



REVISION	DATE

**ELLSWORTH ARCHITECTS**  
 3136 LANIER DRIVE  
 ATLANTA, GEORGIA 30319  
 PHONE: 404.949.9351

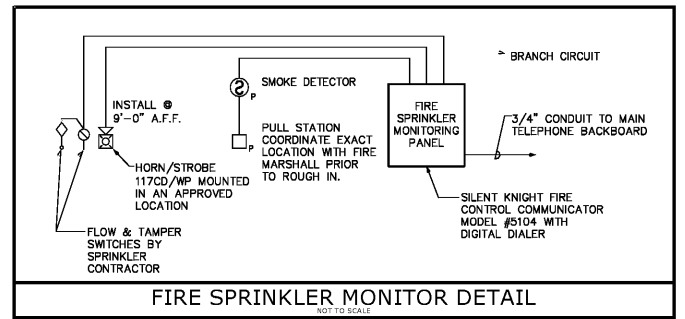
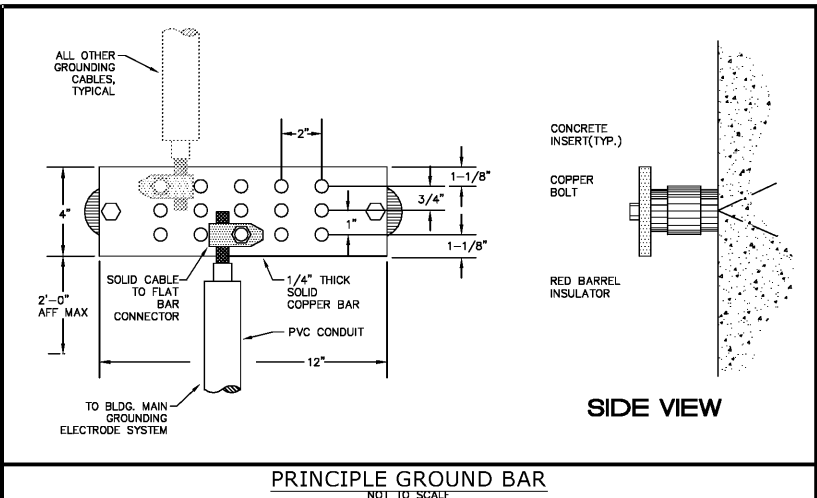
**PRO BUILDING SYSTEMS**  
 DESIGN BUILD CONTRACTORS  
 3678 North Peachtree Road  
 Atlanta, Georgia 30341  
 (770) 455-1791 / Fax 455-4123  
 www.probdgsystems.com

**GINN CHRYSLER - DODGE - RAM AND JEEP**  
 I-20 ACCESS ROAD  
 COVINGTON GEORGIA 30040

DATE: 11.06.2018  
 SCALE: AS SHOWN  
 BY: GD  
 JOB ID:

ELECTRICAL RISER DIAGRAM  
 DRAWING TITLE

SHEET 11 OF 14



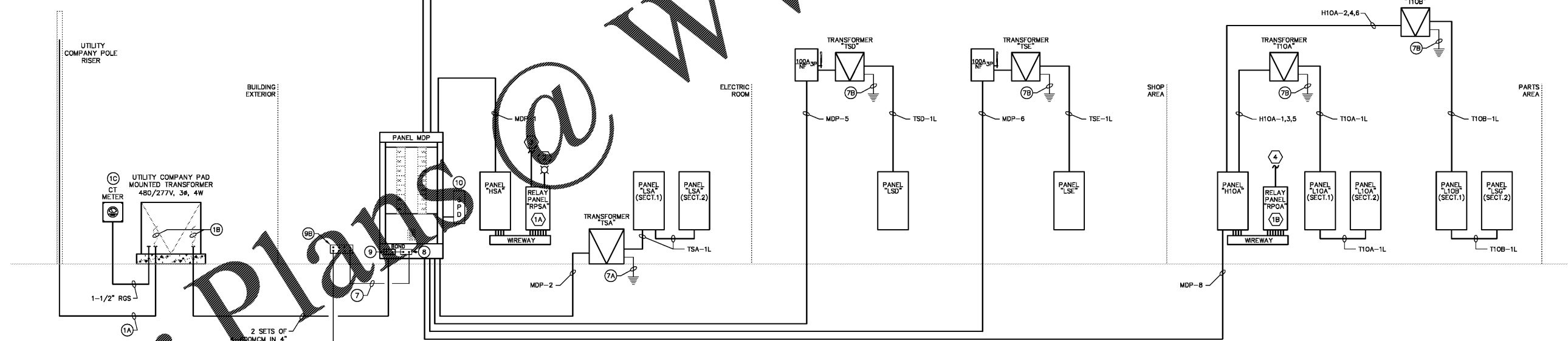
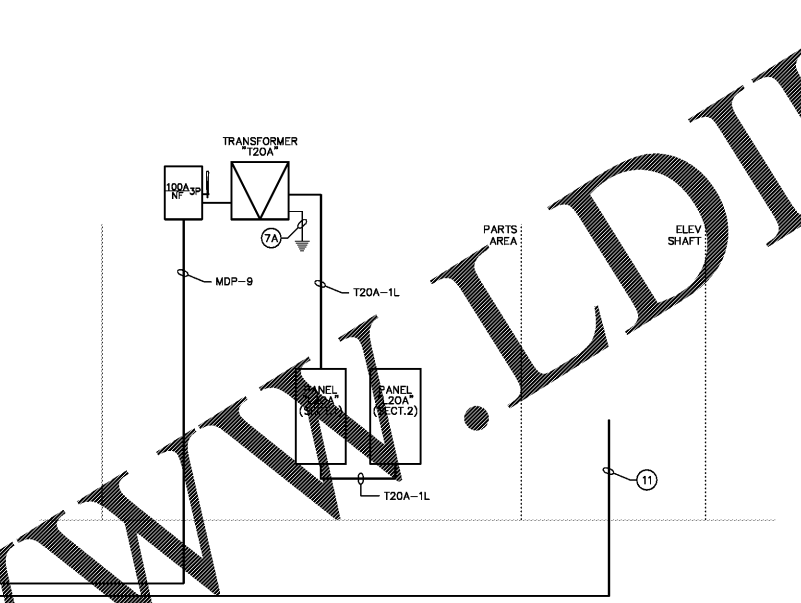
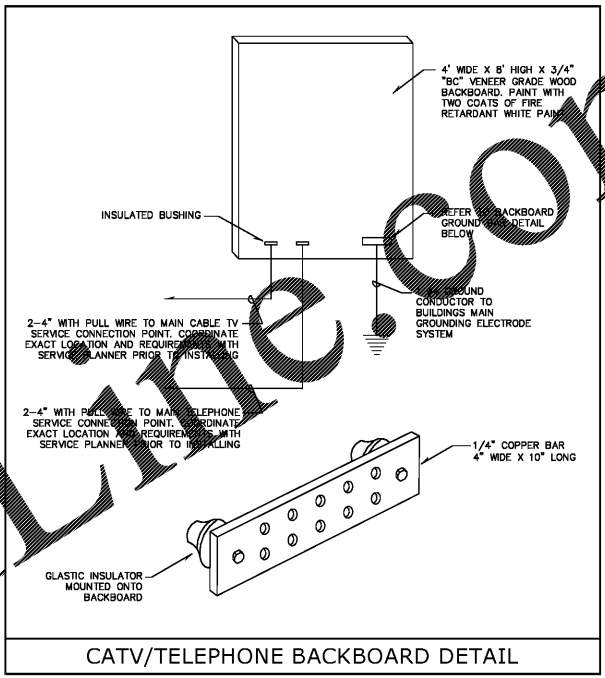
- ### RISER KEY NOTES
- 1A COORDINATE EXACT REQUIREMENTS FOR CONDUITS WITH UTILITY COMPANY PRIOR TO ROUGH IN.
  - 1B COORDINATE EXACT REQUIREMENTS FOR CONDUITS WITH UTILITY COMPANY PRIOR TO ROUGH IN. PROVIDE 8" OF SLACK OF EACH CONDUCTOR FOR FUTURE EXTENSION AND CONNECTION BY THE UTILITY COMPANY.
  - 1C COORDINATE EXACT REQUIREMENTS FOR CT METER/METERING WITH UTILITY COMPANY PRIOR TO ORDERING.
  - 2 EXOTHERMIC CONNECTION. ELECTRICALLY CONTINUOUS STEEL REINFORCING BAR, 20 FEET AT MINIMUM, IN BUILDING FOUNDATION IN DIRECT CONTACT WITH EARTH.
  - 3 PROVIDE 10 FOOT BY 3/4" DIAMETER COPPER GROUND ROD, TYPICAL.
  - 4 EXOTHERMIC CONNECTION, TYPICAL.
  - 5 CONNECTION TO METALLIC COLD WATER PIPE BEFORE FIRST VALVE WITH HEAVY DUTY BRONZE GROUND CLAMP SUITABLE FOR THIS INSTALLATION.
  - 6 PROVIDE 1#3/0 BONDING JUMPER AROUND FIRST VALVE.
  - 7 PROVIDE 1#3/0 GROUNDING ELECTRODE CONDUCTOR IN 3/4" SCHEDULE 40 PVC.
  - 7A PROVIDE 1#2 GROUNDING ELECTRODE CONDUCTOR IN 3/4" SCHEDULE 40 PVC CONDUIT TO PRINCIPLE GROUND BAR.
  - 7B PROVIDE 1#6 GROUNDING ELECTRODE CONDUCTOR IN 3/4" SCHEDULE 40 PVC CONDUIT TO PRINCIPLE GROUND BAR.
  - 8 NEUTRAL BAR.
  - 9A GROUND BAR.
  - 9B PRINCIPLE GROUND BAR. REFER TO DETAIL THIS SHEET.
  - 10 PROVIDE SURGE PROTECTION DEVICE (SPD) WITH 200KA SURGE CURRENT RATING IN A NEMA 1 ENCLOSURE, SURFACE MOUNTED. SPD SHALL BE UL 1449, 4TH EDITION LISTED.
  - 11 PROVIDE 2" CONDUIT TO SHAFT FOR FUTURE ELEVATOR.

### LOAD SUMMARY-ELECTRICAL SERVICE

RECEPTACLE LOAD (225 REC. AT 180VA) = 40.5 KVA  
 GENERAL LIGHTING PER 220-12 (16,571 SQ. FT. X 3.5W/SQ. FT.) (22,326 SQ. FT. X 1.0W/SQ. FT.) = 80.3 KVA  
 BUILDING SIGNAGE = 4.8 KVA  
 SITE LIGHTING = 32.0 KVA  
 MECHANICAL LOAD (LARGEST MOTOR HP) (LARGEST UNIT TON) = 150.0 KVA  
 WATER HEATERS = 4.5 KVA  
 ELEVATOR (EST 40HP) = 43.2 KVA  
 SERVICE EQUIPMENT (LIFTS, WHEEL ALIGNMENT, COMPRESSORS, CAR CHARGERS) = 87.0 KVA

DIVERSIFICATION PER NEC ART. 220-44:  
 RECEPTACLES: 1ST 10 KVA @ 100% = 10.0 KVA  
 RECEPTACLES: REMAINDER (30.5 KVA) @ 50% = 15.2 KVA  
 GENERAL LIGHTING/SIGNAGE (85.1 KVA) @ 125% = 106.4 KVA  
 SITE LIGHTING (32.0 KVA) @ 125% = 40.0 KVA  
 MECHANICAL LOAD = 154.5 KVA  
 SERVICE EQUIPMENT (INCLUDING LARGEST @ 125%) = 89.7 KVA

**TOTAL LOADS**  
 415.8 KVA  
 500 AMPS  
 PROPOSED SERVICE - 480 VOLT, 3Ø, 4W, 800 AMPS



- ### LIGHTING CONTROL KEY NOTES
- 1A MASTER CONTROL RELAY PANEL WITH 48 RELAYS, SURFACE MOUNT, NEMA 4 ENCLOSURE MODEL GR-2400 OR EQUIVALENT
  - 1B SLAVE RELAY PANEL WITH 32 RELAYS, SURFACE MOUNT, NEMA 4 ENCLOSURE PCO 2400 OR EQUIVALENT
  - 2 PHOTOCELL PCO 2400 OR EQUIVALENT
  - 3 PROVIDE LOW VOLTAGE WIRING TO IT/DATA CLOSET FOR WEB BASED CONNECTIONS
  - 4 PROVIDE 1" CONDUIT TO RELAY PANEL RPSA

### SCHEDULE OF DRY-TYPE TRANSFORMERS

MARK	KVA	VOLTAGE		MOUNTING	MARK	SECONDARY FEEDER		NOTES
		PRIMARY	SECONDARY			BREAKER	FEEDER	
*T20A	75	480 VOLT 3Ø, 3W	208/120 VOLT 3Ø, 4W	FLOOR	T20A-1L	⊙	4#3/0 & 1#4G IN 2-1/2"	
*TSD	45	480 VOLT 3Ø, 3W	208/120 VOLT 3Ø, 4W	SUSPENDED	TSD-1L	⊙	4#1/0 & 1#6G IN 2"	
*TSE	45	480 VOLT 3Ø, 3W	208/120 VOLT 3Ø, 4W	SUSPENDED	TSE-1L	⊙	4#1/0 & 1#6G IN 2"	
*T10A	45	480 VOLT 3Ø, 3W	208/120 VOLT 3Ø, 4W	SUSPENDED	T10A-1L	⊙	4#1/0 & 1#6G IN 2"	
*T10B	45	480 VOLT 3Ø, 3W	208/120 VOLT 3Ø, 4W	SUSPENDED	T10B-1L	⊙	4#1/0 & 1#6G IN 2"	
*T20A	75	480 VOLT 3Ø, 3W	208/120 VOLT 3Ø, 4W	SUSPENDED	T20A-1L	⊙	4#3/0 & 1#4G IN 2-1/2"	

KEY NOTE:  
 ⊙ PANEL MAIN BREAKER IS TRANSFORMER SECONDARY BREAKER.

Order Plans

**PROMUS**  
 SCOTT MERIWETHER, P.E.  
 GEORGIA LICENSE #30780  
 518 BLACK CANYON PARK  
 CANTON, GA 30114  
 PROJECT MANAGER: GEORGE DAVIDOV  
 PHONE 678.246.5146