS INDUSTRY ASSOCIATION
TWY	TAXIWAY
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
V	VOLTAGE, VOLTS
VA	VOLT-AMPERES
VFR	VISUAL FLIGHT RULES
V-NET	VIDEO NETWORK
W	WIRE, WATTS
W/	WITH
WP	WEATHER PROOF

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ABBREVIATIONS

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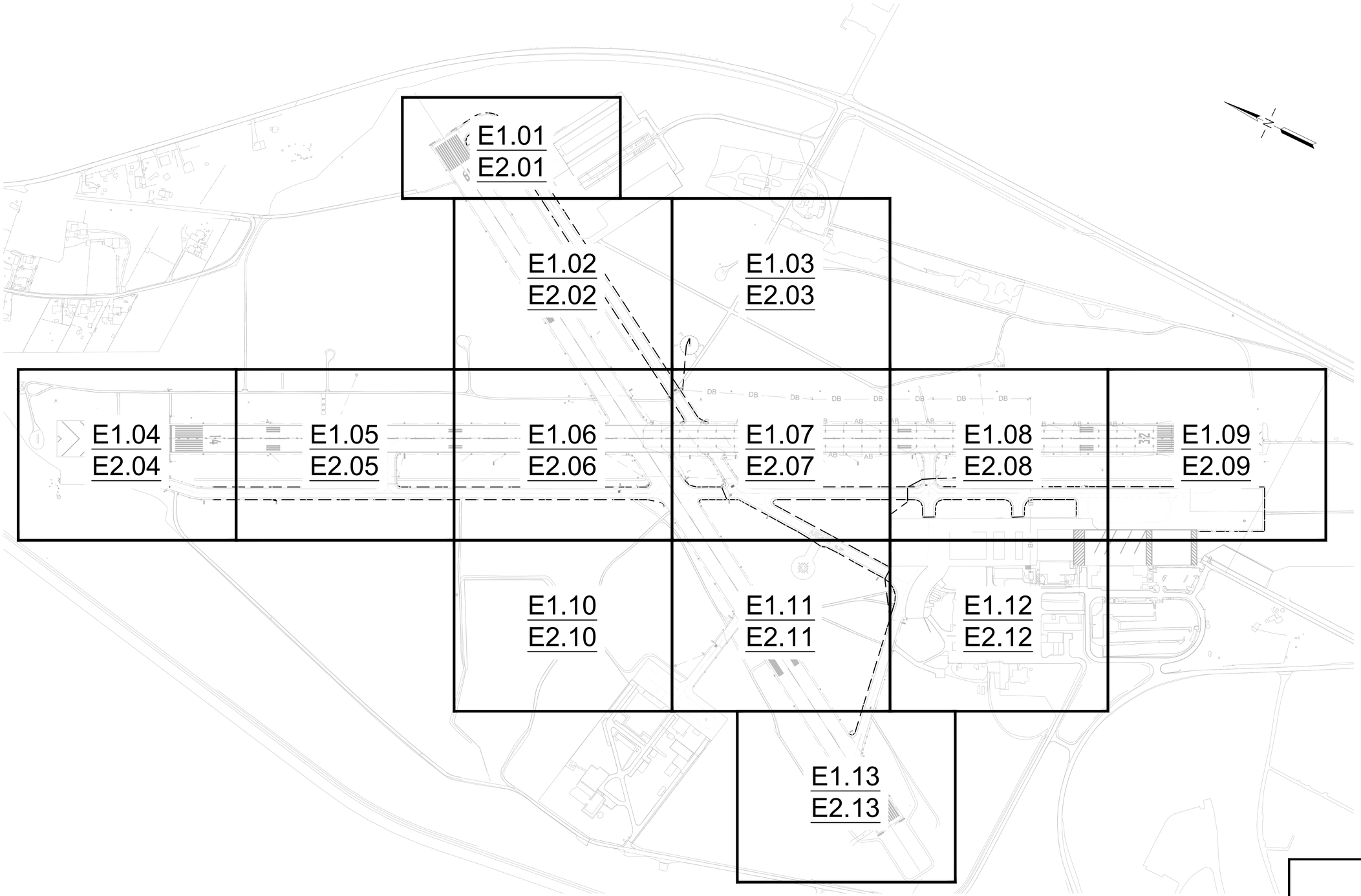

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OVERALL PLAN

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DEMO ELECTRICAL LEGEND (FOR SHEETS E1.01 THRU E1.13)

CONDUITS/CABLES	DESCRIPTION
TWA/C*	EXISTING AIRFIELD LIGHTING CONDUIT & CABLE TO REMAIN. "TWA/C" DENOTES CIRCUIT ID."*" DENOTES 2-CONDUCTORS.
TWA/C*	EXISTING AIRFIELD LIGHTING CABLE TO BE REMOVED. CONDUIT TO REMAIN. "TWA/C" DENOTES CIRCUIT ID."*" DENOTES 2-CONDUCTORS.
DB DB DB 19E* TW F/B* TWA/D/G* 32C*, 32E*, 32Z*	EXISTING AIRFIELD LIGHTING DUCTBANK AND CABLES TO REMAIN. "*" DENOTES 2-CONDUCTORS.
DB DB DB 19E* TW F/B* TWA/D/G* 32C*, 32E*, 32Z*	EXISTING AIRFIELD LIGHTING CABLE TO BE REMOVED FROM EXISTING DUCTBANK. AIRFIELD LIGHTING DUCTBANK TO REMAIN. "*" DENOTES 2-CONDUCTORS.
FAA-P FAA-P MALSR	EXISTING MALSR CONDUIT & CABLE TO REMAIN. "MALSR" DENOTES CIRCUIT ID.
FAA	EXISTING FAA CONDUIT & CABLE TO REMAIN.
AB AB BEACON*	EXISTING CABLE TO BE REMOVED AND CONDUIT TO BE ABANDONED. "BEACON" DENOTES CIRCUIT ID AND CABLE TO BE REMOVED. "*" DENOTES 2-CONDUCTORS.

LIGHTS	DESCRIPTION
	EXISTING TWY EDGE LIGHT TO REMAIN.
	REMOVE EXISTING TWY EDGE LIGHT, ISOLATION TRANSFORMER AND CABLE. BASE CAN TO REMAIN.
	EXISTING RWY EDGE LIGHT TO REMAIN.
	EXISTING MALSR LIGHT BAR TO REMAIN.
HANDHOLE & STRUCTURE	**DESCRIPTION**
	EXISTING POWER OR COMMUNICATION HANDHOLE TO REMAIN.
	EXISTING POWER/COMMUNICATION HANDHOLE TO BE ACCESSED FOR REMOVAL OF CABLE, HAND HOLE TO REMAIN.
	EXISTING PAPI TO REMAIN.
J	EXISTING JUNCTION BASE CAN TO REMAIN.
	EXISTING REIL TO REMAIN
P	EXISTING PRIMARY WINDCONE AND FOUNDATION TO BE REMOVED.
S	EXISTING SECONDARY WINDCONE TO BE REMOVED. FOUNDATION TO REMAIN.
	EXISTING BEACON AND FOUNDATION TO BE REMOVED.

SIGN	DESCRIPTION
	EXISTING AIRFIELD SIGN TO REMAIN.
R	EXISTING AIRFIELD SIGN TO BE REMOVED. FOUNDATION TO BE REMOVED.
	EXISTING UNLIGHTED AIRFIELD SIGN AND FOUNDATION TO BE REMOVED.
A1	EXISTING LIGHTED TAXIWAY AND RUNWAY LOCATION SIGN PANEL
A1	REMOVE LIGHTED TAXIWAY AND RUNWAY LOCATION SIGN PANEL
← A1 A1 →	EXISTING LIGHTED DIRECTION, DESTINATION, & BOUNDARY SIGN PANEL
← A1 A1 →	REMOVE LIGHTED DIRECTION, DESTINATION, & BOUNDARY SIGN PANEL
5	EXISTING LIGHTED RUNWAY DISTANCE REMAINING SIGN PANEL.
5	REMOVE LIGHTED RUNWAY DISTANCE REMAINING SIGN PANEL.
14-32	EXISTING LIGHTED MANDATORY SIGN PANEL
14-32	REMOVE LIGHTED MANDATORY SIGN PANEL
	EXISTING BLANK SIGN PANEL
	REMOVE BLANK SIGN PANEL

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TWY A LIGHTING AND VAULT REHAB
AIP No. 3-06-0010-053-2022

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ACI No. XXXXX
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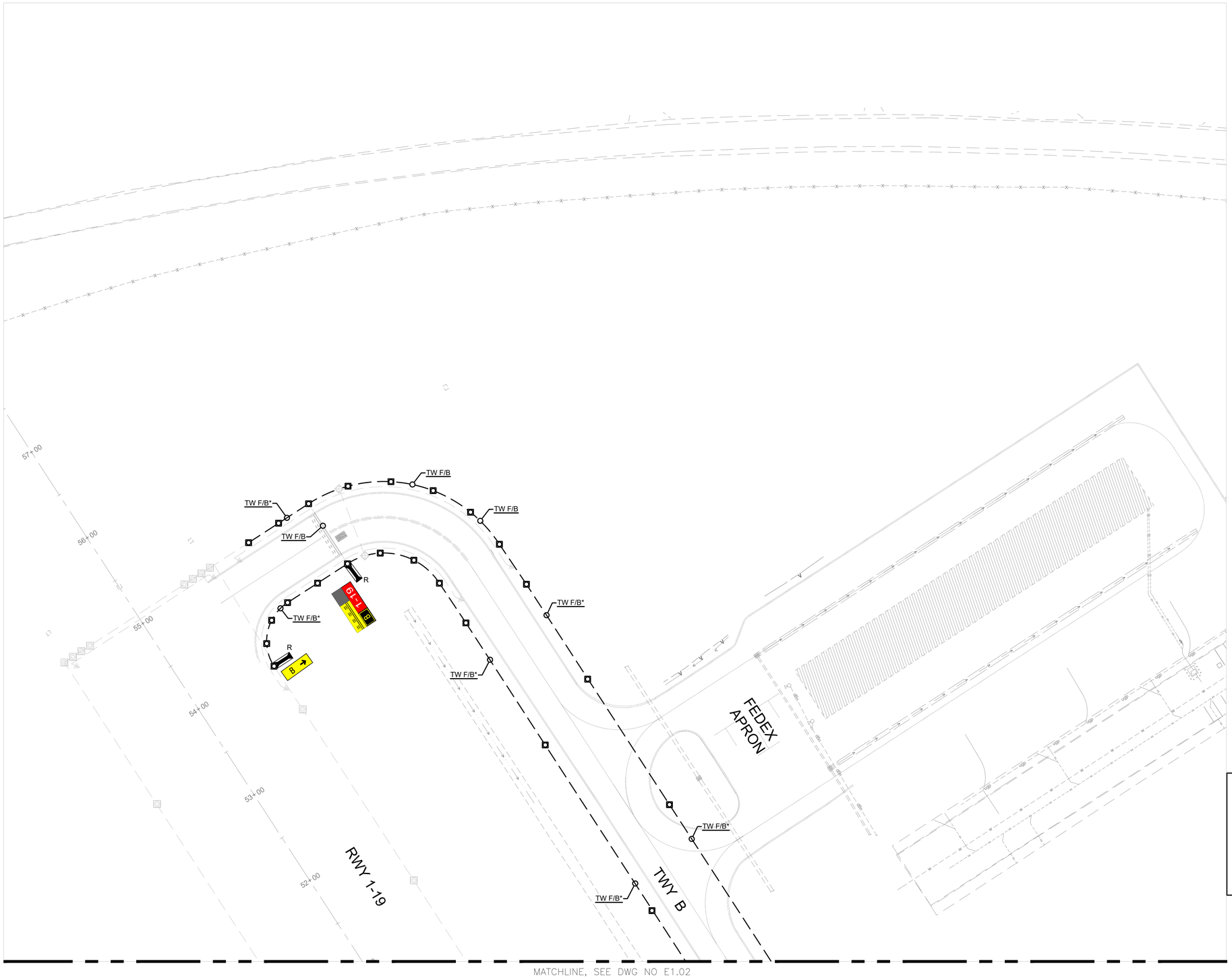
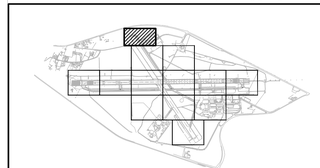
DEMO ELECTRICAL LEGEND

Sheet: E1.00

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.





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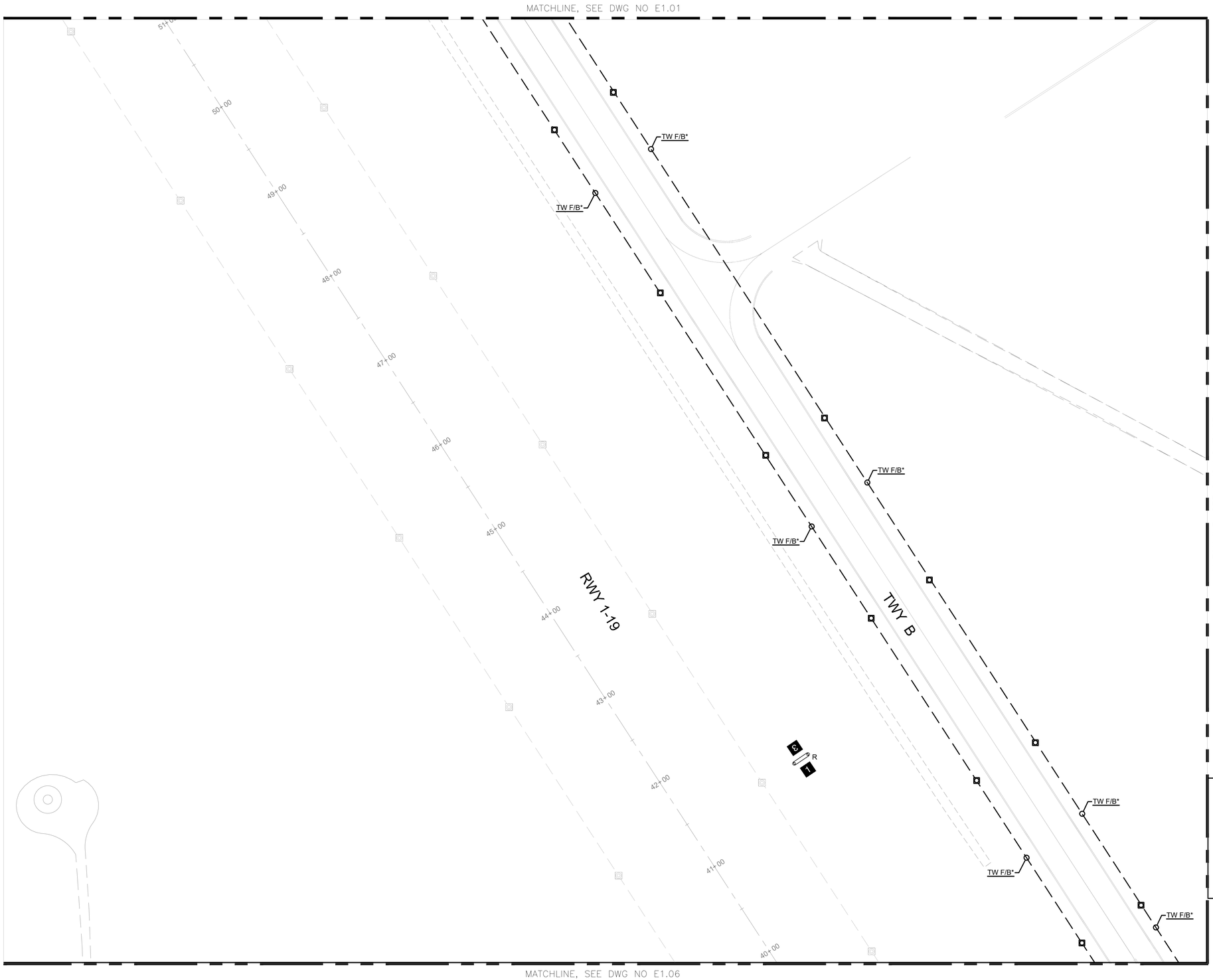
AIRFIELD LIGHTING DEMO PLAN 1

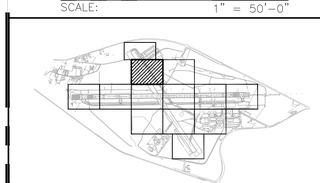
Sheet: E1.01



GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'
SCALE: 1" = 50'-0"



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AIRFIELD LIGHTING DEMO PLAN 2

Sheet: E1.02

MATCHLINE, SEE DWG NO E1.02

REMOVE (E) WINDCONE STEP DOWN TRANSFORMER AND DISCONNECT AND ASSOCIATED EQUIPMENT

P

5
E3.02

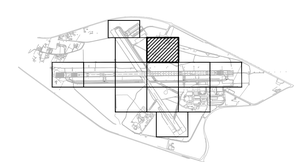
WINDCONE*

MATCHLINE, SEE DWG NO E1.07

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'
SCALE: 1" = 50'-0"



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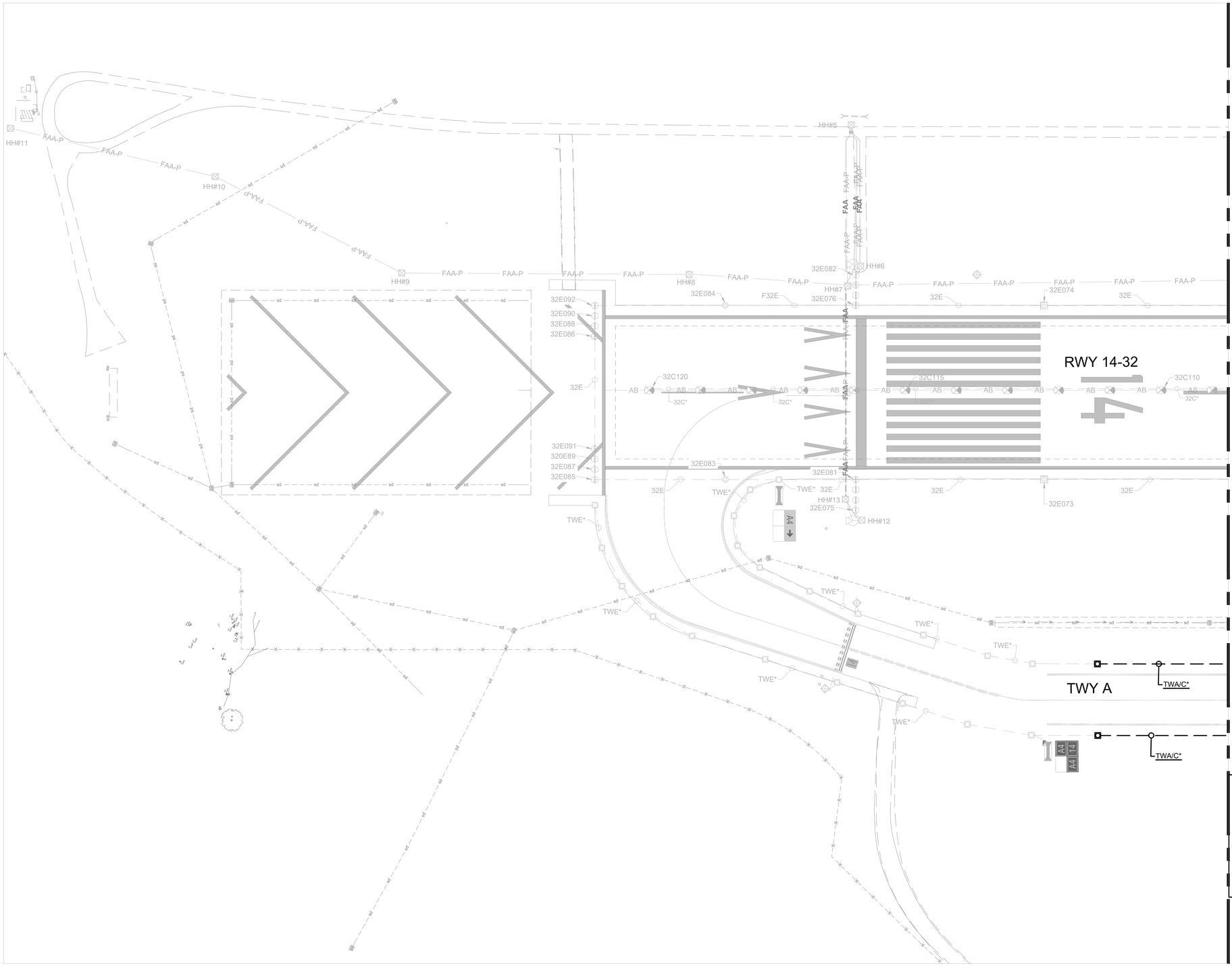
AIRFIELD LIGHTING DEMO PLAN 3

Sheet: E1.03

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.
2. THIS SHEET IS FOR REFERENCE ONLY.



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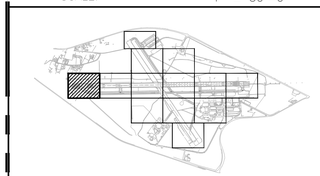
SCALE: 1" = 50'-0"



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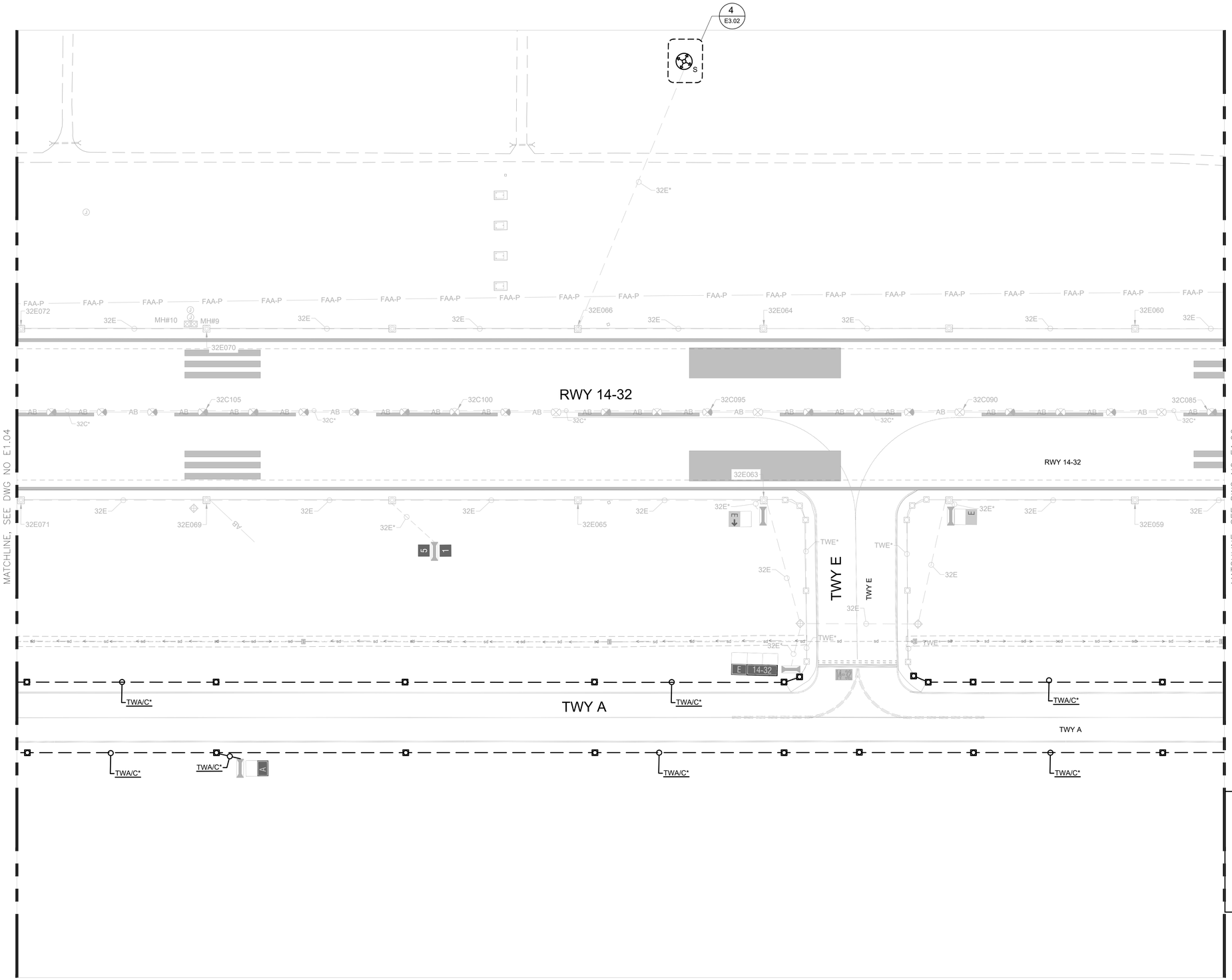
AIRFIELD LIGHTING DEMO PLAN 4

Sheet: E1.04



GENERAL NOTES

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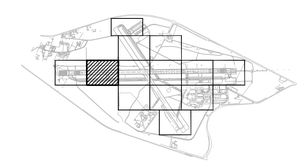
50' 0 50' 100'
SCALE: 1" = 50'-0"



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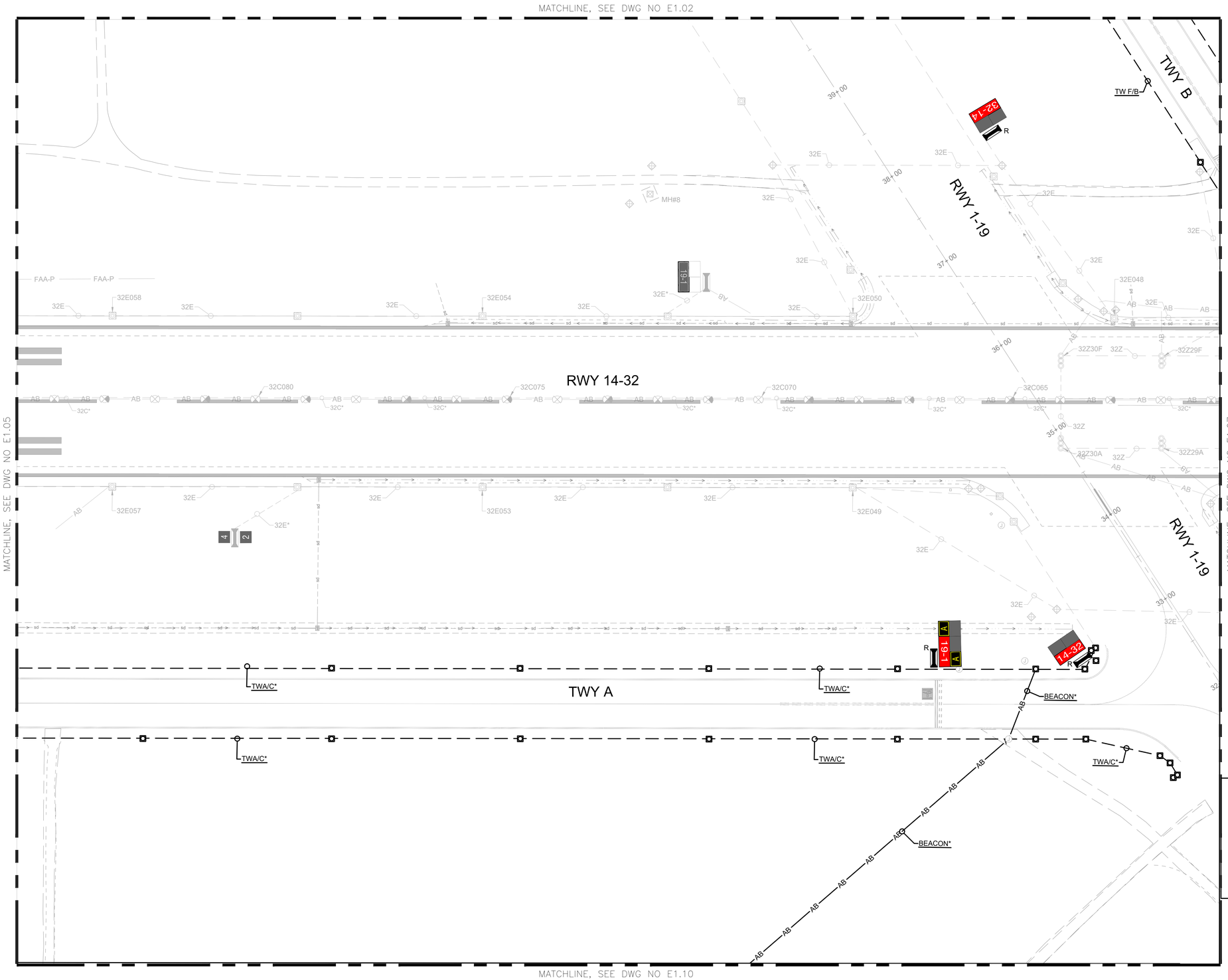
AIRFIELD LIGHTING DEMO PLAN 5

Sheet: E1.05



GENERAL NOTES

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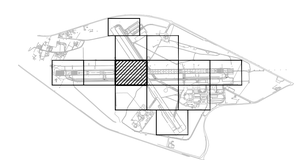
50' 0 50' 100'

SCALE: 1" = 50'-0"



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Approved: DL

AIRFIELD LIGHTING DEMO PLAN 6

Sheet: E1.06

MATCHLINE, SEE DWG NO E1.03

MATCHLINE, SEE DWG NO E1.06

MATCHLINE, SEE DWG NO E1.08

MATCHLINE, SEE DWG NO E1.11

RWY 14-32

RWY 1-19

TWY A

TWY B

TWY G

WINDCONE*

TW F/B*

TWB*

TWA/D/G

BEACON*

MH#6

MH#7

TWE*

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'

SCALE: 1" = 50'-0"

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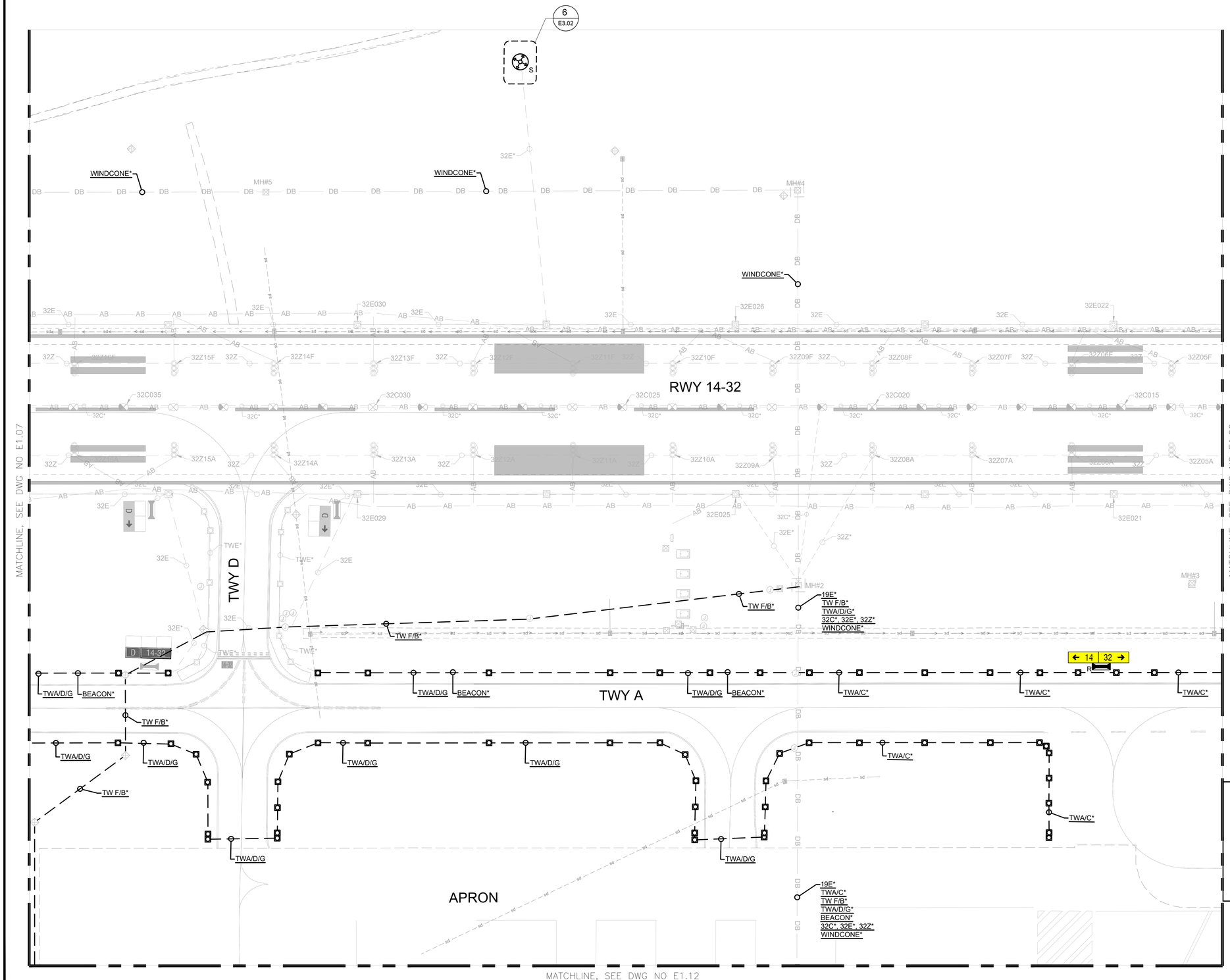
AIRFIELD LIGHTING DEMO PLAN 7

Sheet: E1.07



GENERAL NOTES

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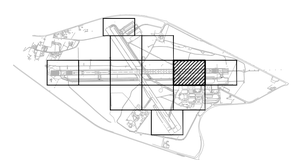
50' 0 50' 100'
SCALE: 1" = 50'-0"



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ACI No. XXXXX
Date: 12/2022
File Name: FILE NAME

Drawn: KV
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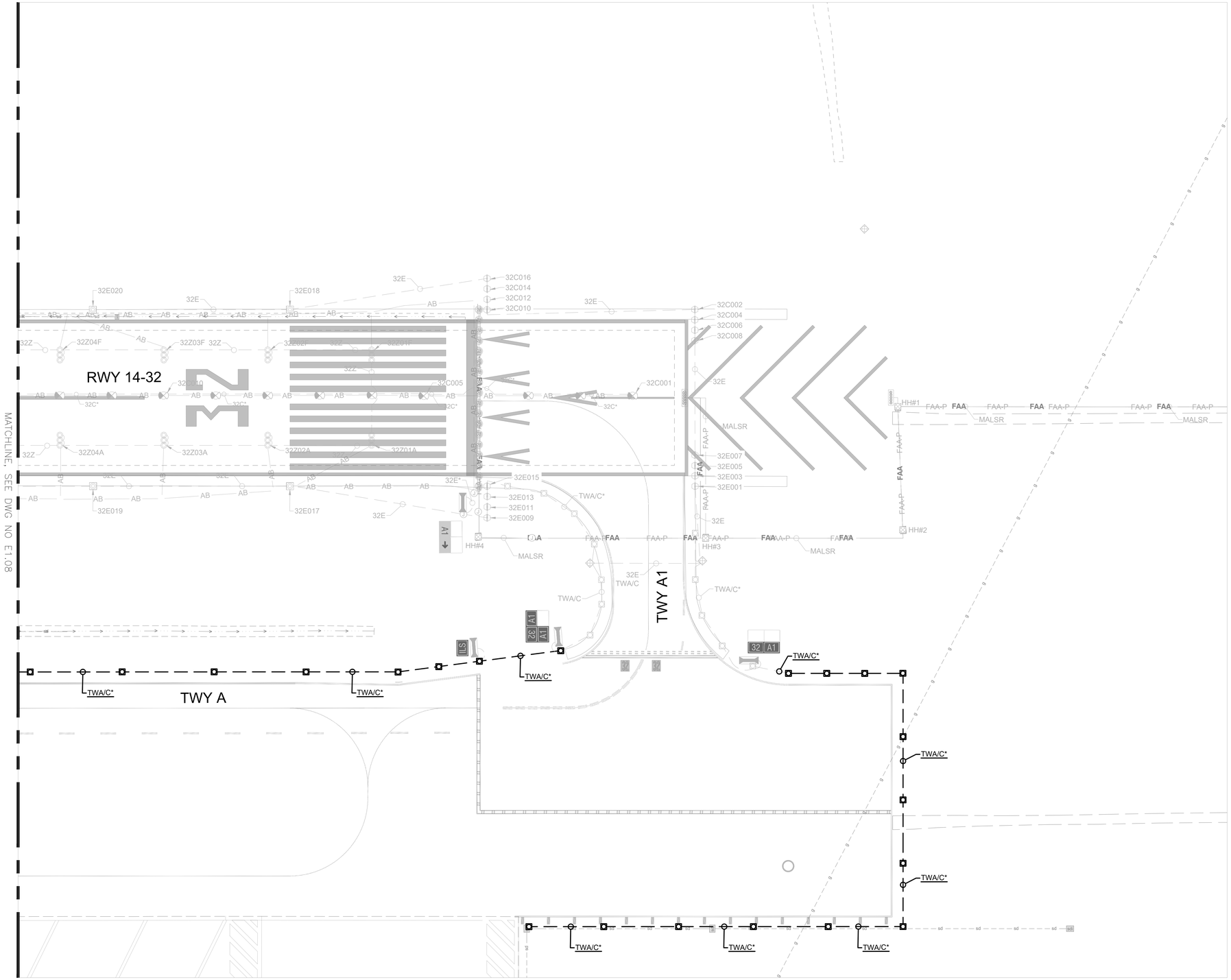
AIRFIELD LIGHTING DEMO PLAN 8

Sheet: E1.08

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



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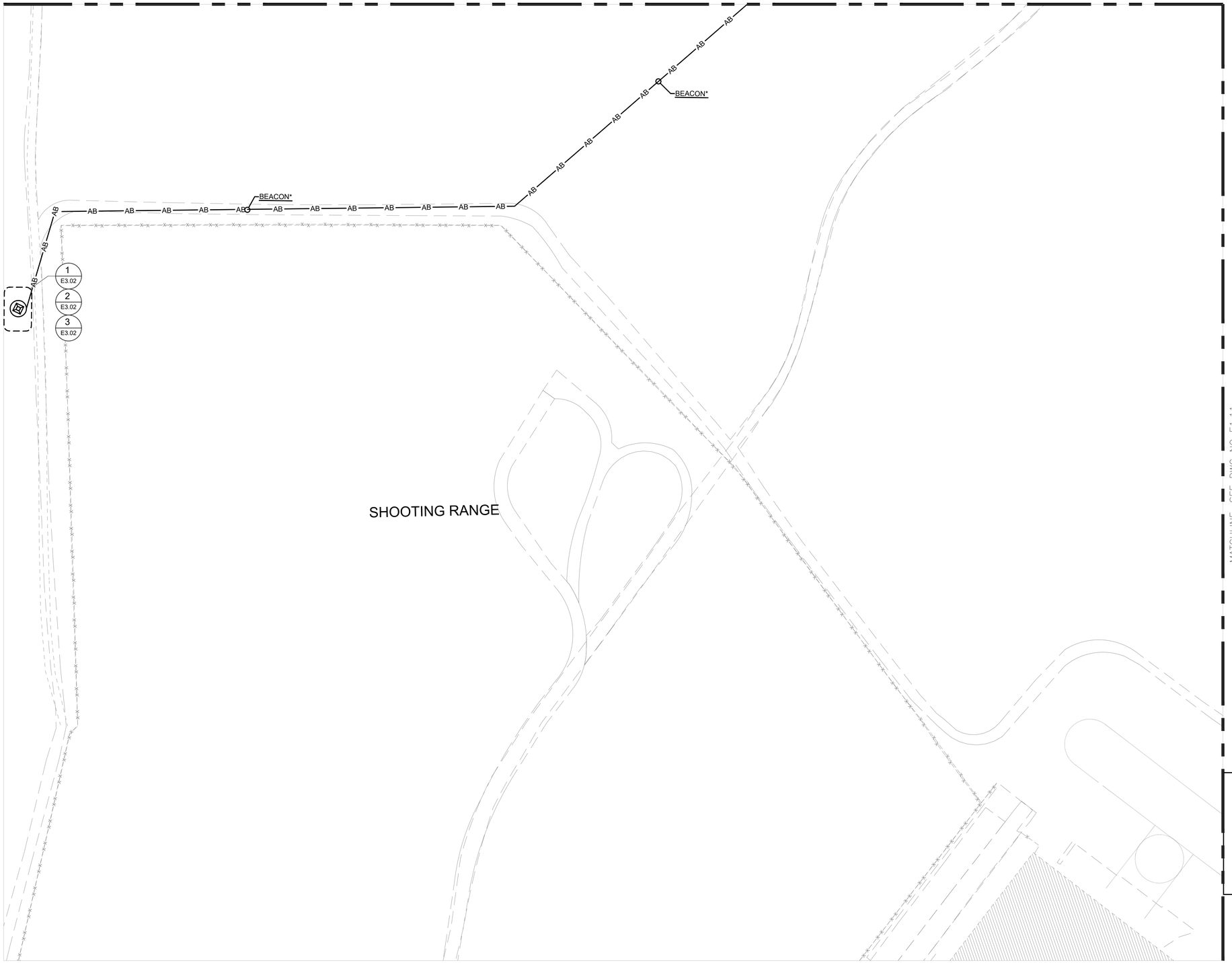
AIRFIELD LIGHTING DEMO PLAN 9

Sheet: E1.09

MATCHLINE, SEE DWG NO E1.06

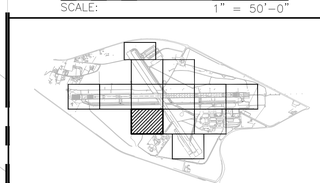


MATCHLINE, SEE DWG NO E1.11

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'
SCALE: 1" = 50'-0"



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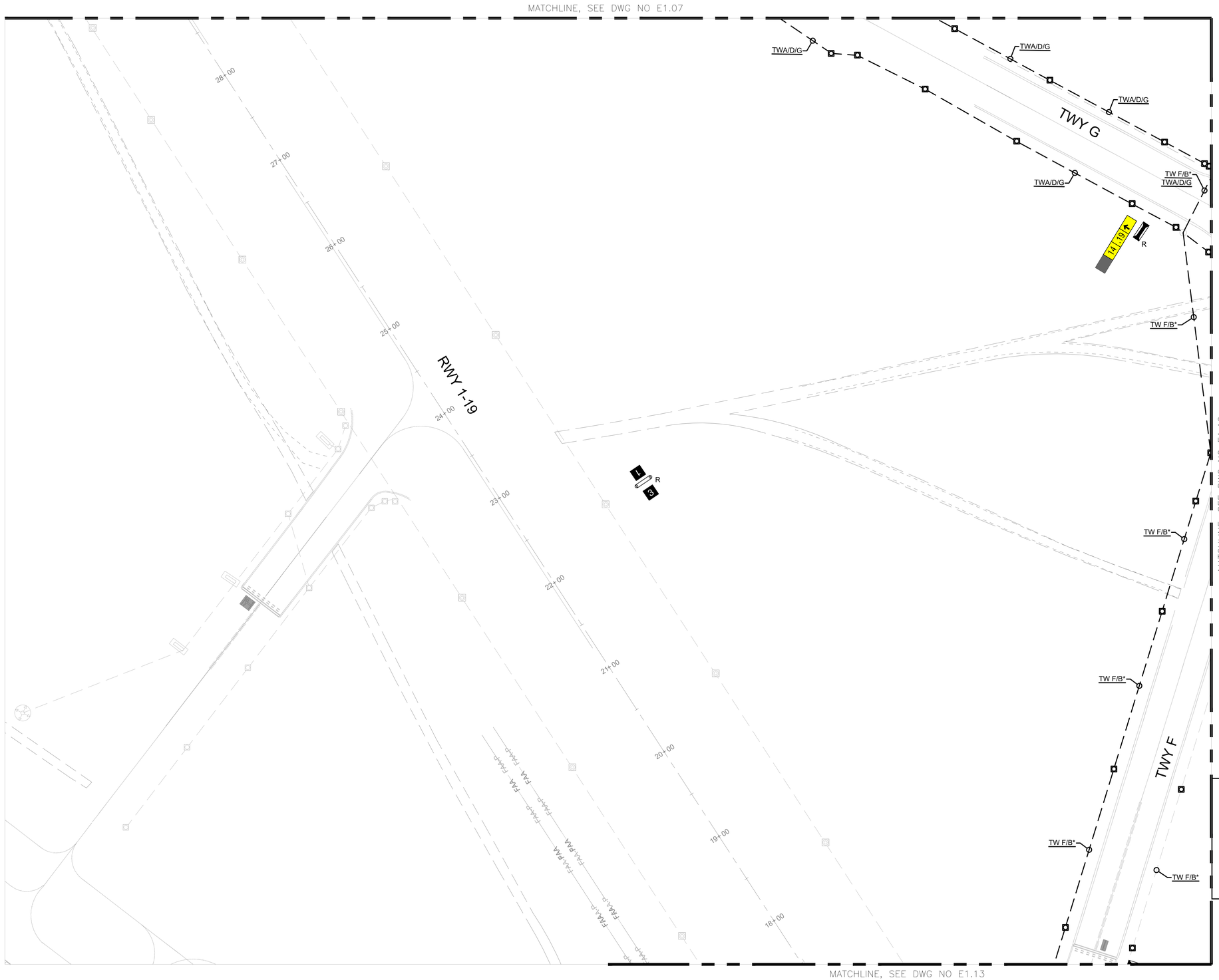
AIRFIELD LIGHTING DEMO PLAN 10

Sheet: E1.10



GENERAL NOTES

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50' 0 50' 100'
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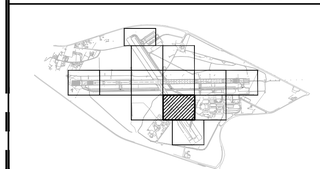

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AIRFIELD LIGHTING DEMO PLAN 11

Sheet: E1.11

MATCHLINE, SEE DWG NO E1.08

APRON

TW F/B*

TWA/D/G*

TWA/D/G*

TW F/B*

TW F/B*

R

TWY F

TW F/B*

MATCHLINE, SEE DWG NO E1.11

19E*
TWA/C*
TW F/B*
TWA/D/G*
BEACON*
32C*, 32E*, 32Z*
WINDCONE*

(E) GENERATOR ROOM TO BE DEMOLISHED

ARFF STATION

MH#1

(E) FAA BACKUP GENERATOR

(E) AFL VAULT TO REMAIN FOR STORAGE EQUIPMENT TO BE REMOVED. REFER TO SHEET E4.01 THROUGH E4.05 FOR ADDITIONAL REMOVAL DETAILS.

1-9
E3.01

EXISTING METERED SWITCHBOARDS

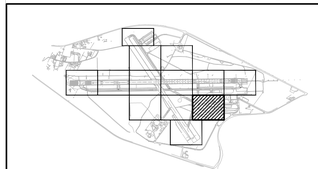
EXISTING SCE AIRPORT TRANSFORMERS

MATCHLINE, SEE DWG NO E1.13

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'
SCALE: 1" = 50'-0"



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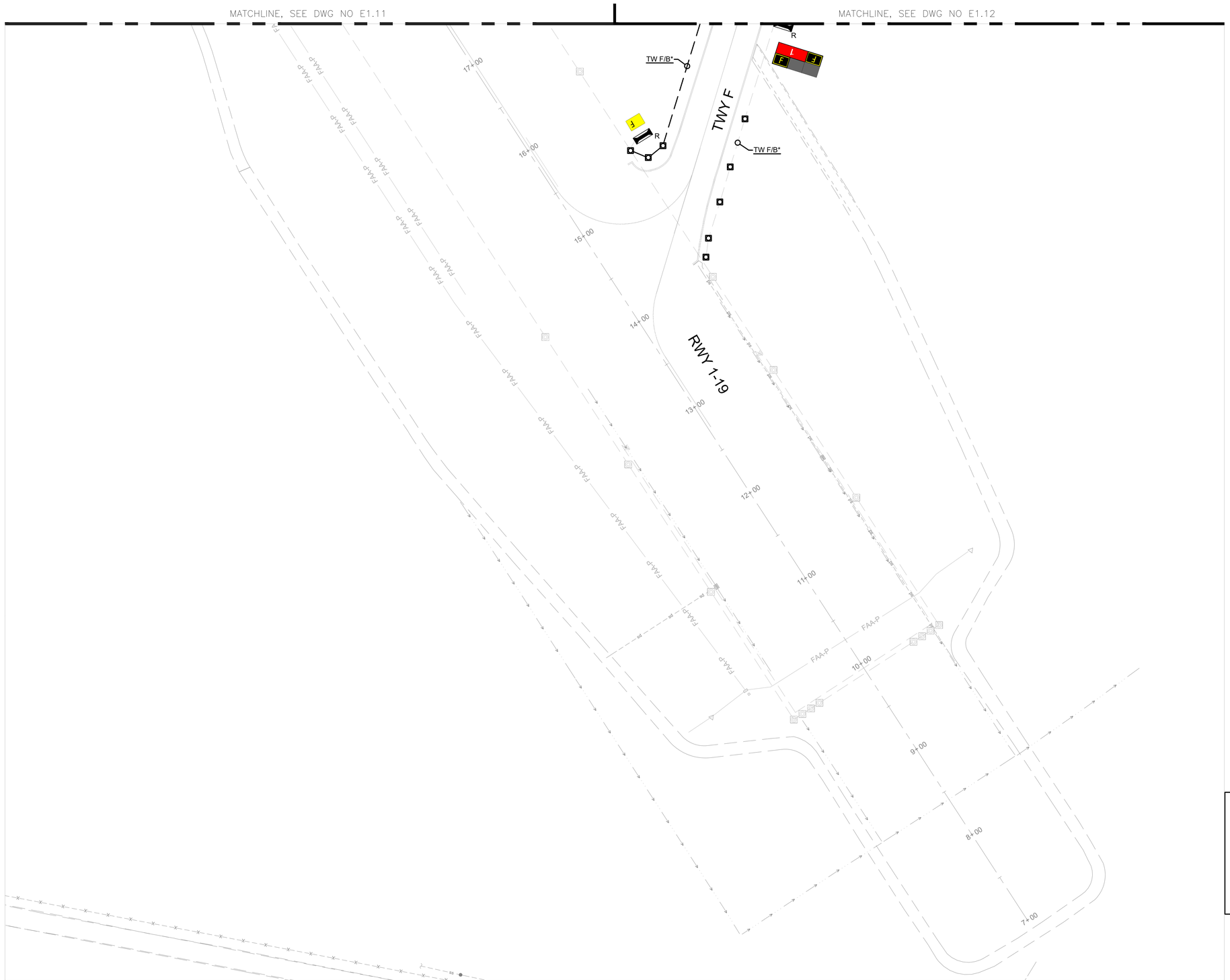
AIRFIELD LIGHTING DEMO PLAN 12

Sheet: E1.12



GENERAL NOTES

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50' 0 50' 100'
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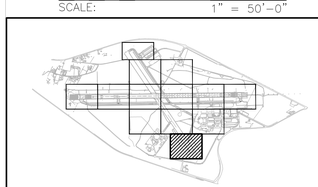

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AIRFIELD LIGHTING DEMO PLAN 13

Sheet: E1.13

NEW ELECTRICAL LEGEND (FOR SHEETS E2.01 THRU E2.13)

CONDUITS/CABLES	DESCRIPTION
TWY A1	EXISTING AIRFIELD LIGHTING CONDUIT & CABLE TO REMAIN. "TWY A1" DENOTES CIRCUIT ID.
TWY A1	NEW AIRFIELD LIGHTING CABLES TO BE INSTALLED IN EXISTING CONDUIT. "TWY A1" DENOTES CIRCUIT ID WITH 1-1/C #8 5KV FAA CABLE WITH 1#6 GREEN GROUND WIRE. CIRCUIT ID'S WITH "*" DENOTES 2-1/C #8 5KV FAA L-824 CABLE WITH 1#6 GREEN GROUND WIRE.
TWY A1 TWY B1	NEW 2" PVC SCHEDULE 40 CONDUIT & AIRFIELD LIGHTING CABLE TO BE INSTALLED IN EXISTING PAVEMENT OR NON-PAVED EARTH. "TWY A1", "TWY A2" DENOTES CIRCUIT ID, WITH 1-1/C #8, 5KV, FAA L-824 CABLE. "*" DENOTES 2-1/C #8 5KV FAA L-824 CABLES WITH 1#6 GREEN GROUND WIRE. REFER SHEET E6.03.
19E TWY A1 TWY B1 DB DB DB	EXISTING AIRFIELD LIGHTING DUCTBANK AND CABLES TO REMAIN.
19E* TWY A1* TWY B1* DB DB DB	NEW AIRFIELD LIGHTING CABLE TO BE INSTALLED IN EXISTING DUCTBANK. ALL NEW CABLE INSTALLED IN AIRFIELD LIGHTING DUCTBANKS SHALL BE #8, 5KV, FAA L-824 CABLE UNLESS OTHERWISE NOTED. EACH CONDUIT WITH NEW AIRFIELD LIGHTING CABLE SHALL INCLUDE A 1#6 GREEN GROUND WIRE. CIRCUIT ID'S WITH "*" DENOTES 2-1/C #8 5KV FAA L-824 CABLE WITH 1#6 GREEN GROUND WIRE.
FAA-P FAA-P MALSR	EXISTING MALSR CONDUIT & CABLE TO REMAIN. "MALSR" DENOTES CIRCUIT ID.
FAA	EXISTING FAA CONDUIT & CABLE TO REMAIN.
AB AB	ABANDONED CONDUIT

LIGHTS	DESCRIPTION
	EXISTING TAXIWAY EDGE LIGHT TO REMAIN.
	INSTALL NEW L-861T(L) ELEVATED T/W EDGE LIGHT WITH NEW TRANSFORMER ON EXISTING BASE CAN. REFER DETAIL 2 SHEET E6.01.
	EXISTING RUNWAY EDGE LIGHT TO REMAIN.
	EXISTING MALSR LIGHT BAR TO REMAIN.
HANDHOLE & STRUCTURE	**DESCRIPTION**
	EXISTING POWER OR COMMUNICATION HANDHOLE TO REMAIN.
	EXISTING POWER/COMMUNICATION HANDHOLE TO BE ACCESSED FOR REMOVAL OF CABLE, HAND HOLE TO REMAIN.
	EXISTING PAPI TO REMAIN.
	EXISTING JUNCTION BASE CAN TO REMAIN.
	EXISTING REIL TO REMAIN
P	NEW PRIMARY WINDCONE ON NEW FOUNDATION. REFER DETAIL 1 SHEET E6.07
S	NEW SECONDARY WINDCONE ON EXISTING FOUNDATION. REFER DETAIL 1 SHEET E6.08
	NEW BEACON ON NEW FOUNDATION AND POLE. REFER DETAIL 1 SHEET E6.09.

SIGN	DESCRIPTION
	EXISTING AIRFIELD SIGN TO REMAIN.
N	NEW AIRFIELD SIGN TO INSTALLED ON NEW FOUNDATION. REFER DETAIL 1 SHEET E6.06.
A1	EXISTING LIGHTED TAXIWAY AND RUNWAY LOCATION SIGN PANEL.
A1	NEW LIGHTED TAXIWAY AND RUNWAY LOCATION SIGN PANEL (YELLOW LEGEND AND BORDER ON BLACK BACKGROUND).
← A1 A1 →	EXISTING LIGHTED DIRECTION, DESTINATION & BOUNDARY SIGN PANEL.
← A1 A1 →	NEW LIGHTED DIRECTION, DESTINATION & BOUNDARY SIGN PANEL (BLACK LEGEND ON YELLOW BACKGROUND)
5	EXISTING LIGHTED RUNWAY DISTANCE REMAINING SIGN PANEL.
5	NEW LIGHTED RUNWAY DISTANCE REMAINING SIGN PANEL (WHITE LEGEND ON BLACK BACKGROUND).
14-32	EXISTING LIGHTED MANDATORY SIGN PANEL
14-32	NEW LIGHTED MANDATORY SIGN PANEL (BLACK OUTLINE ON OUTSIDE EDGE OF WHITE LEGEND ON RED BACKGROUND).
	EXISTING BLANK SIGN PANEL
	NEW BLANK SIGN PANEL

A1-01, 2M — SIGN ID, # OF MODULES
N: — NORTHING
E: — EASTING

1. ALL NON-RDR SIGNS SHALL BE SIZE 1, CLASS 2, MODE 2, AND STYLE 2.
2. ALL RDR SIGNS SHALL BE SIZE 4, CLASS 2, MODE 2, AND STYLE 2.
3. SIGN LENGTHS:

NO. OF MODULES	1	2	3	4
APPROXIMATE SIGN LENGTH (FEET)	8'	12'	15'	18'

   A. SIGN LENGTHS MAY VARY DEPENDING ON MANUFACTURER. LENGTH SHOWN IS MEANT FOR BIDDING PURPOSE ONLY.

   B. CONFIRM LENGTH WITH MANUFACTURER PRIOR TO BID AND ADJUST FOUNDATION ACCORDINGLY. CONTRACTOR SHALL BE PAID FOR THE LENGTH OF SIGN (NO. OF MODULES) AS SHOWN ON THIS SCHEDULE. IF MANUFACTURER REQUIRES A LONGER SIGN THAN SHOWN, ANY ADDITIONAL COST OF SIGN & FOUNDATION SHALL BE THE RESPONSIBILITY AND COST OF THE CONTRACTOR WITH NO SEPARATE PAYMENT.

4. FOR NEW SIGNS BLUE STAKE THE 4 CORNERS OF SIGN AND FOUNDATION AND DEFINED EDGE OF T/W TO OBTAIN ENGINEER'S APPROVAL PRIOR TO INSTALLATION.
5. SIGN COORDINATE IS PROVIDED TO THE NEAREST EDGE OF SIGN TO DEFINED EDGE OF TAXIWAY. (NOT SIGN FOUNDATION OR BASE CAN).
6. NEW SIGNS SHALL BE INSTALLED PERPENDICULAR TO THE T/W CENTERLINE MARKING UNLESS OTHERWISE SHOWN. CONTRACTOR SHALL SURVEY EXISTING MARKING TO PROVIDE OFFSET FOR SIGN FOUNDATION INSTALLATION.
7. NEW SIGN FOUNDATIONS MUST BE LEVEL AND NOT SLOPE WITH THE EXISTING GRADES.

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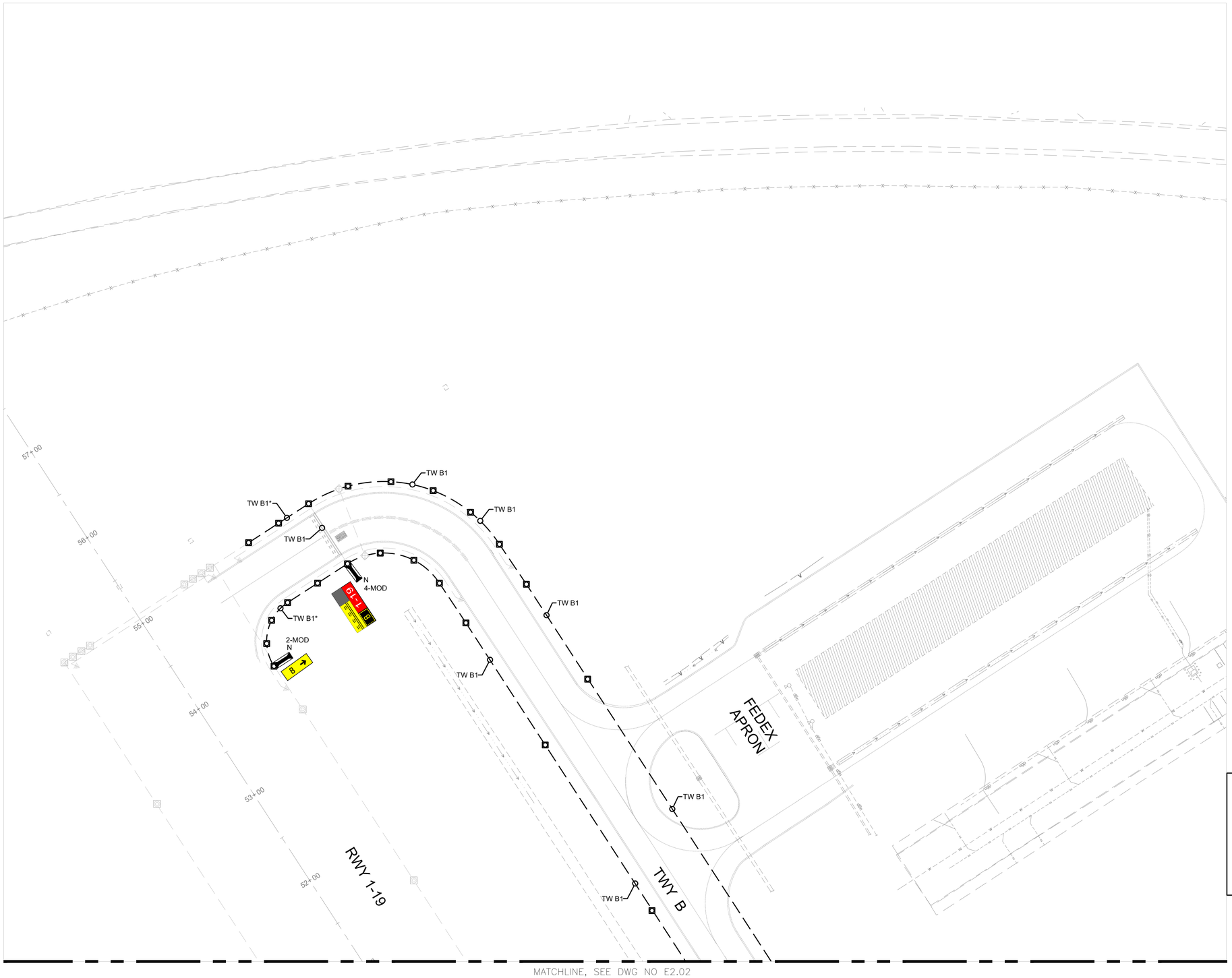
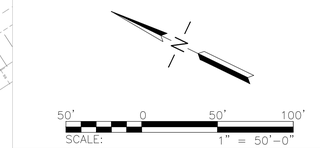
NEW ELECTRICAL LEGEND

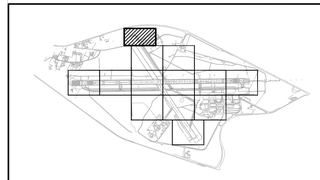
Sheet: E2.00

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.







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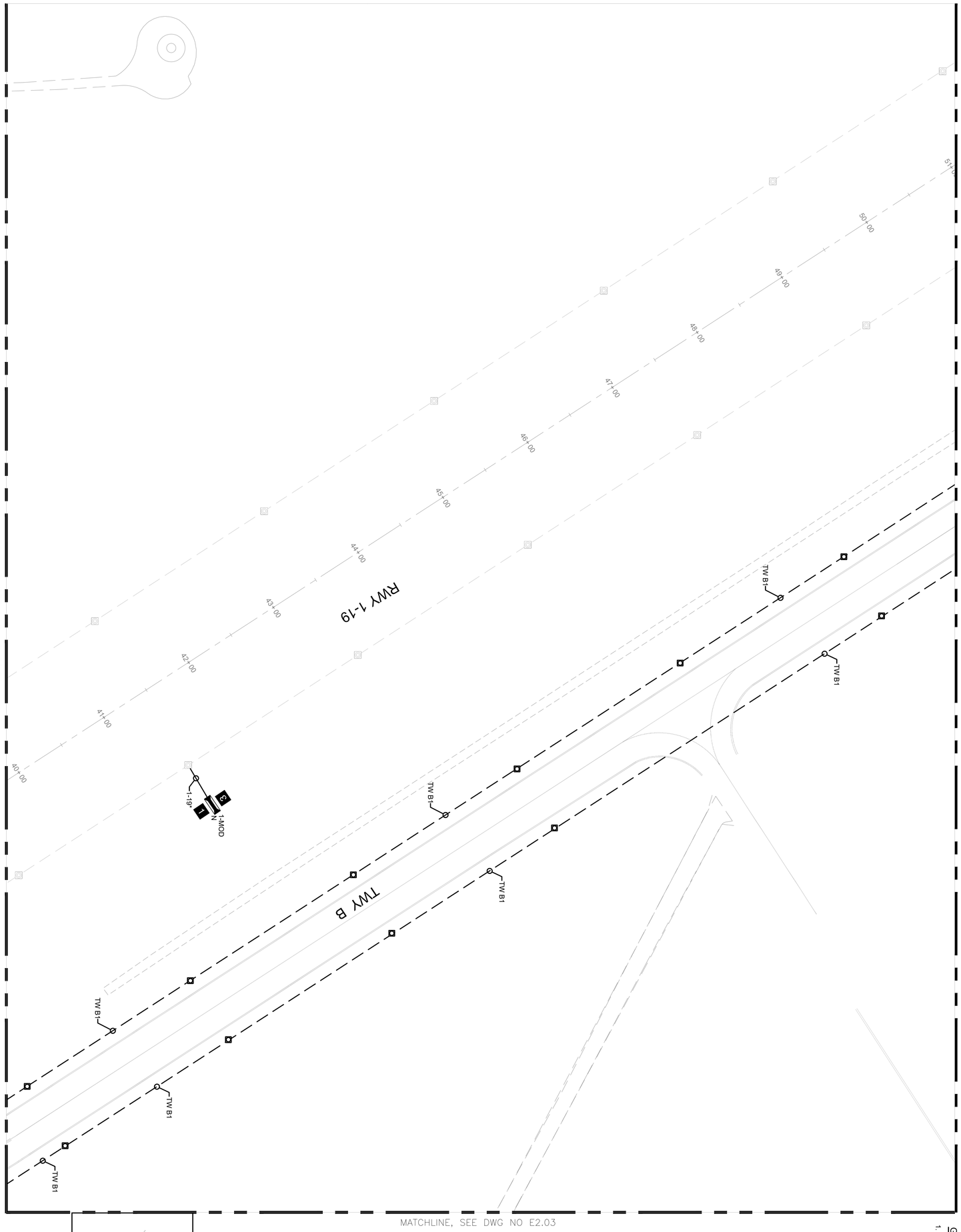
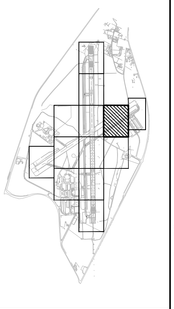
AIRFIELD LIGHTING NEW PLAN 1

Sheet: E2.01





SCALE: 1" = 50'-0"

50' 0 50' 100'

N

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

No.	Revision	Date	By

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AIRFIELD LIGHTING NEW PLAN 2

Sheet: E2.02

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MATCHLINE, SEE DWG NO E2.02

(N) WINDCONE STEP DOWN TRANSFORMER AND DISCONNECT AND ASSOCIATED EQUIPMENT. REFER TO SHEET E6.07 FOR DETAIL.

P

WINDCONE

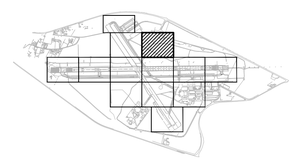
MATCHLINE, SEE DWG NO E2.07

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'

SCALE: 1" = 50'-0"



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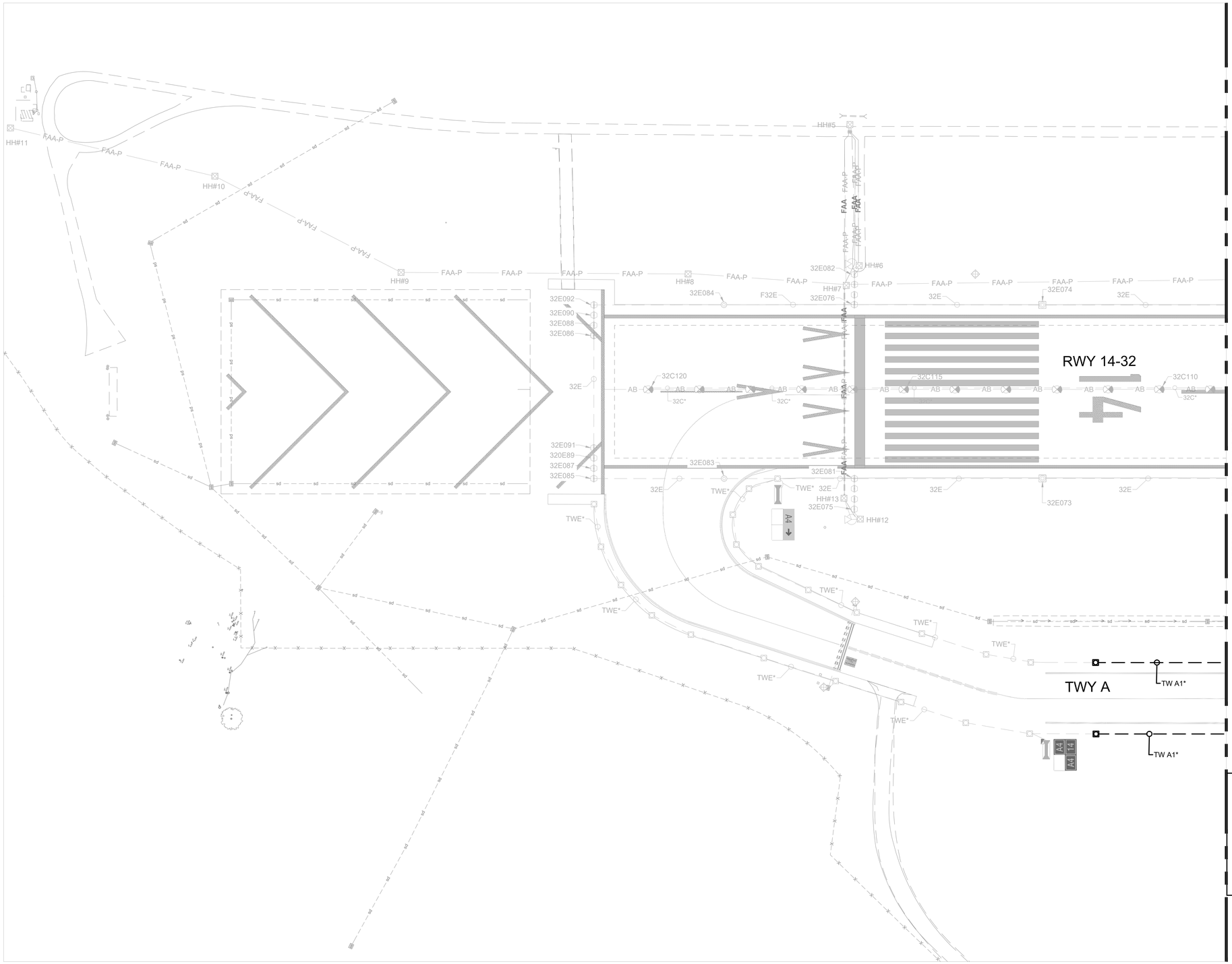
AIRFIELD LIGHTING NEW PLAN 3

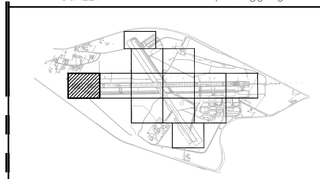
Sheet: E2.03

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



50' 0 50' 100'
SCALE: 1" = 50'-0"



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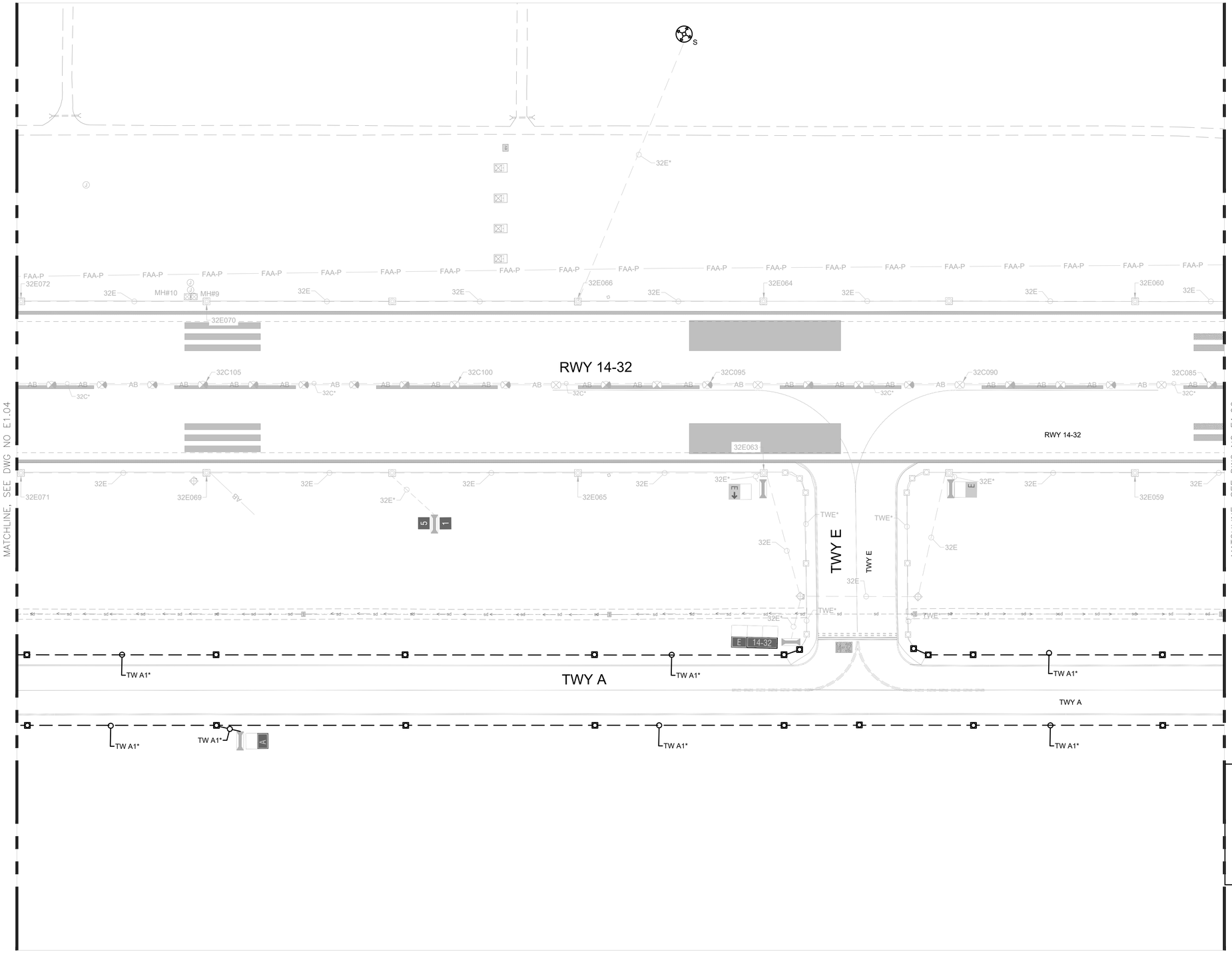
AIRFIELD LIGHTING NEW PLAN 4

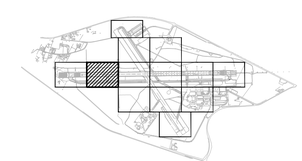
Sheet: E2.04

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



50' 0 50' 100'
SCALE: 1" = 50'-0"



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AIRFIELD LIGHTING NEW PLAN 5

Sheet: E2.05

MATCHLINE, SEE DWG NO E2.02

MATCHLINE, SEE DWG NO E2.05

MATCHLINE, SEE DWG NO E2.07

MATCHLINE, SEE DWG NO E2.10

RWY 14-32

RWY 1-19

TWY A

TWY B

32-14

N
2-MOD

14-32

N
2-MOD

19-1

N
4-MOD

MH#8

FAA-P

FAA-P

32E058

32E057

32E054

32E053

32E050

32E049

32E048

32C080

32C075

32C070

32C065

32Z30F

32Z29F

32Z30A

32Z29A

TW A1*

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

SCALE: 1" = 50'-0"

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AIRFIELD LIGHTING NEW PLAN 6

Sheet: E2.06

MATCHLINE, SEE DWG NO E2.03

WINDCONE*

TW B1

B 32-14

TW F/B*

TWY B

MH#7

MH#6

RWY 14-32

TWY A

TWY G

RWY 1-19

TWE*

TWB*

TW A1*

TW A2

TW B1*

B 14-32

A 1-19

B 1-19

2-MOD

3-MOD

4-MOD

N

31+00

30+00

29+00

MATCHLINE, SEE DWG NO E2.06

MATCHLINE, SEE DWG NO E2.08

MATCHLINE, SEE DWG NO E2.11

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'

SCALE: 1" = 50'-0"

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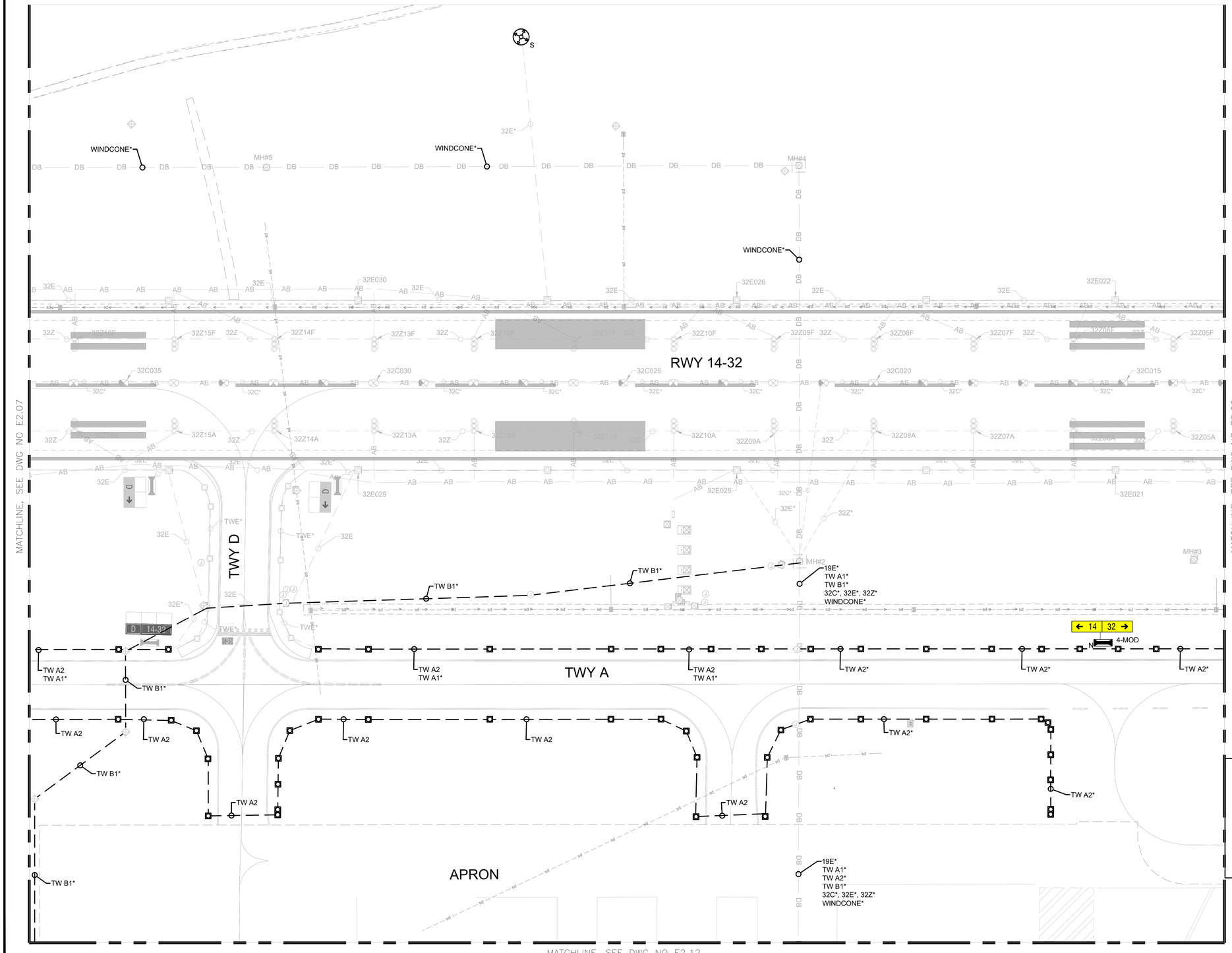
AIRFIELD LIGHTING NEW PLAN 7

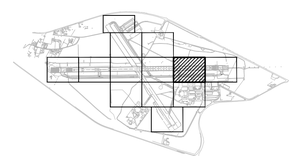
Sheet: E2.07

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



50' 0 50' 100'
SCALE: 1" = 50'-0"



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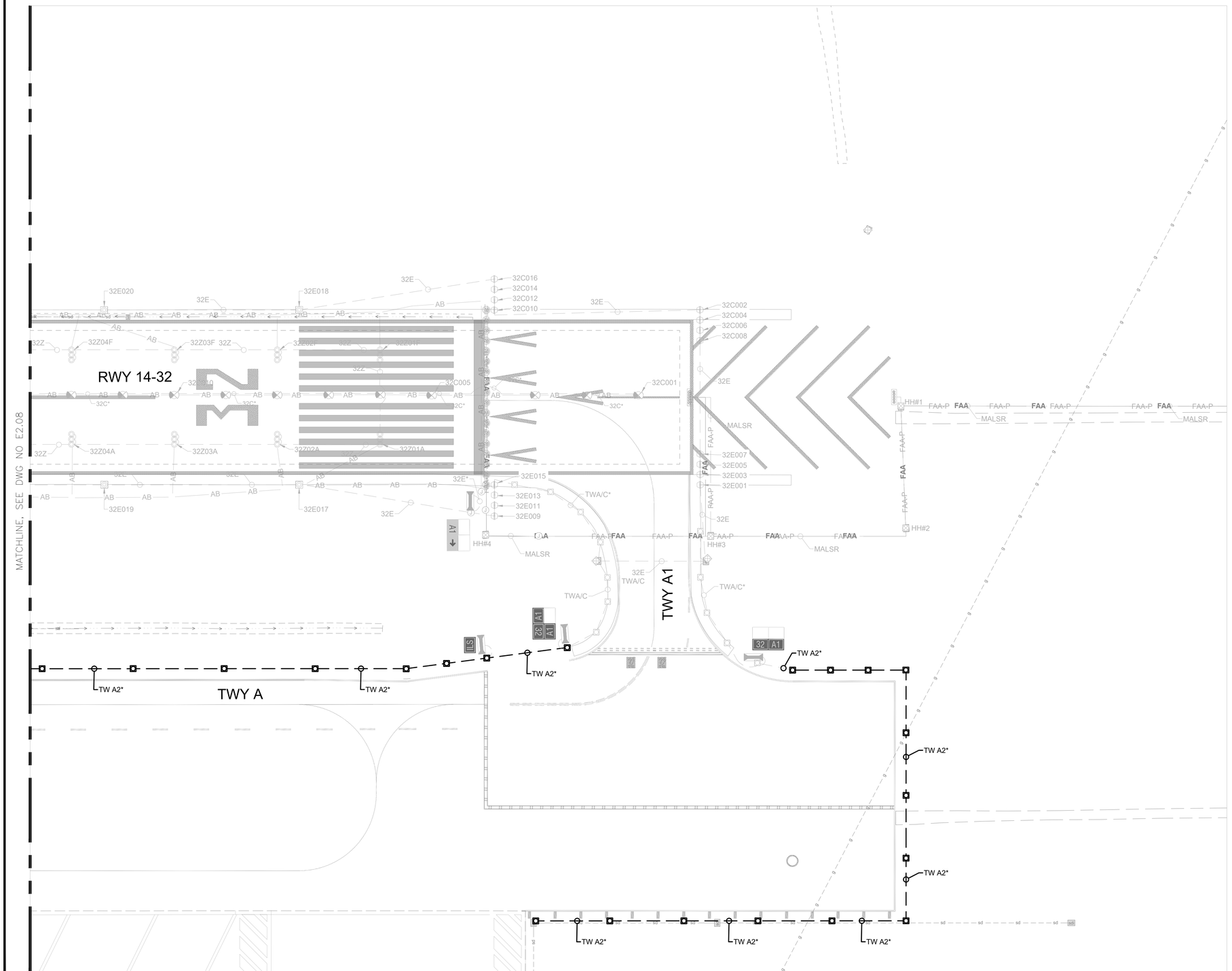
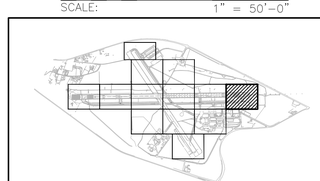
AIRFIELD LIGHTING NEW PLAN 8

Sheet: E2.08

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.





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Approved: DL

AIRFIELD LIGHTING NEW PLAN 9

Sheet: E2.09

MATCHLINE, SEE DWG NO E2.06

AB

SHOOTING RANGE

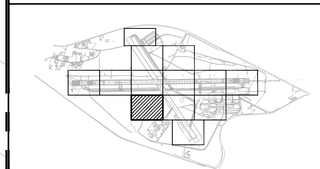
MATCHLINE, SEE DWG NO E2.11

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.
2. THIS SHEET IS FOR REFERENCE ONLY.

50' 0 50' 100'

SCALE: 1" = 50'-0"



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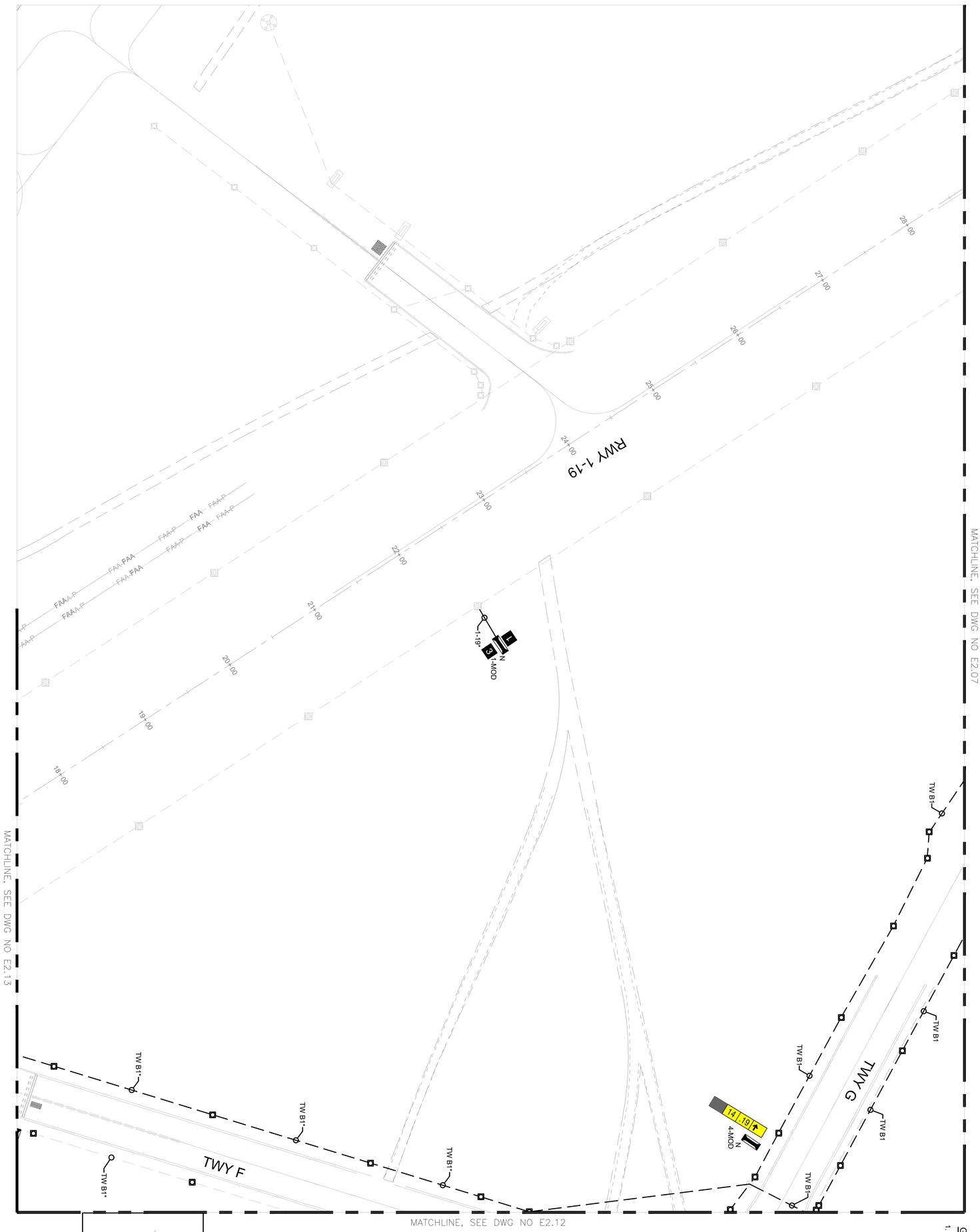
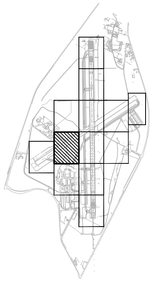
AIRFIELD LIGHTING NEW PLAN 10

Sheet: E2.10





SCALE: 1" = 50'-0"

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

No.	Revision	Date	By

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AIRFIELD LIGHTING NEW PLAN 11

Sheet: E2.11

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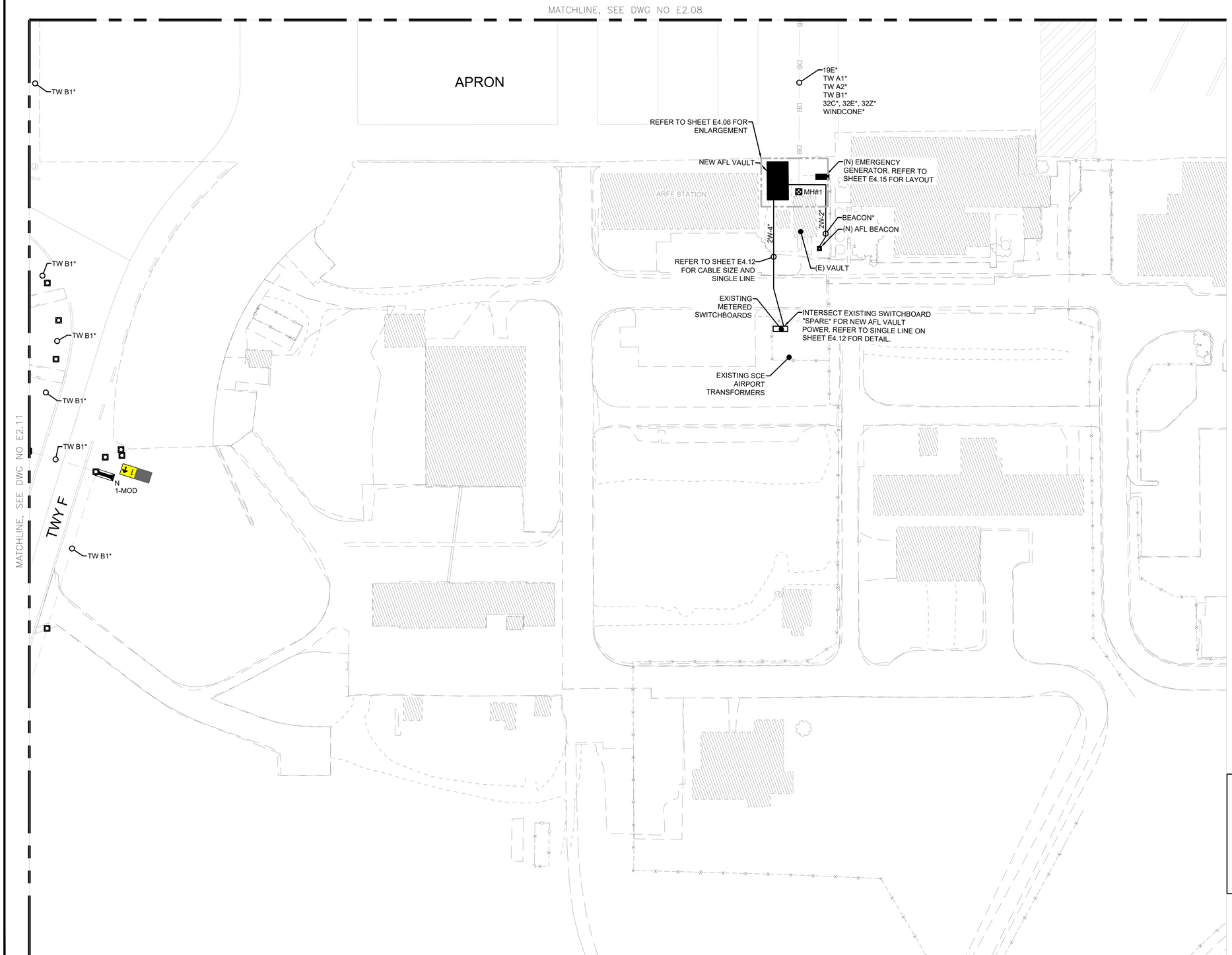
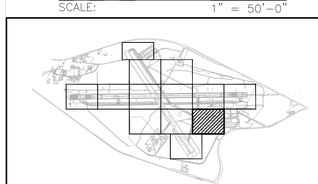


GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'
SCALE: 1" = 50'-0"



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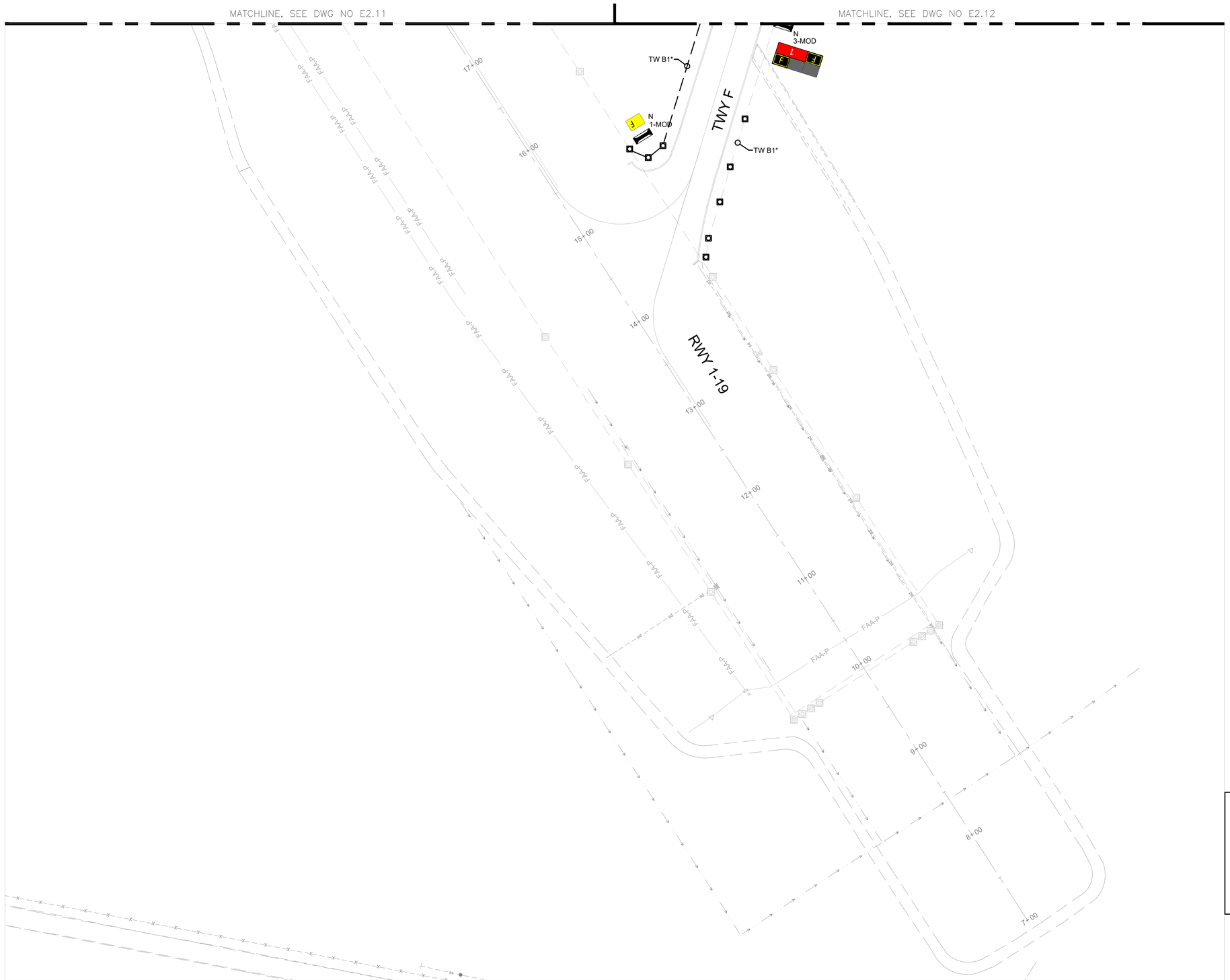
ACI No. XXXXX
Date: 12/2022
File Name: FILE NAME

Drawn: KV
Checked: JA
Approved: DL

AIRFIELD LIGHTING NEW PLAN 12

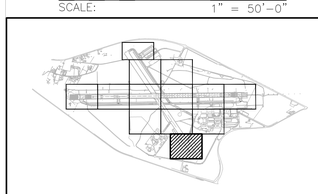
Sheet: E2.12



GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

50' 0 50' 100'
SCALE: 1" = 50'-0"



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File Name: FILE NAME

Drawn: KV
Checked: JA
Approved: DL

AIRFIELD LIGHTING NEW PLAN 13

Sheet: E2.13

1 AIRPORT METERS
SCALE: NTS

2 EXISTING VAULT ENTRANCE
SCALE: NTS

3 EXISTING VAULT ENTRANCE
SCALE: NTS

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

4 EXISTING VAULT AND GENERATOR ROOM
SCALE: NTS

5 EXISTING VAULT AND FENCE LINE
SCALE: NTS

6 EXISTING VAULT, GENERATOR ROOM, AND ARFF STATION
SCALE: NTS

7 EXISTING VAULT INTERIOR
SCALE: NTS

7 EXISTING VAULT INTERIOR
SCALE: NTS

6 INTERIOR FIRST HANDHOLE (MH#1)
SCALE: NTS

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HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
TWY A LIGHTING AND VAULT REHAB
AIP No. 3-06-0010-053-2022

No.	Revision	Date	By

ACI No. XXXXX
Date: 12/2022
File Name: FILE NAME

Drawn: KV
Checked: JA
Approved: DL

SITE VISIT PICTURES 1

Sheet: E3.01

1 AREA FOR FUTURE BEACON
SCALE: NTS

2 EXISTING BEACON
SCALE: NTS

3 EXISTING BEACON HANDHOLE
SCALE: NTS

4 14-32 NORTH WINDCONE
SCALE: NTS

5 1-19 WINDCONE
SCALE: NTS

6 14-32 SOUTH WINDCONE
SCALE: NTS

7 UNLIGHTED SIGN
SCALE: NTS

GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

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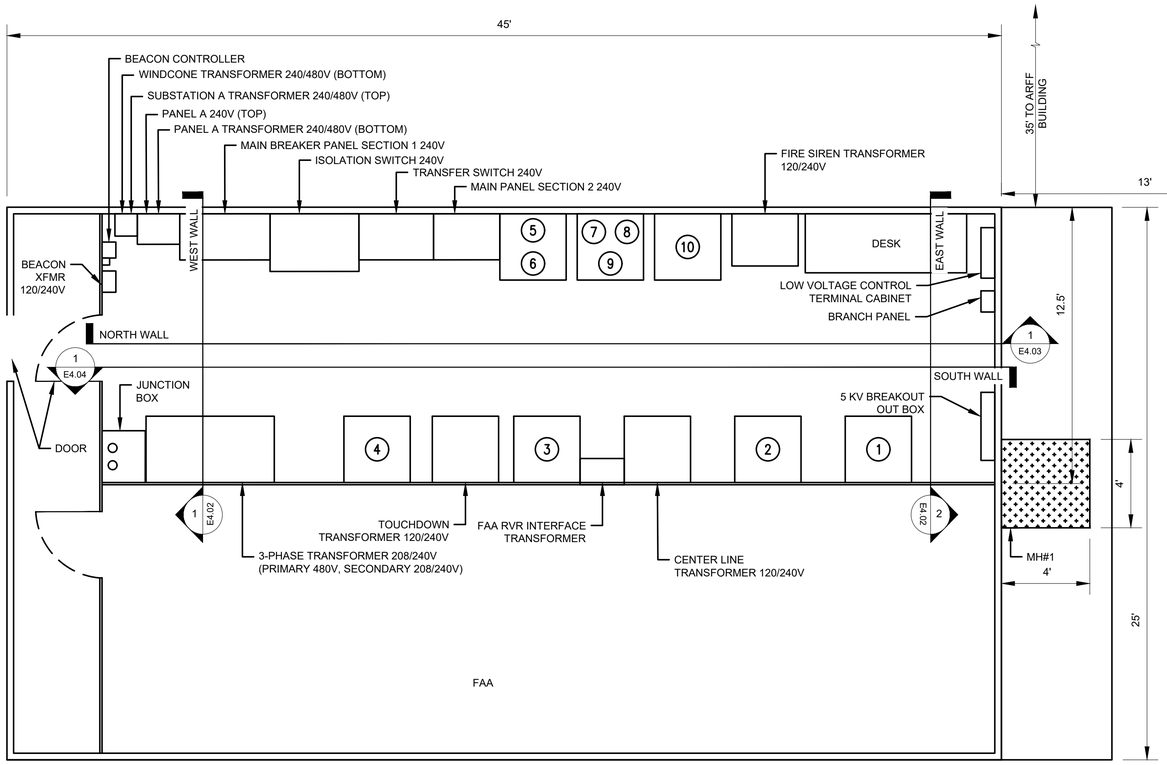
SITE VISIT PICTURES 2

Sheet: E3.02

CCR SCHEDULE									
CCR NO.	CIRCUITING	DESCRIPTION	OUTPUT WATTAGE (KW)	STEPS	OUTPUT CURRENT (A)	INPUT VOLTAGE (V)	INPUT CURRENT (A)	SERIAL NO.	COMMENTS
1	-	-	20	5	6.6	240	91	33	MALFUNCTIONED
2	32E	RUNWAY 12-30 RWY EDGE LIGHTS	20	5	6.6	240	92	3117	
3	32C	RUNWAY 12-30 RWY CENTER LINE LIGHTS	50	5	20	2400	23	423	MALFUNCTIONED
4	32Z	RUNWAY 12-30 RWY TOUCHDOWN ZONE LIGHTS	50	5	20	2400	23	414	MALFUNCTIONED
5	TWA/E	TWY A & E EDGE LIGHTS	7.5	3	6.6	240	36	1376	MALFUNCTIONED
6	-	TWY A & E EDGE LIGHTS	7.5	3	6.6	240	36	-	MALFUNCTIONED
7	TWF/B	TWY B & F EDGE LIGHTS	7.5	3	6.6	240	36	-	-
8	TWA/D/G	TWY A, D, & G EDGE LIGHTS	7.5	3	6.6	240	36	-	-
9	TWA/C	TWY A & C EDGE LIGHTS	7.5	3	6.6	240	36	-	-
10	-	RUNWAY 1-19 EDGE LIGHTS	7.5	3	6.6	240	36	75-NS10170-3	-



1 EXISTING AIRFIELD LIGHTING VAULT LAYOUT
SCALE: 3-1/2" = 1'-0"

GENERAL NOTES

1. SEE SHEET E0.01 FOR ELECTRICAL NOTES AND ABBREVIATIONS

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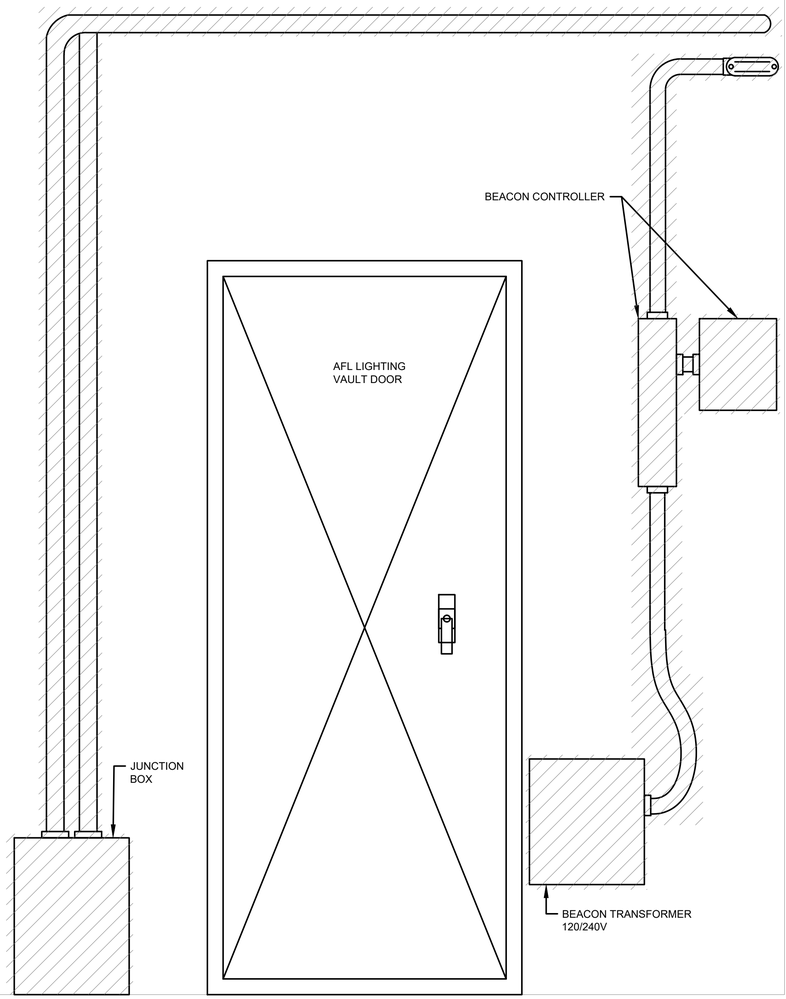
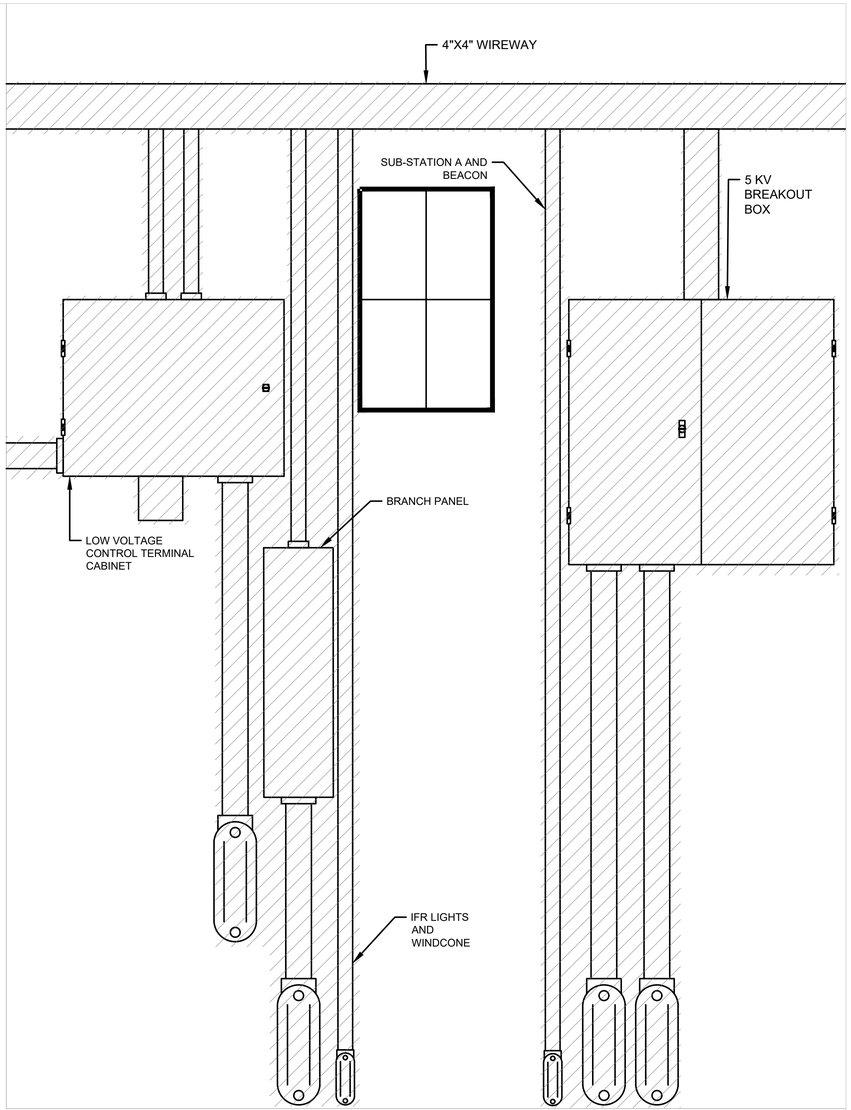
EXISTING AIRFIELD LIGHTING VAULT LAYOUT

Sheet: E4.01



1 EXISTING WEST WALL ELEVATION
SCALE: NTS



2 EXISTING EAST WALL ELEVATION
SCALE: NTS

GENERAL NOTES

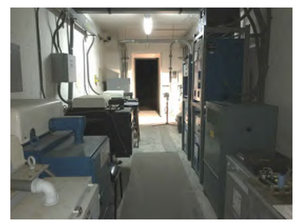
1. SEE SHEET E0.01 FOR ELECTRICAL NOTES AND ABBREVIATIONS

SHEET LEGEND

DEMOLISH EXISTING ELECTRICAL EQUIPMENT/CABLES AFTER NEW VAULT IS ENERGIZED AND COMMISSIONED.

3 EXISTING BREAKOUT BOX (BOB)
SCALE: NTS

4 EXISTING WEST WALL
SCALE: NTS



5 EXISTING EAST WALL
SCALE: NTS

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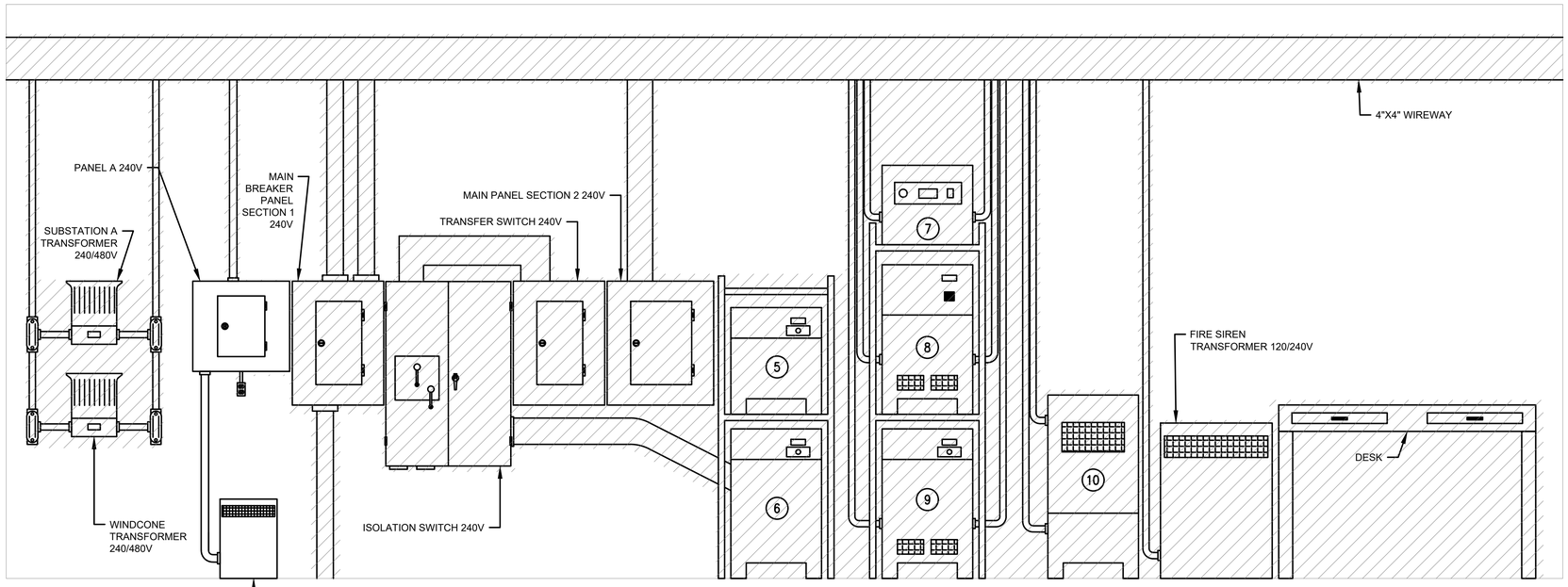
EXISTING WALL ELEVATION (WEST & EAST)

Sheet: E4.02



1 EXISTING NORTH WALL ELEVATION
SCALE: NTS

CCR SCHEDULE									
CCR NO.	CIRCUITING	DESCRIPTION	OUTPUT WATTAGE (KW)	STEPS	OUTPUT CURRENT (A)	INPUT VOLTAGE (V)	INPUT CURRENT (A)	SERIAL NO.	COMMENTS
5	TWE	TWY A & E EDGE LIGHTS	7.5	3	6.6	240	36	1376	MALFUNCTIONED
6	TWE	TWY A & E EDGE LIGHTS	7.5	3	6.6	240	36	-	MALFUNCTIONED
7	TWE	TWY B & F EDGE LIGHTS	7.5	3	6.6	240	36	-	-
8	TWE	TWY A, D, & G EDGE LIGHTS	7.5	3	6.6	240	36	-	-
9	TWE	TWY A & C EDGE LIGHTS	7.5	3	6.6	240	36	-	-
10	-	RUNWAY 1-19 EDGE LIGHTS	7.5	3	6.6	240	36	75-NS10170-3	-

6 TWY CCR SECTION 2
SCALE: NTS

5 TWY CCR SECTION 1
SCALE: NTS

GENERAL NOTES

1. SEE SHEET E0.01 FOR ELECTRICAL NOTES AND ABBREVIATIONS

SHEET LEGEND

DEMOLISH EXISTING ELECTRICAL EQUIPMENT/CABLES AFTER NEW VAULT IS ENERGIZED AND COMMISSIONED.

2 EXISTING PANEL A AND MAIN BREAKER PANEL SECTION 1
SCALE: NTS

3 MAIN BREAKER PANEL SECTION 1
SCALE: NTS

4 MAIN BREAKER PANEL SECTION 2
SCALE: NTS

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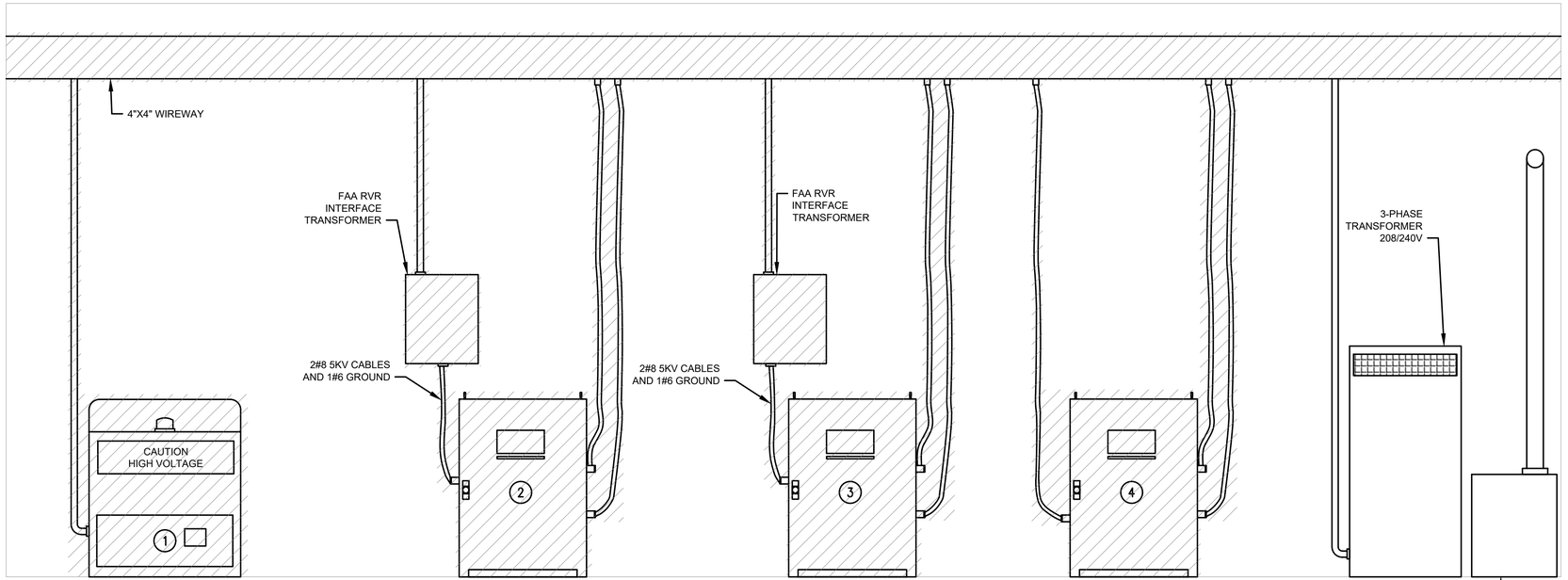
EXISTING NORTH WALL ELEVATION

Sheet: E4.03



1 EXISTING SOUTH WALL ELEVATION
SCALE: NTS

CCR SCHEDULE									
CCR NO.	CIRCUITING	DESCRIPTION	OUTPUT WATTAGE (KW)	STEPS	OUTPUT CURRENT (A)	INPUT VOLTAGE (V)	INPUT CURRENT (A)	SERIAL NO.	COMMENTS
1	-	-	20	5	6.6000	240	91	-	MALFUNCTIONED
2	32E	RUNWAY 14-32 EDGE LIGHTS	10	5	6.6	240	58	-	NEW
3	32C	RUNWAY 14-32 CENTER LINE LIGHTS	10	5	6.6	240	58	-	NEW
4	32Z	RUNWAY 14-32 TOUCHDOWN ZONE LIGHTS	10	5	6.6	240	58	-	NEW

GENERAL NOTES

1. SEE SHEET E0.01 FOR ELECTRICAL NOTES AND ABBREVIATIONS

SHEET LEGEND

DEMOLISH EXISTING ELECTRICAL EQUIPMENT/CABLES AFTER NEW VAULT IS ENERGIZED AND COMMISSIONED.

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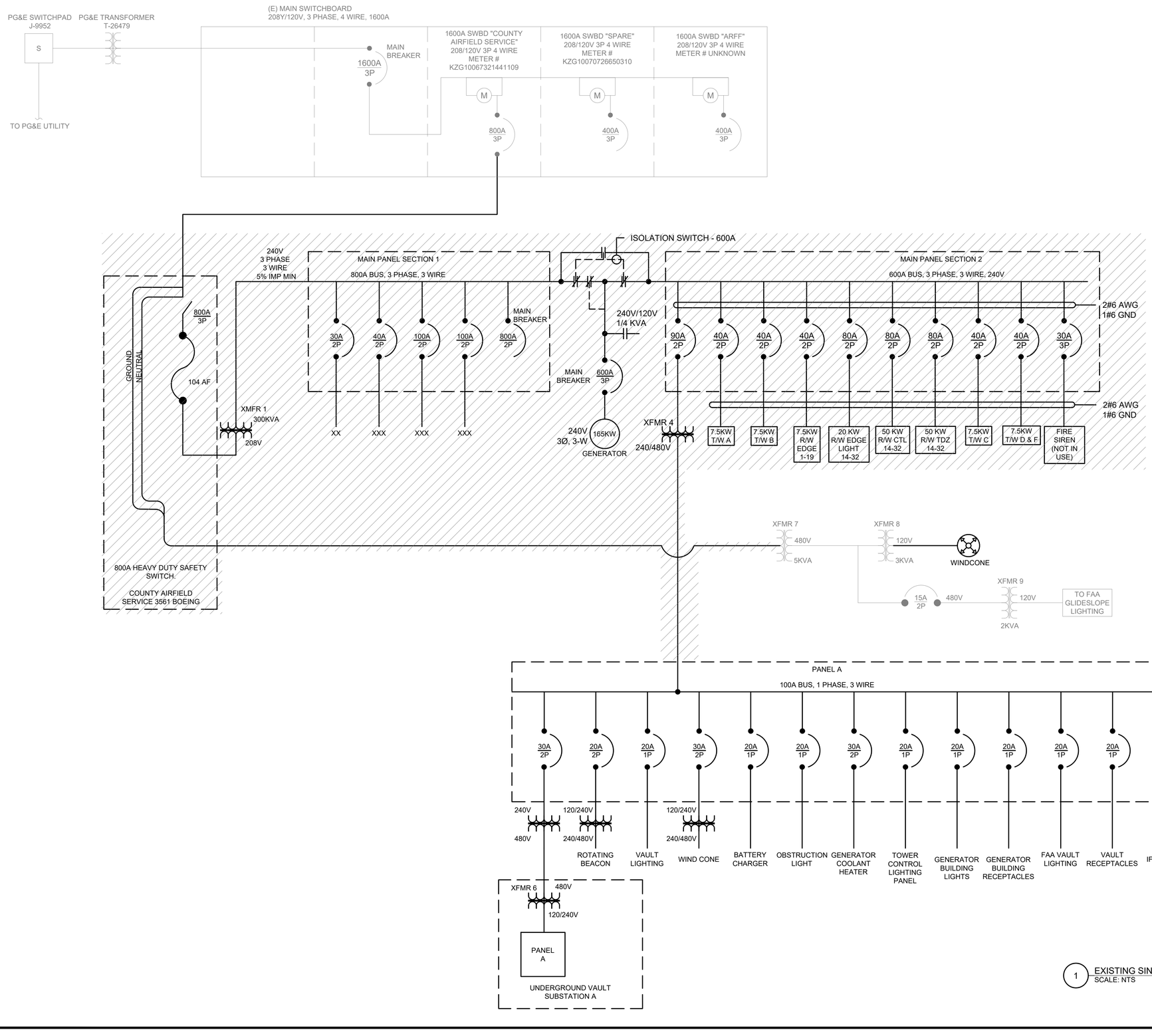
EXISTING SOUTH WALL ELEVATION

Sheet: E4.04



1 EXISTING SINGLE LINE DIAGRAM
SCALE: NTS

GENERAL NOTES

1. SEE SHEET E0.01 FOR ELECTRICAL NOTES AND ABBREVIATIONS

SHEET LEGEND

- S — EXISTING PG&E SWITCHPAD TO REMAIN
- EXISTING CIRCUIT BREAKER TO BE REMOVED
- XFMR 4 / 240/480V — EXISTING TRANSFORMER AND SIZE TO BE REMOVED
- EXISTING CLOSED CONTACT TO BE REMOVED
- EXISTING OPEN CONTACT TO BE REMOVED

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ACI No. XXXXX
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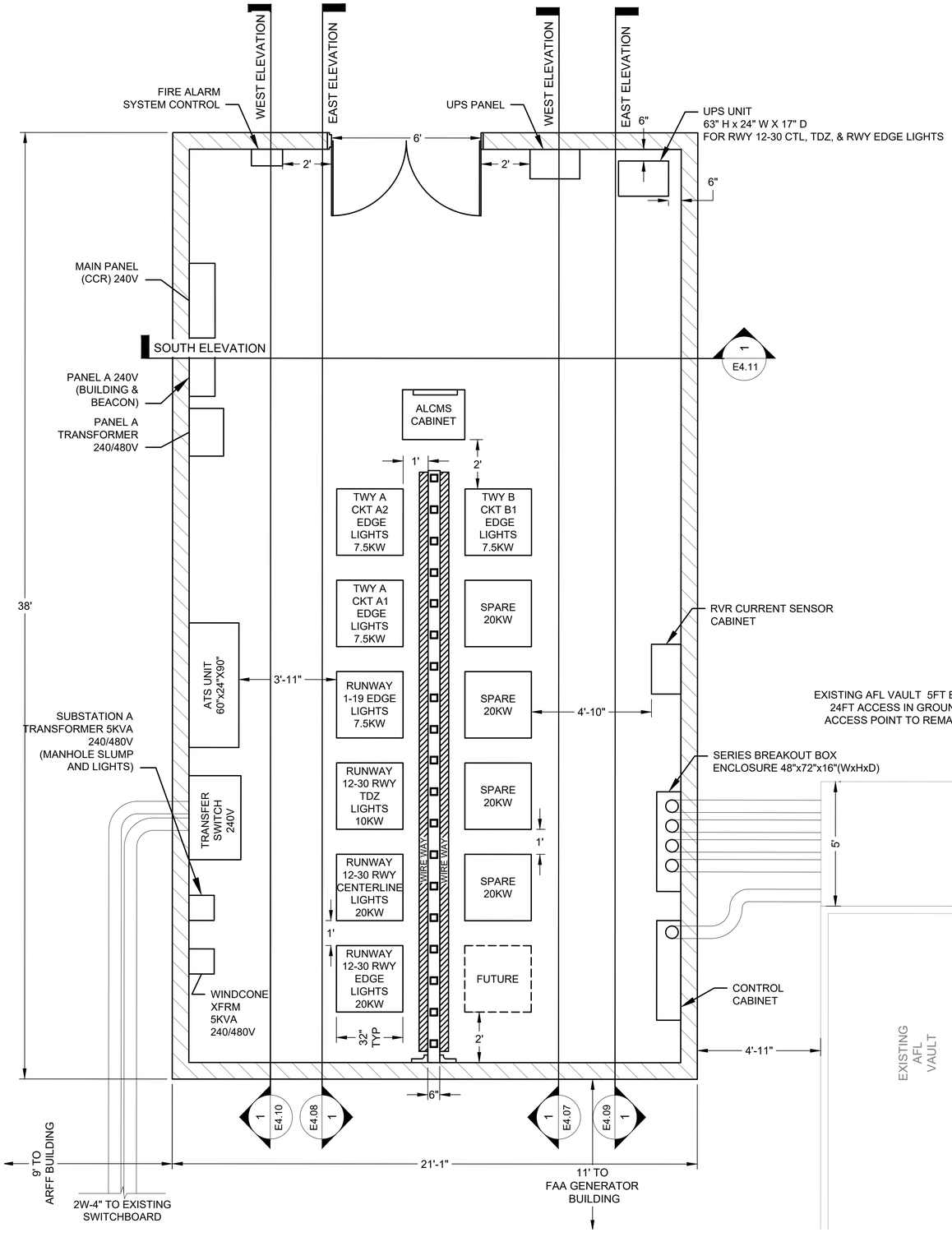
DEMO SINGLE LINE DIAGRAM

Sheet: E4.05



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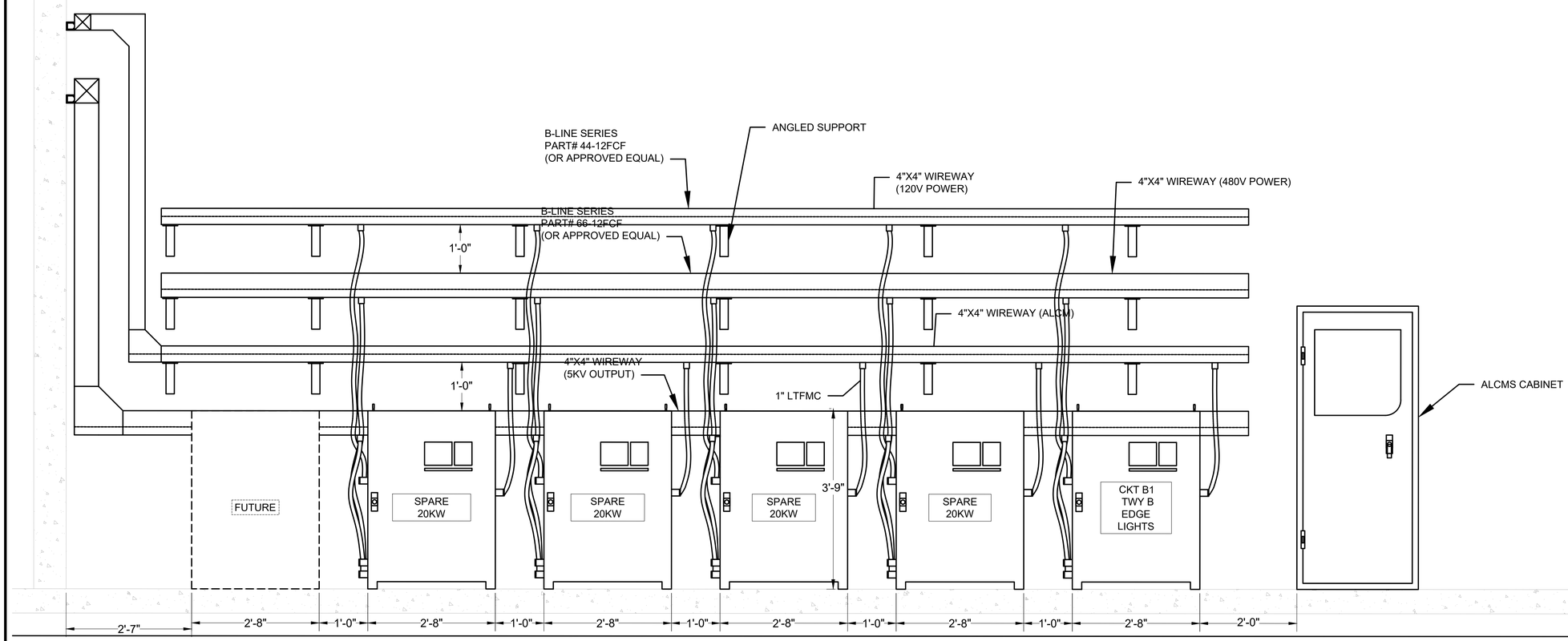
NEW VAULT LAYOUT

Sheet: E4.06



1 WEST WALL (ALCMS AND CCR ELEVATION)
SCALE: NTS

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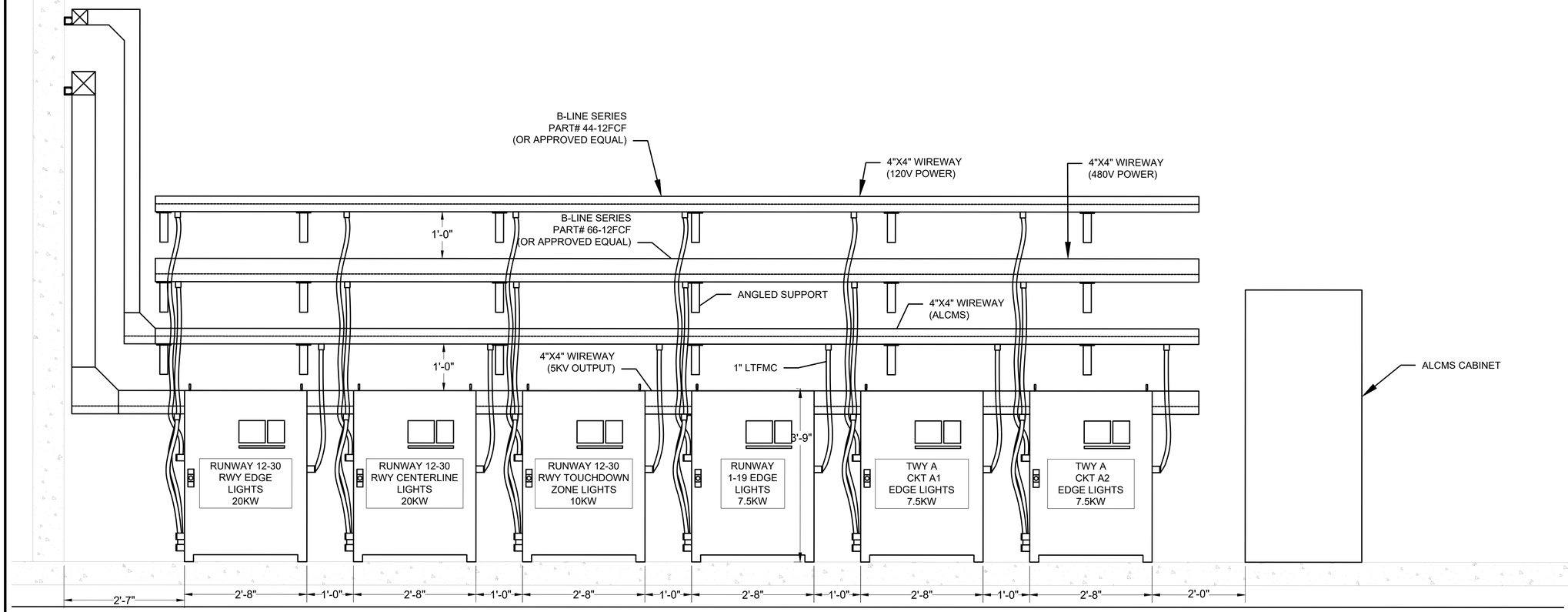
ACI No. XXXXX
Date: 12/2022
File Name: FILE NAME

Drawn: KV
Checked: JA
Approved: DL

WEST ELEVATION

Sheet: E4.07



1 EAST WALL (CCR ELEVATION)
SCALE: NTS

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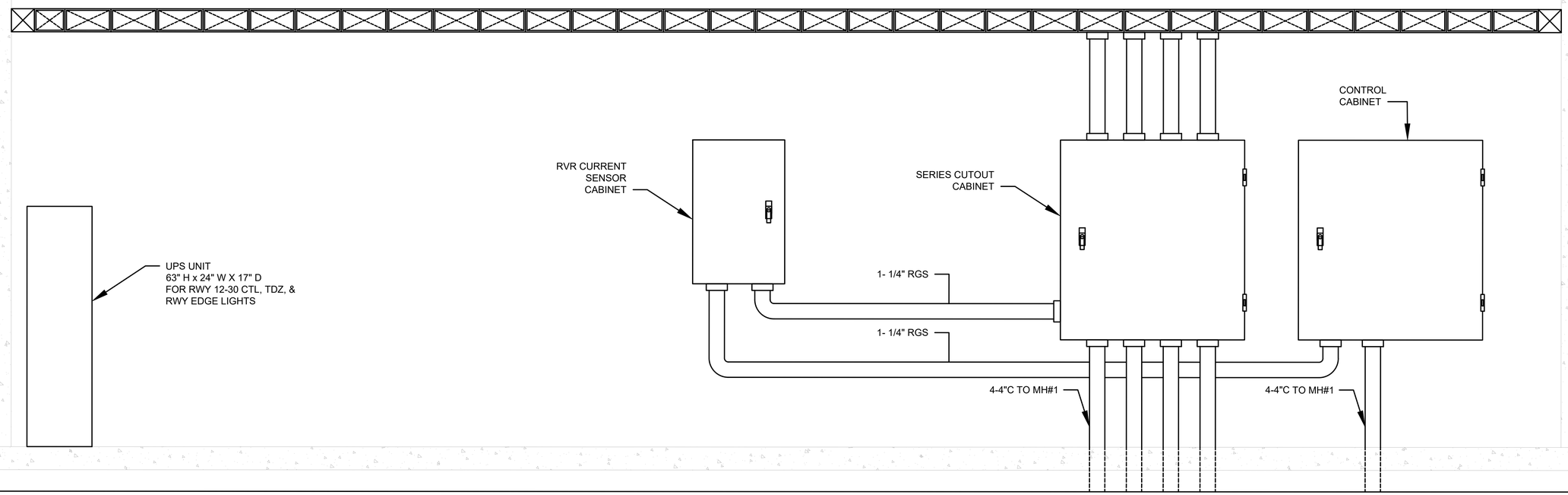
EAST ELEVATION

Sheet: E4.08



1 EAST WALL (BREAK OUT BOX AND UPS)
SCALE: NTS

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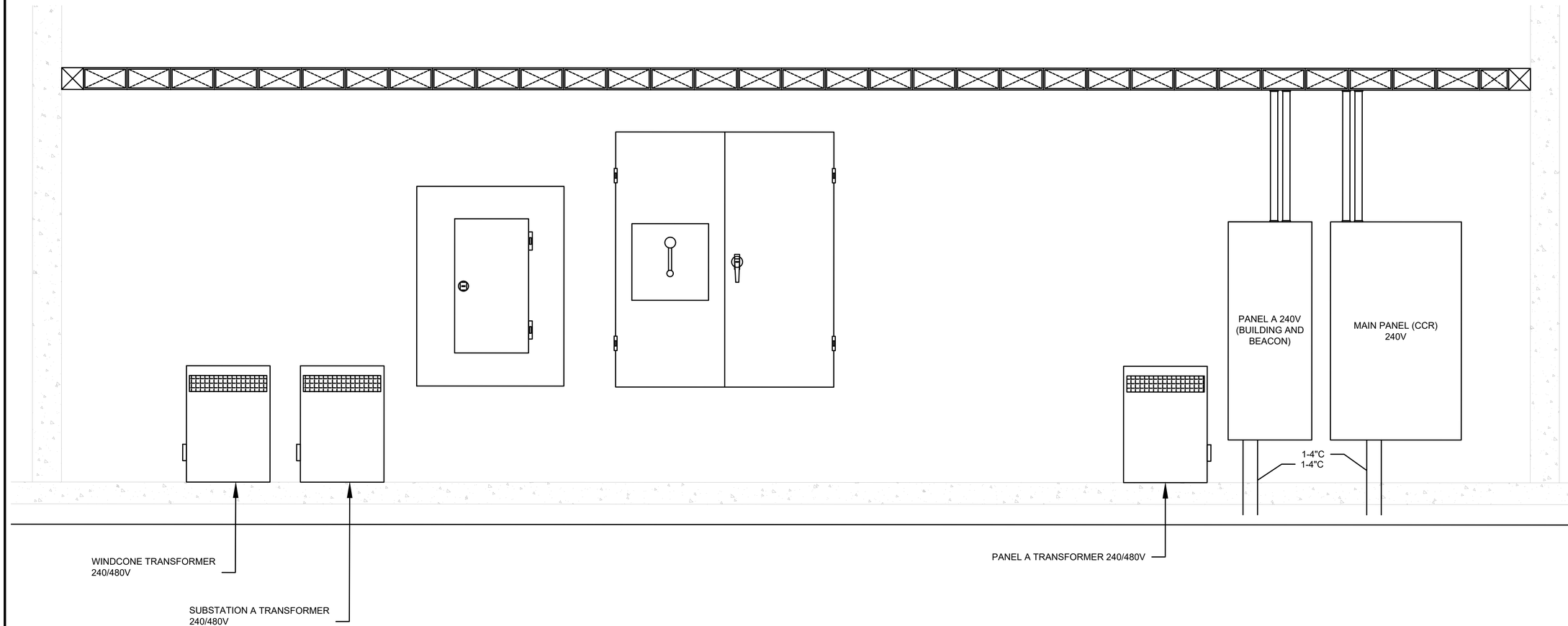
EAST WALL ELEVATION

Sheet: E4.09



1 WEST WALL (PANELS AND TRANSFORMERS)
SCALE: NTS

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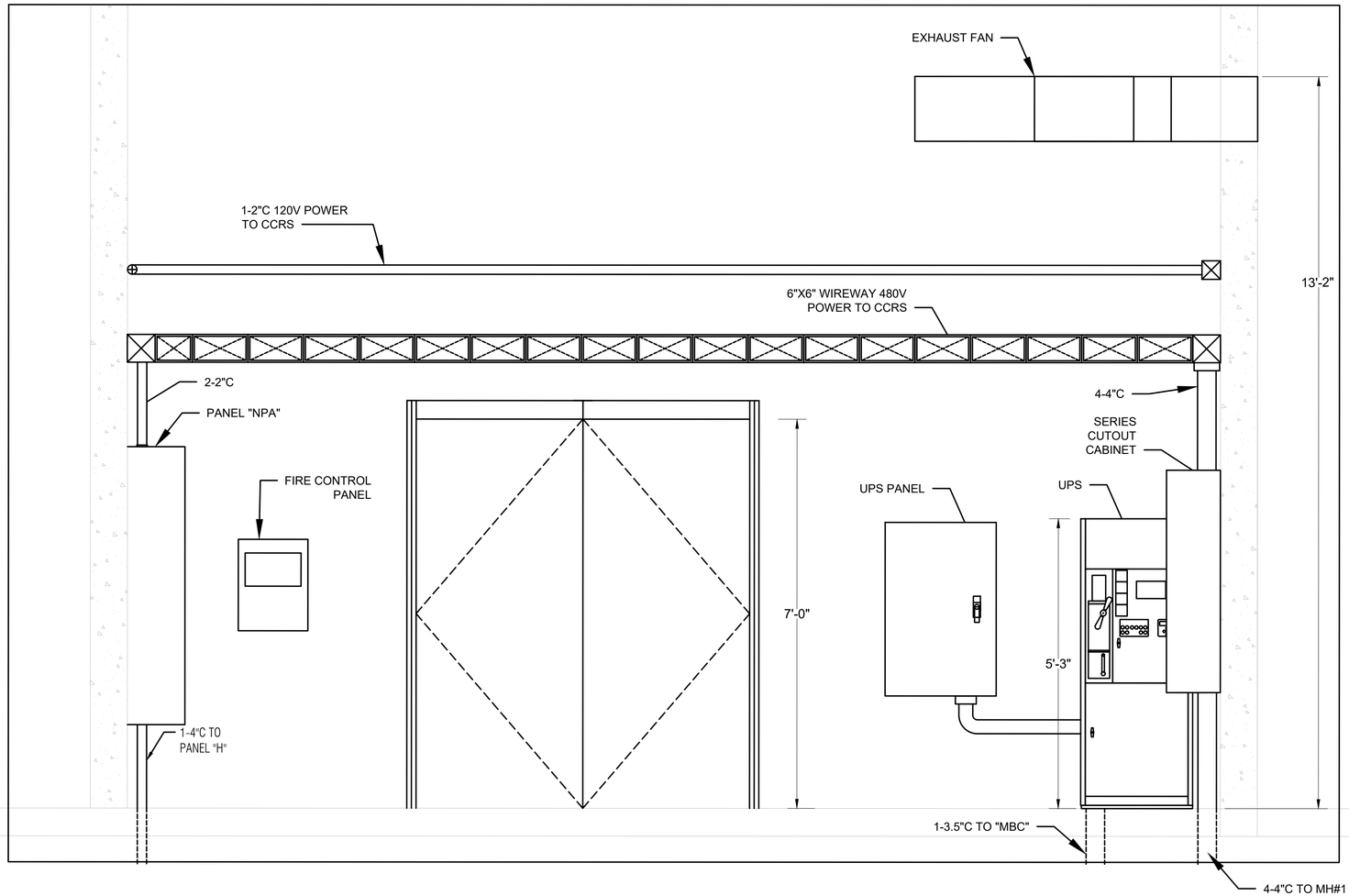
WEST WALL ELEVATION

Sheet: E4.10



1 SOUTH WALL (DOOR AND UPS)
SCALE: NTS

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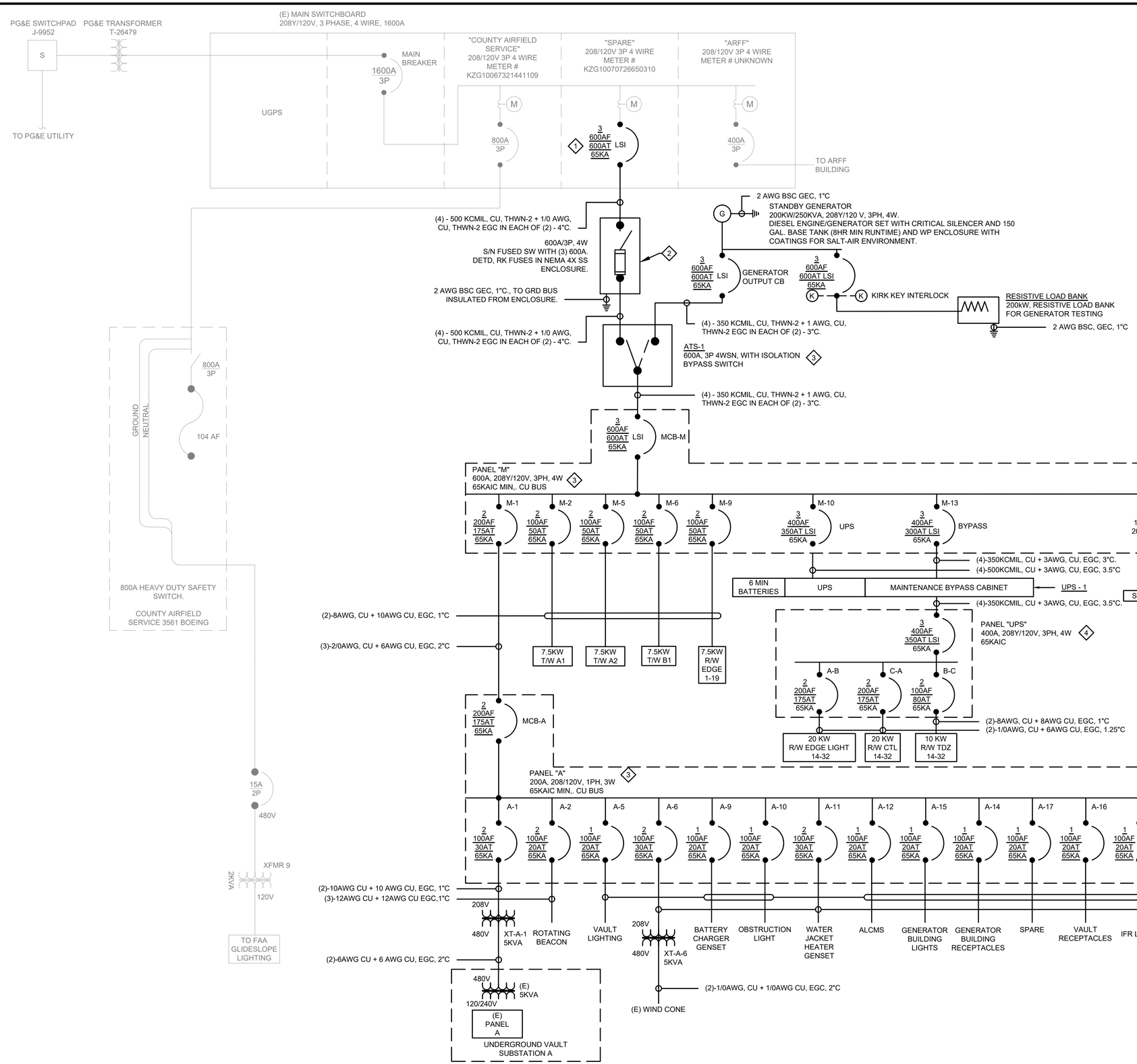
NORTH WALL ELEVATION

Sheet: E4.11



GENERAL NOTES

1. SEE SHEETS E0.01 & E1.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

FEEDER SCHEDULE

1. ALL CONDUCTORS ARE COPPER WITH THWN-2 INSULATION (600V). AMPACITIES BASED ON 75 DEC. C.
2. GEC = GROUND ELECTRODE CONDUCTOR.
   EGC = EQUIPMENT GROUND CONDUCTOR.
   BSC = BARE STRANDED COPPER CONDUCTOR.
3. ONE CONDUIT PER FEEDER UON, BU NUMBER OF SETS.
4. CONDUIT SIZES SHOWN ARE MINIMUM LARGER MAY BE USED WHERE INDICATED.

KEYED NOTES

1. REMOVE EXISTING 400A CIRCUIT BREAKER AND RETURN TO OWNER. PROVIDE NEW 600AF/600AT CIRCUIT BREAKER AS INDICATED. NEW BREAKER TO MATCH EXISTING SWITCHBOARD CONSTRUCTION AND AIC RATING AND BE FULLY ADJUSTABLE (LSI) TYPE.
2. FUSED SWITCH DISCONNECT TO BE MOUNTED ON EXTERIOR OF VAULT BUILDING.
3. "ATS-1" TO BE MOUNTED IN INTERIOR OF VAULT BUILDING ALONG WITH PANELS "M" AND "A". ATS-1 TO BE 600A, 3P, 4WSN, ASCO (SCHNEIDER ELECTRIC) #JO7ATSA30600C5XC, OR APPROVED EQUIVALENT.
4. UPS-1, FLOOR MOUNTED WITH DUAL FEED AND MAINTENANCE BYPASS SWITCH. BATTERY TO BE VRLA TYPE IN ADJACENT CABINET. GALAXY VS SERIES BY SCHNEIDER ELECTRIC, #GVSUPS75KFS-GVSBPSU150G (UPS) AND GVSBPSU150G (MAINT. BYPASS).

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NEW VAULT SINGLE LINE

Sheet: E4.12

VOLTAGE DROP CALCULATION

1/2/2023

PROJECT: CRC HUMBOLT COUNTY AIRPORT, MCKINLEYVILLE, CA
NUMBER:
VOLT DROP CALCULATION BASED ON CHAPTER 9 OF THE NATIONAL ELECTRICAL CODE
PREPARED BY: LEAN Engineering, Irvine, CA

SYSTEM VOLTAGE: 208
SYSTEM PHASE: 3

METRIC (Y/N): N Date: 2/24/2023

LOAD DESCRIPTION	NOMINAL VOLTAGE	SYSTEM PHASE	STARTING VOLTAGE	POWER FACTOR	LENGTH OF CIRCUIT IN FEET	CURRENT IN AMPS	FINAL WIRE SIZE	FINAL WIRE RUNS	REQ'D GND WIRE SIZE	LINE TO NEUTRAL Y/N	MAGNETIC CONDUIT Y/N	WIRE TYPE Copper Aluminum	VOLTS DROPPED	SINGLE RUN PERCENT	ADD % TO OTHER LOAD Y/N	ADD TO WHAT LOAD	ENDING VOLTAGE	TOTAL PERCENT DROPPED
(E) MSB TO PNL M	208	3	208.0	100%	225.0	571.0	500	2	1/0	N	Y	C	3.2	1.55%	N		204.8	1.55%
PNL M TO PNL A	208	1	204.8	100%	25.0	80.0	1	1	8	N	Y	C	0.6	0.31%	Y	(E) MSB TO PNL M	204.1	1.86%
XT-A-1 TO SUB A	480	1	480.0	100%	650.0	10.4	6	1	6	N	Y	C	6.6	1.38%	N		473.4	1.38%
XT-A-6 TO WIND CONE	480	1	480.0	100%	3600.0	10.4	1/0	1	1/0	N	Y	C	9.0	1.87%	N		471.0	1.87%

1 VOLTAGE DROP CALCULATION
SCALE: NTS

PANEL: PANEL M | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 600A | MAIN: 600A/3P M.C.B.
LOCATION:ALV | MOUNTING: SURFACE | FED FROM: EXIST MSB | FEED: TOP BOTTOM X
CIRCUIT CODE: blank or **N**: NON-CONTINUOUS **L**: LONG-CONTINUOUS **R**:DEMANDABLE RECEPT'S **K**: KITCHEN **P**: PANEL **U**:UNIT **M**: MOTOR

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
SUBFEED TO PANEL A	P	175/	1	11815			2	70/	L	7.5 KW CCR T/W A1
				5200						
PART OF CIRCUIT ABOVE	P	/2	3		11940		4	/2	L	SAME AS CIRCUIT ABOVE
					5200					
7.5 KW CCR T/W A2	L	70/	5			5200	6	70/	L	7.5 KW CCR T/W B1
						5200				
SAME AS CIRCUIT ABOVE	L	/2	7	5200			8	/2	L	SAME AS CIRCUIT ABOVE
				5200						
7.5 KW CCR R/W EDGE 1-19	L	70/	9		5200		10	350/	L	75 KW UPS
					27976					
SAME AS CIRCUIT ABOVE	L	/2	11			5200	12	/	L	SAME AS CIRCUIT ABOVE
						27976				
75 KW UPS MPD (MPD LOAD IS LESS THAN INPUT LOAD)	L	300/	13				14	/3	L	SAME AS CIRCUIT ABOVE
				29400						
SAME AS CIRCUIT ABOVE	L	/	15				16	20/1		
SAME AS CIRCUIT ABOVE	L	/3	17				18	20/1		SPARE
7.5 HP FIRE SIREN	M	30/	19	2880			20	20/1		SPARE
SAME AS CIRCUIT ABOVE	M	/	21		2880		22	20/1		SPARE
SAME AS CIRCUIT ABOVE	M	/3	23			2880	24	20/1		SPARE
SPARE		20/1	25				26	20/1		SPARE
SPARE		20/1	27				28	20/1		SPARE
SPARE		20/1	29				30	20/1		SPARE
SPARE		20/1	31				32	20/1		SPARE
SPARE		20/1	33				34	20/1		SPARE
SPARE		20/1	35				36	20/1		SPARE
BUSSED SPACE			37				38			BUSSED SPACE
BUSSED SPACE			39				40			BUSSED SPACE
BUSSED SPACE			41				42			BUSSED SPACE
				CONNECTED VA PER PHASE	59,695	53,196	46,456			DEMAND KVA: 168
				TOTAL CONNECTED VA		159,347				DEMAND AMPS: 467
CONN. VA (CODE N): 0				CONN. VA (CODE R): 0		CONN. VA (CODE M): 8,640				CONNECTED AMPS: 443
CONN. VA (CODE L): 126,952				CONN. VA (CODE K): 0						HIGH PH AMPS/LCL: 499

PANEL NOTES:

2 PANEL 'M' SCHEDULE
SCALE: NTS

PANEL: UPS | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 400A | MAIN: 350A/3P M.C.B.
LOCATION:ACV | MOUNTING: SURFACE | FED FROM: UPS-1 | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or **N**: NON-CONTINUOUS **L**: LONG-CONTINUOUS **R**:DEMANDABLE RECEPT'S **K**: KITCHEN **P**: PANEL **U**:UNIT **M**: MOTOR

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
20 KW CCR R/W EDGE LIGHT 14-32	L	175/	1	13832			2	20/1		SPARE
SAME AS CIRCUIT ABOVE	L	/2	3		13832		4	20/1		SPARE
20 KW CCR R/W CTL 14-32	L	175/	5			13852	6	20/1		SPARE
SAME AS CIRCUIT ABOVE	L	/2	7	13852			8	20/1		SPARE
10 KW CCR R/W TDZ 14-32	L	80/	9		6968		10	20/1		SPARE
SAME AS CIRCUIT ABOVE	L	/2	11			6968	12	20/1		SPARE
SPARE		20/1	13				14	20/1		SPARE
SPARE		20/1	15				16	20/1		SPARE
SPARE		20/1	17				18	20/1		SPARE
SPARE		20/1	19				20	20/1		SPARE
SPARE		20/1	21				22	20/1		SPARE
SPARE		20/1	23				24	20/1		SPARE
SPARE		20/1	25				26	20/1		SPARE
SPARE		20/1	27				28	20/1		SPARE
SPARE		20/1	29				30	20/1		SPARE
				CONNECTED VA PER PHASE	27,684	20,800	20,820			DEMAND KVA: 87
				TOTAL CONNECTED VA		69,304				DEMAND AMPS: 241
CONN. VA (CODE N): 0				CONN. VA (CODE R): 0		CONN. VA (CODE M): 0				CONNECTED AMPS: 193
CONN. VA (CODE L): 69,304				CONN. VA (CODE K): 0						HIGH PH AMPS/LCL: 288

PHASE BAL. A-B 24.9% PHASE BAL. B-C 0.1% PHASE BAL. C-A 25%

PANEL NOTES:

3 PANEL 'UPS' SCHEDULE
SCALE: NTS

PANEL: PANEL A | VOLTAGE: 208 /120V, 1-PH, 3W | BUS SIZE: 200A | MAIN: 175A/2P M.C.B.
LOCATION:ALV | MOUNTING: SURFACE | FED FROM: | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or **N**: NON-CONTINUOUS **L**: LONG-CONTINUOUS **R**:DEMANDABLE RECEPT'S **K**: KITCHEN **P**: PANEL **U**:UNIT **M**: MOTOR

ITEM	CODE	BKR	CKT	A	B	CKT	BKR	CODE	ITEM
SUBFEED TO XT-A (5 KVA)	L	30/	1	2500		2	20/1	L	ROTATING BEACON
			3	595					
SAME AS CIRCUIT ABOVE	L	/2			2500	4	20/1		SPARE
VAULT LIGHTING	L	20/1	5	500		6	30/	L	SUBFEED TO XT-A-6
			7	2500					
SPARE		20/1			2500	8	/2	L	SAME AS CIRCUIT ABOVE
GENERATOR BATTERY CHARGER	N	20/1	9	1500		10	20/1	L	OBSTRUCTION LIGHT
			11	500					
GENERATOR WATER JACKET HEATER	N	30/			3000	12	20/1	L	ALCMS
SAME AS CIRCUIT ABOVE	N	/2	13	3000	1500	14	20/1	R	(E) GENERATOR BLDG RECEPT
				720					
(E) GENERATOR BUILDING LIGHTS	L	20/1	15		500	16	20/1	R	VAULT RECEPTACLES
					1440				
SPARE		20/1	17			18	20/1		SPARE
IFR LIGHT	L	20/1	19		500	20	20/1		SPARE
SPARE		20/1	21			22	20/1		SPARE
SPARE		20/1	23			24	20/1		SPARE
SPARE		20/1	25			26	20/1		SPARE
SPARE		20/1	27			28	20/1		SPARE
SPARE		20/1	29			30	20/1		SPARE
SPARE		20/1	31			32	20/1		SPARE
BUSSED SPACE			33			34			BUSSED SPACE
BUSSED SPACE			35			36			BUSSED SPACE
BUSSED SPACE			37			38			BUSSED SPACE
BUSSED SPACE			39			40			BUSSED SPACE
BUSSED SPACE			41			42			BUSSED SPACE
				CONNECTED VA PER PHASE	11,815	11,940			DEMAND KVA: 27.3
CONN. VA (CODE N): 7,500				TOTAL CONN. VA	23,755				DEMAND AMPS: 131.1
CONN. VA (CODE L): 14,095				CONN. VA (CODE K): 0					CONN. AMPS: 114.2
CONN. VA (CODE R): 2,160				CONN. VA (CODE M): 0					HIGH PH. AMPS/LCL: 115.1

PANEL NOTES:

4 PANEL 'A' SCHEDULE
SCALE: NTS

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TWY A LIGHTING AND VAULT REHAB
AIP No. 3-06-0010-053-2022

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Drawn: KV
Checked: JA
Approved: DL

VOLTAGE DROP CALCULATION AND PANEL M SCHEDULE

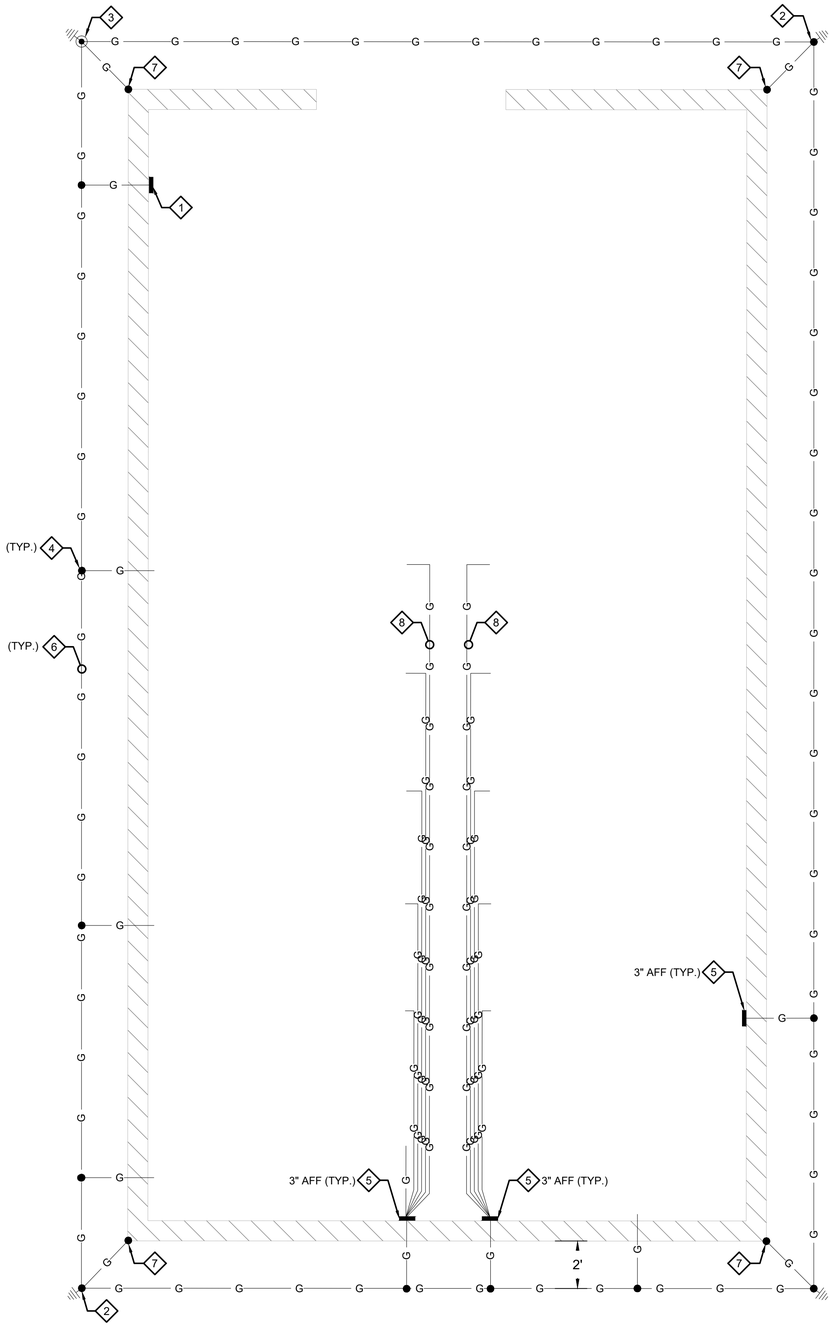
Sheet: E4.13

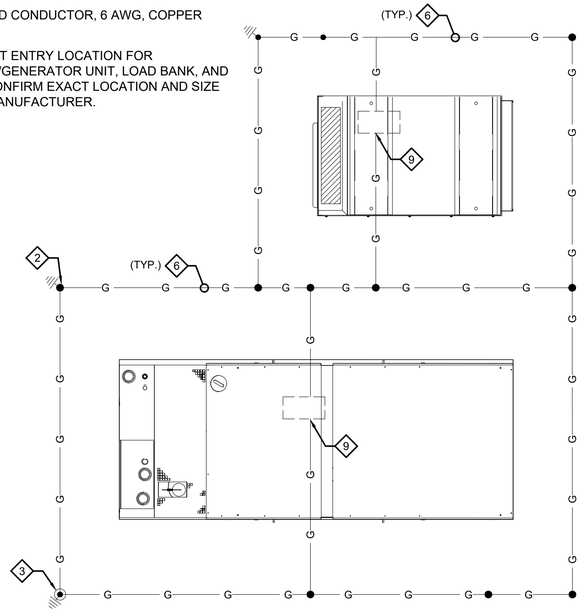
SHEET NOTES:

1. MAIN GROUND BUS (MGB).
2. DRIVEN GROUND ROD 3/4"X10', TYPICAL UON.
3. DRIVEN GROUND ROD 3/4"X10' IN TEST WELL WITH ACCESSIBLE COVER.
4. EXOTHERMIC WELDED CONNECTION.
5. INTERMEDIATE GROUND BUS (IGB). PROVIDE 5KV INSULATORS IN CCR ROOM.
6. GROUND CONDUCTOR, 4/0 AWG, COPPER, TYPICAL, UON.
7. DOWNLEAD FOR LIGHTNING PROTECTION SYSTEM.
8. GROUND CONDUCTOR, 6 AWG, COPPER
9. CONDUIT ENTRY LOCATION FOR ENGINEER/GENERATOR UNIT, LOAD BANK, AND AHU. CONFIRM EXACT LOCATION AND SIZE WITH MANUFACTURER.

SHEET LEGEND:

G NEW GROUNDING RING.





EXISTING AFL VAULT

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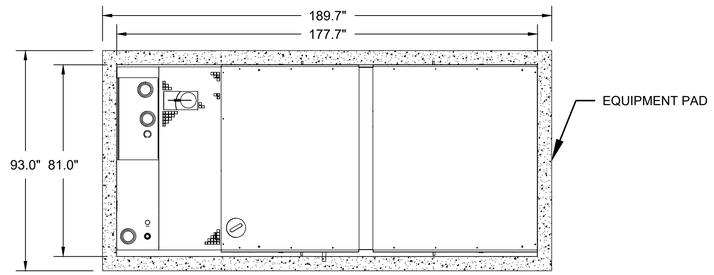
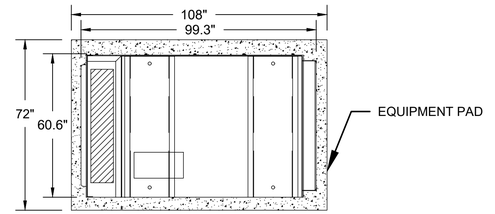
NEW VAULT GROUNDING LAYOUT PLAN

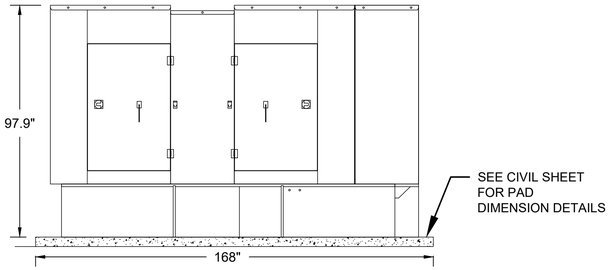
Sheet: E4.14



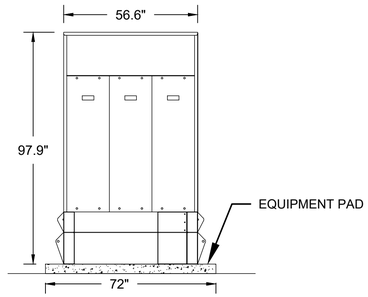
A GENERATOR PLAN VIEW
SCALE: NTS



A LOAD BANK PLAN VIEW
SCALE: NTS

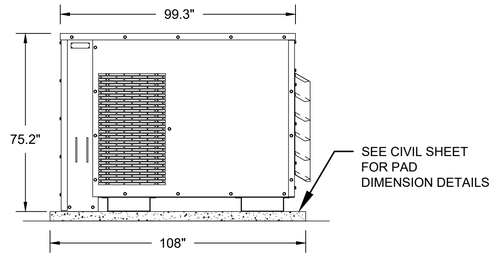


B GENERATOR SIDE VIEW 1
SCALE: NTS

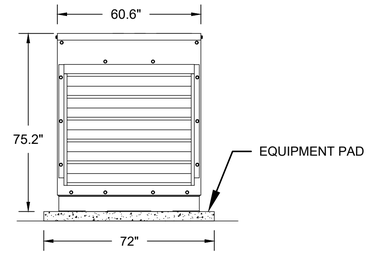


C GENERATOR SIDE VIEW 2
SCALE: NTS

1 GENERATOR ELEVATION
SCALE: NTS



B LOAD BANK SIDE VIEW 1
SCALE: NTS



C LOAD BANK SIDE VIEW 2
SCALE: NTS

2 LOAD BANK ELEVATION
SCALE: NTS

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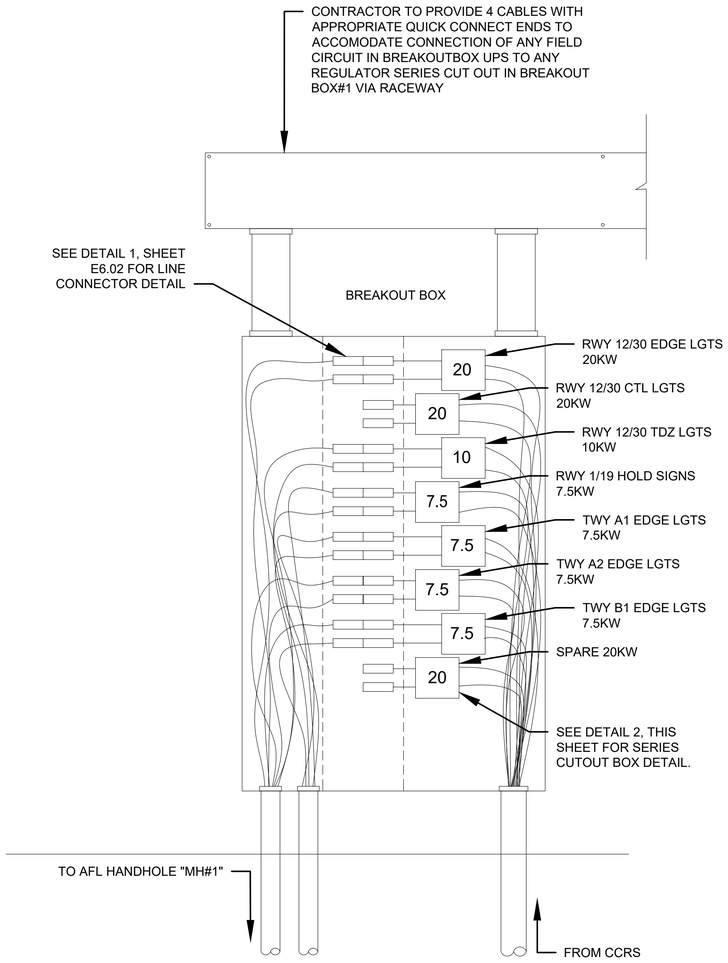
POWER EQUIPMENT ELEVATION DETAILS

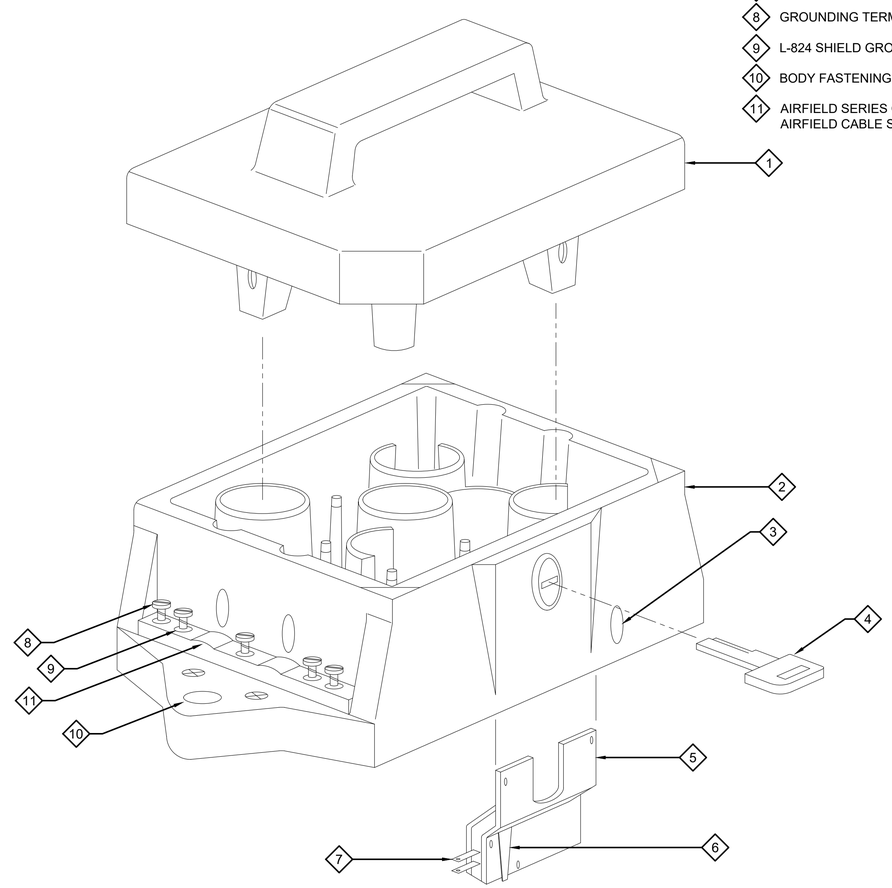
Sheet: E4.15



1 BREAKOUT BOX DETAIL
SCALE: NTS

SERIES CUTOUT NOTES:

1. COVER
2. BODY
3. INSULATION MEASUREMENT SOCKET
4. LOCK AND KEY
5. INTERLOCK SWITCH (LOCATED INSIDE CUTOUT)
6. INTERLOCK SWITCH WIRING SHIELD CONNECTION (IF USED)
7. INTERLOCK SWITCH TERMINALS (IF USED)
8. GROUNDING TERMINALS (2)
9. L-824 SHIELD GROUNDING CLAMP SCREWS (3)
10. BODY FASTENING HOLE
11. AIRFIELD SERIES CABLE STRESS RELIEF AND AIRFIELD CABLE SHIELD GROUNDING CLAMP



2 SERIES CIRCUIT CUTOUT DETAIL
SCALE: NTS

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VAULT DETAILS

Sheet: E4.16

LEGEND:

——·——·——·—— AC CABLE - PROVIDED BY OTHERS

DEVICE RATING			
DEVICE	RATING	TYPE	ACCESSORIES
QB	600AF, 480/277 VAC	3P MCCB	-
Q5	600AF, 480/277 VAC	3P MCCB	1 AUX SWITCH (SPDT TYPE)
Q2	600AF, 480/277 VAC	4P MCCB	1 AUX SWITCH (SPDT TYPE)
Q3	600AF, 480/277 VAC	4P MCCB	1 AUX SWITCH (SPDT TYPE)
QSF	400AF, 600V	3P MCCB	1 AUX SWITCH (SPDT TYPE)
Q7	32A, 500VDC	3P DC BREAKER	1 SHUNT TRIP (110-125VAC/DC) 1 AUX CONTACT (1 FORM C + 1 BA)

NOTES:

1. INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL,STATE AND LOCAL CODES.
2. REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
3. DRAWING DEPICTS POWER SYSTEM CONNECTIONS AND IS NOT REPRESENTATIVE OF PHYSICAL LAYOUT, PLEASE REFER TO MECHANICAL DRAWINGS FOR PHYSICAL LAYOUT.

△4 MAXIMUM AVAILABLE FAULT CURRENT IS 30KAIC.

△5 AC SOURCE TO BE 208VAC 3PH WYE FOR 3 WIRE SYSTEM: 3 WIRE+GROUND. FOR 4 WIRE SYSTEM: 4 WIRE+GROUND.

△6 AC CABLING SHALL BE 600V RATED, 3 WIRE+GROUND. FOR 4 WIRE SYSTEM : AC CABLING SHALL BE 600V RATED, 4 WIRE+GROUND.

△7 SINGLE MAINS CONFIGURATION IS A DEFAULT.
FOR DUAL MAINS CONFIGURATION REMOVE THE 3 SHORTING STRAPS/WIRES.

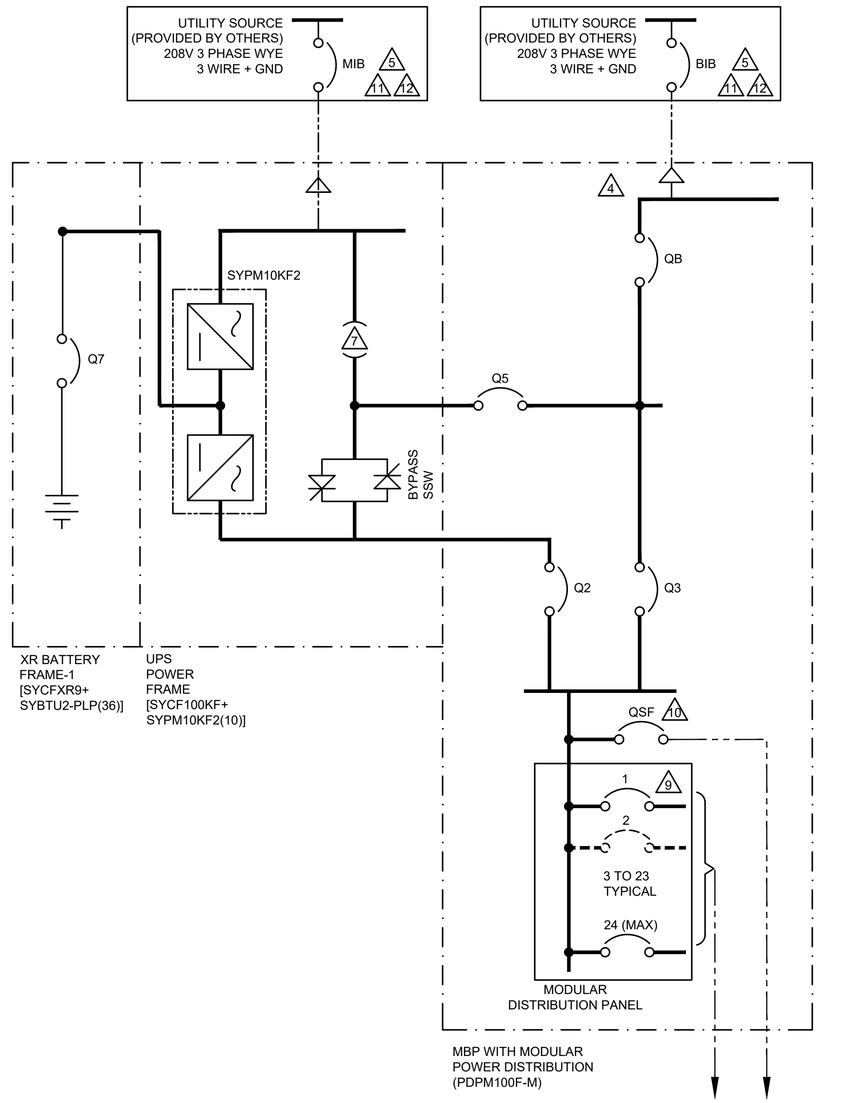
8. THIS DRAWING SHOWS MINIMUM NUMBER OF XR BATTERY FRAMES. MAXIMUM (4) XR BATTERY FRAMES CAN BE BAYED TO UPS.

△9 DISTRIBUTION MODULES ARE NOT PART OF PDPM100F-M.

△10 SEE INSTALLATION MANUAL FOR RECOMMENDED SETTINGS.

△11 SEE TABLE BELOW FOR RECOMMENDED SETTING.

△12 FOR PROPER INSTALLATION OF EPO, MIB BREAKER MUST BE INTERRUPTED UPON OF THE EPO BUTTON. A SHUNT TRIP COIL MAY THEREFORE BE NECESSARY FOR THIS PURPOSE. FOR MORE DETAILS, SEE EPO SECTION IN THE INSTALLATION MANUAL.



100K UPS FRAME SUBMITTAL DATA - W/ MODULAR PDU - W/O TRANSFORMER																			
UPS RATING				VOLTAGE CURRENT		RECTIFIER AC INPUT MIB DUAL OR SINGLE FEED 4						BYPASS AC INPUT BIB DUAL FEED 4						AC OUTPUT	
						CURRENT		RECOMMENDATIONS				CURRENT		RECOMMENDATIONS				CURRENT	
UPS FRAME RATING	QTY OF 10KW POWER MODULES	kVA	kW	INPUT	OUTPUT	FULL LOAD	MAX	100% OCPD	100% CABLE	80% OCPD	80% CABLE	FULL LOAD	MAX	100% OCPD	100% CABLE	80% OCPD	80% CABLE	NOM	MAX
100kV/ 100kW 100K FRAME	7	70	70	208	208	-	-	-	-	300A	1x35	195	243	-	-	250A	1x250	196	245

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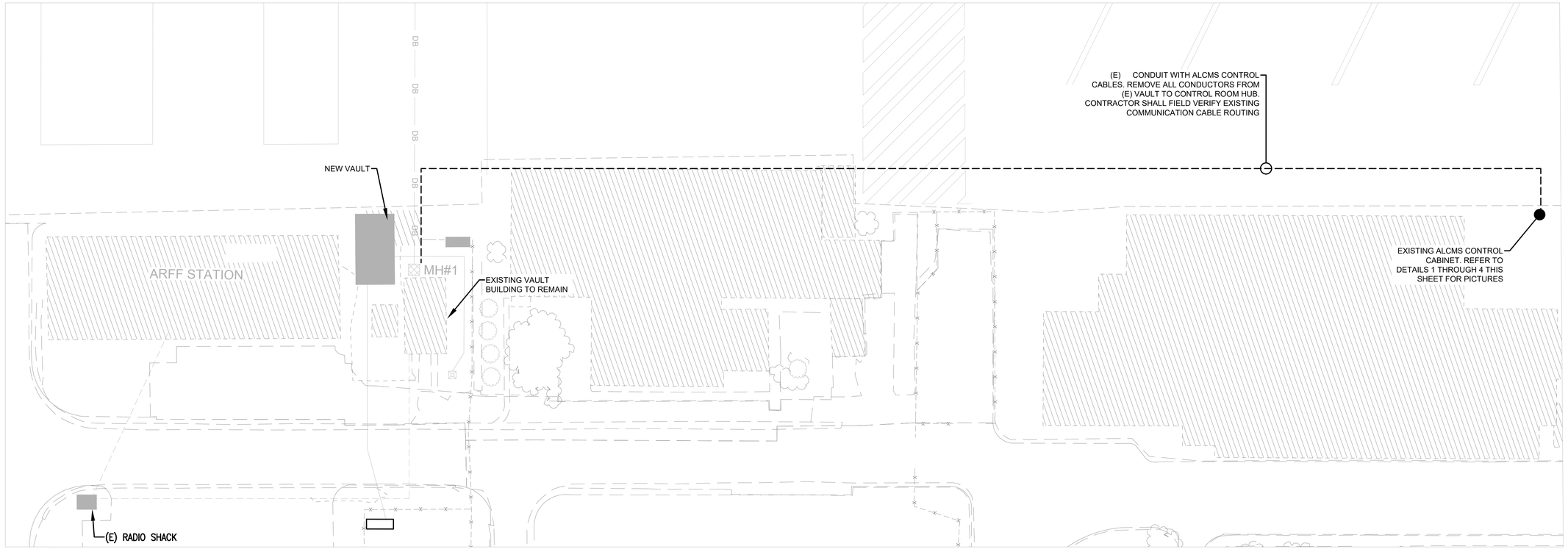
UPS DETAIL

Sheet: E4.17

GENERAL NOTES

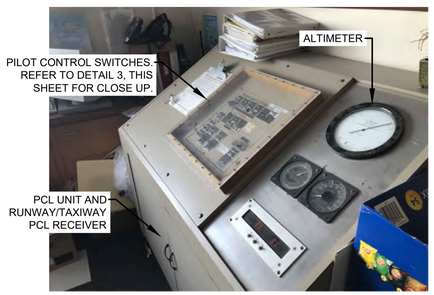
1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



1 PCL UNIT AND RUNWAY/TAXIWAY PCL RECIEVER IN CONTROL CABINET
SCALE: NTS

2 PCL UNIT ENCLOSURE
SCALE: NTS

3 PILOT CONTROL SWITCHES
SCALE: NTS



4 PILOT CONTROL CABINET
SCALE: NTS

50' 0 50' 100'
SCALE: 1" = 50'-0"

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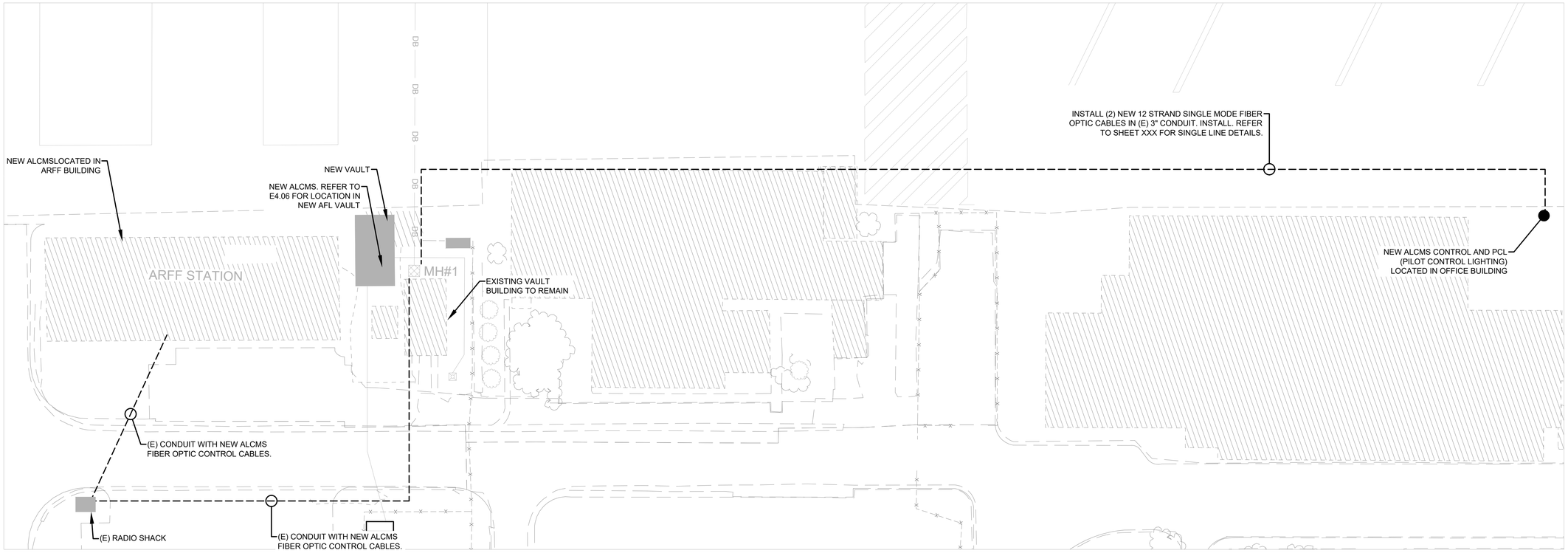
CONTROL CABLE - DEMO

Sheet: E5.01

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



50' 0 50' 100'
SCALE: 1" = 50'-0"

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ACI No. XXXXX
Date: 12/2022
File Name: FILE NAME

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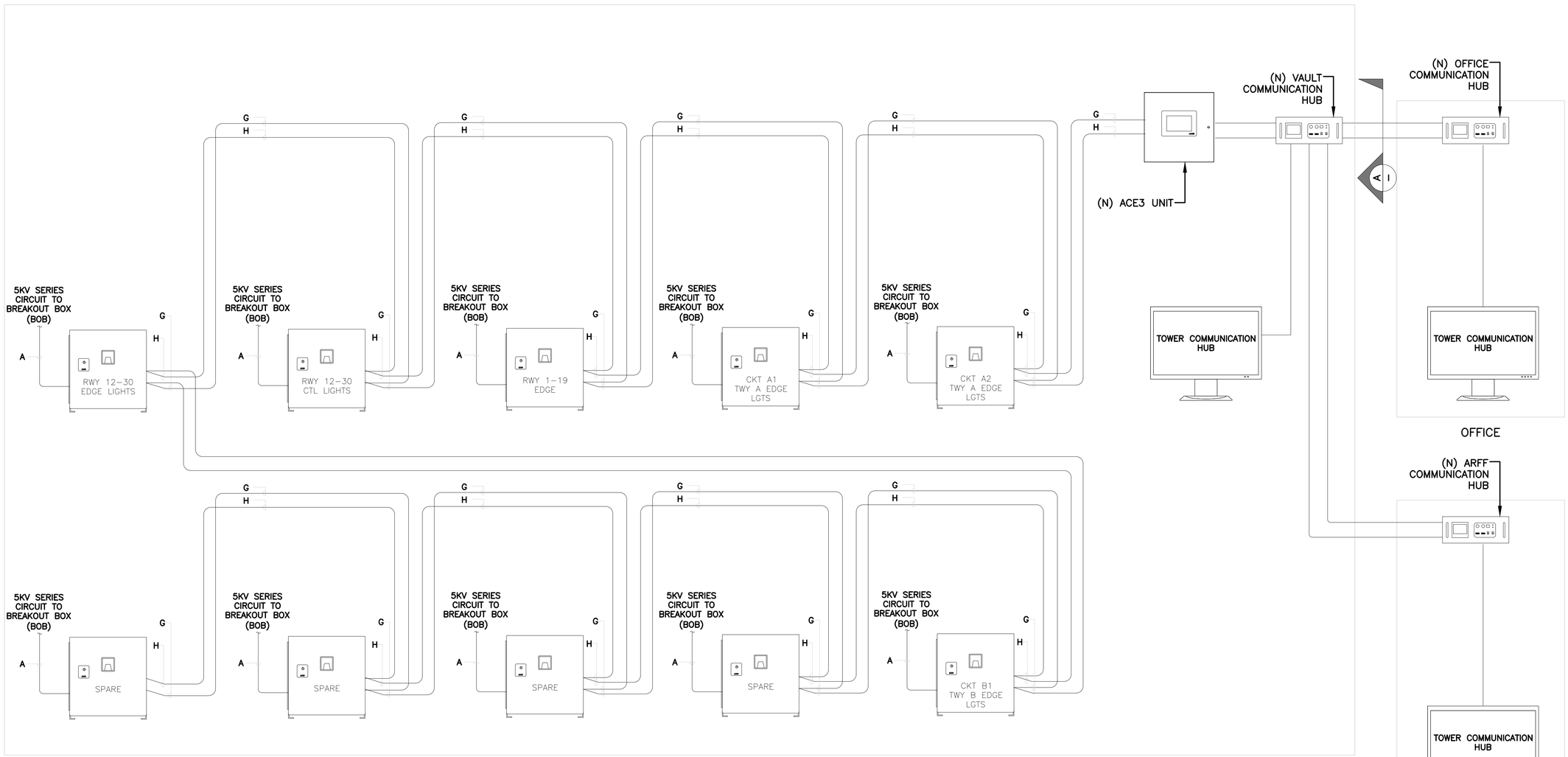
CONTROL CABLE - NEW

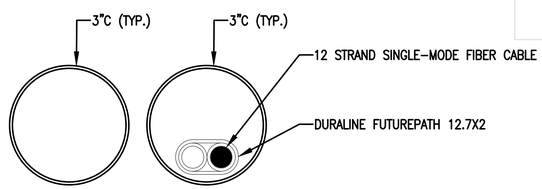
Sheet: E5.02

GENERAL NOTES

1. SEE SHEETS E0.01 & E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



AIRFIELD LIGHTING VAULT



1 DUCTBANK SECTION - A
SCALE: NTS

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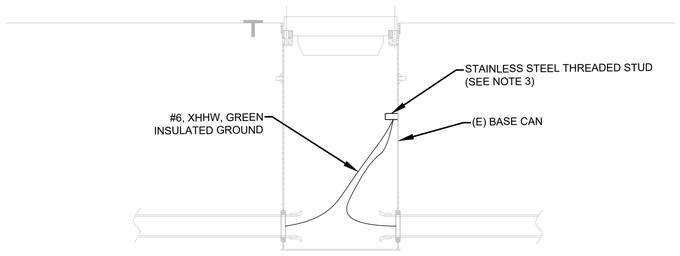
AFLC LOOP SCHEMATIC

Sheet: E5.03



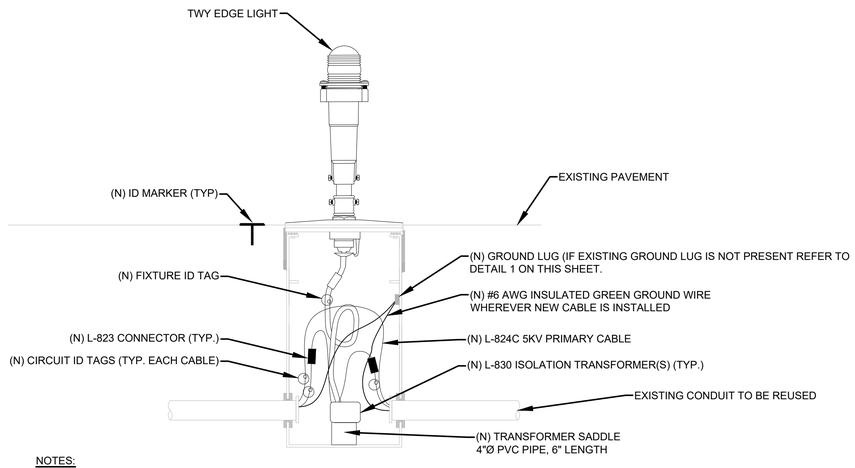
NOTES:

1. LENGTH OF #6 INSULATED GROUND CONDUCTOR SHALL BE OF SUFFICIENT LENGTH TO ALLOW THE INSET OR ELEVATED LIGHT FIXTURE OR BASE PLATE TO BE EASILY SET ASIDE WITHOUT REMOVAL.
2. VACUUM OUT ANY DEBRIS AND METAL SHAVINGS FROM THE BOTTOM OF THE CAN.
3. INSTALL A 3/8" STAINLESS STEEL THREADED STUD (PRIOR TO INSTALLATION OF NEW CABLE) BY MEANS OF AN ARC STUD WELDING GUN, HBS A12 OR APPROVED EQUAL. AFTER WELDING THE STUD, THE CONTRACTOR SHALL COLD GALVANIZE THE INSIDE WALL OF THE BASE CAN AROUND THE STUD WELD. INSTALL COMPRESSION TERMINAL ON XHHW TO CONNECT TO STUD. PROVIDE BURNDY YA6CTC38 OR APPROVED EQUAL.
4. CONTRACTOR SHALL ASSUME THAT ALL BASE CANS REQUIRE GROUND LUG RETROFIT. COST FOR THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT WITH NO SEPARATE PAYMENT.
5. IF BASE CANS ARE PVC, CONTRACTOR SHALL TAP METAL TOP RING AND INSTALL CRIMP LUG ON BOTTOM SIDE OF THE TOP RING AND GROUND TO #6 INSULATED GREEN GROUND.
6. DETAIL APPLIES TO BASE CANS FOR BOTH ELEVATED AND IN-PAVEMENT FIXTURES.

1 RETROFIT EXISTING BASE CAN DETAIL
SCALE: NTS

GENERAL NOTES

1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



NOTES:

1. REMOVE EXISTING BASE PLATE AND ELEVATED LIGHT FIXTURE, CLEAN AND PREP FOR REINSTALLATION.
2. REMOVE AND DISCARD CABLE, CONNECTORS, ISOLATION TRANSFORMER AND GROUND CONNECTIONS.
3. TOP OF CAN SHOULD BE CLEANED OF DEBRIS UTILIZING COMPRESSED AIR, INCLUDING BLOWING OUT DEBRIS FROM ALL BOLT HOLES. ALL BOLT HOLES SHALL BE BRUSHED OUT USING WEILER P/N#3H707 OR APPROVED EQUAL OR TAPPED PRIOR TO INSTALLATION OF NEW BOLTS.
4. WASH AND VACUUM ALL DEBRIS FROM INSIDE (E) BASE CAN.
5. CLEAN AND MANDREL (E) CONDUIT.
6. IF CONDUIT IS PROTRUDING MORE THAN 1.5", CUT CONDUIT AND INSTALL NEW BELL END (TYP.).
7. INSTALL NEW CABLE, CONNECTORS, ISOLATION TRANSFORMER, TRANSFORMER SADDLE, CABLE TAGS, BELL END AND GROUND CONNECTIONS.
8. INSTALL NEW LED LIGHT FIXTURE WITH NEW SAE J429 GRADE 5 CARBON STEEL, ANTI-CORROSION BOLTS (MFG. BY GBA COMPONENTS OR APPROVED EQUAL) AND WASHERS. ANTI-SEIZE MUST BE APPLIED THOROUGHLY TO THE ENTIRE BOLT THREAD UP TO A MAXIMUM OF 1/2" BELOW THE BOLT HEAD.
9. IF REQUIRED, RETROFIT GROUND LUG IN (E) BASE CAN. REFER TO DETAIL 1 THIS SHEET.

2 TYPICAL ELEVATED LIGHT INSTALLATION DETAIL (TWY EDGE)
SCALE: NTS

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MCKINLEYVILLE, CA
TWY A LIGHTING AND VAULT REHAB
AIP No. 3-06-0010-053-2022

No.	Revision	Date	By

ACI No. XXXXX
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AIRFIELD LIGHTING DETAILS 1

Sheet: E6.01

GENERAL NOTES

1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

NOTES FOR STEP 1:

1. PENCIL TAPER BOTH ENDS
2. APPLY SILICONE
3. CRIMP CONNECTOR ENDS ONTO CABLE

1A STEP 1
SCALE: NTS

NOTES FOR STEP 2:

1. APPLY SCOTCH 130C RUBBER TAPE HALF-LAPPED FOR A TOTAL WIDTH OF 2" AT THE CONNECTION POINT AND BOTH ENDS

1B STEP 2
SCALE: NTS

NOTES FOR STEP 3:

1. APPLY SCOTCH 88 HALF LAPPED 3" AT THE CONNECTION POINT AND BOTH ENDS, COMPLETELY COVERING THE RUBBER TAPE.

1C STEP 3
SCALE: NTS

INSTALLATION NOTES:

1. CONTRACTOR SHALL HAVE A MECHANICAL CRIMPING TOOL AND PENCIL TAPER ON SITE.
2. MAKE ALL CONNECTIONS WITH THESE TOOLS. ALL PERSONNEL PERFORMING SPLICES AND SUPERVISOR SHALL ATTEND A 1/2 HOUR TRAINING SEMINAR CONDUCTED BY A REPRESENTATIVE OF THE SPLICE KIT MANUFACTURER. COST FOR THE TRAINING SHALL BE INCIDENTAL TO THE CONTRACT WITH NO SEPARATE PAYMENT. NO EXCEPTIONS WILL BE ALLOWED. INSPECTOR SHALL MAINTAIN A LIST AT ALL TIMES OF CERTIFIED PERSONNEL.
3. SUPPLY A LIBERAL AMOUNT OF LUBRICANT SILICONE 5 OZTUBE, PRODUCT #G-661 AS SUPPLIED BY ANIXTER, OR APPROVED EQUAL ON CONNECTIONS BETWEEN CABLE AND CONNECTOR.
4. CONTRACTOR SHALL OBTAIN MANUFACTURING INSTALLATION INSTRUCTIONS PRIOR TO BID. SUBMIT AS PART OF SHOP DRAWING.
5. THIS DETAIL SHALL ONLY BE USED BETWEEN THE TRANSFORMER AND PRIMARY HOME RUN CABLE INSIDE THE BASECAN.

1A L-823 CONNECTOR KIT DETAIL (CLASSIC KIT)
SCALE: NTS

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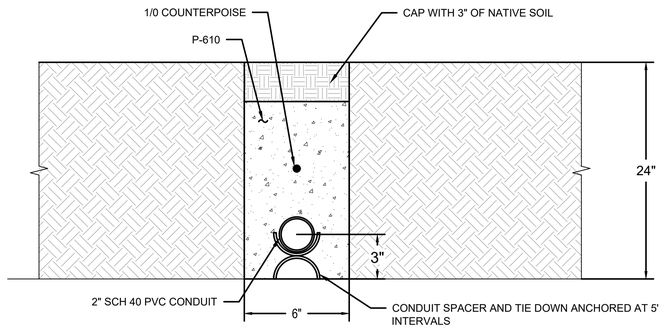
AIRFIELD LIGHTING DETAILS 2

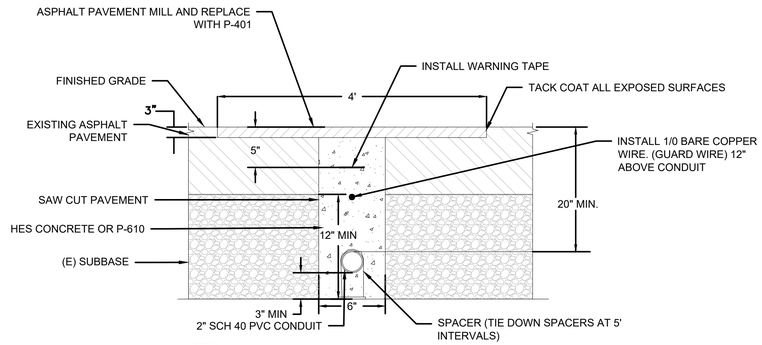
Sheet: E6.02



NOTES:

1. 6" WIDE TRENCH IN ASPHALT PAVEMENT TO MIN. 24" DEPTH. THOROUGHLY CLEAN CUT.
2. ENCASE WITH CONCRETE AS SHOWN.
3. CONTRACTOR SHALL FILL CONCRETE 21" UP TO EXISTING GRADE AND THEN CAP WITH 3" OF EXISTING NATIVE SOIL. THE COST OF THIS ADDITIONAL CONCRETE IS INCIDENTAL TO THE COST OF THE CONDUIT INSTALLATION WITH NO SEPARATE PAYMENT. CONTRACTOR SHALL SCHEDULE WORK TO ENSURE THAT CONCRETE ENCASEMENT OF CONDUIT REACHED MINIMUM OF 3000 PSI AT LEAST 1 HOUR PRIOR TO ANY AIRPLANE TRAFFIC FOR TAXIWAY REOPENING.

1 1W-2" CONDUIT IN NON-PAVED EARTH (NATIVE SOIL)
SCALE: NTS



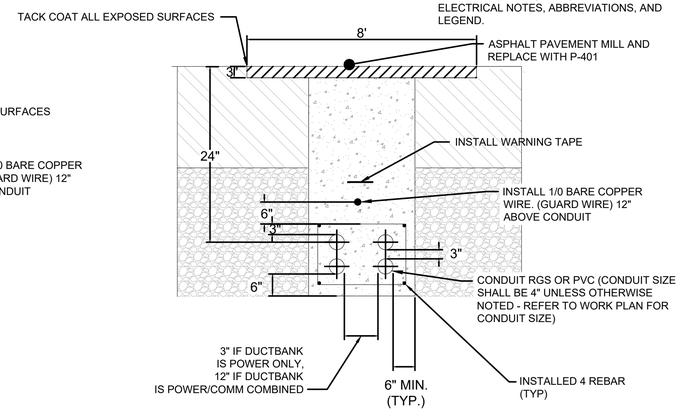
NOTES:

1. SAWCUT 6" WIDE TRENCH IN EXISTING ASPHALT PAVEMENT TO MIN. 20" DEPTH. THOROUGHLY CLEAN CUT.
2. ENCASE WITH CONCRETE AS SHOWN.
3. COMPLETE ASPHALT PAVEMENT RESTORATION AS SHOWN.
2. CONTRACTOR SHALL SCHEDULE WORK TO ENSURE THAT CONCRETE ENCASEMENT OF CONDUIT REACHED MINIMUM OF 3000 PSI AT LEAST 1 HOUR PRIOR TO ANY AIRPLANE TRAFFIC FOR RUNWAY REOPENING.

2 CONDUIT INSTALLATION IN EXISTING ASPHALT PAVEMENT
SCALE: NTS

GENERAL NOTES

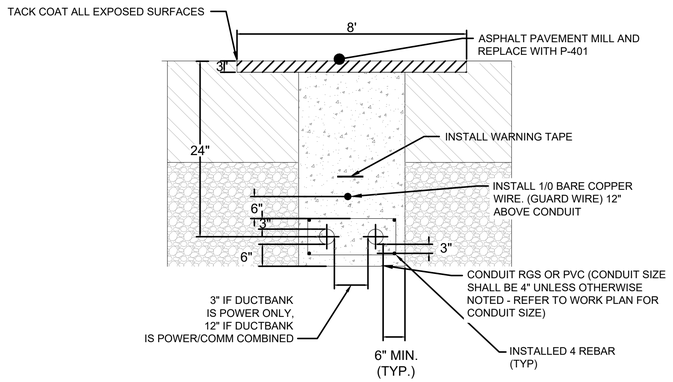
1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



NOTES:

1. SAWCUT 6" WIDE TRENCH IN EXISTING ASPHALT PAVEMENT TO MIN. 20" DEPTH. THOROUGHLY CLEAN CUT.
2. ENCASE WITH CONCRETE AS SHOWN.
3. COMPLETE ASPHALT PAVEMENT RESTORATION AS SHOWN.
2. CONTRACTOR SHALL SCHEDULE WORK TO ENSURE THAT CONCRETE ENCASEMENT OF CONDUIT REACHED MINIMUM OF 3000 PSI AT LEAST 1 HOUR PRIOR TO ANY AIRPLANE TRAFFIC FOR RUNWAY REOPENING.

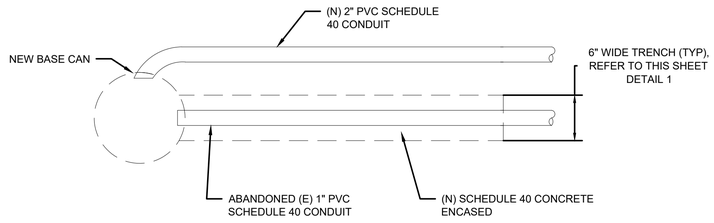
3 4W-4" CONDUIT INSTALLATION IN EXISTING ASPHALT PAVEMENT
SCALE: NTS



NOTES:

1. SAWCUT 6" WIDE TRENCH IN EXISTING ASPHALT PAVEMENT TO MIN. 20" DEPTH. THOROUGHLY CLEAN CUT.
2. ENCASE WITH CONCRETE AS SHOWN.
3. COMPLETE ASPHALT PAVEMENT RESTORATION AS SHOWN.
2. CONTRACTOR SHALL SCHEDULE WORK TO ENSURE THAT CONCRETE ENCASEMENT OF CONDUIT REACHED MINIMUM OF 3000 PSI AT LEAST 1 HOUR PRIOR TO ANY AIRPLANE TRAFFIC FOR RUNWAY REOPENING.

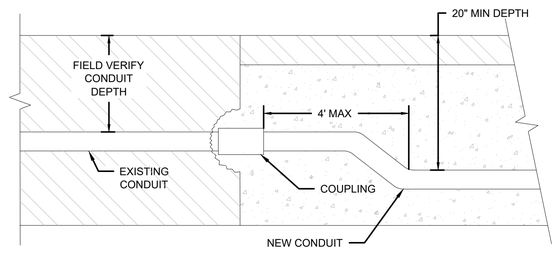
4 2W-4" CONDUIT INSTALLATION IN EXISTING ASPHALT PAVEMENT
SCALE: NTS



DETAIL 4 NOTES:

1. PROVIDE SMOOTH CURVES AND ENTER BASE CAN PERPENDICULAR TO SIDE.
2. PROVIDE A MINIMUM 3' LONG CONDUIT TRANSITION. INSTALL CONDUIT AT FULL DEPTH.

5 CONNECTING NEW CONDUIT TO EXISTING BASE CAN
SCALE: NTS



NOTES:

1. LOCATE EXISTING CONDUIT WHICH IS BEING INTERCEPTED AND FIELD VERIFY CONDUIT DEPTH.
2. SAW CUT A 4'x4' MINIMUM SECTION OF PAVEMENT AND HAND EXCAVATE AT POINT OF CONNECTION. CUT CONDUIT AND CHISEL OUT AN AREA AROUND CONDUIT END.
3. CLEAN CONDUIT AND INSTALL A COUPLING.
4. SAW CUT OR KERF TRENCH FOR NEW CONDUIT TO EXCAVATED HOLE AREA.
5. INSTALL NEW CONDUIT AS INDICATED IN CONDUIT INSTALLATIONS.
6. IF EXISTING CONDUIT DEPTH IS LESS THAN THE NEW CONDUIT TRANSITION TO GREATER DEPTH.
7. RESTORE THE CEMENT TREATED BASE BY POURING (N) P-610.

6 EXISTING CONDUIT CONNECTION DETAIL
SCALE: NTS

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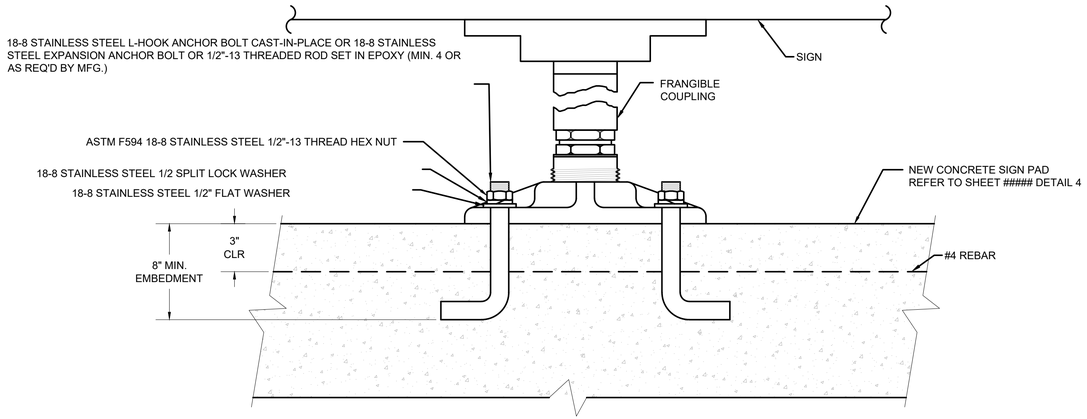
AIRFIELD LIGHTING DETAILS 3

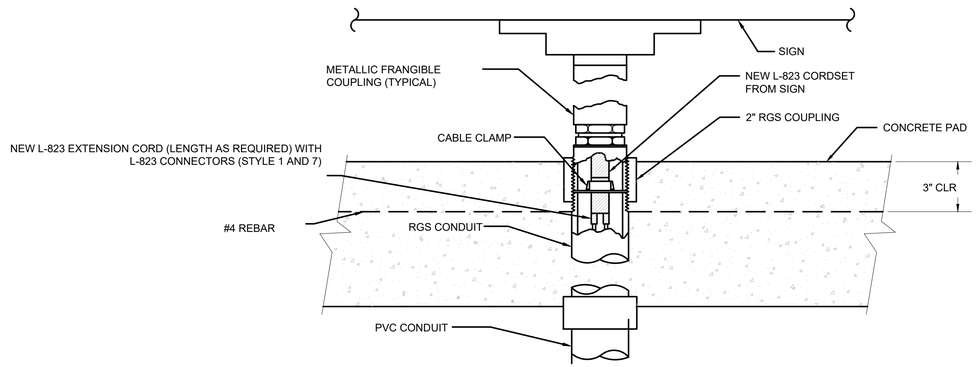
Sheet: E6.03



1 ANCHOR "J" BOLT DETAIL - NEW CONCRETE PAD
SCALE: NTS

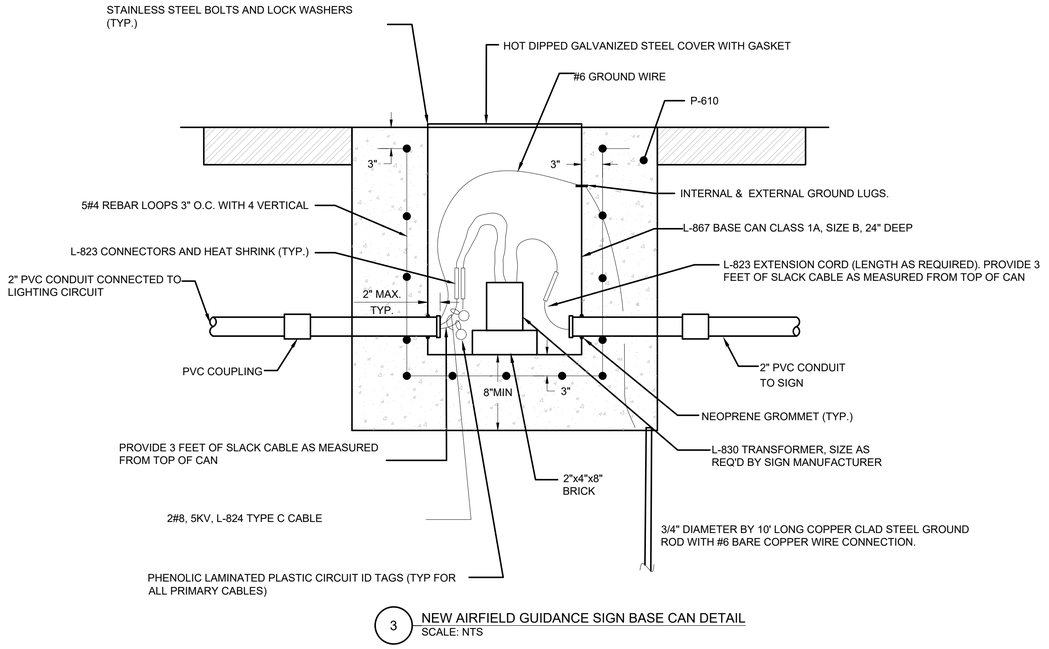
GENERAL NOTES

1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

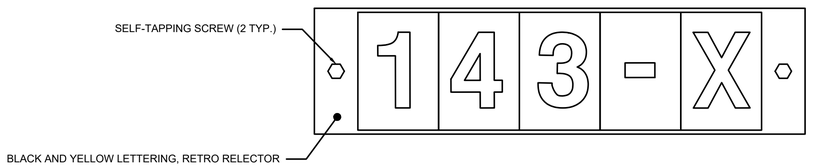


NOTE: DETAIL APPLIES TO NEW CONCRETE PAD CONSTRUCTION AND NEW SIGNAGE POWER LEG/LOCATION.

2 POWER LEG DETAIL - NEW CONCRETE PAD
SCALE: NTS



3 NEW AIRFIELD GUIDANCE SIGN BASE CAN DETAIL
SCALE: NTS



NOTE: PROVIDE MINIMUM 2" TALL LETTERING

4 TYPICAL SIGN ID TAG
SCALE: NTS

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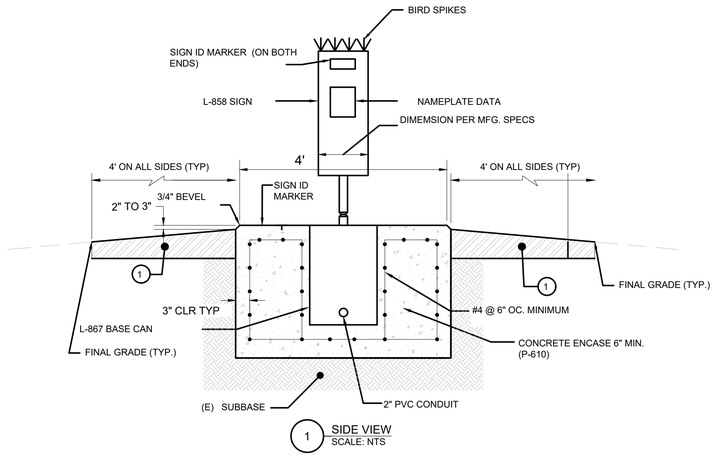
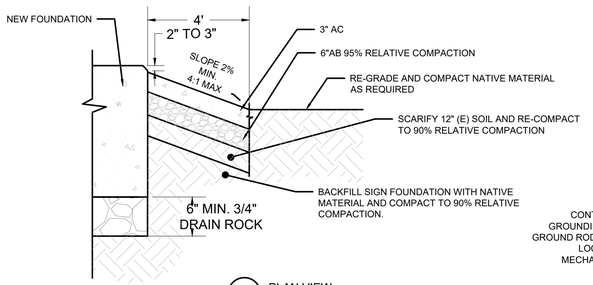
AIRFIELD LIGHTING DETAILS 4

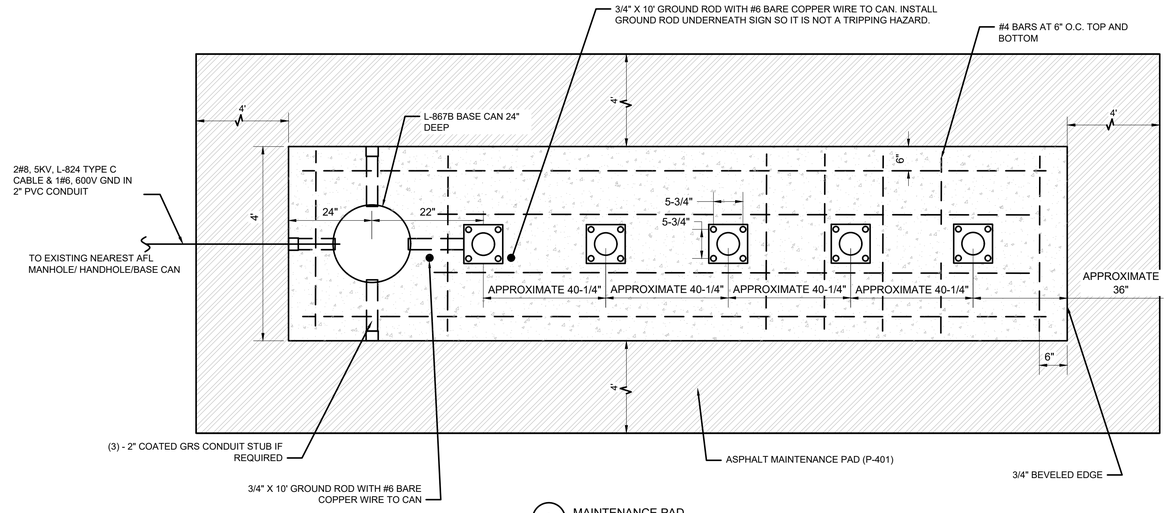
Sheet: E6.04



1 SIDE VIEW
SCALE: NTS



2 PLAN VIEW
SCALE: NTS



3 MAINTENANCE PAD
SCALE: NTS

GENERAL NOTES

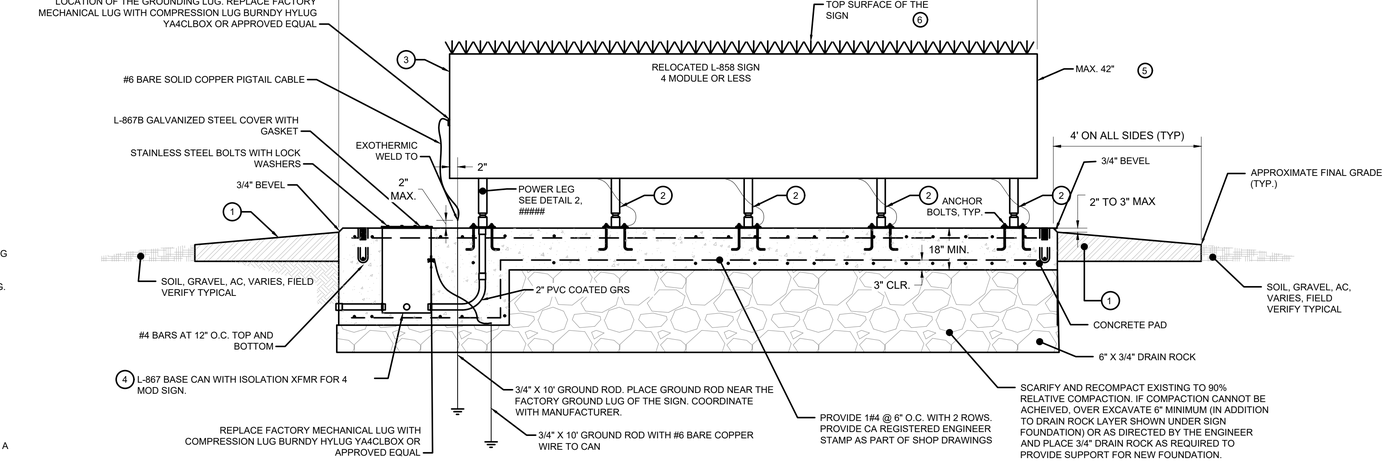
1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

KEY NOTES:

1. PROVIDE 4' MAINTENANCE PAD AROUND SIGN PAD. REFER TO DETAIL 4 ON THE SAME SHEET.
2. TETHER. MINIMUM 1 PER MODULE AND AT LEAST 2 TETHERS PER SIGN.
3. INSTALL NEW SIGNS PER MANUFACTURER MOUNTING PLATE TEMPLATE, RECOMMENDATIONS, AND INSTRUCTIONS. NUMBER AND SPACING OF LEGS AS PER MANUFACTURERS REQUIREMENTS. EXISTING SIGNS ARE MANUFACTURED BY ADB.
4. FOR RELOCATED SIGNS REUSE TRANSFORMERS. FOR NEW SIGNS PROVIDE TRANSFORMER PER MFG. RECOMMENDATIONS. PROVIDE NEW L-823 EXTENSION CORDSET OR REQUIRED LENGTH.
5. PROVIDE GUIDANCE SIGN IDENTIFICATION MARKER ON EACH END OF THE SIGN (TOTAL OF TWO MARKERS PER SIGN).
6. INSTALL BIRD SPIKES.

GENERAL NOTES:

1. SEE SHEETS ##### & ##### FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.
2. CONTRACTOR SHALL VERIFY THE LOCATION OF THE SOURCE OF POWER TO THE SIGN WHETHER IT'S A LIGHT FIXTURE OR HANDHOLE.
3. INSTALL NEW OR RELOCATED SIGN, TRANSFORMER, FOUNDATION, SECONDARY CABLES, CONDUIT, AND CONNECT TO THE EXISTING CIRCUIT.
4. CONTRACTOR SHALL BLUE STAKE THE LOCATION OF THE SIGN AND SIGN FOUNDATION (ALL FOUR CORNERS) PRIOR TO INSTALLING THE FOUNDATION. CONTRACTOR SHALL SUPPLY A SURVEY SHOP DRAWING THAT SHOWS THE LOCATION AND ELEVATION OF THE FOUR CORNERS OF SIGN FOUNDATION, FOUR CORNER LOCATION AND ELEVATION OF THE MAINTENANCE PAD AND AN ADDITIONAL LOCATION AND ELEVATION OF 15' DIAGONAL FROM EACH CORNER OF THE SIGN FOUNDATION FOR ENGINEER'S APPROVAL.



4 NEW LIGHTED GUIDANCE SIGNS 4 MODULES OR LESS INSTALLATION DETAILS ON NEW FOUNDATION
SCALE: NTS

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AIRFIELD LIGHTING DETAILS 5

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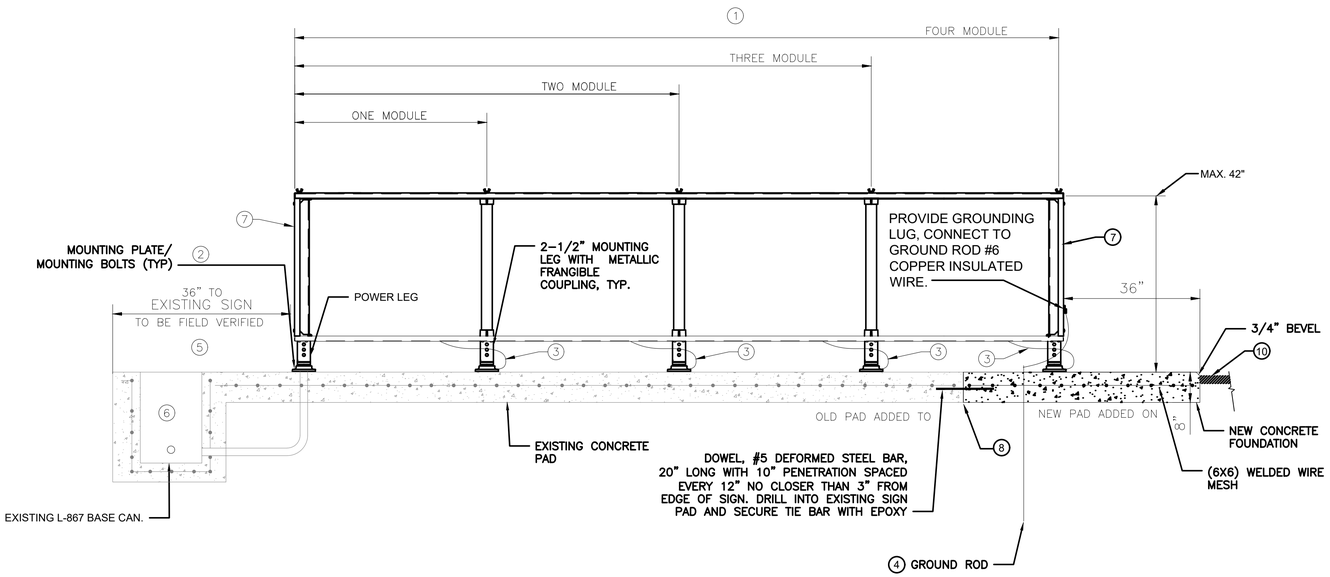

1 NEW GUIDANCE SIGN (4 MODULES OR LESS) ON EXTENDED FOUNDATION
SCALE: NTS

GENERAL NOTES

1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

NEW SIGN KEY NOTES:

1. IF THE NEW SIGN POWER AND MOUNTING LEGS DO NOT MATCH THE EXISTING, PROVIDE NEW STAINLESS STEEL HILTI BOLTS AND EXPANSION ANCHORS FOR NEW MOUNTING PLATES. REFER TO DETAILS ON E5.05. ASSUME EVERY NEW SIGN ON EXISTING FOUNDATION REQUIRES NEW BOLTS. INSTALL NEW SIGN PER MANUFACTURER MOUNTING PLATE TEMPLATE, RECOMMENDATIONS, AND INSTRUCTIONS.
2. INSTALL NEW MOUNTING PLATE FOR POWER LEG ON EXISTING 2" CONDUIT FROM EXISTING L-867 BASE CAN. SEE DETAIL 2, DRAWING E5.05.
3. TETHER. MINIMUM 1 PER MODULE AND AT LEAST 2 TETHERS PER SIGN. TETHER LENGTH SHALL BE 1'.
4. PROVIDE 3/4"X10' COPPER CLAD GROUND ROD, DRILL A HOLE THRU PAD IF REQUIRED. INSTALL DIRECTLY UNDER SIGN TO ELIMINATE TRIP HAZARD.
5. FIELD VERIFY DISTANCE OF EXISTING L-867 BASE CAN FROM SIGN TO CONFIRM REQUIRED LENGTH OF NEW L-823 EXTENSION CORD REQUIRED. PERFORM THIS PRIOR TO SHOP DRAWING SUBMISSION. PROVIDE INFORMATION AS PART OF SHOP DRAWING.
6. 6 PROVIDE NEW L-830 ISOLATION TRANSFORMER TO MATCH TOTAL SIGN VA LOAD PER MANUFACTURER'S RECOMMENDATION. PROVIDE NEW CORDSET EXTENSION CORD AT REQUIRED LENGTH.
7. PROVIDE GUIDANCE SIGN IDENTIFICATION MARKER ON EACH END OF THE SIGN (TOTAL OF TWO MARKERS PER SIGN).
8. IF JOINT IS WITHIN 6" OF MOUNTING LEG BOLT, SAWCUT EXISTING CONCRETE PAD BACK (AND REMOVE SPOILS) TO OBTAIN A MOUNTING BOLT LOCATION OUTSIDE OF THE 6" RESTRICTION.

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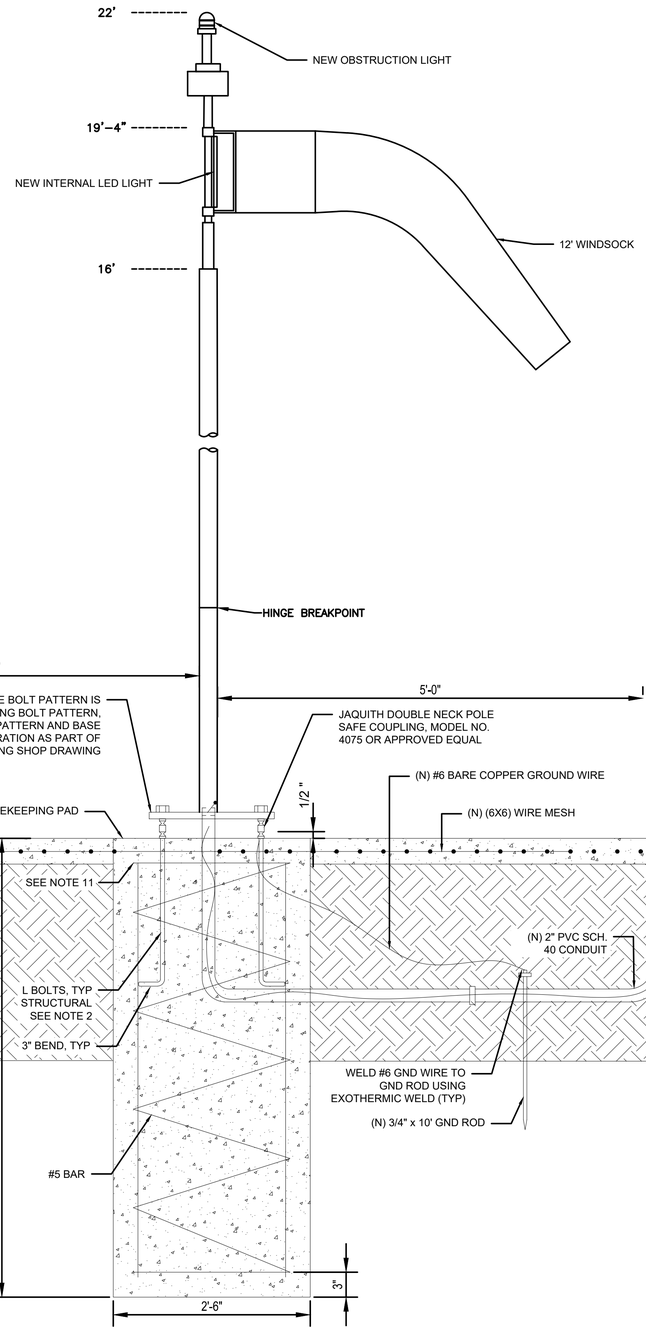
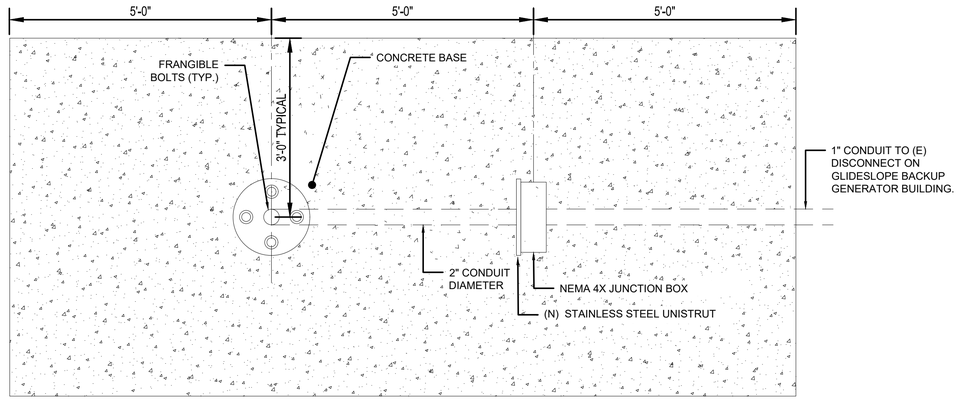
AIRFIELD LIGHTING DETAILS 6

Sheet: E6.06



1 NEW L-807 PRIMARY RUNWAY WIND CONE ON EXISTING FOUNDATION
SCALE: NTS



1B NEW L-807 PRIMARY RUNWAY WIND CONE ON EXISTING FOUNDATION - PLAN VIEW
SCALE: NTS

GENERAL NOTES

1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.

SHEET NOTES

1. PROVIDE NEW 6.6A/6.6A TRANSFORMER TO FEED THE WINDCONE.

REMOVAL NOTES:

1. FOR WINDCONE WITH DISCONNECT ON EXISTING PAD, PRIOR TO REMOVAL TURN OFF POWER AT THE VAULT, THEN SHUT OFF EXISTING DISCONNECT.
2. DISCONNECT THE GROUND WIRE FROM THE BASE.
3. UNBOLT THE SUPPORT POLE FROM THE BASE AND REMOVE.
4. REMOVE SECONDARY WIRES AND CAP CONDUIT.
5. CLEAN ANCHOR BOLTS WITH A WIRE BRUSH AND COAT WITH A ANTI-SEIZE COMPOUND FOR PROTECTION.

STRUCTURAL NOTES:

1. STRUCTURAL CONCRETE FOR ALL STRUCTURES SHALL CONFORM WITH STANDARD SPECIFICATIONS STRUCTURAL CONCRETE (F'C = 4,000 PSI) UNLESS NOTED OTHERWISE. SPECIAL INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 1705.3 OF THE 2017 LOS ANGELES CITY BUILDING CODE.
2. L BOLTS SHALL BE GALVANIZED 3/4" -10 UNC (19MM) F1554 GRADE 36 STEEL.
3. WASHERS SHALL BE GALVANIZED F436 STEEL.
4. NUTS SHALL BE GALVANIZED A563 STEEL.
5. CHAMFER ALL EXPOSED EDGES OF CONCRETE TO 3/4 ".
6. VERIFY ANCHOR PLATE AND DEPENDENT DIMENSIONS CONFORM TO MANUFACTURER SPECIFICATION BEFORE FABRICATING.
7. PURSUANT TO SECTION 4216 OF CALIFORNIA GOVERNMENT CODE, AT LEAST 2 WORKING DAYS PRIOR TO EXCAVATION YOU MUST CONTACT DIGALERT. IF UTILITY CONFLICTS ARISE, LOCATION MAY BE ADJUSTED TO +/- 2 FEET. ANY LARGER DEVIATIONS SHALL REQUIRE APPROVAL.
8. FG IS TYPICALLY EARTH BUT OTHER MATERIALS MAY BE ENCOUNTERED. FG AT LOCATIONS ADJACENT TO FOUNDATIONS SHALL BE RETURNED TO EXISTING CONDITION.
9. ALL REINFORCEMENT SHALL BE GRADE 60 STEEL. SPIRAL LAP SPLICES SHALL OVERLAP 1 1/2 TURNS. END SPIRALS WITH 180 HOOKS 1 1/2 AND EXTRA TURNS AT TOP AND BOTTOM OF SHAFT.
10. WELDS SHALL CONFORM TO AMERICAN WELDING SOCIETY (AWS) STANDARDS.

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CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
TWY A LIGHTING AND VAULT REHAB
AIP No. 3-06-0010-053-2022

No.	Revision	Date	By

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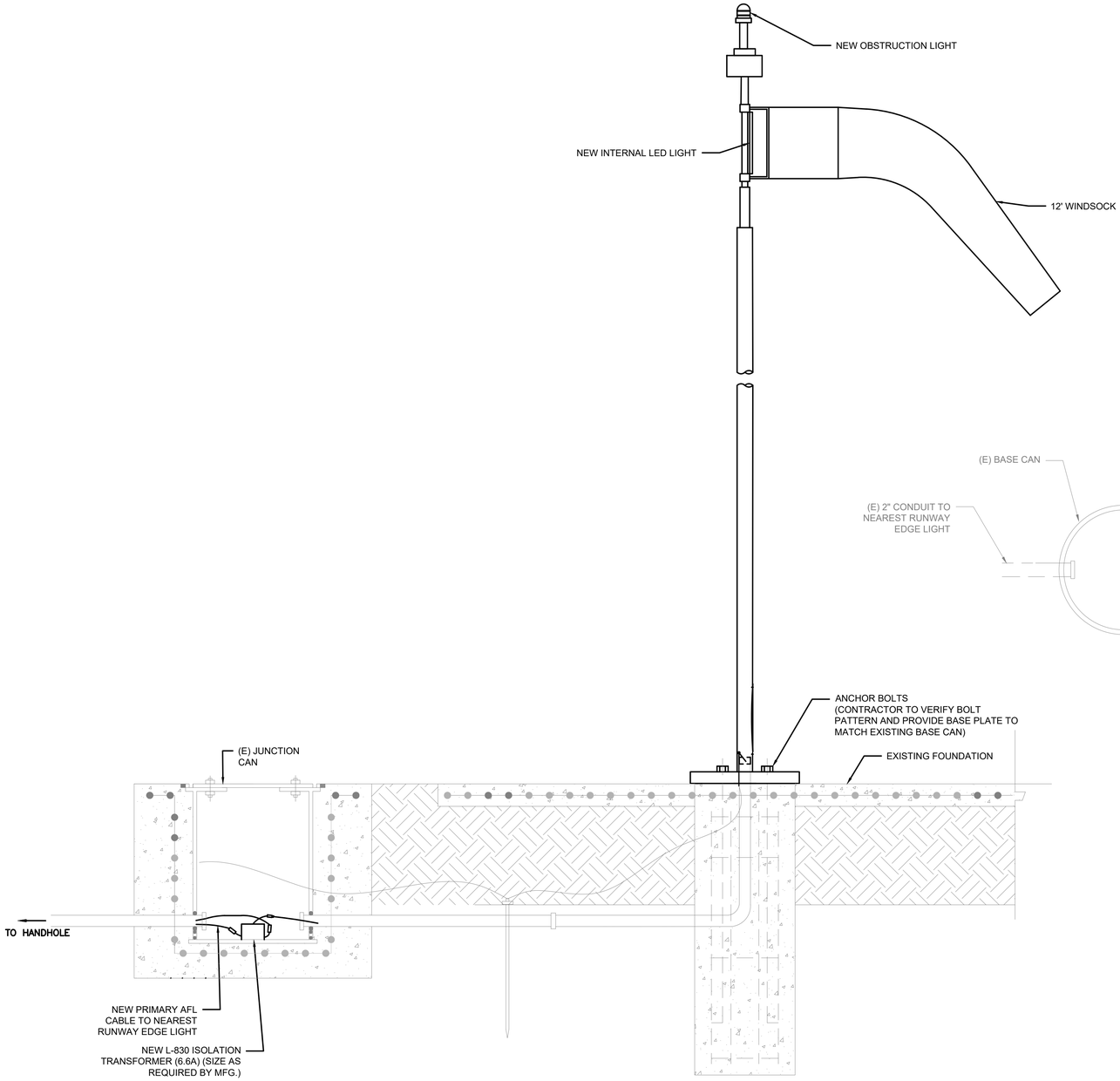
Drawn: KV
Checked: JA
Approved: DL

AIRFIELD LIGHTING DETAILS 7

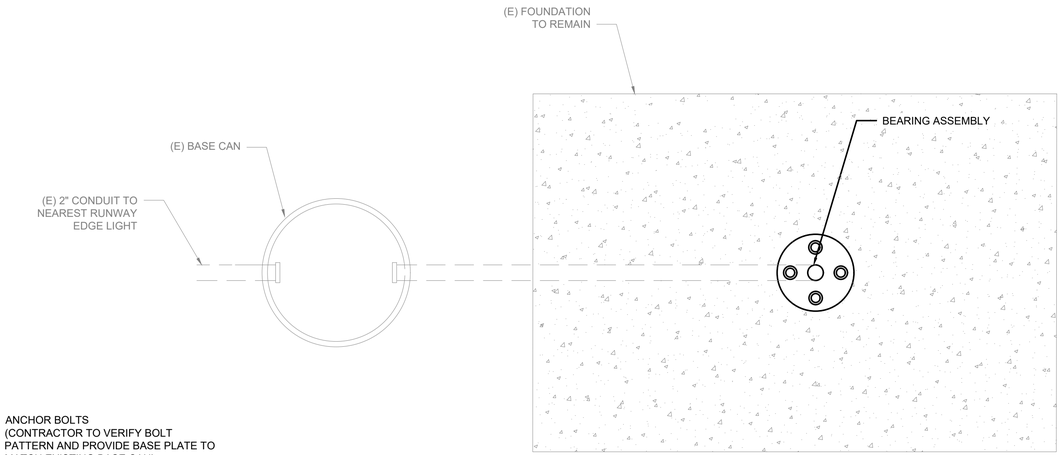
Sheet: E6.07

GENERAL NOTES

1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



1 NEW L-806 SECONDARY RUNWAY WIND CONE ON EXISTING FOUNDATION
SCALE: NTS



1B NEW L-806 SECONDARY RUNWAY WIND CONE ON EXISTING FOUNDATION - PLAN VIEW
SCALE: NTS

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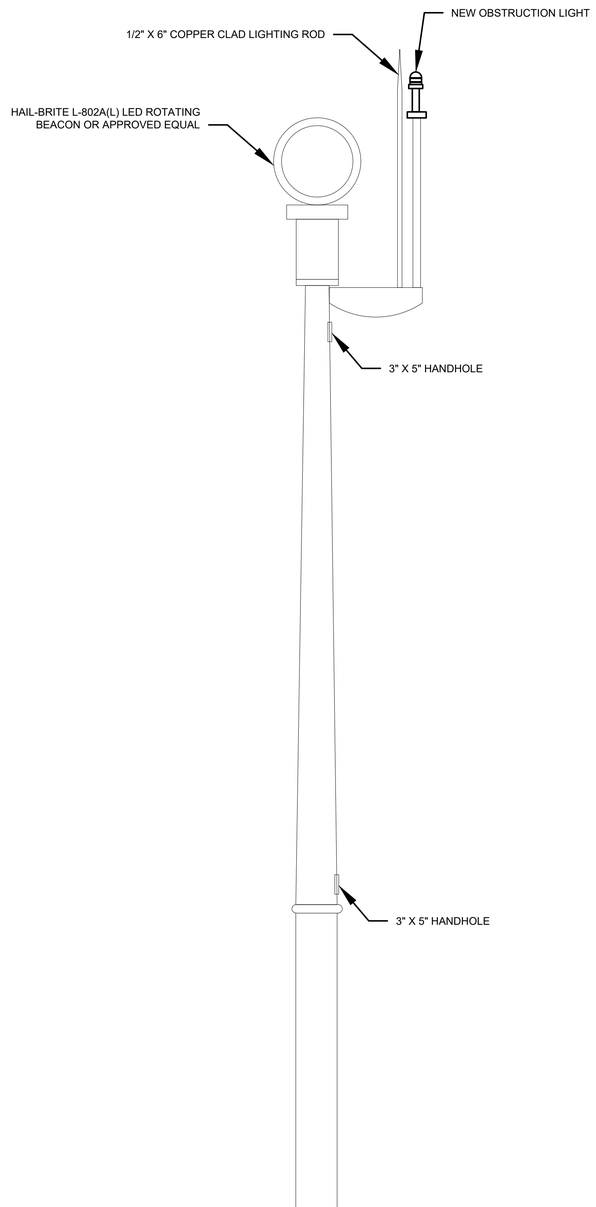
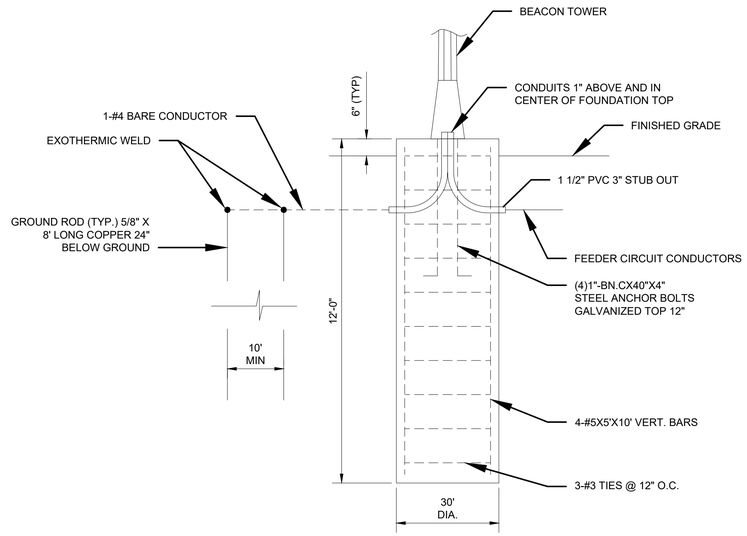
AIRFIELD LIGHTING DETAILS 8

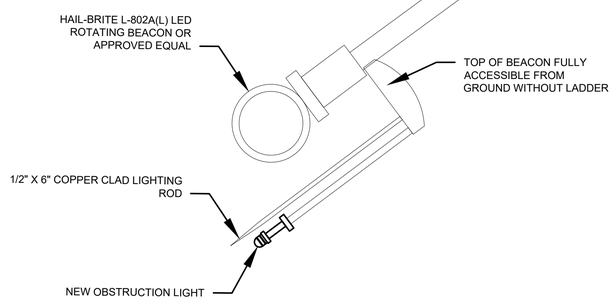
Sheet: E6.08



1 BEACON WITH TILT DOWN POLE - FULL HEIGHT
SCALE: NTS

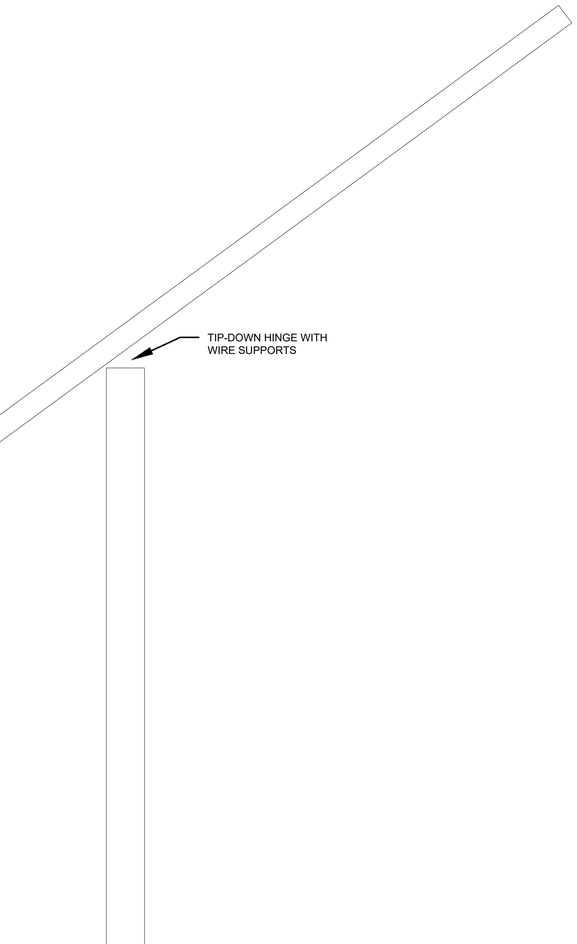


2 ROTATING BEACON TOWER CONCRETE BASE
SCALE: NTS



GENERAL NOTES

1. SEE SHEETS E0.01, E1.00, AND E2.00 FOR ELECTRICAL NOTES, ABBREVIATIONS, AND LEGEND.



2 BEACON WITH TILT DOWN POLE - TILT DOWN
SCALE: NTS

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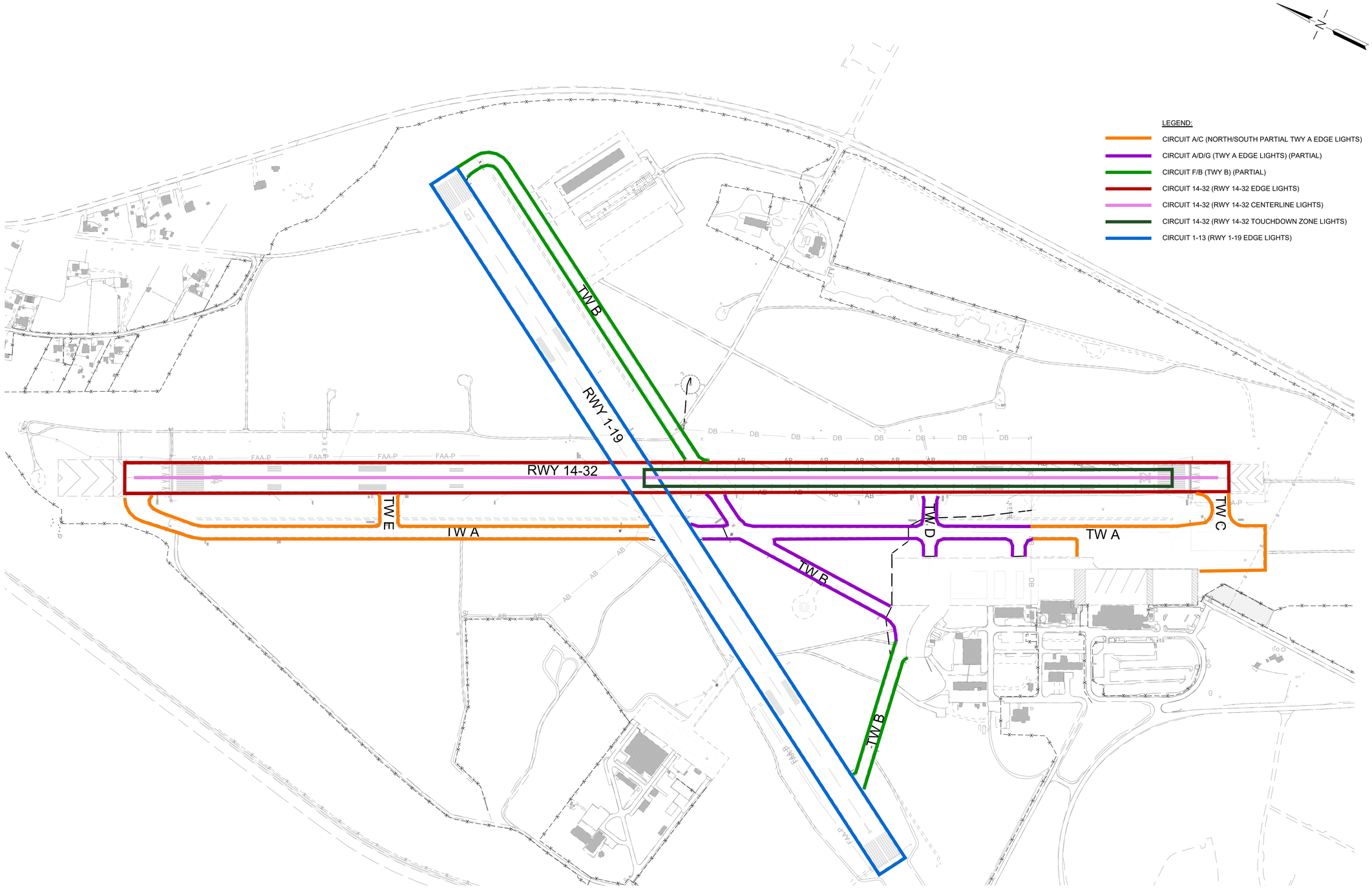
AIRFIELD LIGHTING DETAILS 9

Sheet: E6.09



1 EXISTING OVERALL CIRCUIT MAP
SCALE: NTS

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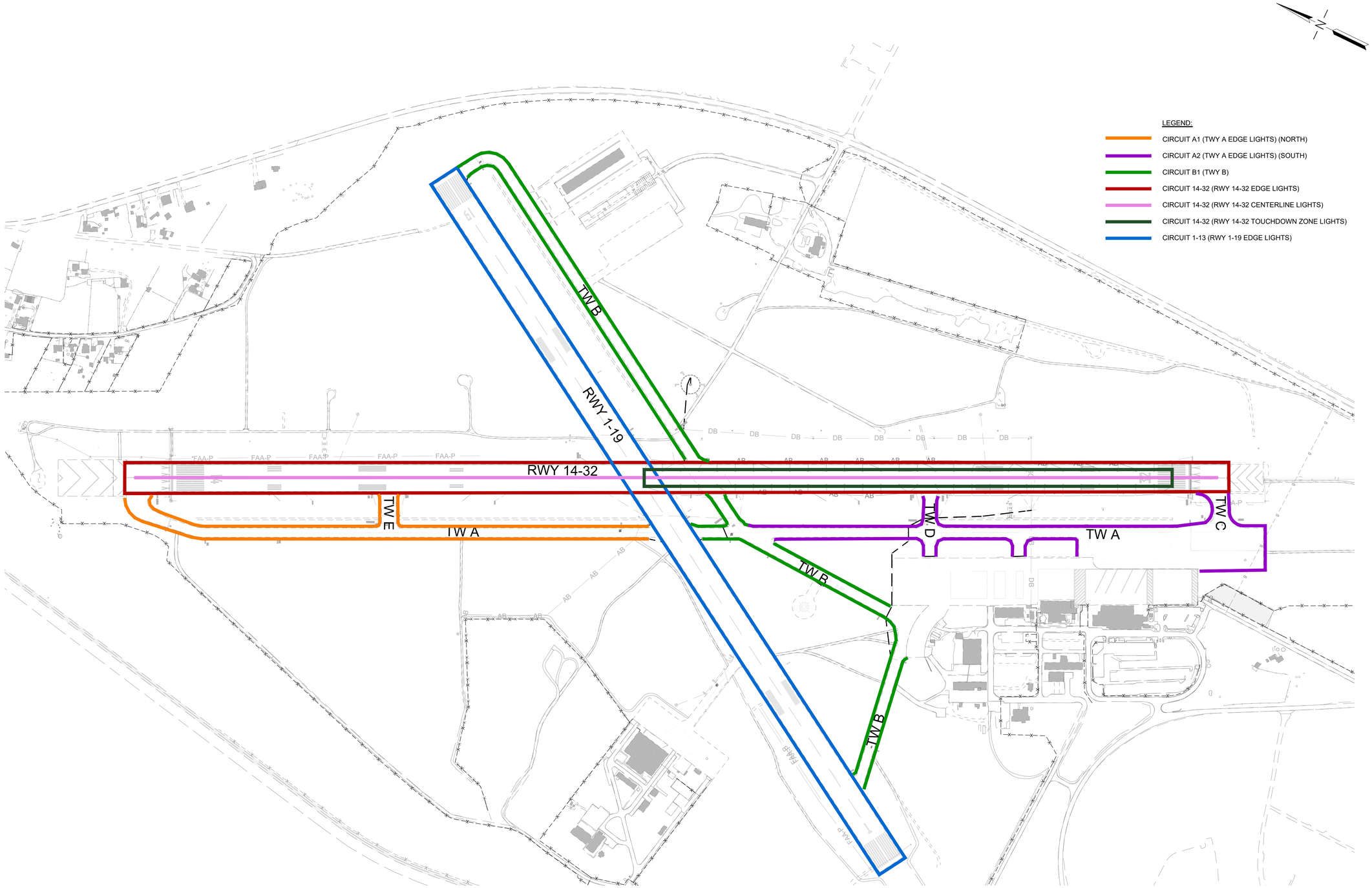
EXISTING OVERALL CIRCUIT MAP

Sheet: E7.01



1 NEW OVERALL CIRCUIT MAP
SCALE: NTS

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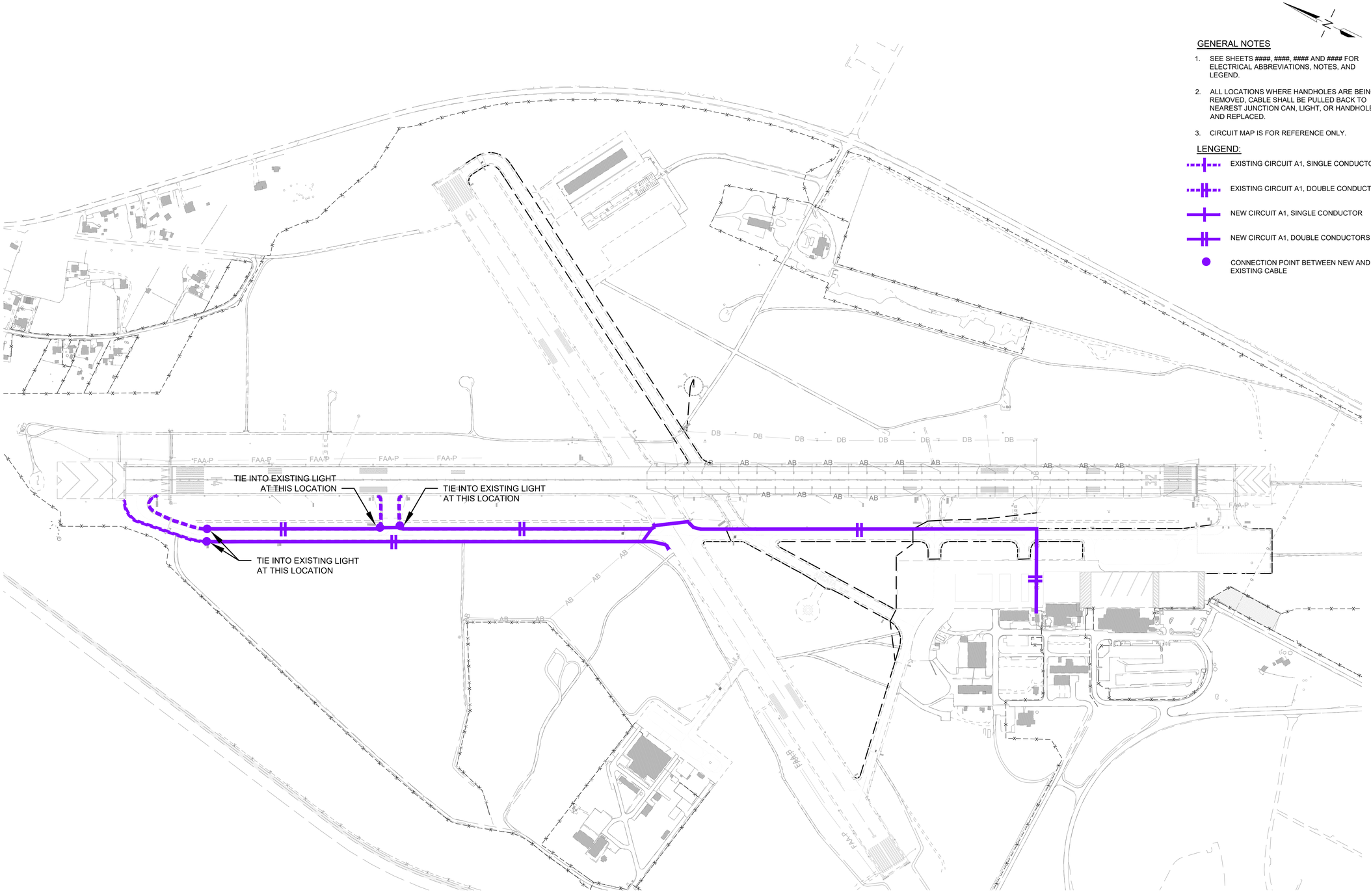
NEW OVERALL CIRCUIT MAP

Sheet: E7.02



1 NEW CIRCUIT A1 (TWY A EDGE LIGHTS NORTH SIDE)
SCALE: NTS

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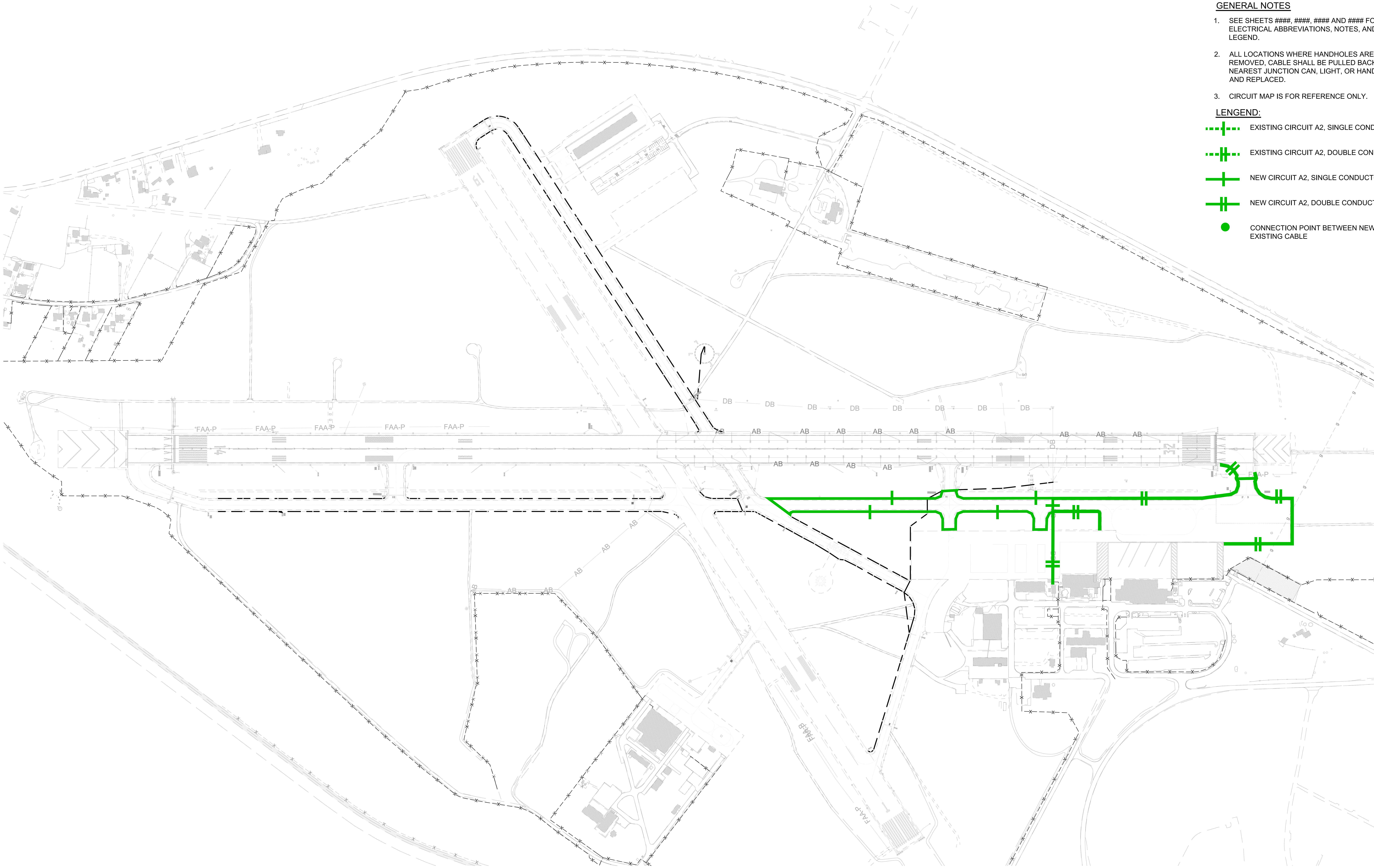
NEW CIRCUIT A1 (TWY A EDGE LIGHTS NORTH)

Sheet: E7.03



GENERAL NOTES

1. SEE SHEETS ####, ####, #### AND #### FOR ELECTRICAL ABBREVIATIONS, NOTES, AND LEGEND.
2. ALL LOCATIONS WHERE HANDHOLES ARE BEING REMOVED, CABLE SHALL BE PULLED BACK TO NEAREST JUNCTION CAN, LIGHT, OR HANDHOLE AND REPLACED.
3. CIRCUIT MAP IS FOR REFERENCE ONLY.

LENGEND:

- EXISTING CIRCUIT A2, SINGLE CONDUCTOR
- EXISTING CIRCUIT A2, DOUBLE CONDUCTORS
- NEW CIRCUIT A2, SINGLE CONDUCTOR
- NEW CIRCUIT A2, DOUBLE CONDUCTORS
- CONNECTION POINT BETWEEN NEW AND EXISTING CABLE

1 NEW CIRCUIT A2 (TWY A EDGE LIGHTS SOUTH SIDE)
SCALE: NTS

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NEW CIRCUIT B2 (TWY A EDGE LIGHTS SOUTH)

Sheet: E7.04

GENERAL NOTES

1. SEE SHEETS ####, ####, ##### AND #### FOR ELECTRICAL ABBREVIATIONS, NOTES, AND LEGEND.
2. ALL LOCATIONS WHERE HANDHOLES ARE BEING REMOVED, CABLE SHALL BE PULLED BACK TO NEAREST JUNCTION CAN, LIGHT, OR HANDHOLE AND REPLACED.
3. CIRCUIT MAP IS FOR REFERENCE ONLY.

LENGEND:

- EXISTING CIRCUIT B1, SINGLE CONDUCTOR
- EXISTING CIRCUIT B1, DOUBLE CONDUCTORS
- NEW CIRCUIT B1, SINGLE CONDUCTOR
- NEW CIRCUIT B1, DOUBLE CONDUCTORS
- CONNECTION POINT BETWEEN NEW AND EXISTING CABLE

1 NEW CIRCUIT B1 (TWY B EDGE LIGHTS)
SCALE: NTS

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NEW CIRCUIT B1 (TWY B EDGE LIGHTS)

Sheet: E7.05