

University of South Carolina
Greene Street Vehicular & Pedestrian Improvements
Project Number: H27-Z346
Project Manager: Emily Jones

Addendum Number Two (2)

DATE: June 16, 2017

FROM: Aimee B. Rish, Procurement Specialist

TO: All Bidders

The following items add to, modify, clarify, or otherwise alter the Drawings and/or specifications and will become a part of the Contract Documents. Where a portion of the Drawings and/or specifications is added to, modified, clarified, or otherwise altered, the portion not so affected shall remain. Bidder shall include all effects that these items may have on his proposal.

Project Manual:

1. Clarification: The time for Project Completion on the form SE-330 is 45 days. With an anticipated Date of Commencement of July 1, 2016, the date of Substantial Completion would be August 18, 2016. However, Substantial Completion shall exclude the installation of trees and shrubs in the event that Alternate #2 is accepted. The contractor is expected to properly augment forces to meet the revised contract period. The site shall be fully accessible for student move –in by the close of business on Friday, August 18, 2016.

Drawings

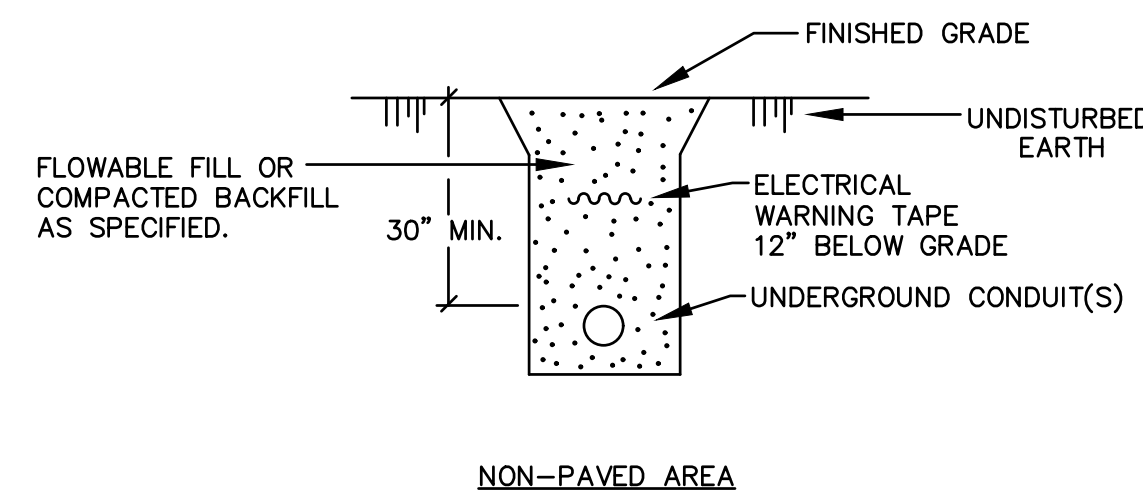
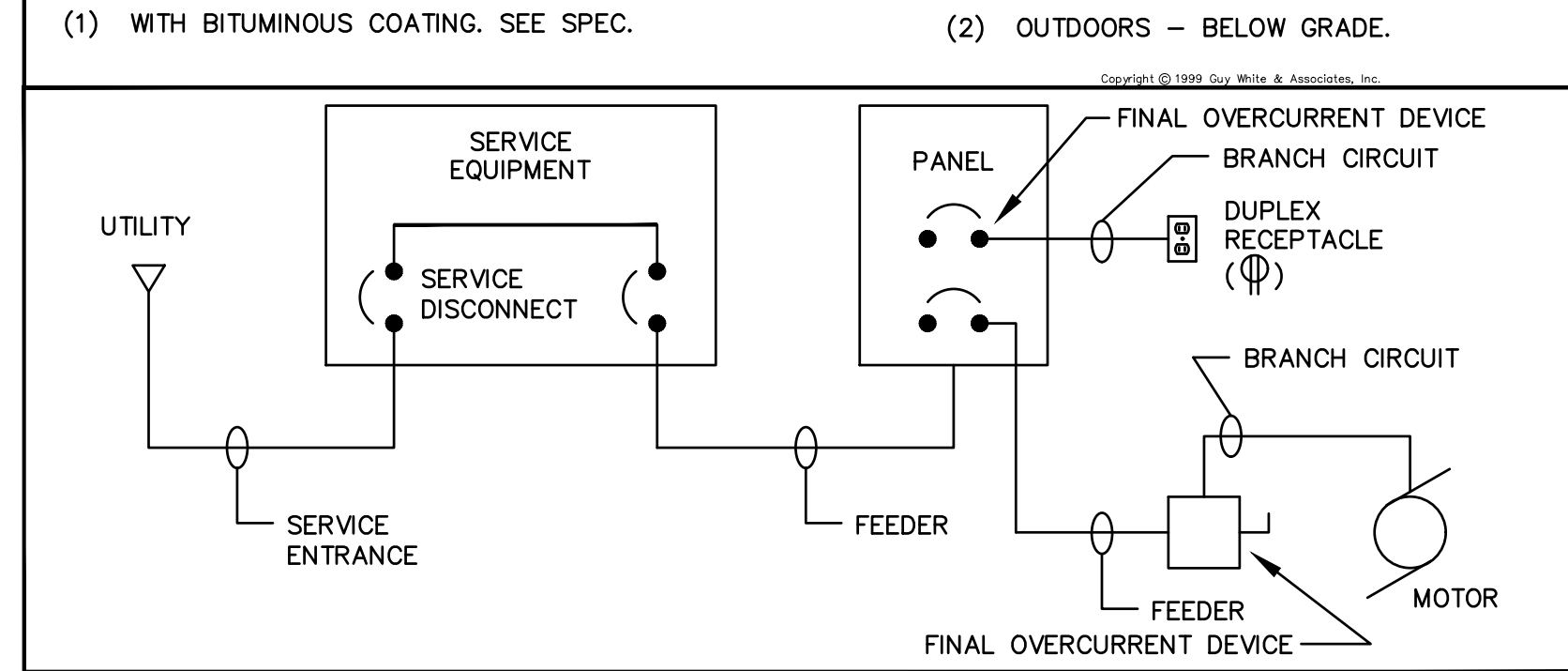
1. Delete Electrical Plans, Sheets E001, ES100 and ES101, and replace with the attached sheets dated 6/16/2017. The contractor shall coordinate relocation of the existing street lights with SCE&G. The contractor will be responsible for providing & installing new conduit as shown on the plans. SCE&G will relocate street light poles, fixtures and provide all wiring and accessories for complete installation.

Attachments:

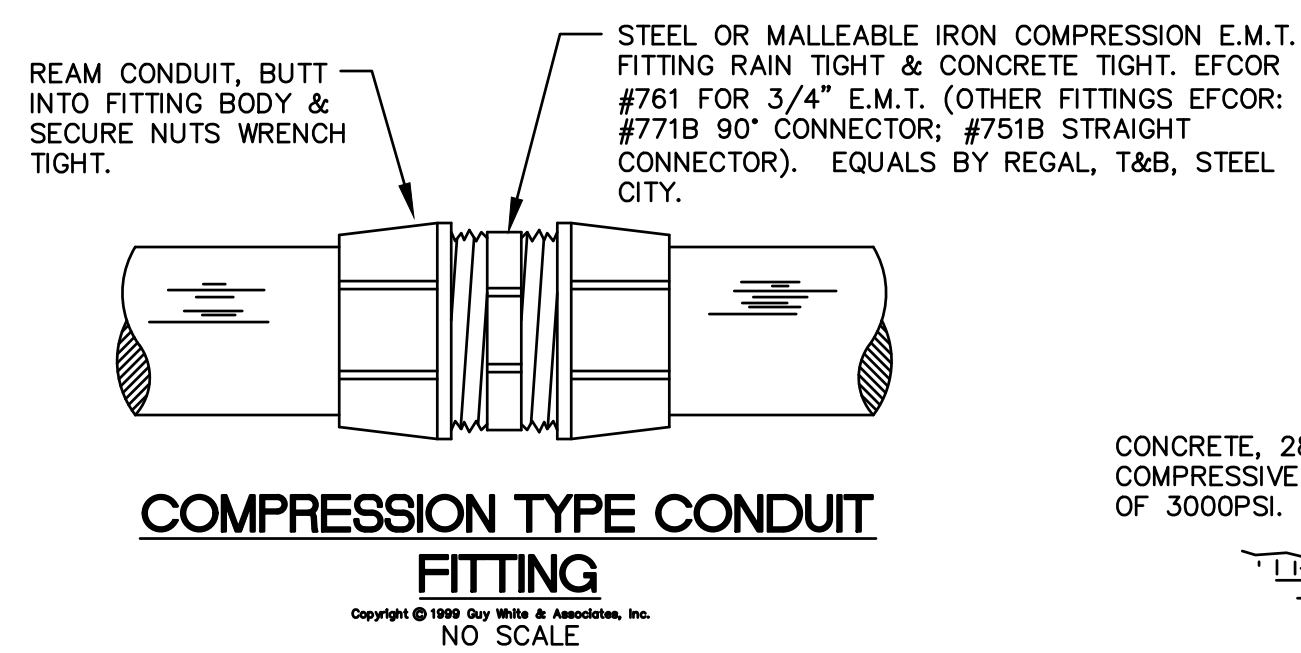
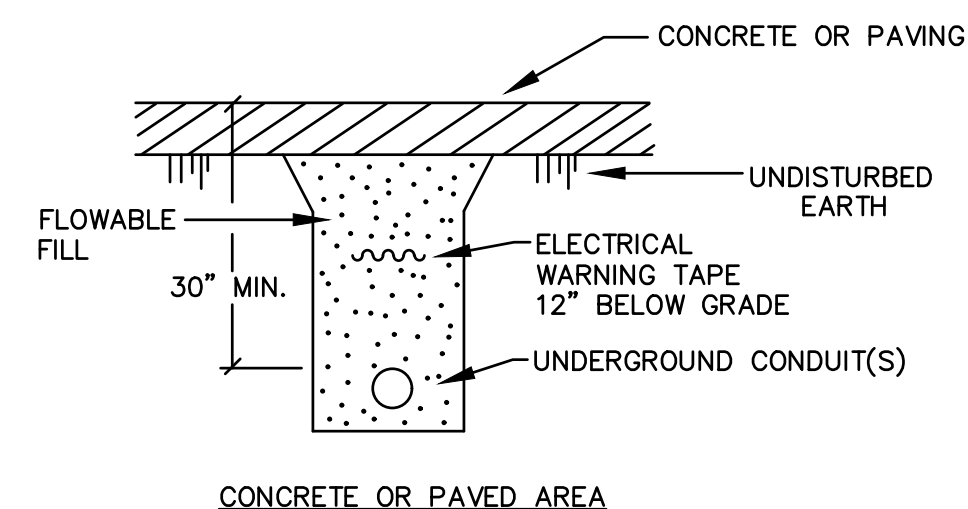
Sheet E 001, Electrical Notes, Schedules & Details
Sheet ES 100, Electrical Site Demolition Plan
Sheet ES 101, Electrical Site Plan, New Work

RACEWAY MATERIAL USE TABLE

APPLICATION	RACEWAY MATERIAL						
	EMT	IMC	GRS	40 PVC	ENT	AC/MC CABLE	MFD. WIRING
CONTRACTOR MAY USE ANY MATERIAL MARKED (●) FOR APPLICATION LISTED. IF MATERIAL IS NOT MARKED FOR AN APPLICATION, IT SHALL NOT BE USED FOR THAT APPLICATION.							
BRANCH CIRCUITS							
CONCEALED ABOVE CEILING	●	●	●				
CONCEALED IN WALLS	●	●	●				
EXPOSED FROM FLOOR TO 7'-0" A.F.F. (INTERIOR)		●	●				
EXPOSED FROM 7'-0" A.F.F. AND ABOVE (INTERIOR)	●	●	●				
IN OR UNDER CONCRETE FLOORS		(1)	(1)		NOT PERMITTED	NOT PERMITTED	NOT PERMITTED
OUTDOORS - BELOW GRADE		(1)	(1)		NOT PERMITTED	NOT PERMITTED	NOT PERMITTED
OUTDOORS - EXPOSED		●	●				
STUB-UPS BELOW PANELS & ENCLOSURES		●	●				
FEEDER CONDUITS		●	●				
SERVICE ENTRANCE		●	●				
(1) WITH BITUMINOUS COATING. SEE SPEC. (2) OUTDOORS - BELOW GRADE.							



UNDERGROUND CONDUIT NOT IN A DUCTBANK
NO SCALE



COMPRESSION TYPE CONDUIT FITTING
NO SCALE

ABBREVIATIONS

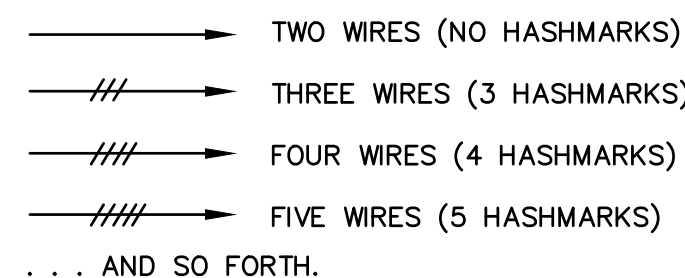
THE FOLLOWING STANDARD ABBREVIATIONS ARE USED IN THESE PLANS AND SPECIFICATIONS. CONTRACTOR IS CAUTIONED THAT ALL ABBREVIATIONS LISTED MAY NOT BE USED; CONSULT PLANS AND SPECIFICATIONS FOR ABBREVIATIONS APPLICABLE TO THIS PROJECT.

A.F.F. ABOVE FINISHED FLOOR
B.F.F. BELOW FINISHED FLOOR
A.F.G. ABOVE FINISHED GRADE
B.F.G. BELOW FINISHED GRADE
U.N.O. UNLESS NOTED OTHERWISE
CKT. CIRCUIT
C. CONDUIT
E.C. EMPTY CONDUIT
FLX. FLEXIBLE CONDUIT
WFLX WEATHERPROOF FLEXIBLE CONDUIT

BRANCH CIRCUIT WIRING - HASHMARK CODE

BRANCH CIRCUITS SHOWN ON THESE DRAWINGS MAY INCLUDE HASHMARKS WHICH INDICATE THE NUMBER OF WIRES TO BE PROVIDED IN A CONDUIT RUN BETWEEN OUTLETS OR JUNCTION BOXES. WIRE SIZES SHALL BE AS TABULATED IN PANELBOARD SCHEDULES UNLESS OTHERWISE INDICATED ON PLAN. SEE SYMBOL SCHEDULE FOR CONDUIT ROUTING NOTATION. HASHMARK CODE IS AS FOLLOWS:

EACH PHASE AND NEUTRAL WIRE IN A CONDUIT RUN IS REPRESENTED BY A HASHMARK. FOR EXAMPLE -



NOTE: GROUND WIRES ARE NOT GENERALLY SHOWN. EXAMINE SPECIFICATIONS AND GENERAL NOTES TO DETERMINE REQUIREMENTS FOR GROUND WIRES AND WHERE SPECIFIED, PROVIDE IN ADDITION TO THE NUMBER OF WIRES INDICATED BY HASHMARK CODE.

NOTE: CONTRACTOR IS CAUTIONED THAT MULTI-WIRE (LINE-TO-NEUTRAL) BRANCH CIRCUITS DO NOT INDICATE ALL REQUIRED NEUTRAL CONDUCTORS. PROVIDE SEPARATE NEUTRAL CONDUCTORS (WITH COLORED STRIPE TO MATCH PHASE CONDUCTOR) FOR EACH PHASE CONDUCTOR.

EMPTY CONDUITS ARE NOTED BY "EC" WITH TRADE SIZE.

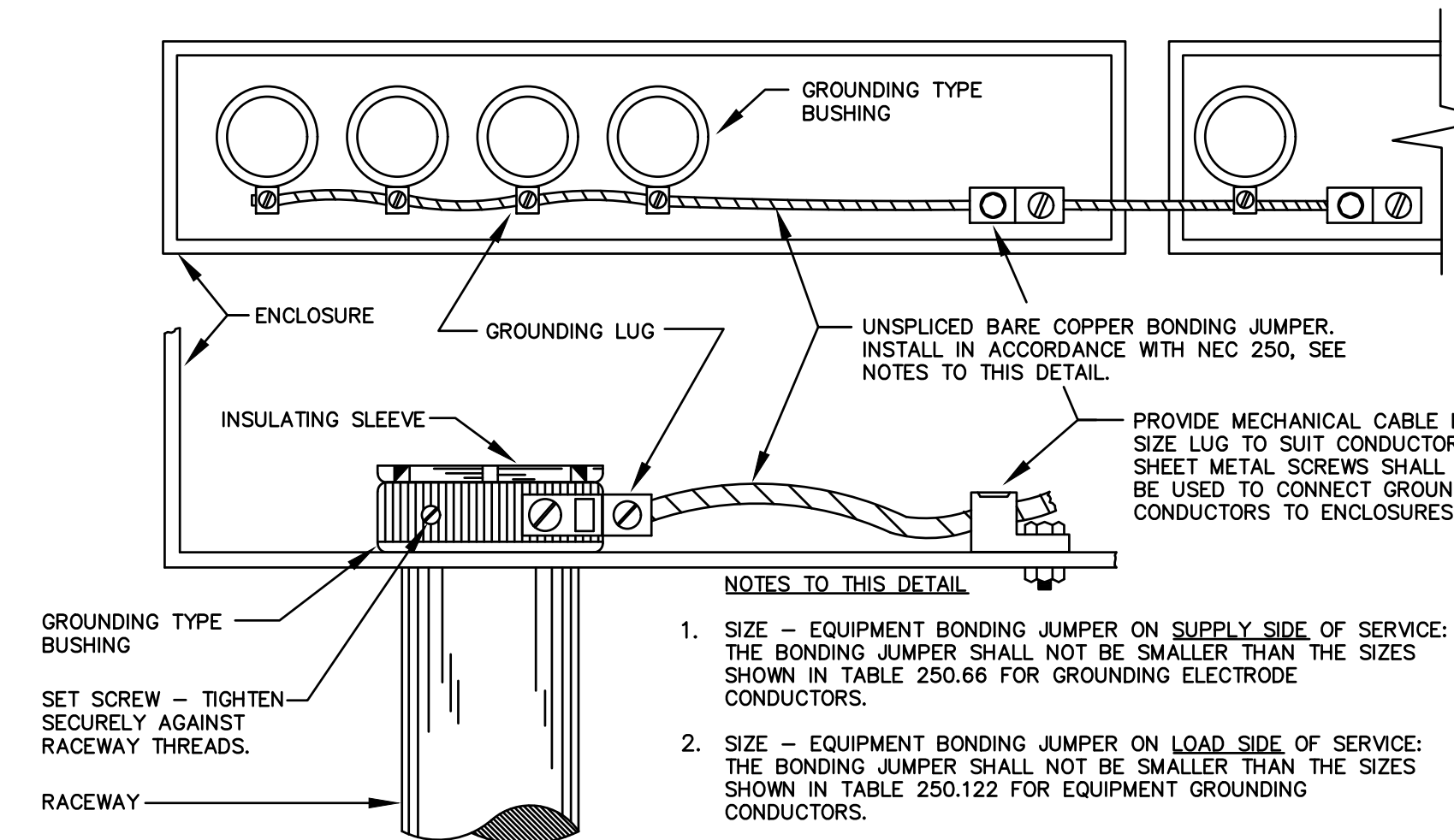
GENERAL NOTES

- DO NOT SCALE DRAWINGS UNLESS DIMENSIONS ARE SHOWN. LOCATE LIGHTING FIXTURES AND EQUIPMENT AS OBVIOUSLY INDICATED AND COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS. SEE CIVIL PLANS.
- MINIMUM SIZE CONDUCTOR FOR POWER SHALL BE NO. 12 AWG. ALL CONDUCTORS SHALL BE COPPER.
- ALL FUSES SHALL BE DUAL-ELEMENT TYPE, "FUSETRON" BY BUSSMAN, OR "ECON" BY ECONOMY.
- BRANCH CIRCUIT SIZES ARE AWG 12-3/4" C. UNLESS OTHERWISE NOTED IN PANELBOARD SCHEDULES.
- ALL BRANCH CIRCUIT LOADS SHALL BE BALANCED ACROSS PANELBOARD BUSES TO OBTAIN MINIMUM NEUTRAL CURRENT.
- ALL FLEXIBLE CONDUIT SHALL CONTAIN A GREEN WIRE BONDED TO RIGID RACEWAY, BOX OR FIXTURE AT EACH END OF FLEX. SIZE GROUND WIRE PER N.E.C. TABLE 250-122.
- CONTRACTOR IS CAUTIONED THAT WORK SHALL BE COMPLETED IN PHASES AS REQUIRED TO MAINTAIN USE OF STREETS, SIDEWALKS, BUSINESSES AND THE LIKE. REFER TO LANDSCAPE ARCHITECT AND CIVIL PLANS FOR PHASING OF WORK.
- ALL WORK SHALL COMPLY WITH NFPA, ADA, AASHTO, SCDOT, CITY OF COLUMBIA AND ALL OTHER APPLICABLE CODES AND STANDARDS.
- SEE CIVIL AND UTILITY PLANS FOR DUCTBANKS, MANHOLES, HANDHOLES AND ADDITIONAL NEW UTILITIES. VERIFY EXACT LOCATIONS OF HANDHOLES, RISER POLES, PEDASTALS AND THE LIKE WITH UTILITIES.
- NEW DUCTBANK WITH MANHOLES, HANDHOLES, SPLICE VAULTS, TRAFFIC INFRASTRUCTURE AND OTHER UTILITIES ARE INDICATED ON CIVIL PLANS.
- CONDUIT ROUTING SHOWN DOES NOT INDICATE PATH OF ROUTING-SHOWN FOR CLARITY ONLY. ROUTE CONDUITS IN R.O.W. SEE CIVIL PLANS.
- COORDINATE ALL NEW METER POINT LOCATIONS AND SERVICE LOCATIONS WITH SCE&G PRIOR TO BIDDING.
- ALL CONDUIT ELBOWS BELOW GRADE SHALL BE BITUMINOUS COATED GRS.
- IF REQUIRED TO SUIT LUGS, PROVIDE HYDRAULIC CRIMP TYPE WIRE REDUCERS IN METER CENTER AS REQUIRED TO CONNECT FEEDER CONDUCTORS TO CONTACTOR/CIRCUIT BREAKERS.
- MINIMUM COVER FOR LIGHTING, TRAFFIC CONTROL AND IRRIGATION POWER CIRCUITS SHALL BE 30".
- CONTRACTOR IS CAUTIONED THAT THESE PLANS ARE DIAGRAMMATIC ONLY AND THAT EXACT LOCATIONS AND ROUTINGS FOR NEW WORK SHALL BE AS OBVIOUSLY INDICATED AND AS DIRECTED BY OWNER, WITH MODIFICATIONS AS REQUIRED TO AVOID CONFLICTS IN THE FIELD. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND

ELECTRICAL SYMBOLS

○	OUTDOOR LIGHTING STANDARD & FIXTURE	□	PUSHBUTTON
□	OUTDOOR LIGHTING STANDARD & FIXTURE	□	BUZZER, BELL OR CHIME
□	TRANSFORMER	⊕	CONNECTION TO EXISTING CIRCUIT
□	PANELBOARD	⌒	BRANCH CIRCUIT RACEWAY - CONCEALED IN WALL OR CEILING
□	SAFETY SWITCH	⌒	BRANCH CIRCUIT RACEWAY - CONCEALED IN FLOOR OR UNDERGROUND
⊕	FLUSH JUNCTION BOX CEILING (①-WALL)	⌒	BRANCH CIRCUIT RACEWAY - EXPOSED
⊕	PULL BOX OR JUNCTION BOX IN FLOOR	⊗	TYPICAL: SYMBOLS DENOTE EXISTING. REMOVE COMPLETE.
○	CONDUIT STUB	⊗	TYPICAL: "X" ON PLAN SYMBOLS DENOTES EXISTING. REMOVE COMPLETE.
⊕	DUPLEX RECEPTACLE (⊕-HIGH MOUNT)		
⊕	WEATHERPROOF DUPLEX RECEPTACLE. 16" UP		
⊕	GROUND FAULT INTERRUPTER RECEPTACLE		
⊕	EMERGENCY CALL BOX		
EX	EXISTING; TO REMAIN		
ER	EXISTING; BEING RELOCATED		
EN	EXISTING; NEW LOCATION		

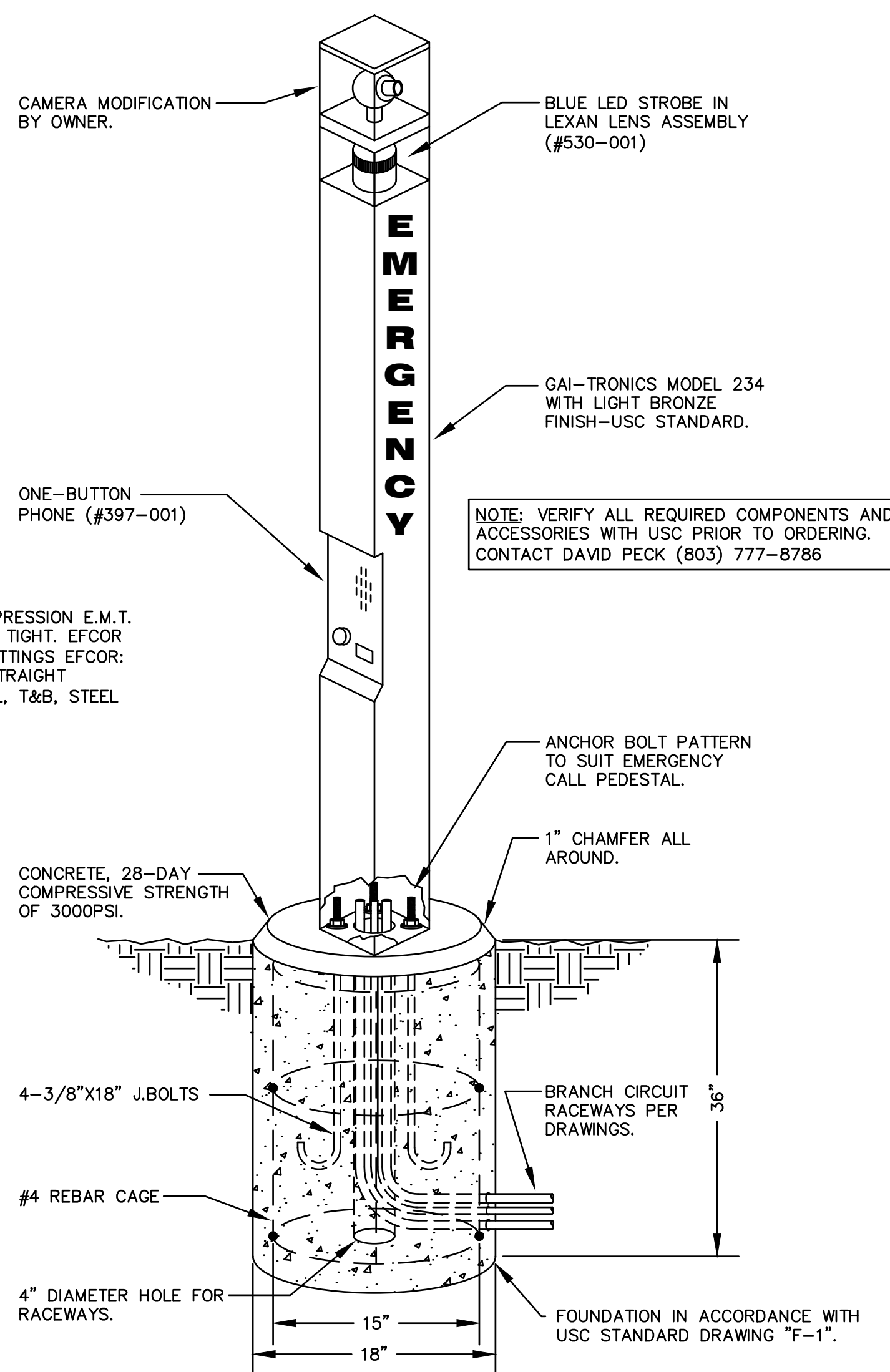
NOTE: ALL DEVICES SHOWN ON THIS SCHEDULE ARE SYMBOLIC ONLY. SEE ELECTRICAL SPECIFICATIONS FOR EXACT DEVICE REQUIREMENTS AND PERFORMANCE CHARACTERISTICS.



NOTES TO THIS DETAIL

- SIZE - EQUIPMENT BONDING JUMPER ON SUPPLY SIDE OF SERVICE: THE BONDING JUMPER SHALL NOT BE SMALLER THAN THE SIZES SHOWN IN TABLE 250.66 FOR GROUNDING ELECTRODE CONDUCTORS.
- SIZE - EQUIPMENT BONDING JUMPER ON LOAD SIDE OF SERVICE: THE BONDING JUMPER SHALL NOT BE SMALLER THAN THE SIZES SHOWN IN TABLE 250.122 FOR EQUIPMENT GROUNDING CONDUCTORS.
- FOR MORE THAN ONE RACEWAY IN ENCLOSURE, BOND ALL LUGS TOGETHER BEFORE TYING BONDING JUMPER TO ENCLOSURE.
- BOND BOTH ENDS OF EACH CONDUIT 1" AND LARGER.
- EXTEND BONDING JUMPER TO EACH PANEL INCLUDING TWO-SECTION PANELS WITH FEED-THRU NIPPLES.

GROUNDING OF CONDUITS 1" C. AND LARGER
NO SCALE



USC STANDARD EMERGENCY CALL BOX
NO SCALE

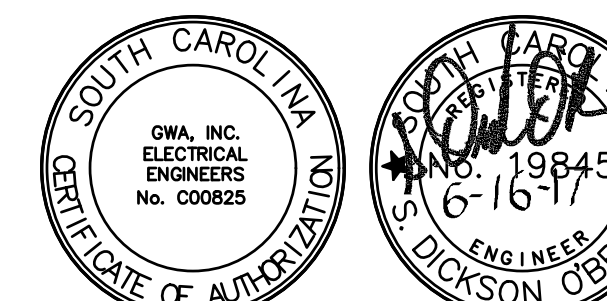
Revisions	Date

GREENE STREET PEDESTRIAN IMPROVEMENTS
ELECTRICAL NOTES, SCHEDULES, AND DETAILS

GRIMBALL & ASSOCIATES
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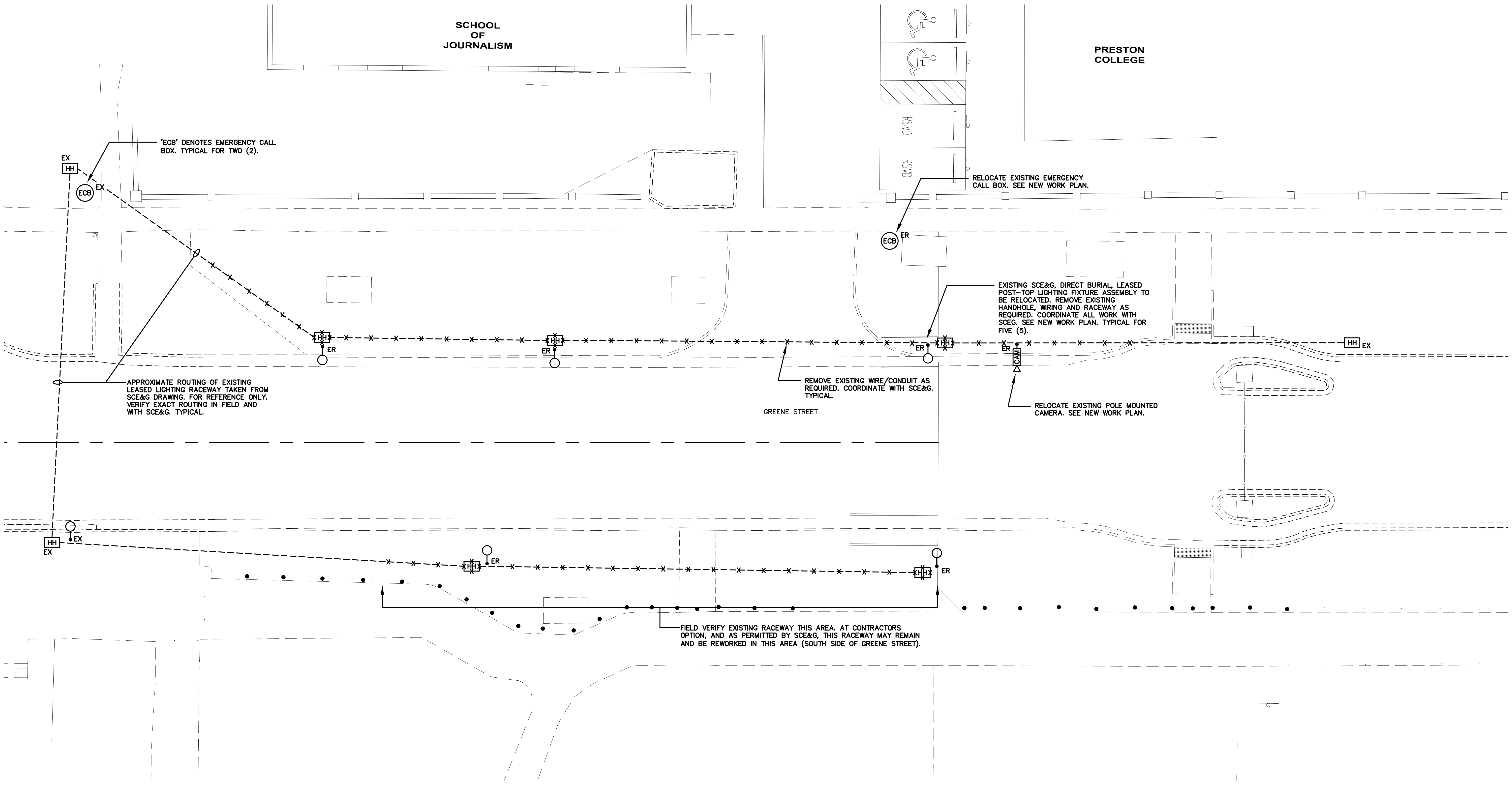
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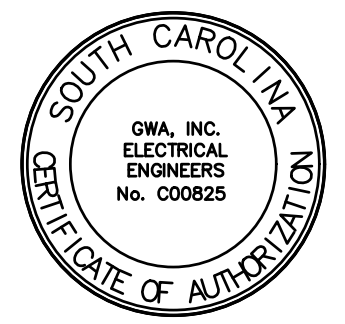
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Checked by:	SDO
Date:	6/16/17
Drawing No.	E001
Sheet No.	1 OF 3



ELECTRICAL SITE DEMOLITION PLAN
SCALE: 1" = 10'-0"



KEY PLAN
SCALE: 1"=1000'



GWA-16-3074

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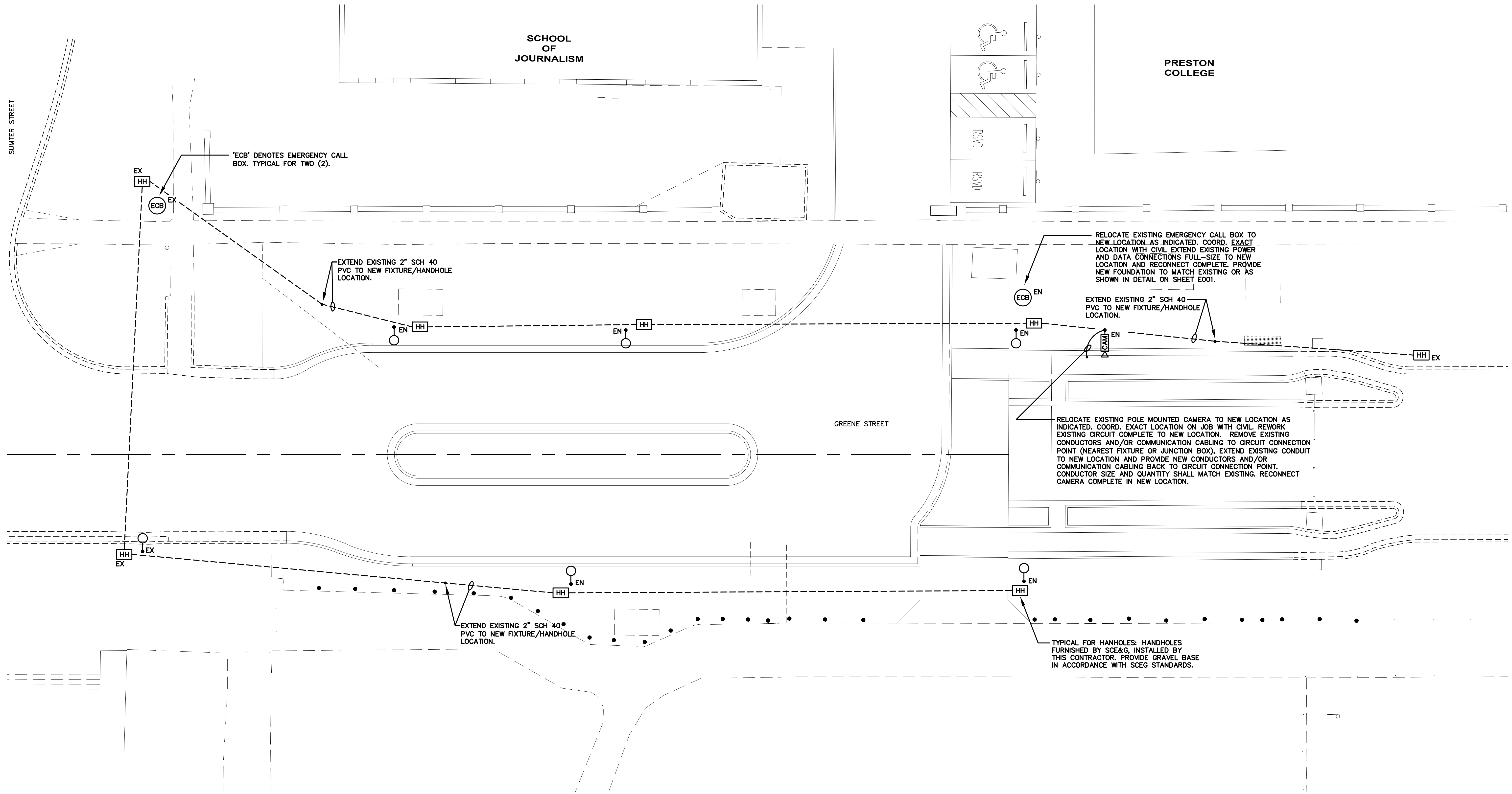
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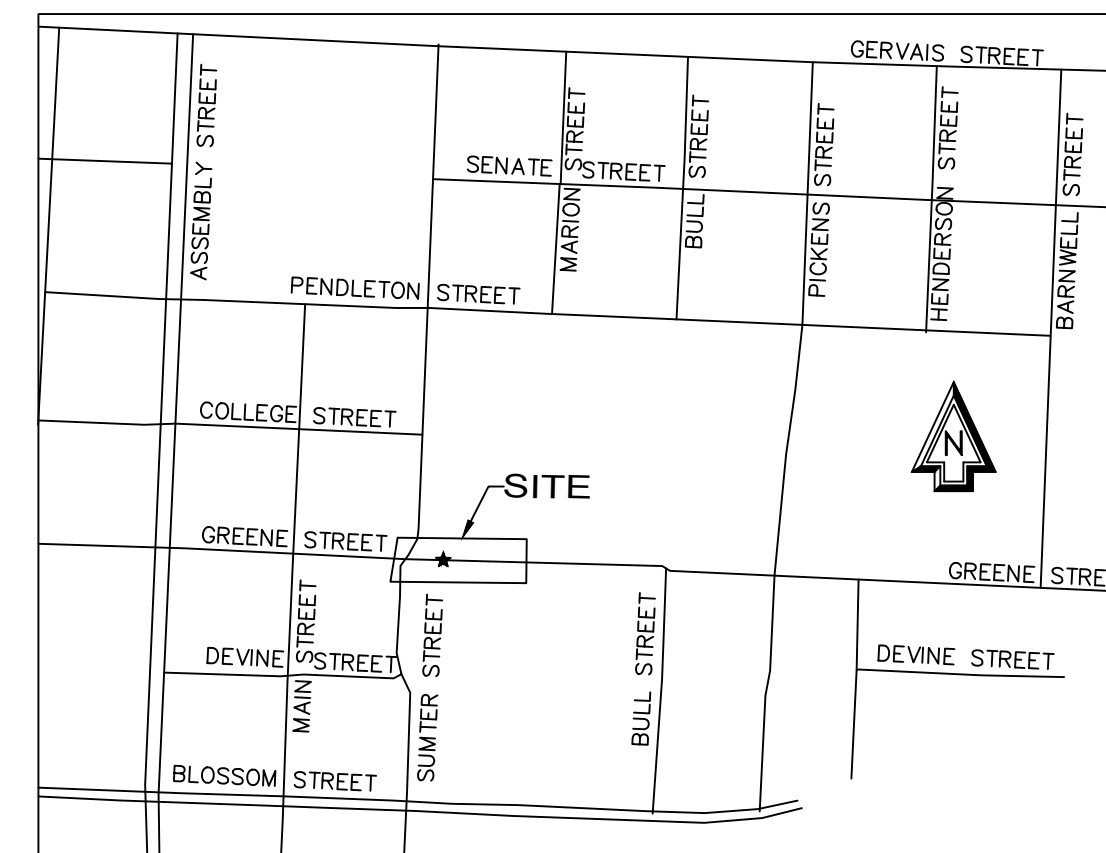
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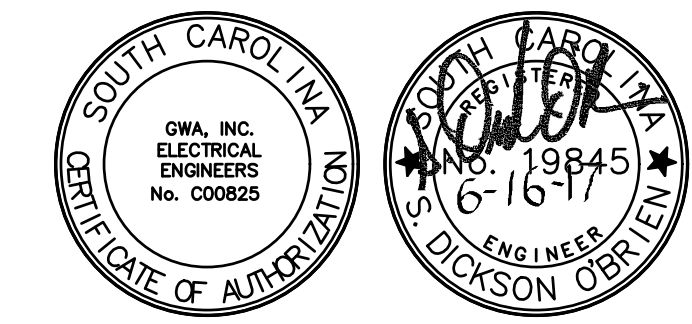
ELECTRICAL SITE PLAN - NEW WORK

SCALE: 1" = 10'-0"

- NOTES TO LEASED LIGHTING INFRASTRUCTURE**
- COORDINATE WITH CIVIL FOR PROJECT LIMITS, RIGHT-OF WAY, ROADWORK, LANDSCAPE FEATURES AND OTHER UTILITIES. MAKE FIELD ADJUSTMENTS TO LIGHTING INFRASTRUCTURE ROUTING, LAYOUT AND HANDHOLE PLACEMENTS AS REQUIRED. ROUTING AND HANDHOLE LOCATIONS INDICATED ARE SCHEMATIC.
 - ALL LIGHTING DEMOLITION AND NEW WORK INFRASTRUCTURE SHALL COMPLY WITH SCE&G LEASED LIGHTING REQUIREMENTS. SCE&G LEASED LIGHTING CONTACT: WAYNE CHAPMAN (803) 217-2889 OR KIMBERLY BENTON (803) 217-5754.
 - HANDHOLES SHALL BE INSTALLED ON GRAVEL BASE IN ACCORDANCE WITH SCE&G GUIDELINES. ADJUST HANDHOLE AND COVER AS REQUIRED TO SUIT FINAL GRADING AND HARDSCAPE. HANDHOLES SHALL BE INSTALLED FLUSH, SQUARE AND PARALLEL TO ROADWAY, SIDEWALKS AND OTHER MAJOR SITE FEATURES.
 - ALL WORK SHALL COMPLY WITH USC GUIDELINES, SCE&G REQUIREMENTS, SCDOT, AASHTO, NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES AND STANDARDS.
 - REWORK EXISTING LIGHTING INFRASTRUCTURE RACEWAY AS REQUIRED TO NEW LOCATIONS. COORDINATE EXTEND OF DEMOLITION AND NEW WORK WITH PROJECT LIMITS, OTHER TRADES AND WITH SCE&G. PROVIDE ALL WORK AS REQUIRED FOR A COMPLETE AND SEAMLESS INFRASTRUCTURE. SCE&G WILL PROVIDE ALL LEASED LIGHTING CONDUCTORS AND INSTALL FIXTURES IN NEW LOCATIONS.



KEY PLAN
SCALE: 1"=1000'



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ELECTRICAL SITE PLAN - NEW WORK

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END OF ADDENDUM Number One (1)