WIRING DIAGRAM LEGEND

SYMBOL	DESCRIPTION
A2	POST TOP LED LUMINAIRE MOUNTED ON 16' HIGH ROUND FLUTED ALUMINUM POLE. SUBSCRIPT "A" DENOTES LIGHT FIXTURE TYPE IN THE LIGHTING FIXTURE SCHEDULE. SEE LIGHTING FIXTURE SCHEDULE. NUMERAL DENOTES CIRCUIT NUMBER FOR CONNECTION.
	PROPOSED ELECTRICAL SERVICE/CONTROL CENTER EQUIPMENT WITH FIELD PANEL BOARD. SEE DETAILS.
FPA1 10	PROPOSED BRANCH CIRCUIT. CONTROL SYSTEM (FPA), CIRCUIT I.D. NUMBER (1) PLAN SYMBOL (10) SEE TABLE A, THIS SHEET.
	CONDUIT AND WIRING TRENCHED IN EARTH UNDER NEW PROPOSED ASPHALT OR CONCRETE PAVEMENT, INSTALLED A MINIMUM OF 24" BELOW FINISHED GRADE. SIZE AS SHOWN.
	CONDUIT AND WIRING RUN CONCEALED IN BRIDGE STRUCTURE. SEE STRUCTURAL/BRIDGE PLANS FOR LOCATION AND CONDUIT ROUTING.
	CONDUIT AND WIRING TRENCHED IN EARTH, INSTALLED A MINIMUM OF 24" BELOW FINISHED GRADE. SIZE AS SHOWN.

GENERAL WIRING PLAN NOTES

GES1 ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES HAVING JURISDICTION. WHERE CONFLICTS OCCUR, THE MORE STRINGENT SHALL APPLY.

GES2 BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER WITH TYPE "THHN/THWN-2" INSULATION RATED AT 600 VOLTS. CONDUCTORS #10 AND SMALLER SHALL BE SOLID.

GES3 SEE LANDSCAPING AND OTHER UTILITY PLANS PRIOR TO UNDERGROUND CONDUIT INSTALLATION AND ROUTE CONDUITS TO AVOID WITH TREE PLANTING AND OTHER UTILITIES.

GES4 DO NOT SCALE THESE DRAWINGS. ROUGHING IN SHALL BE DONE FROM FIELD CONDITIONS AND DIMENSIONS ON ROADWAY DRAWINGS AND EQUIPMENT SHOP DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL ITEMS.

GES5 CONDUITS RUN EXPOSED SHALL BE FULL WEIGHT RIGID GALVANIZED STEEL (RGSC).

GES6 PROVIDE PHOTOCELL "ON" AT DUSK, "OFF" AT DAWN CONTROL OF LIGHT FIXTURES VIA TWO (2) - 2P, 30A CONTACTORS INSTALLED IN A CONTROL CENTER CABINET.

GES7 PROVIDE 60 AMP, 120/240V, 3W, 1 PHASE, 60 HZ SERVICE.

NOTE: CONVERT TO METAL CONDUIT AND PROVIDE CONDUIT EXPANSION COUPLINGS AT ALL LOCATIONS WHERE CONDUITS PASS THROUGH EXPANSION/CONTRACTION JOINTS.

LOAD SCHEDULE

120V 1 PHASE, 3 WIRE — FIELD PANEL "FPA"

CKT. ID (BKR)	QUANTITY FIXTURE TYPE "A"	QUANTITY FIXTURE TYPE "B"	KW	AMPS	BREAKER SIZE (AMPS)
FPA1	12	6	1.35	5.63	20
FPA2	12	6	1.35	5.63	20
TOTAL	24	12	2.70	11.25	

WIRING PLAN NOTES

LP1 WIRING SHALL BE INSTALLED IN CONDUIT CONCEALED INSIDE BRIDGE STRUCTURE. CONDUIT/WIRING SHOWN OUTSIDE OF BRIDGE STRUCTURE ON PLAN SHEETS FOR CLARITY.

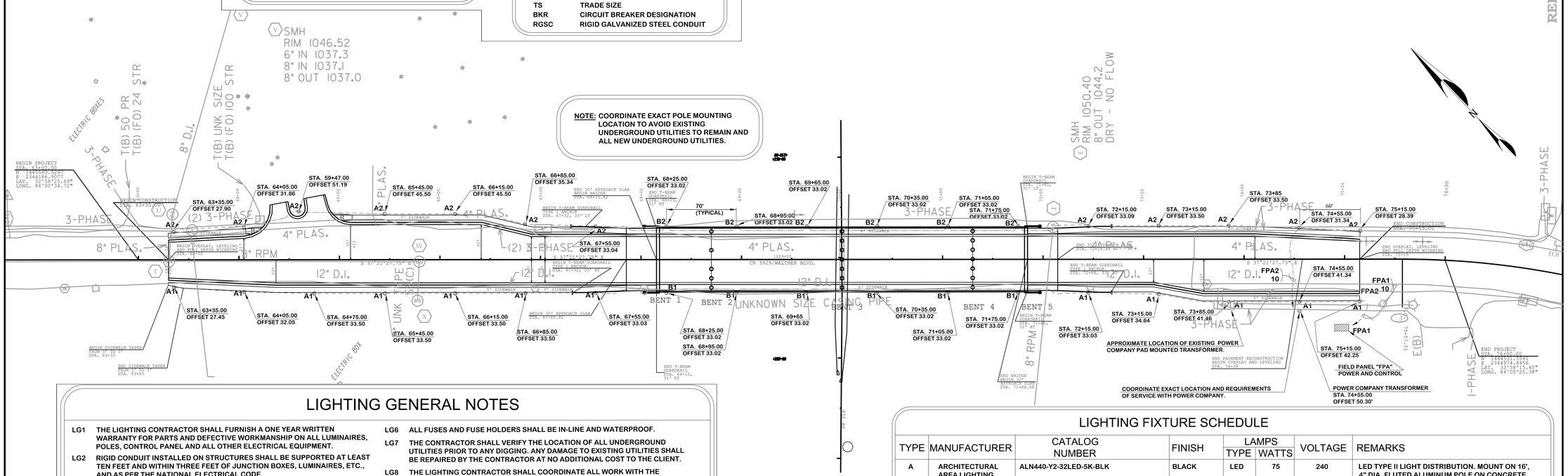
ABBREVIATIONS

MH	MOUNTING HEIGHT
PVC	PVC SCHEDULE 40 CONDUIT
C	CONDUIT
CKT	CIRCUIT
TS	TRADE SIZE
BKR	CIRCUIT BREAKER DESIGNATION
RGSC	RIGID GALVANIZED STEEL CONDUIT

TABLE "A"
CIRCUITRY CONDUCTOR CONDUIT TYPE & SIZE

PLAN SYMBOL	DESCRIPTION	
10	2 #10 1 #10G TS 3/4"C	2 AWG SIZE 10 CONDUCTORS 1 AWG SIZE 10 GROUNDING CONDUCTOR TRADE SIZE 3/4" PVC CONDUIT

NOTE: COORDINATE EXACT POLE MOUNTING LOCATION TO AVOID EXISTING UNDERGROUND UTILITIES TO REMAIN AND ALL NEW UNDERGROUND UTILITIES.



LIGHTING GENERAL NOTES

LG1 THE LIGHTING CONTRACTOR SHALL FURNISH A ONE YEAR WRITTEN WARRANTY FOR PARTS AND DEFECTIVE WORKMANSHIP ON ALL LUMINAIRES, POLES, CONTROL PANEL AND ALL OTHER ELECTRICAL EQUIPMENT.

LG2 RIGID CONDUIT INSTALLED ON STRUCTURES SHALL BE SUPPORTED AT LEAST TEN FEET AND WITHIN THREE FEET OF JUNCTION BOXES, LUMINAIRES, ETC., AND AS PER THE NATIONAL ELECTRICAL CODE.

LG3 ALL ELECTRICAL MATERIALS, SUCH AS CONDUIT, CABLES, WIRES AND JUNCTION BOXES, SHALL BE NEW U.L. LISTED AND MEET REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND THE AMERICAN NATIONAL STANDARDS INSTITUTE.

LG4 IF THE CONTRACTOR SPECIFIES ANY LUMINAIRE OR FIXTURE OTHER THAN THOSE SPECIFIED ON PLANS IN THE LIGHTING FIXTURE SCHEDULE, THE CONTRACTOR SHALL SUBMIT TO THE PROJECT CONSTRUCTION ENGINEER PRODUCT DATA SHEETS, PHOTOMETRIC DATA AND DESIGN CALCULATIONS FOR THE PROPOSED LUMINAIRES TO VERIFY THE LIGHTING DESIGN CRITERIA.

LG5 THE CONTRACTOR SHALL INSTALL A NYLON CORD PULL CORD OR GALVANIZED PULL WIRE IN EACH EMPTY CONDUIT.

LG6 ALL FUSES AND FUSE HOLDERS SHALL BE IN-LINE AND WATERPROOF.

LG7 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 TO THE CLIENT.

LG8 THE LIGHTING CONTRACTOR SHALL COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR.

LG9 ALL CONDUIT WHICH IS RUN UNDER A ROADWAY SHALL BE INSTALL PRIOR TO ANY NEW PAVING. NO NEW PAVING SHALL BE CUT TO INSTALL ELECTRICAL LINES.

LG10 ALL SHOP DRAWINGS FOR LIGHTING STANDARDS, LUMINAIRES, CONDUIT, WIRING, LIGHTING CABINETS, ETC. MUST BE SUBMITTED TO THE PROJECT CONSTRUCTION ENGINEER FOR REVIEW AND SIGNED APPROVAL PRIOR TO CONSTRUCTION.

LG11 CARE MUST BE TAKEN IN THE INSTALLATION OF THE CONDUIT SYSTEM TO AVOID ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES.

LG12 NO CONDUIT IS TO BE RUN ON PRIVATE PROPERTY.

LIGHTING LAYOUT PLAN
SCALE: 1"=50'

GEORGIA REGISTERED 2-2-15 No. 27902 PROFESSIONAL ENGINEER GARY HAMILTON LOTT

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NUMBER	FINISH	LAMPS TYPE	LAMPS WATTS	VOLTAGE	REMARKS
A	ARCHITECTURAL AREA LIGHTING POLE: HAPCO	ALN440-Y2-32LED-5K-BLK POLE: 76546-006 WITH CAST ALUMINUM PEDESTAL BASE WITH DOOR AND STAINLESS STEEL SCREWS ARLINGTON SERIES - ARS	BLACK POLE: BLACK	LED -	75 -	240 -	LED TYPE II LIGHT DISTRIBUTION. MOUNT ON 16', 4" DIA. FLUTED ALUMINUM POLE ON CONCRETE FOUNDATION LOCATED BEHIND SIDEWALK. PROVIDE 12" DIA. BOLT CIRCLE TO UTILIZE POLE BREAKAWAY FEATURE AS PER MANUFACTURER'S REQUIREMENTS.
B	ARCHITECTURAL AREA LIGHTING POLE: HAPCO	ALN440-Y2-32LED-5K-BLK POLE: 76546-006 WITH CAST ALUMINUM PEDESTAL BASE WITH DOOR AND STAINLESS STEEL SCREWS ARLINGTON SERIES - ARS	BLACK POLE: BLACK	LED -	75 -	240 -	LED TYPE II LIGHT DISTRIBUTION. MOUNT ON 16', 4" DIA. FLUTED ALUMINUM POLE MOUNTED ON BRIDGE STRUCTURE. PROVIDE 11" DIA. BOLT CIRCLE FOR MOUNTING ON BRIDGE STRUCTURE.

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: INNOVATIVE PROGRAM DELIVERY

LIGHTING PLANS

GWINNETT COUNTY

DRAWING No. 25-001

RELEASED FOR CONSTRUCTION: 02/06/2015