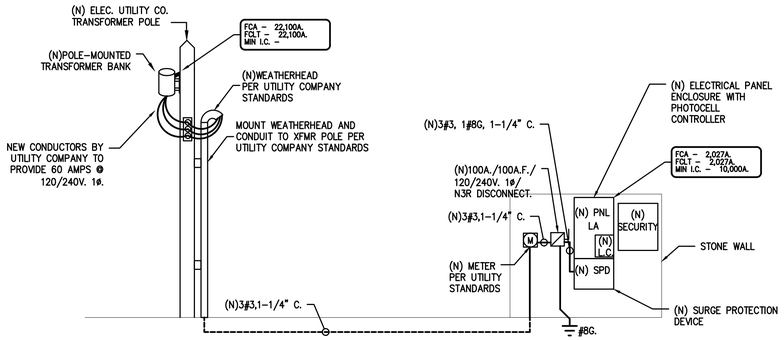
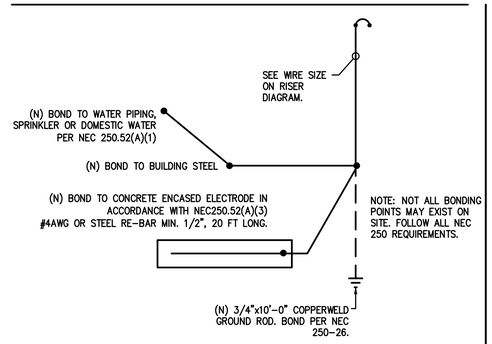
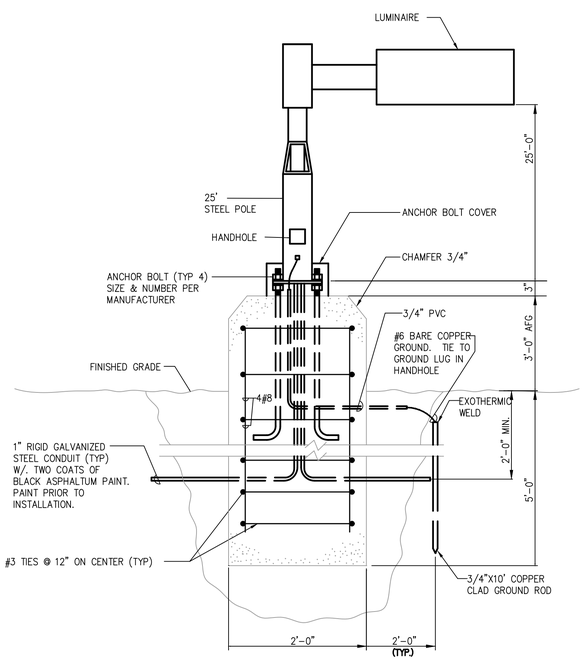


01 ELECTRICAL RISER DIAGRAM
SCALE: N.T.S.



GROUNDING DETAIL 02
SCALE: NONE



POLE MOUNTED SITE LIGHT 03
SCALE: NONE

ELECTRICAL DISTRIBUTION DIAGRAM NOTES:

1. CONDUCTOR SIZES SHOWN ARE FOR COPPER CONDUCTORS WITH THWN INSULATION IN EMT (4" C., OR LESS) OR RIGID CONDUIT (> 4" C.) PROVIDE GROUNDING CONDUCTORS FOR ALL CONDUIT. GROUNDING CONDUCTORS ARE NEEDED FOR ALL PVC CONDUIT.
2. SHORT CIRCUIT CURRENT VALUES ARE GIVEN IN RMS SYMETRICAL AMPERES. PREFIX 'FCA' INDICATES MAXIMUM AVAILABLE FAULT CURRENT. PREFIX 'FCLT' INDICATES APPARENT LET–THRU CURRENT FROM UPSTREAM CURRENT LIMITING DEVICE.
3. ELECTRICAL SYSTEM SHALL BE FULLY RATED. SERIES RATED EQUIPMENT IS NOT ACCEPTABLE.
4. PROVIDE FULL LENGTH, FULL SIZE INSULATED GROUND AND NEUTRAL BUS IN ALL PANELBOARDS.
5. REFER TO ELECTRICAL UTILITY SPECIFICATIONS FOR ALL WORK AT SERVICE POINT OF ATTACHMENT.
6. CONTRACTOR TO VERIFY FAULT CURRENT AVAILABLE AT UTILITY TRANSFORMER SECONDARY WITH ELECTRICAL UTILITY FOR THE FINAL SELECTION OF EQUIPMENT AIC RATINGS.
7. SPARES AND SPACES ARE INDICATED ON PANELBOARD SCHEDULES.
8. FLEXIBLE METAL CONDUIT SHALL NOT BE USED IN WET LOCATIONS OR WET AREAS.
9. ALL FEEDER AND BRANCH CIRCUIT WIRING METHODS SHALL INCLUDE AN EQUIPMENT–GROUNDING CONDUCTOR PER NEC.
10. ALL CONDUIT BELOW GRADE OR IN CONCRETE SLABS SHALL BE PVC. MAXIMUM CONDUIT SIZE FOR CONDUIT IN CONCRETE SLABS IS 3/4".
11. A PERMANENTLY AFFIXED LABEL SHALL BE APPLIED WITH THE AVAILABLE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE 2 X 3 IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. THIS LABEL SHALL ALSO INCLUDE THE DATE OF THE CALCULATION. COH ELECTRICAL CODE 504.1.1.

VOLTAGE DROP CALCULATION:
VOLTAGE DROP CALCULATIONS HAVE BEEN PERFORMED. NO CIRCUIT HAS A VOLTAGE DROP HIGHER THAN 3%.

ELECTRICAL LOAD ANALYSIS
PROJECT NAME: NECHES – LITTLE CYPRESS ITM
PROJECT NUMBER: 26014.00

SERVICE VOLTAGE: 120/240V, 1 PHASE, 4 WIRE, WYE
SERVICE RATING: 100 AMPS

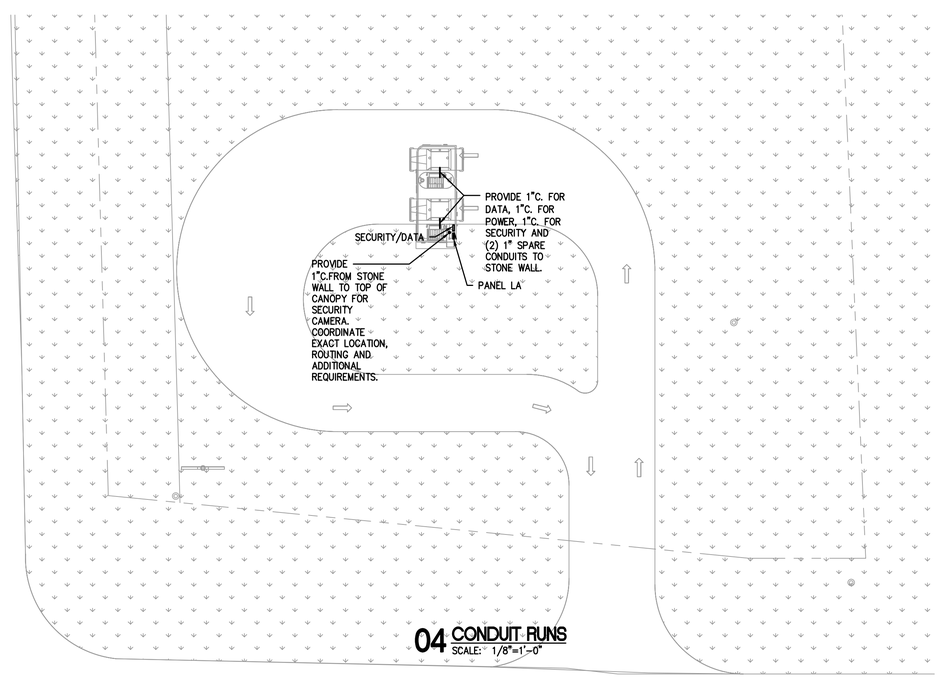
LOAD DESCRIPTION	CODE LOAD (kVA)	CONNECTED LOAD (kVA)	DEMAND FACTORS (%)	DESIGN LOAD (kVA)	REMARKS
LIGHTS (1.3 VA/FT2):		0.0	125%	0.0	NEC 220.12
SIGN LIGHTS:		0.0	125%	0.0	NEC 220.12
SITE LIGHTS:		5.8	125%	7.3	NEC 220.12
RECEPTACLES:		0.0	10kVA+50%	0.0	NEC 220.K, 220.I, 220.44
EQUIPMENT:		8.1	100%	8.1	NEC 220.14.A
WATER HEATERS:		0.0	100%	0.0	NEC 220.14.A
HVAC:		0.0	100%	0.0	NEC 220.14.A
ELECTRIC HEAT:		0.0	100%	0.0	IN HVAC
LARGEST MOTOR:		0.0	125%	0.0	NEC 430.22
		TOTAL DESIGN LOAD:		15	kVA
		@ 240, 1 PHASE:		64	AMPS

NOTE: ALL LOADS AND DEMAND FACTORS ARE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NEC ARTICLE 220

PROJECT NAME: NECHES – LITTLE CYPRESS ITM
PROJECT NUMBER: 26014.00
PANEL: LA — NEW PANEL
VOLTAGE: 120/240V, 1PH, 3W BUS: 125 AMP MAINS: 100A. M.C.B. ACCESSORIES: INSULATED GROUND NEMA–3R, LOCKABLE.
CODES: 0=LIGHTS 1=RECEP 2=EQUIP 3=A/C 4=HTG 5=125% LGST MTR 6=KITCHEN 7=PREVIOUSLY CALCULATED

CODE	LOAD	CIRCUIT DESCRIPTION	BKR	CKT	PH	CKT	BKR	CIRCUIT DESCRIPTION	LOAD	CODE
0	900	LTG POLE	20/1	1	A	2	30/1	ATM/ITM MACHINE	2880	2
0	126	LTG DOWNLIGHTS	20/1	3	C	4	20/1	SPARE		
0	1200	SIGN	20/1	5	A	6	20/1	SECURITY	400	2
2	600	ATT DED. QUAD RECEPT	20/1	7	C	8	20/1	SIGN	1200	0
2	600	DED. QUAD FOR DATA/SECURITY	20/1	9	A	10	20/1	SIGN	1200	0
0	1200	SIGN	20/1	11	C	12	30/1	ATM/ITM MACHINE	2880	2
2	100	PHOTOCELL CONTROLLER	20/3	13	A	14	20/1	IRRIGATION CONTROL	400	2
2	100	--	--	15	C	16	20/1	SPARE		
2	100	--	--	17	A	18	20/1	SPARE		
			20/1	19	C	20	20/1			

	LIGHTS	RECEP.	EQUIP.	MOTORS	EL. HEAT	PHASE	PHASE	CONN.KVA	LOAD FACTORS	DES. KVA	DES. AMP
	3300	0	4480	0	0	A	A	7.8	LIGHTS @ 125% EQUIP. @ 100%	8.6	62
	2526	0	3580	0	0	C	C	6.1	LG. MOTOR @125%	6.7	49
	5826	0	8060	0	0	TOTAL	TOTAL	13.9	RECEPS @ 10kW+50%	15.3	64



04 CONDUIT RUNS
SCALE: 1/8"=1'–0"

SLI DESIGN, INC.
ARCHITECTURE PLANNING INTERIOR DESIGN
15810 PARK TEN PLACE, SUITE 300
HOUSTON, TEXAS 77084
713-465-4650
www.sligroup.com

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Neches FCU - Little Cypress ITM
STATE HWY 87 Orange, TX 77632
E/B/E PROJECT NUMBER : 26014.00

	DATE
ISSUED FOR CLIENT APPROVAL	
ISSUED FOR BIDDING	
ISSUED FOR PERMIT	
ISSUED FOR CONSTRUCTION	

REVISIONS

MARK	DESCRIPTION	DATE
	ISSUE FOR PROGRESS REVIEW	02/06/2026
	ISSUE FOR PERMIT & CONSTRUCTION	03/03/2026

PRINT DATE

JOSHUA GUERRERO 154536 REGISTERED PROFESSIONAL ENGINEER 03/03/2026

DRAWING TITLE
ELECTRICAL SCHEDULES

SHEET NO.
E2.01

E|B|E CONSULTING ENGINEERS Mechanical Electrical Plumbing
12603 Southwest Frwy, Ste 170, Stafford, Tx 77477
Tel: (713) 840-0177 / Firm Reg. No: 5638

NORTH