



# EMERGENCY GENERATOR REPLACEMENT TOM GREEN COUNTY JUVENILE JUSTICE CENTER

1253 WEST 19 TH. STREET, SAN ANGELO, TEXAS

SHEET LIST	
Sheet Number	Sheet Name
A1.00	SITE PLAN, PARTIAL FLOOR PLAN & FENCE SECTION
APE-1	SITE UTILITY PLAN, PARTIAL ELEC. PLAN, SCHEDULES & NOTES

Drawn By \_\_\_\_\_  
Checked By \_\_\_\_\_

• • •  
• POWER SYSTEMS  
• MEP ENGINEER  
• • •

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KFW

KFW ARCHITECTS AIA

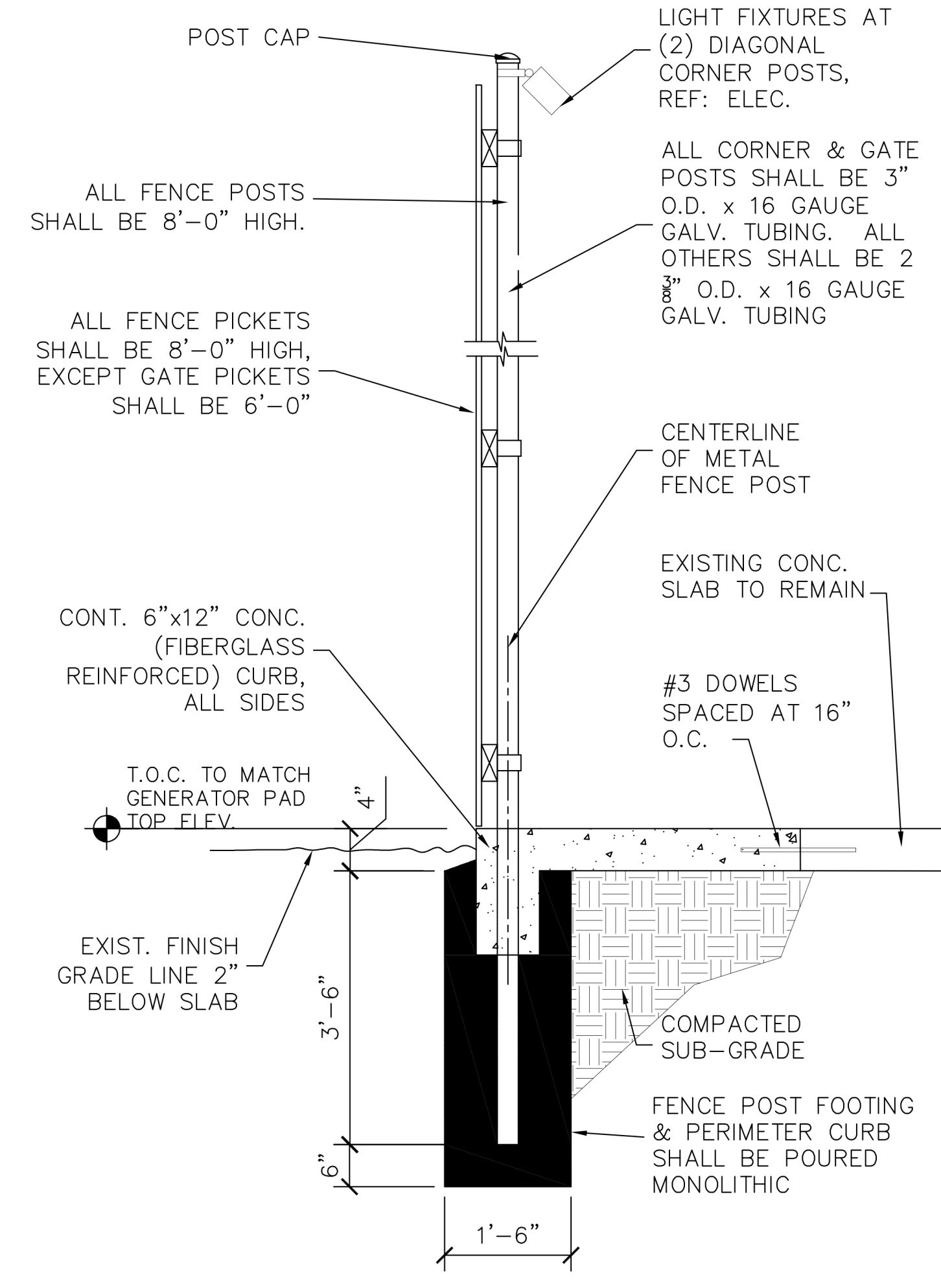
100% FINAL  
CONSTRUCTION  
DOCUMENTS SET  
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BIDDING &  
CONSTRUCTION  
03-09-2022



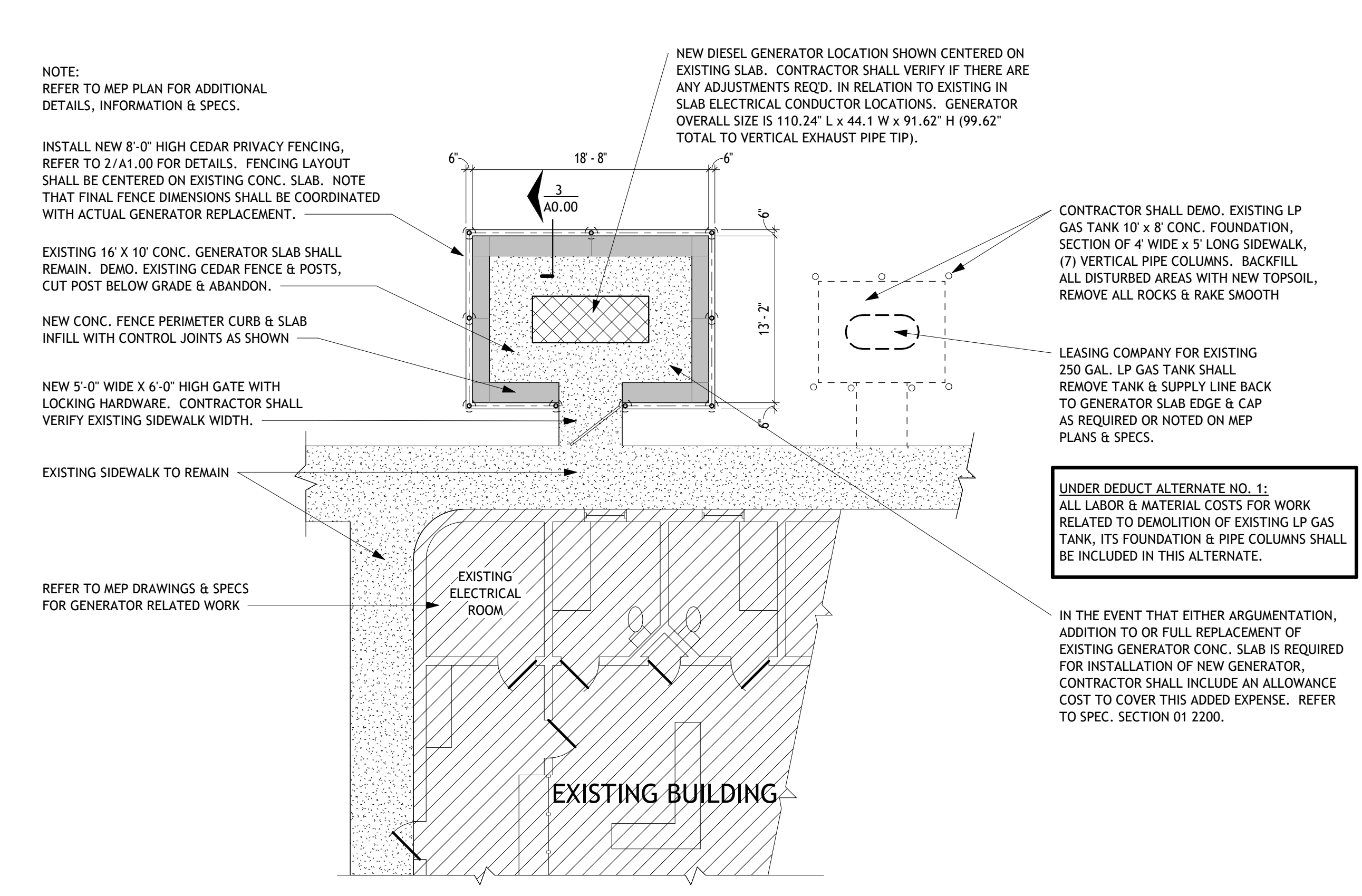
EMERGENCY GENERATOR REPLACEMENT  
**T.G.C. JUVENILE JUSTICE CENTER**  
SAN ANGELO, TEXAS

Project No. 306-15-1121  
Date 02-18-2022

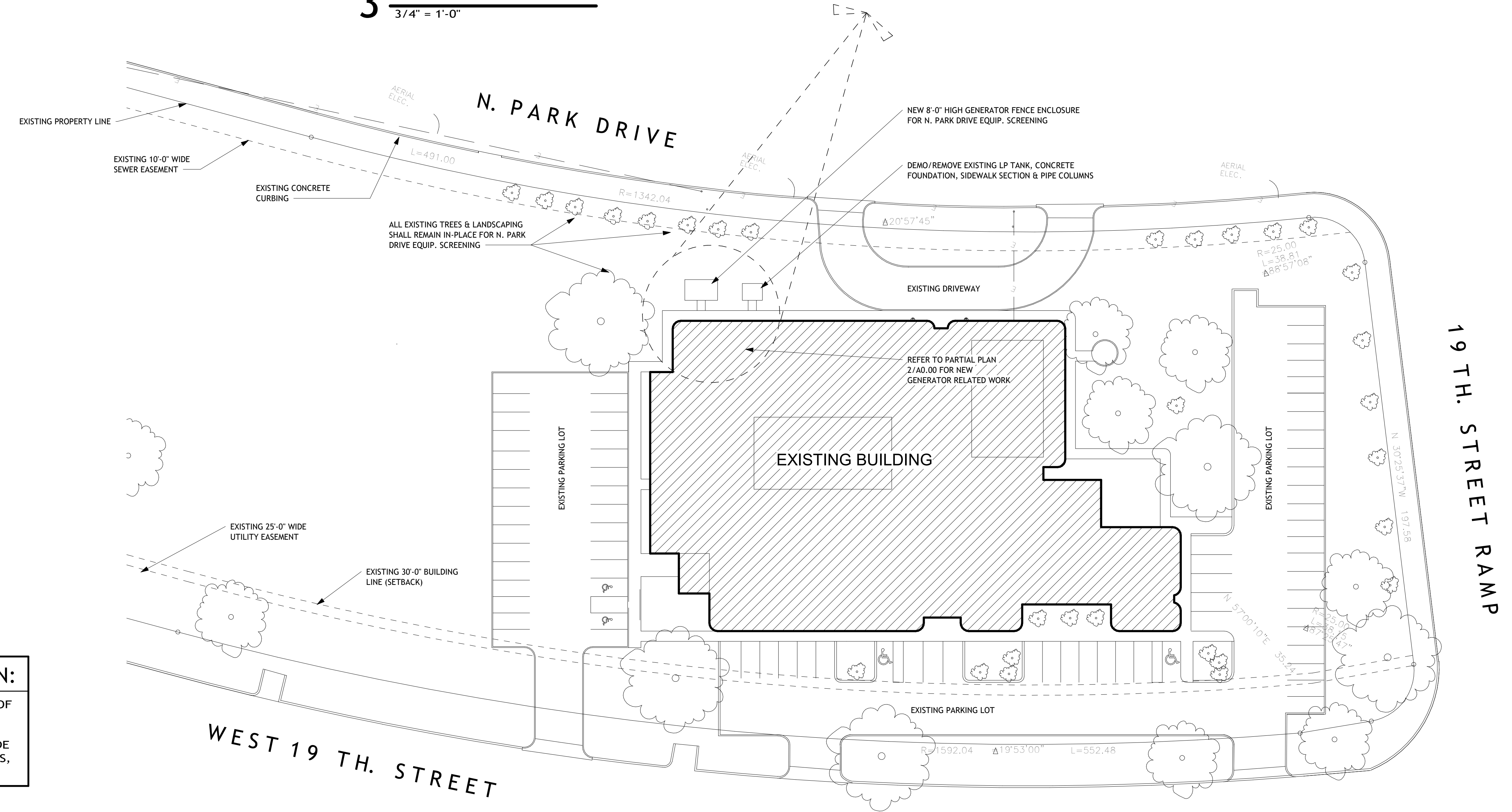
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**3 NEW FENCE SECTION**  
3/4" = 1'-0"



**2 PARTIAL PLAN @ S.E. CORNER**  
1/8" = 1'-0"



**1 OVERALL SITE PLAN**  
1" = 30'-0"

**PROPERTY LEGAL DESCRIPTION:**  
PLAT OF LOT 6, TRACT 2, SECTION 5 TRACT 2 OF NORTH CONCHO LAND SUBDIVISION, 1253 W. 19TH. ST., SAN ANGELO, TOM GREEN COUNTY, TEXAS. REF: VOL. 4, PAGE 764 & REF: PARKSIDE GROUP VOL. 834, PAGE 725 D.R. PLAT RECORDS, TOM GREEN COUNTY, TEXAS.

GENERAL ELECTRICAL NOTES

- A. ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE 2014 NATIONAL ELECTRICAL CODE AND LOCAL CODES.
  - B. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO MINIMIZE CONFLICTS.
  - C. ALL WIRE AND CABLE SIZES ARE FOR COPPER. ALUMINUM WILL NOT BE ALLOWED. MINIMUM WIRE SIZE IS #12. MINIMUM CONDUIT SIZE IS 3/4 INCH. ALL POWER CONDUCTORS SHALL BE THIN STRANDED AND BE INSTALLED IN CONDUIT.
  - D. NO CONDUCTOR SHALL BE LOADED BEYOND ITS ALLOWABLE AMPACITY.
  - E. CONFIRM WITH LOCAL CODES, MECHANICAL CONTRACTOR AND EQUIPMENT VENDORS ON THE LOCATION AND MOUNTING METHOD FOR DISCONNECT SWITCHES, MANUAL MOTOR STARTERS, COMBINATION STARTER/DISCONNECTS, ETC. PRIOR TO ELECTRICAL ROUGH-IN AND INSTALLATION. COMPLY WITH ADA MOUNTING HEIGHTS.
  - F. ELECTRICAL CONTRACTOR SHALL DOUBLE CHECK ALL FEEDER CONDUCTOR AND CONDUIT SIZES WITH NEC AND LOCAL CODES PRIOR TO BID, ORDERING OR CUTTING CONDUCTORS.
  - G. ELECTRICAL CONTRACTOR SHALL COORDINATE WORK WITH ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO ARCHITECT/ENGINEER IMMEDIATELY.
  - H. UNLESS OTHERWISE NOTED, BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER (THIN OR EQUAL) SIZED AS FOLLOWS:
- | BREAKER RATING | WIRE SIZE |
|----------------|-----------|
| 20 AMP         | #12 AWG   |
| 30             | #10       |
| 40             | #8        |
| 50             | #6        |
| 60             | #4        |
| 70             | #4        |
| 80             | #4        |
| 90             | #3        |
| 100            | #2        |
| 110            | #2        |
| 125            | #1        |
| 150            | #1/0      |
| 175            | #2/0      |
| 200            | #3/0      |
- J. INSTALL MARKING TAPE IN TRENCH FOR ALL UNDERGROUND UTILITIES.
  - K. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO OWNER PROVIDED EQUIPMENT.
  - L. ALL J-BOXES SHALL BE ACCESSIBLE FOR FUTURE SERVICE PER NEC. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES AND POINTS OF ACCESS.
  - M. LIGHT FIXTURES SHALL BE OPERATED BY SWITCH LOCATED IN SAME ROOM UNLESS OTHERWISE NOTED.
  - N. CONDUITS SHALL NOT BE ROUTED EXPOSED IN FINISHED AREAS UNLESS NOTED.
  - O. PERMANENTLY CONNECTED EQUIPMENT NOT SUPPLIED WITH ON/OFF UNIT SWITCH TO SERVE AS A DISCONNECTING MEANS SHALL BE SUPPLIED WITH DISCONNECT AS PER N.E.C. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO FURNISH ALL DISCONNECTS.
  - P. PROVIDE GRAY DEVICES WITH STAINLESS STEEL COVERPLATES.
  - Q. SEAL AROUND ALL EXTERIOR WALL PENETRATIONS.
  - R. DRAWINGS ARE SCHEMATIC IN NATURE AND MAY NOT BE DRAWN EXACTLY TO SCALE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND ALL OTHER TRADES TO AVOID SPACING OR ROUTING PROBLEMS.

ALL BRANCH CIRCUITS WITH AN OVERALL LENGTH IN EXCESS OF 75 FEET SHALL BE INCREASED IN WIRE SIZE TO ACCOMMODATE VOLTAGE DROP.

ELECTRICAL ABBREVIATIONS

A	AMPERES	MAX	MAXIMUM
A/C	AIR CONDITIONING	MCB	MAIN CIRCUIT BREAKER
AF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AUX	AUXILIARY	MDP	MAIN DISTRIBUTION PANEL
ATS	AUTOMATIC TRANSFER SWITCH	MECH	MECHANICAL
AWG	AMERICAN WIRE GAGE	MIN	MINIMUM
		MISC	MISCELLANEOUS
		MLO	MAIN LUG ONLY
		MSB	MAIN SWITCHBOARD
		MTD	MOUNTED
BLDG	BUILDING		
C	CONDUIT		
CB	CIRCUIT BREAKER		
CCTV	CLOSED CIRCUIT TELEVISION		
CKT	CIRCUIT		
CLG	CEILING		
		NEC	NATIONAL ELECTRICAL CODE
		NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
		NF	NON FUSED
		NIC	NOT IN CONTRACT
		N.C.	NORMALLY CLOSED
		N.O.	NORMALLY OPEN
DWG	DRAWING		
EA	EACH		
EC	ELECTRICAL CONDUIT		
EF	EXHAUST FAN		
ELEC	ELECTRIC/ELECTRICAL		
EMT	ELECTRICAL METALLIC TUBING		
EPO	EMERGENCY POWER OFF EQUIPMENT		
EWC	ELECTRIC WATER COOLER		
FA	FIRE ALARM		
FACP	FIRE ALARM CONTROL PANEL		
		PF	POWER FACTOR
		PH	PHASE
		PNL	PANEL
		PVC	POLYVINYL CHLORIDE
G	GROUND		
GFI	GROUND FAULT INTERRUPT		
		RECP	RECEPTACLE
		RE	REFER TO
		RGS	RIGID GALVANIZED STEEL
HP	HORSEPOWER		
HVAC	HEATING/VENTILATION/AIR CONDITIONING		
		TYP	TYPICAL
IG	ISOLATED GROUND		
IMT	INTERMEDIATE METAL		
		UL	UNDERWRITER'S LABORATORIES
		UN	UNLESS OTHERWISE NOTED
J-BOX	JUNCTION BOX		
		V	VOLTS
		VA	VOLT-AMPERES
KVA	KILOVOLT-AMPERES		
KW	KILOWATTS		
		WP	WEATHERPROOF

UTILITY NOTES:

- 1 FOLLOW ALL NATIONAL STATE AND LOCAL CODES FOR UTILITY INSTALLATION. EXISTING UTILITY LOCATIONS ARE REPRESENTATIVE IN NATURE ONLY. THIS SHEET IS INTENDED TO ILLUSTRATE NEW WORK ONLY.
- 2 REPLACE EXISTING ANNUNCIATOR PANEL WITH NEW REMOTE ANNUNCIATOR TO BE FURNISHED AS AN OPTION WITH NEW GENERATOR.
- 3 PULL EXISTING WIRING FOR EXISTING ANNUNCIATOR AND REPULL WITH (2) THHN #16 COPPER AND (1) BELDEN #9841 COMMUNICATIONS CABLE. CONNECT NEW CONTROL WIRING TO BOTH THE GENERATOR CONTROL PANEL AND THE NEW ANNUNCIATOR.
- 4 REPLACE THE EXISTING TRANSFER SWITCH IN ROOM 148 WITH A 230 AMP RATED UNIT EQUAL TO KOHLER KSS-ACTA-0230S. MAKE ALL CONNECTIONS TO INCOMING FEEDERS. LABEL XFER SWITCH #1-22.
- 5 CONTRACTOR SHALL PULL EXISTING POWER FEEDER FROM GENERATOR TO XFER SWITCH. PULL A NEW SET OF (4) #4/0, #4GR COPPER CONDUCTORS IN EXISTING CONDUIT. THE DESIGN INTENT IS TO REPLACE THE POWER FEEDER TO AVOID SPLICES. LOCATE THE NEW GENERATOR TO REUSE THE EXISTING CONDUIT STUB UPS AT THE GENERATOR PAD. (REFER TO ARCH).
- 6 APPLICABLE CODES:  
2015 INTERNATIONAL BUILDING CODE  
2014 NATIONAL ELECTRICAL CODE  
CITY OF SAN ANGELO ORDINANCES  
2015 INTERNATIONAL FIRE CODE
- 7 CONTRACTOR IS RESPONSIBLE TO CONTACT DIGTESS BEFORE ANY EXCAVATION OR DITCHING.

EXTERIOR LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NUMBER	LAMPS	REMARKS
XA	LUMARK	NFFLD-S-C70-D-UNV-33-BZ-7050	20W LED 5000° K 2760 LUMENS	POLE MOUNT LED, BRONZE, WITH TOP & SIDE VISORS: TSZLW-NFFLD-XX

- NOTES:
- SUBSTITUTION OF FIXTURES PERMITTED WITH ENGINEER'S APPROVAL.
  - MOUNT FIXTURE ON ENCLOSURE POLE AT 8'-0" AFG.

MISCELLANEOUS SYMBOL SCHEDULE

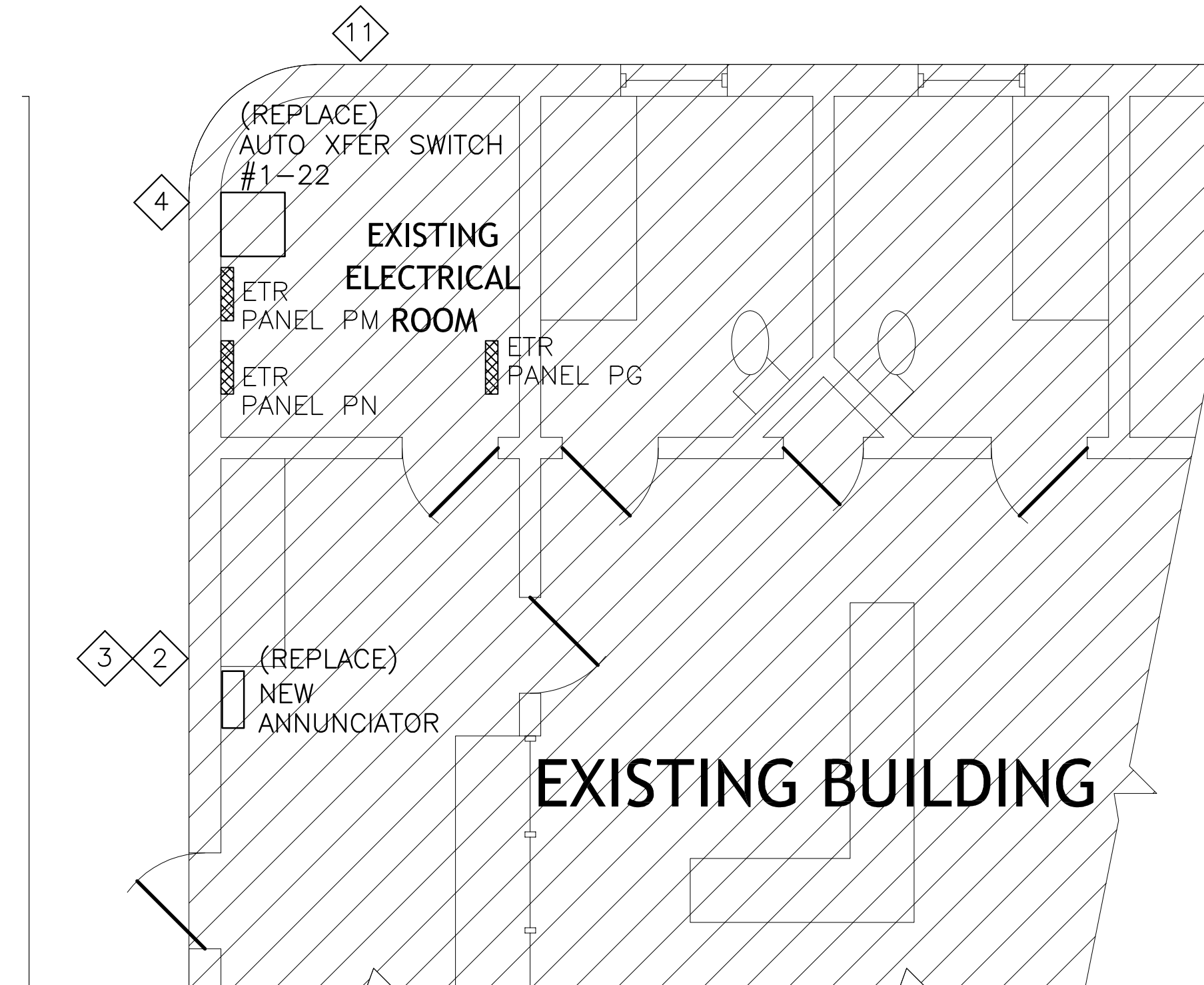
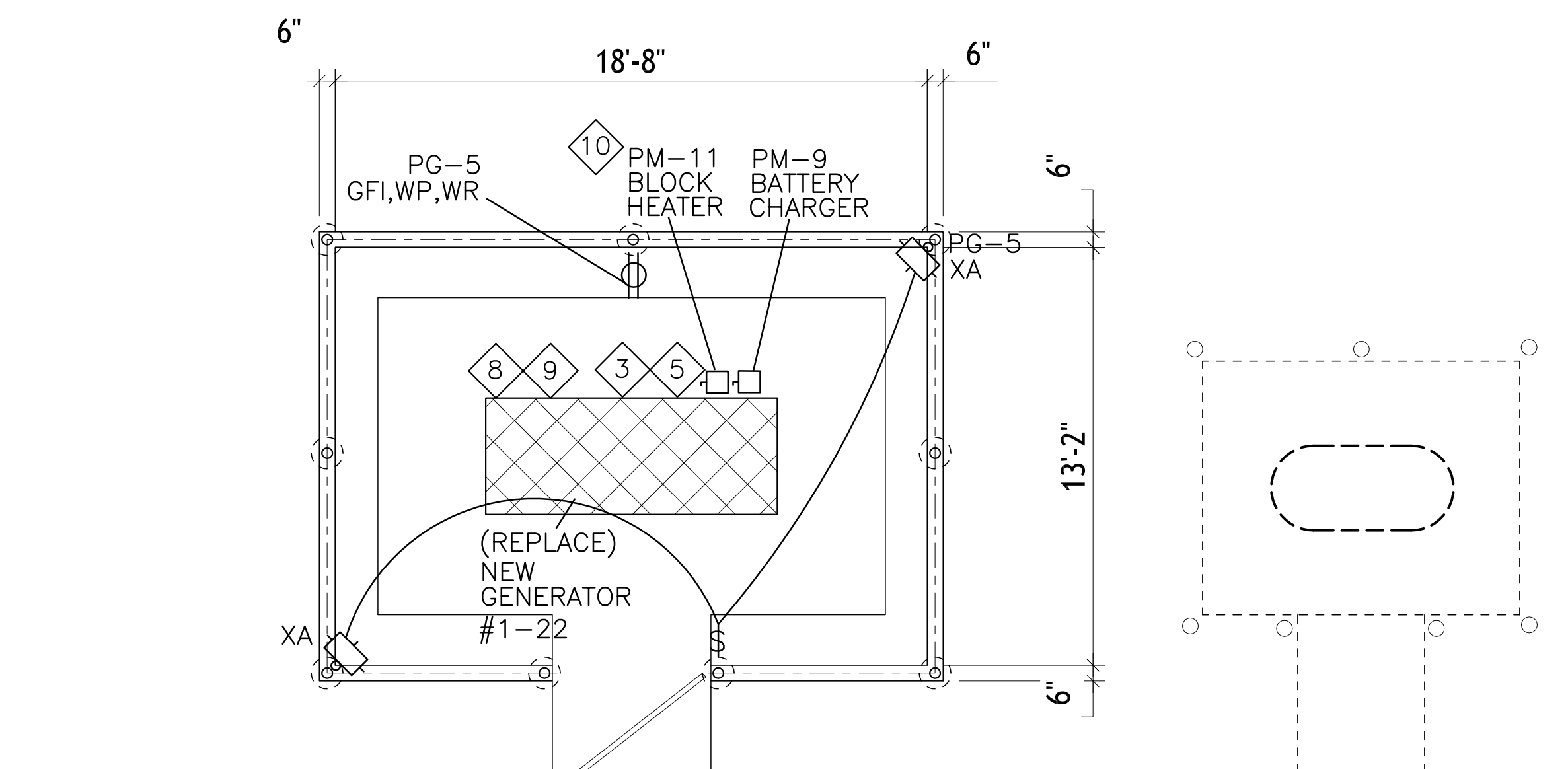
SYMBOL	DESCRIPTION	REMARKS
⊕	DUPLEX RECEPTACLE 20A/120V 18" AFF UON	
⊖	RECEPTACLE MOUNTED ABOVE COUNTERTOP	
⊕⊖	FOURPLEX RECEPTACLE 20A/120V 18" AFF UON	
⊕ WP	WEATHER-PROOF RECEPTACLE 18" AFF UON	
⊕ SP	DUPLEX RECEPTACLE W/SURGE SUPPRESSION 20A/125V 18" AFF UON	
⊕	SINGLE POLE SWITCH 20A, 48" AFF UON	
⊕ <sup>3</sup>	THREE-WAY SWITCH 20A, 48" AFF UON	
⊕	SINGLE POLE KEY OPERATED SWITCH 20A, 48" AFF UON	
⊕	DIMMER SWITCH, 48" AFF UON	
⊕	SWITCH WITH PILOT LIGHT, 48" AFF UON	
⊕ GFI	RECEPTACLE WITH GROUND FAULT INTERRUPTER, 18" AFF UON	
⊕	DUPLEX RECEPTACLE, LOWER HALF SWITCHED	

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS

DISTRIBUTION SYMBOL SCHEDULE

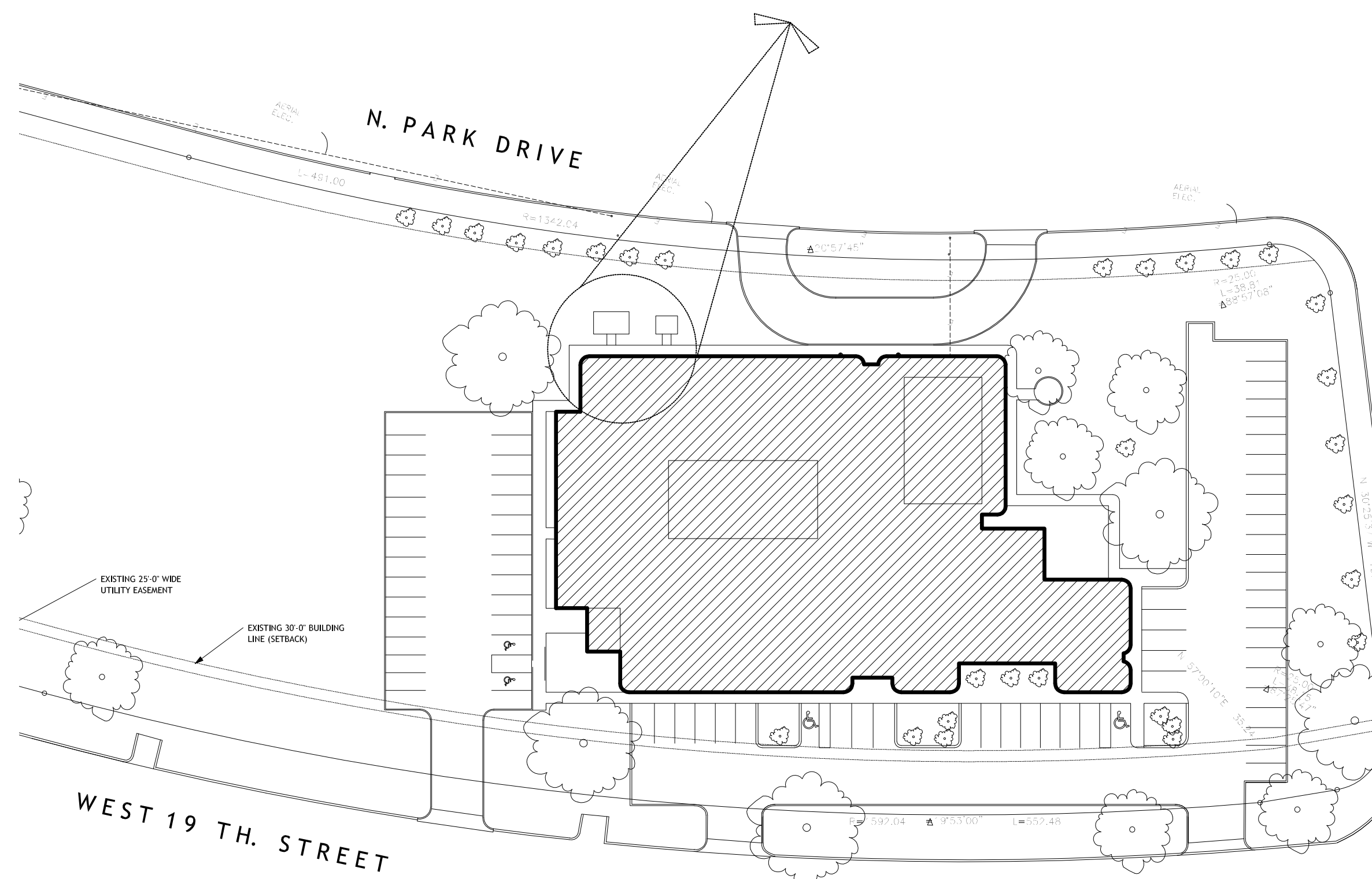
SYMBOL	DESCRIPTION	REMARKS
Ⓚ	PHOTOCELL	
Ⓚ	DISCONNECT SWITCH, AMP/POLE/NEUTRAL/FUSE/ENCLOSURE	
Ⓚ	POWER AND/OR LIGHTING PANELBOARD, REFER TO PANELBOARD SCHEDULE	
Ⓚ	SWITCHBOARD, REFER TO SWITCHBOARD SCHEDULE OR RISER	

NOTE: ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS



PARTIAL ELECTRICAL PLAN AT SE CORNER

SCALE: 1/4" = 1'-0"



SITE UTILITY PLAN

SCALE: 1" = 50'-0"

OVERALL PLAN

SCALE: VARIES

Drawn By  
Checked By

POWER SYSTEMS, INC.  
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KFW ARCHITECTS AIA

100% FINAL CONSTRUCTION DOCUMENTS SET ISSUED FOR BIDDING & CONSTRUCTION 03-09-2022

MARCH 9, 2022

EMERGENCY GENERATOR REPLACEMENT  
T.G.C. JUVENILE JUSTICE CENTER  
SAN ANGELO, TEXAS

MPE PROJECT #2202  
Power Systems

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ORDINANCES

THIS DRAWING IS REPRESENTATIVE IN NATURE ONLY. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE, COUNTY, MUNICIPAL AND FEDERAL LAWS AND/OR ORDINANCES GOVERNING THE PROJECT. IF IN ANY INSTANCE THE PLANS AND SPECIFICATIONS ARE IN DIRECT CONFLICT WITH SUCH LAWS AND/OR ORDINANCES, THE LAWS AND/OR ORDINANCES SHALL HAVE JURISDICTION.

Project No. 306-15-1121

Date MARCH 9, 2022

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