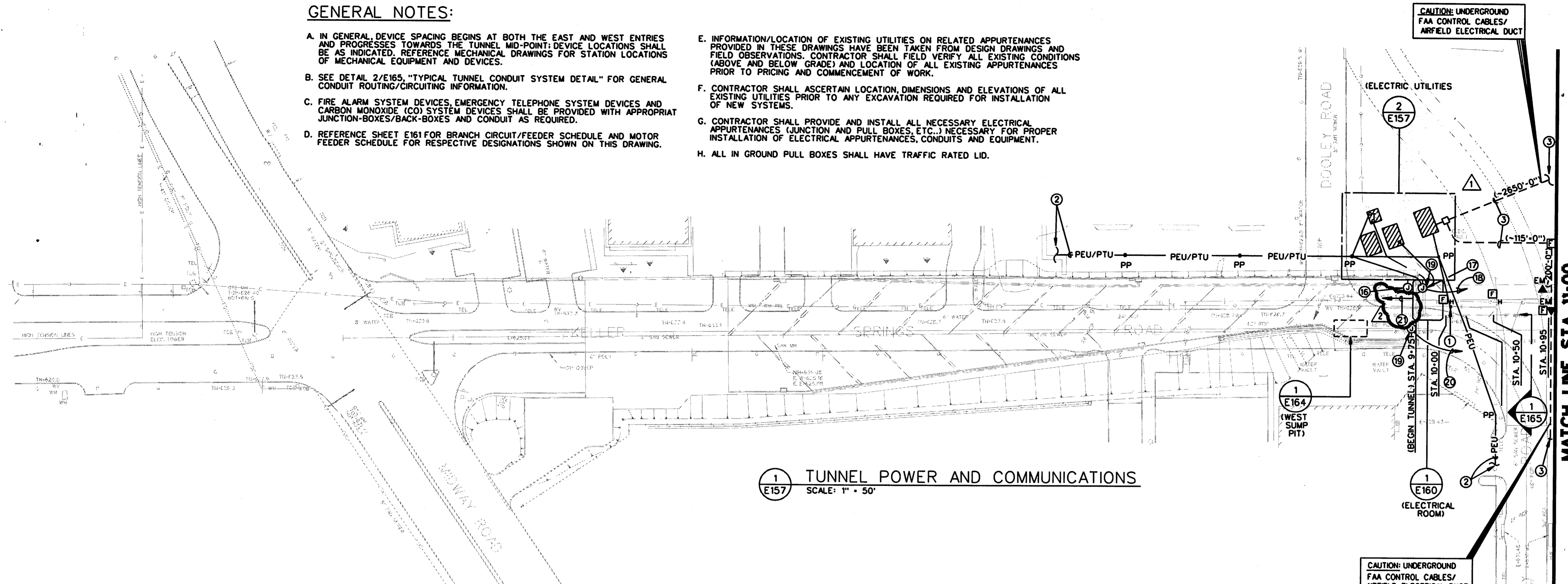


GENERAL NOTES:

- A. IN GENERAL, DEVICE SPACING BEGINS AT BOTH THE EAST AND WEST ENTRIES AND PROGRESSES TOWARDS THE TUNNEL MID-POINT; DEVICE LOCATIONS SHALL BE AS INDICATED. REFERENCE MECHANICAL DRAWINGS FOR STATION LOCATIONS OF MECHANICAL EQUIPMENT AND DEVICES.
- B. SEE DETAIL 2/E165, "TYPICAL TUNNEL CONDUIT SYSTEM DETAIL" FOR GENERAL CONDUIT ROUTING/CIRCUITING INFORMATION.
- C. FIRE ALARM SYSTEM DEVICES, EMERGENCY TELEPHONE SYSTEM DEVICES AND CARBON MONOXIDE (CO) SYSTEM DEVICES SHALL BE PROVIDED WITH APPROPRIATE JUNCTION-BOXES/BACK-BOXES AND CONDUIT AS REQUIRED.
- D. REFERENCE SHEET E161 FOR BRANCH CIRCUIT/FEEDER SCHEDULE AND MOTOR FEEDER SCHEDULE FOR RESPECTIVE DESIGNATIONS SHOWN ON THIS DRAWING.
- E. INFORMATION/LOCATION OF EXISTING UTILITIES ON RELATED APPURTENANCES PROVIDED IN THESE DRAWINGS HAVE BEEN TAKEN FROM DESIGN DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS (ABOVE AND BELOW GRADE) AND LOCATION OF ALL EXISTING APPURTENANCES PRIOR TO PRICING AND COMMENCEMENT OF WORK.
- F. CONTRACTOR SHALL ASCERTAIN LOCATION, DIMENSIONS AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO ANY EXCAVATION REQUIRED FOR INSTALLATION OF NEW SYSTEMS.
- G. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY ELECTRICAL APPURTENANCES (JUNCTION AND PULL BOXES, ETC.) NECESSARY FOR PROPER INSTALLATION OF ELECTRICAL APPURTENANCES, CONDUITS AND EQUIPMENT.
- H. ALL IN GROUND PULL BOXES SHALL HAVE TRAFFIC RATED LID.

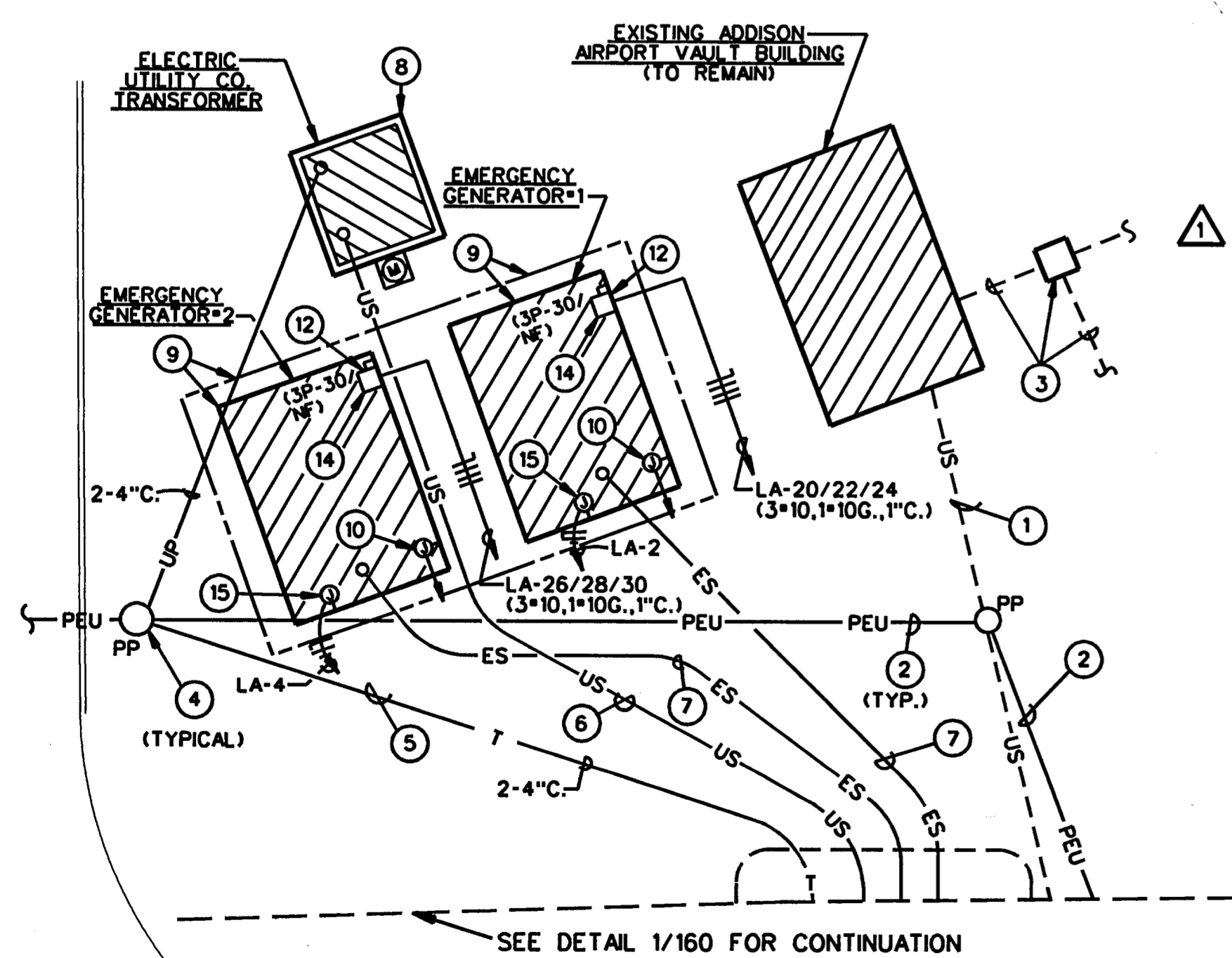


1 TUNNEL POWER AND COMMUNICATIONS
SCALE: 1" = 50'

KEY NOTES:

- 1 EXISTING ELECTRIC UTILITY DUCTBANK TO ADDISON AIRPORT ELECTRICAL VAULT.
- 2 PROPOSED OVERHEAD PRIMARY POWER LINES BY ELECTRIC UTILITY.
- 3 EXISTING AIRFIELD HAND-HOLE/MAN-HOLE AND EXISTING UNDERGROUND FAA CONTROL CABLE/AIRFIELD ELECTRICAL DUCT TO REMAIN; COORDINATE NEW CONSTRUCTION IN THIS AREA WITH EXISTING.
- 4 PROPOSED OVERHEAD PRIMARY POWER POLE PROVIDED AND INSTALLED BY ELECTRIC UTILITY.
- 5 NEW UNDERGROUND DUCT FOR TUNNEL TELEPHONE UTILITIES.
- 6 NEW UNDERGROUND DUCT FOR TUNNEL ELECTRICAL SERVICE TO MAIN SWITCHBOARD 'MSB'.
- 7 NEW UNDERGROUND DUCTS FOR TUNNEL EMERGENCY GENERATOR ELECTRICAL SERVICE TO AUTOMATIC TRANSFER SWITCH 'ATS'.
- 8 PROPOSED PAD-MOUNTED TRANSFORMER AND WATT-HOUR METER PROVIDED AND INSTALLED BY ELECTRIC UTILITY. PROVIDE TRANSFORMER PAD IN ACCORDANCE WITH ELECTRIC UTILITY CO. STANDARDS; COORDINATE EXACT REQUIREMENTS WITH ELECTRIC UTILITY COMPANY. UNDERGROUND CONDUIT RISER FOR TRANSFORMER PRIMARY SERVICE SHALL BE PROVIDED & INSTALLED BY THE CONTRACTOR.
- 9 PROVIDE AND INSTALL EMERGENCY GENERATOR COMPLETE WITH WEATHER-PROOF HOUSING AND CONCRETE PAD; PAD SHALL EXTEND 3'-0" MINIMUM BEYOND HOUSING.
- 10 EXTEND 1-1/2" CONDUIT WITH PULL-WIRE MINIMUM TO RESPECTIVE AUTOMATIC TRANSFER SWITCH 'ATS' AND ANNUNCIATOR PANEL FOR GENERATOR CONTROL WIRING.
- 11 NOT USED.
- 12 BLOCK HEATER.
- 13 NEW UNDERGROUND TRANSFORMER PRIMARY SERVICE (2-4").
- 14 CONTRACTOR SHALL PROVIDE AND INSTALL UNISTRUT SUPPORTS FOR PROPER INSTALLATION OF THIS DEVICE INSIDE ENCLOSURE.
- 15 POWER FOR GENERATOR RECEPTACLE AND ENCLOSURE LIGHTING.
- 16 12"x12"x6" JUNCTION-BOX EMBEDDED IN WALL. REF. 568 FOR LOCATION.
- 17 STUB-OUT A 2" AND 1/2" GRS CONDUITS TO IN GROUND PULL-BOX (BROOKS CAT #38).
- 18 1/2" C. AND 2" C. TO JUNCTION BOX IN ELECTRICAL ROOM REF. SHT. E160 FOR LOCATION.
- 19 IN GROUND PULL-BOX (BROOKS CAT #38).
- 20 1/2" GRS CONDUIT TO JUNCTION BOX IN ELECTRICAL ROOM REF. SHT. E160 FOR LOCATION.

2 1-1/2" CONDUIT WITH PULL STRING ROUTED ALONG NORTH SIDE OF ROADWAY TO ADDISON TOLL PLAZA. PROVIDE PULL-BOX(ES) AS REQUIRED. REFER TO SHEET E160 FOR ADDITIONAL TOLL PLAZA REQUIREMENTS.



2 PARTIAL SITE PLAN - ELECTRICAL
SCALE: 1" = 10'-0"



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY LEOPOLDO F. RIOS, P.E., 58272 ON MAY 18, 1998

FINAL RECORD DRAWING
Date: 12/25/99

CHANGE ORDER	HDR	5-27-98
ADDENDUM No.1	HDR	2-12-97

No.	REVISION	BY	DATE
TEXAS TURNPIKE AUTHORITY ADDISON AIRPORT TUNNEL			

TUNNEL POWER AND COMMUNICATIONS PLANS

HDR HDR Engineering, Inc. SECTION XIII

DRAWN: WTD DATE: 12/05/96 DESIGNED: LR DATE: 08/28/98
CHECKED: BL DATE: 08/28/96 SCALE: 1" = 50'

CONTRACT No. DNT-260 SHEET E157 OF 166

STATION DESIGNATION	DEVICE/ DESIGNATION	QUANTITY AT THIS STATION	BRANCH CIRCUIT (WHERE APPLICABLE)
10-00	F _H	1	N/A
10-50	F _H	1	N/A
10-95	F	2	N/A
10-95	EM	2	N/A

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