LEGEND

UNDERGROUND OR UNDERSLAB CONDUIT. SEE NOTE BELOW.

A — LIGHT FIXTURE, CAPITAL LETTER INDICATES TYPE.

J–BOX WITH BLANK COVER, UNLESS OTHERWISE NOTED.

ENCLOSED CIRCUIT BREAKER

TFROC — TYPICAL FOR REMAINDER OF CIRCUIT.

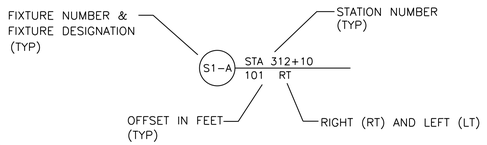
38,781 A AVAILABLE — AVAILABLE SYMMETRICAL SHORT CIRCUIT CURRENT AT THE EQUIPMENT AS CALCULATED BY THE ENGINEER. THE ELECTRICAL DISTRIBUTION SYSTEM SHALL BE A FULLY RATED SYSTEM.

30' — LENGTH OF FEEDER IN FEET.

NOTE: HASH MARKS INDICATE NUMBER OF #12 CU. HOT CONDUCTORS, #12 CU. NEUTRAL CONDUCTOR, RESPECTIVELY. GROUND CONDUCTOR NOT SHOWN. NO HASH MARKS INDICATE 3#12 CU. CONDUCTORS (A HOT, NEUTRAL AND GROUND), UNLESS OTHERWISE NOTED. 1/2" CONDUIT MINIMUM.

FIXTURE SCHEDULE

TYPE	MANUFACTURER & CATALOG NUMBER	MOUNTING	NO./LAMPS	LOAD
A	HOLOPHANE•G250HP-48-L18• -NR-V-G-F2 WITH HOLOPHANE •RTA3080G-P2-ND-GR-2 POLE	30' POLE	1-250W HPS	320W
	OR			
	GE •TGSM25S-3-A-1-FF-S3-BL WITH VALMONT •R800A300-P2-FP-BK-FULL BASE COVER ROUND TAPERED STEEL POLE.	30' POLE	1-250W HPS	320W
	OR APPROVED EQUAL			
E	EXISTING FIXTURE AND POLE			



2 / 25-000 **TYPICAL LIGHT POLE IDENTIFICATION**
SCALE: NTS

GENERAL NOTES:

A. NO CONDUIT MAY BE RUN OUTSIDE THE RIGHT OF WAY BOUNDARY OR ON PRIVATE PROPERTY. ROUTE ALL CONDUITS BETWEEN EACH FIXTURE AND BETWEEN LAST FIXTURE AND SERVICE A IN THE MOST DIRECT ROUTE AS POSSIBLE.

B. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY DIGGING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST.

C. CONTRACTOR SHALL DIRECT BORE WHERE APPLICABLE OR AS INDICATED ON THE DRAWINGS.

D. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40. CONDUIT INSTALLED UNDERNEATH ROADWAYS AND DRIVES SHALL BE GALVANIZED RIGID STEEL CONDUIT. ALL CONDUIT WHICH IS RUN UNDER A ROADWAY SHALL BE INSTALLED PRIOR TO ANY NEW PAVING. NO NEW PAVING SHALL BE CUT TO INSTALL ELECTRICAL LINES.

E. RIGID CONDUIT INSTALLED ON STRUCTURES SHALL BE SUPPORTED AT LEAST EVERY TEN FEET AND WITHIN THREE FEET OF JBOXES, LUMINAIRES, ETC.

F. EXPOSED CONDUIT SHALL BE GALVANIZED RIGID STEEL UNLESS OTHERWISE NOTED.

G. THE LIGHTING CONTRACTOR SHALL FURNISH A ONE YEAR WARRANTY FOR PARTS AND DEFECTIVE WORKMANSHIP ON THE LUMINAIRES, POLES, LIGHTING CONTROL PANEL AND ALL OTHER ELECTRICAL EQUIPMENT.

H. THE CONTRACTOR SHALL INSTALL A NYLON PULL CORD OR GALVANIZED PULL WIRE IN EACH EMPTY CONDUIT. THE COST OF THIS ITEM WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF THE CONDUIT.

I. CONDUIT ACCESSORIES SUCH AS EXPANSION JOINTS, PULLBOXES, CONDULETS, ELBOWS, FLEXIBLE CONDUIT, ETC., SHALL BE INCLUDED IN THE PRICE BID FOR CONDUIT.

J. ALL BALLASTS SHALL BE HIGH POWER FACTOR AUTOTRANSFORMER TYPE.

K. ALL FUSES AND FUSE HOLDERS SHALL BE IN–LINE TYPE AND WATERPROOF.

L. ALL ELECTRICAL MATERIALS, SUCH AS CONDUIT, CABLES, WIRES AND JBOXES, SHALL BE UL LISTED AND MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND THE AMERICAN NATIONAL STANDARDS INSTITUTE. ELECTRICAL CONDUITS, WIRES, CIRCUIT BREAKERS, FUSES, GROUND RODS, POLES AND GROUND CONDUCTORS SHALL MEET GDOT'S STANDARD SPECIFICATIONS AND SHALL BE IN ACCORDANCE WITH GDOT'S QUALIFIED PRODUCTS LIST (QPL).

M. FOR ALL LIGHT POLES, A MINIMUM OF 1'–6" MUST BE MAINTAINED AT ALL TIMES FROM THE FACE OF THE CURB (OR EDGE OF PAVEMENT) TO THE OUTSIDE EDGE OF THE LIGHT POLE.

N. OPERATING VOLTAGE OF THE FIXTURES SHALL BE 480V.

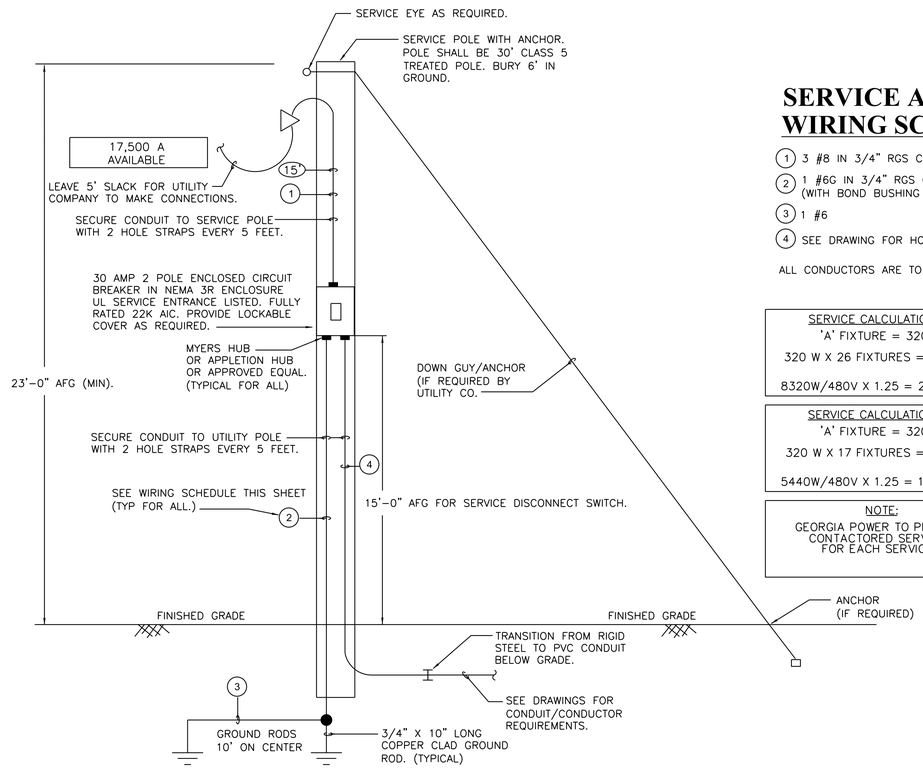
O. THE CONTRACTOR SHALL SUBMIT PHOTOMETRIC DATA AND DESIGN CALCULATIONS FOR THE LUMINAIRES TO VERIFY THE LIGHTING DESIGN CRITERIA.
LIGHTING DESIGN CRITERIA:
1. THE AVERAGE MAINTAINED ILLUMINATION = 1.0 FC (MINIMUM)
2. THE AVG/MIN UNIFORMITY = 3.0:1 (MAXIMUM)
3. THE LIGHT LOSS FACTOR = 0.70.
4. REFERENCE IES RP–8–00.

P. ALL LAMPS SHALL BE HIGH PRESSURE SODIUM TYPE.

Q. REFRACTORS SHALL BE GLASS.

R. LOCAL UTILITY COMPANY IS GEORGIA POWER COMPANY. CONTACT: SETH COLLINS (770)–716–9500 SCOLLINS@SOUNTERNCO.COM

S. ALL LUMINARIES SUPPLIED FOR THIS PROJECT MUST MEET THE GDOT STANDARD SPECIFICATION SECTION 921–LUMINARIES FOR PROJECTS RECEIVING FEDERAL FUNDING.



1 / 25-000 **ONE LINE DIAGRAM SERVICE 'A' & 'B'**
SCALE: NTS

SERVICE A & B WIRING SCHEDULE

1. 3 #8 IN 3/4" RGS C
2. 1 #6G IN 3/4" RGS C (WITH BOND BUSHING AT EACH END)
3. 1 #6
4. SEE DRAWING FOR HOMERUN DESIGNATION

ALL CONDUCTORS ARE TO BE COPPER

SERVICE CALCULATION 'A'
'A' FIXTURE = 320W
320 W X 26 FIXTURES = 8320W
8320W/480V X 1.25 = 21.6 AMPS

SERVICE CALCULATION 'B'
'A' FIXTURE = 320W
320 W X 17 FIXTURES = 5440W
5440W/480V X 1.25 = 14.2 AMPS

NOTE:
GEORGIA POWER TO PROVIDE CONTACTORED SERVICE FOR EACH SERVICE

GEORGIA REGISTERED 7956 PROFESSIONAL ENGINEER
04.09.2012

RELEASED FOR CONSTRUCTION
JUNE 7, 2012

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS

Archer Western Contractors

Heath & Lineback Engineers INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

WOMACK ASSOCIATES CONSULTING ENGINEERS
4200 Perimeter Park South
Suite 225
Atlanta, Georgia 30341
Voice 770-458-3005
Fax 770-458-8388
PROJECT 11073

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: INNOVATIVE PROGRAM DELIVERY

LIGHTING PLAN
LEGENDS, RISER & NOTES
S.R. 400/ I-85
CONNECTOR RAMPS

DRAWING No. 25-000

3/1/2007 GPLN