**Project Manual** 

# Bull Street Parking Garage LED Lighting Retrofit

Construction Documents H27-Z042

University of South Carolina Columbia, SC

March 27, 2013



1201 Main St. Suite #1850 Columbia, SC 29201 Job #: 12230-00



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#### SE-310 REQUEST FOR ADVERTISEMENT

Rev. 7/20/2011

PROJECT NAME: Bull Street Garage LED Lighting Retrofit		
PROJECT NUMBER: H27-Z042		
PROJECT LOCATION: University of South Carolina		
Contractor may be subject to performance appraisal at close of pr	oject	
BID SECURITY REQUIRED? Yes ⊠ No □	<b></b>	
PERFORMANCE & PAYMENT BONDS REQUIRED? Yes	S No L	
CONSTRUCTION COST RANGE: \$100,000 to \$500,000		
<b>DESCRIPTION OF PROJECT:</b> Replace existing HID light fix campus of the University of South Carolina in Columbia, SC. Bas		
Alternate Base Bids to provide new lighting in portions of souther		
A/E NAME: DWG, Inc. Consulting Engineers		
A/E CONTACT: Tom White		
A/E ADDRESS: Street/PO Box: 1201 Main St, Ste 1850		
City: Columbia		
State: <u>SC</u> ZIP: <u>29201-</u>		
EMAIL: twhite@dwginc.com		
TELEPHONE: 803-667-9906	<b>FAX:</b> 803-667-9907	
All questions & correspondence concerning this Invitation shall b		
BIDDING DOCUMENTS/PLANS MAY BE OBTAINED FRO		
to download all documents from the purchasing website	on a map of parentaing necessary to the contractor of temponotone,	
PLAN DEPOSIT AMOUNT: \$0.00 IS DEPOSIT REFUNDA	ABLE: Yes  No	
Only those Bidding Documents/Plans obtained from the above lis	ted source(s) are official. Bidders rely on copies of Bidding	
Documents/Plans obtained from any other source at their own risk		
BIDDING DOCUMENTS/PLANS ARE ALSO ON FILE FOR	R VIEWING PURPOSES ONLY AT (list name and location for	
each plan room or other entity):		
PRE-BID CONFERENCE? Yes ⊠ No ☐ MANDATORY	ATTENDANCE? Yes No 🖂	
<b>DATE:</b> 4/17/2013 <b>TIME:</b> 9:00AM <b>PLACE:</b> 743 Gree	ene St, Conference Rm 53, Columbia, SC	
AGENCY: University of South Carolina		
NAME OF AGENCY PROCUREMENT OFFICER: Juaquana	a Brookins	
ADDRESS: Street/PO Box:743 Greene St	<del></del>	
City: Columbia		
State: <u>SC</u> ZIP: 29208-		
EMAIL: jbrookin@fmc.sc.edu		
<b>TELEPHONE:</b> 803-777-3596	FAX: 803-777-7334	
	NV. 742 Consume St. Conference Day 52 Columbia SC	
BID CLOSING DATE: 5/1/2013 TIME: 2:00PM LOCATION DID DELIVERY ADDRESSES:	JN: 743 Greene St, Conference Rm 53, Columbia, SC	
HAND-DELIVERY:	MAIL SERVICE:	
Attn: Juaquana Brookings	Attn: Juaquana Brookings	
743 Greene St	743 Greene St	
Columbia, SC 29208	Columbia, SC 29208	
IS PROJECT WITHIN AGENCY CONSTRUCTION CERTIFICATION? (Agency MUST check one) Yes $\boxtimes$ No $\square$		
APPROVED BY (Office of State Engineer):	DATE:	

# A701 Instructions to Bidders

Original AIA Document on file at the Office of Construction Services 743 Greene Street, Columbia, SC

#### **OSE FORM 00201** Revised October 22, 2012

#### STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

OWNER: <u>University of South Carolina</u> PROJECT NUMBER: H27-Z042

PROJECT NAME: Bull Street Garage LED Lighting Retrofit

PROJECT LOCATION: Columbia, SC

PROCUREMENT OFFICER: Juaquana Brookins

#### 1. STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

- **1.1.** These Standard Supplemental Instructions To Bidders amend or supplement Instructions To Bidders (AIA Document A701-1997) and other provisions of Bidding and Contract Documents as indicated below.
- **1.2.** Compliance with these Standard Supplemental Instructions is required by the Office of State Engineer (OSE) for all State projects when competitive sealed bidding is used as the method of procurement.
- 1.3. All provisions of A701-1997, which are not so amended or supplemented, remain in full force and effect.
- **1.4.** Bidders are cautioned to carefully examine the Bidding and Contract Documents for additional instructions or requirements.

#### 2. MODIFICATIONS TO A701-1997

- **2.1.** *Delete Section 1.1 and insert the following:* 
  - 1.1 Bidding Documents, collectively referred to as the Invitation for Bids, include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement, Instructions to Bidders (A-701), Supplementary Instructions to Bidders, the bid form (SE-330), the Intent to Award Notice (SE-370), and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, all Addenda issued prior to execution of the Contract, and other documents set forth in the Bidding Documents. Any reference in this document to the Agreement between the Owner and Contractor, AIA Document A101, or some abbreviated reference thereof, shall mean the AIA A101, 2007 Edition as modified by OSE Form 00501 Standard Modification to Agreement Between Owner and Contractor. Any reference in this document to the General Conditions of the Contract for Construction, AIA Document A201, or some abbreviated reference thereof, shall mean the AIA A201, 2007 Edition as modified by OSE Form 00811 Standard Supplementary Conditions.
- 2.2. In Section 1.8, delete the words "and who meets the requirements set forth in the Bidding Documents".
- **2.3.** In Section 2.1, delete the word "making" and substitute the word "submitting."
- **2.4.** *In Section 2.1.1:*

After the words "Bidding Documents," delete the word "or" and substitute the word "and."

*Insert the following at the end of this section:* 

Bidders are expected to examine the Bidding Documents and Contract Documents thoroughly and should request an explanation of any ambiguities, discrepancies, errors, omissions, or conflicting statements. Failure to do so will be at the Bidder's risk. Bidder assumes responsibility for any patent ambiguity that Bidder does not bring to the Owner's attention prior to bid opening.

**2.5.** In Section 2.1.3, insert the following after the term "Contract Documents" and before the period: and accepts full responsibility for any pre-bid existing conditions that would affect the Bid that could have been ascertained by a site visit. As provided in Regulation 19-445.2042(B), A bidder's failure to attend an advertised pre-bid conference will not excuse its responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the State.

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#### STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

**2.6.** *Insert the following Sections* 2.2 *through* 2.6:

#### 2.2 CERTIFICATION OF INDEPENDENT PRICE DETERMINATION

GIVING FALSE, MISLEADING, OR INCOMPLETE INFORMATION ON THIS CERTIFICATION MAY RENDER YOU SUBJECT TO PROSECUTION UNDER SECTION 16-9-10 OF THE SOUTH CAROLINA CODE OF LAWS AND OTHER APPLICABLE LAWS.

- (a) By submitting an bid, the bidder certifies that—
  - (1) The prices in this bid have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to—
    - (i) Those prices;
    - (ii) The intention to submit an bid; or
    - (iii) The methods or factors used to calculate the prices offered.
  - (2) The prices in this bid have not been and will not be knowingly disclosed by the bidder, directly or indirectly, to any other bidder or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
  - (3) No attempt has been made or will be made by the bidder to induce any other concern to submit or not to submit an bid for the purpose of restricting competition.
- (b) Each signature on the bid is considered to be a certification by the signatory that the signatory—
  - (1) Is the person in the bidder's organization responsible for determining the prices being offered in this bid, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; or
  - (2)(i) Has been authorized, in writing, to act as agent for the bidder's principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this certification [As used in this subdivision (b)(2)(i), the term "principals" means the person(s) in the bidder's organization responsible for determining the prices offered in this bid];
  - (ii) As an authorized agent, does certify that the principals referenced in subdivision (b)(2)(i) of this certification have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; and
  - (iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this certification.
- (c) If the bidder deletes or modifies paragraph (a)(2) of this certification, the bidder must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

#### 2.3 DRUG FREE WORKPLACE

By submitting a bid, the Bidder certifies that Bidder will maintain a drug free workplace in accordance with the requirements of Title 44, Chapter 107 of South Carolina Code of Laws, as amended.

#### 2.4 CERTIFICATION REGARDING DEBARMENT AND OTHER RESPONSIBILITY MATTERS

- (a) (1) By submitting an Bid, Bidder certifies, to the best of its knowledge and belief, that-
  - (i) Bidder and/or any of its Principals-
    - (A) Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any state or federal agency;
    - (B) Have not, within a three-year period preceding this bid, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in

#### STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of bids; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

- (C) Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.
- (ii) Bidder has not, within a three-year period preceding this bid, had one or more contracts terminated for default by any public (Federal, state, or local) entity.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).
- (b) Bidder shall provide immediate written notice to the Procurement Officer if, at any time prior to contract award, Bidder learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) If Bidder is unable to certify the representations stated in paragraphs (a)(1), Bid must submit a written explanation regarding its inability to make the certification. The certification will be considered in connection with a review of the Bidder's responsibility. Failure of the Bidder to furnish additional information as requested by the Procurement Officer may render the Bidder nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Bidder is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Bidder knowingly or in bad faith rendered an erroneous certification, in addition to other remedies available to the State, the Procurement Officer may terminate the contract resulting from this solicitation for default.

#### 2.5 ETHICS CERTIFICATE

By submitting a bid, the bidder certifies that the bidder has and will comply with, and has not, and will not, induce a person to violate Title 8, Chapter 13 of the South Carolina Code of Laws, as amended (ethics act). The following statutes require special attention: Section 8-13-700, regarding use of official position for financial gain; Section 8-13-705, regarding gifts to influence action of public official; Section 8-13-720, regarding offering money for advice or assistance of public official; Sections 8-13-755 and 8-13-760, regarding restrictions on employment by former public official; Section 8-13-775, prohibiting public official with economic interests from acting on contracts; Section 8-13-790, regarding recovery of kickbacks; Section 8-13-1150, regarding statements to be filed by consultants; and Section 8-13-1342, regarding restrictions on contributions by contractor to candidate who participated in awarding of contract. The state may rescind any contract and recover all amounts expended as a result of any action taken in violation of this provision. If contractor participates, directly or indirectly, in the evaluation or award of public contracts, including without limitation, change orders or task orders regarding a public contract, contractor shall, if required by law to file such a statement, provide the statement required by Section 8-13-1150 to the procurement officer at the same time the law requires the statement to be filed.

#### 2.6 RESTRICTIONS APPLICABLE TO BIDDERS & GIFTS

Violation of these restrictions may result in disqualification of your bid, suspension or debarment, and may constitute a violation of the state Ethics Act. (a) After issuance of the solicitation, bidder agrees not to discuss this procurement activity in any way with the Owner or its employees, agents or officials. All communications must be solely with the Procurement Officer. This restriction may be lifted by express written permission from the Procurement Officer. This restriction expires once a contract has been formed. (b) Unless otherwise approved in writing by the Procurement

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Officer, bidder agrees not to give anything to the Owner, any affiliated organizations, or the employees, agents or officials of either, prior to award. (c) Bidder acknowledges that the policy of the State is that a governmental body should not accept or solicit a gift, directly or indirectly, from a donor if the governmental body has reason to believe the donor has or is seeking to obtain contractual or other business or financial relationships with the governmental body. Regulation 19-445.2165(C) broadly defines the term donor.

#### **2.7.** *Delete Section 3.1.1 and substitute the following:*

**3.1.1** Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement in the number and for the deposit sum, if any, stated therein. If so provided in the Advertisement, the deposit will be refunded to all plan holders who return the Bidding Documents in good condition within ten days after receipt of Bids. The cost of replacement of missing or damaged documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the Bidding Documents and the Bidder's deposit will be refunded.

- **2.8.** Delete the language of Section 3.1.2 and insert the word "Reserved."
- 2.9. In Section 3.1.4, delete the words "and Architect may make" and substitute the words "has made."

#### **2.10.** *Insert the following Section 3.1.5*

**3.1.5** All persons obtaining Bidding Documents from the issuing office designated in the Advertisement shall provide that office with Bidder's contact information to include the Bidder's name, telephone number, mailing address, and email address.

#### **2.11.** In Section 3.2.2:

Delete the words "and Sub-bidders"

Delete the word "seven" and substitute the word "ten"

#### **2.12.** *In Section 3.2.3:*

In the first Sentence, insert the word "written" before the word "Addendum."

*Insert the following at the end of the section:* 

As provided in Regulation 19-445.2042(B), nothing stated at the pre-bid conference shall change the Bidding Documents unless a change is made by written Addendum.

#### **2.13.** *Insert the following at the end of Section 3.3.1:*

Reference in the Bidding Documents to a designated material, product, thing, or service by specific brand or trade name followed by the words "or equal" and "or approved equal" shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition.

#### **2.14.** *Delete Section 3.3.2 and substitute the following:*

**3.3.2** No request to substitute materials, products, or equipment for materials, products, or equipment described in the Bidding Documents and no request for addition of a manufacturer or supplier to a list of approved manufacturers or suppliers in the Bidding Documents will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids established in the Invitation for Bids. Any subsequent extension of the date for receipt of Bids by addendum shall not extend the date for receipt of such requests unless the addendum so specifies. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

#### **2.15.** *Delete Section 3.4.3 and substitute the following:*

**3.4.3** Addenda will be issued no later than 120 hours prior to the time for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

#### STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

#### **2.16.** *Insert the following Sections 3.4.5 and 3.4.6:*

- **3.4.5** When the date for receipt of Bids is to be postponed and there is insufficient time to issue a written Addendum prior to the original Bid Date, Owner will notify prospective Bidders by telephone or other appropriate means with immediate follow up with a written Addendum. This Addendum will verify the postponement of the original Bid Date and establish a new Bid Date. The new Bid Date will be no earlier than the fifth (5th) calendar day after the date of issuance of the Addendum postponing the original Bid Date.
- **3.4.6.** If an emergency or unanticipated event interrupts normal government processes so that bids cannot be received at the government office designated for receipt of bids by the exact time specified in the solicitation, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal government processes resume. In lieu of an automatic extension, an Addendum may be issued to reschedule bid opening. If state offices are closed at the time a pre-bid or pre-proposal conference is scheduled, an Addendum will be issued to reschedule the conference. Useful information may be available at: <a href="http://www.scemd.org/scgovweb/weather-alert.html">http://www.scemd.org/scgovweb/weather-alert.html</a>
- **2.17.** In Section 4.1.1, delete the word "forms" and substitute the words "SE-330 Bid Form."
- **2.18.** *Delete Section 4.1.2 and substitute the following:* 
  - **4.1.2** Any blanks on the bid form to be filled in by the Bidder shall be legibly executed in a non-erasable medium. Bids shall be signed in ink or other indelible media.
- **2.19.** *Delete Section 4.1.3 and substitute the following:* 
  - **4.1.3** Sums shall be expressed in figures.
- **2.20.** *Insert the following at the end of Section 4.1.4:*

Bidder shall not make stipulations or qualify his bid in any manner not permitted on the bid form. An incomplete Bid or information not requested that is written on or attached to the Bid Form that could be considered a qualification of the Bid, may be cause for rejection of the Bid.

- **2.21.** Delete Section 4.1.5 and substitute the following:
  - **4.1.5** All requested Alternates shall be bid. The failure of the bidder to indicate a price for an Alternate shall render the Bid non-responsive. Indicate the change to the Base Bid by entering the dollar amount and marking, as appropriate, the box for "ADD TO" or "DEDUCT FROM". If no change in the Base Bid is required, enter "ZERO" or "No Change." For add alternates to the base bid, Subcontractor(s) listed on page BF-2 of the Bid Form to perform Alternate Work shall be used for both Alternates and Base Bid Work if Alternates are accepted.
- **2.22.** *Delete Section 4.1.6 and substitute the following:* 
  - **4.1.6** Pursuant to Title 11, Chapter 35, Section 3020(b)(i) of the South Carolina Code of Laws, as amended, Section 7 of the Bid Form sets forth a list of subcontractor specialties for which Bidder is required to list only the subcontractors Bidder will use to perform the work of each listed specialty. Bidder must follow the Instructions in the Bid Form for filling out this section of the Bid Form. Failure to properly fill out Section 7 may result in rejection of Bidder's bid as non-responsive.
- **2.23.** *Delete Section 4.1.7 and substitute the following:* 
  - **4.1.7** Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.
- **2.24.** *Delete Section 4.2.1 and substitute the following:* 
  - **4.2.1** If required by the Invitation for Bids, each Bid shall be accompanied by a bid security in an amount of not less than five percent of the Base Bid. The bid security shall be a bid bond or a certified cashier's check. The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

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#### **2.25.** *Delete Section 4.2.2 and substitute the following:*

**4.2.2** If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney. The bid bond shall:

- .1 Be issued by a surety company licensed to do business in South Carolina;
- .2 Be issued by a surety company having, at a minimum, a "Best Rating" of "A" as stated in the most current publication of "Best's Key Rating Guide, Property-Casualty", which company shows a financial strength rating of at least five (5) times the contract price.
- .3 Be enclosed in the bid envelope at the time of Bid Opening, either in paper copy or as an electronic bid bond authorization number provided on the Bid Form and issued by a firm or organization authorized by the surety to receive, authenticate and issue binding electronic bid bonds on behalf the surety.

#### **2.26.** *Delete Section 4.2.3 and substitute the following:*

**4.2.3** By submitting a bid bond via an electronic bid bond authorization number on the Bid Form and signing the Bid Form, the Bidder certifies that an electronic bid bond has been executed by a Surety meeting the standards required by the Bidding Documents and the Bidder and Surety are firmly bound unto the State of South Carolina under the conditions provided in this Section 4.2.

#### **2.27.** *Insert the following Section 4.2.4:*

**4.2.4** The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and performance and payment bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.

#### **2.28.** *Delete Section 4.3.1 and substitute the following:*

**4.3.1** All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall, unless hand delivered by the Bidder, be addressed to the Owner's designated purchasing office as shown in the Invitation for Bids. The envelope shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail or special delivery service (UPS, Federal Express, etc.), the envelope should be labeled "BID ENCLOSED" on the face thereof. Bidders hand delivering their Bids shall deliver Bids to the place of the Bid Opening as shown in the Invitation for Bids. Whether or not Bidders attend the Bid Opening, they shall give their Bids to the Owner's procurement officer or his/her designee as shown in the Invitation for Bids prior to the time of the Bid Opening.

#### **2.29.** *Insert the following Section 4.3.6 and substitute the following:*

**4.3.5** The official time for receipt of Bids will be determined by reference to the clock designated by the Owner's procurement officer or his/her designee. The procurement officer conducting the Bid Opening will determine and announce that the deadline has arrived and no further Bids or bid modifications will be accepted. All Bids and bid modifications in the possession of the procurement officer at the time the announcement is completed will be timely, whether or not the bid envelope has been date/time stamped or otherwise marked by the procurement officer.

#### **2.30.** *Delete Section 4.4.2 and substitute the following:*

**4.4.2** Prior to the time and date designated for receipt of Bids, a Bid submitted may be withdrawn in person or by written notice to the party receiving Bids at the place designated for receipt of Bids. Withdrawal by written notice shall be in writing over the signature of the Bidder.

#### **2.31.** *In Section 5.1, delete everything following the caption "OPENING OF BIDS" and substitute the following:*

**5.1.1** Bids received on time will be publicly opened and will be read aloud. Owner will not read aloud Bids that Owner determines, at the time of opening, to be non-responsive.

- **5.1.2** At bid opening, Owner will announce the date and location of the posting of the Notice of Intended Award.
- **5.1.3** Owner will send a copy of the final Bid Tabulation to all Bidders within ten (10) working days of the Bid Opening.

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#### STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

- **5.1.4** If Owner determines to award the Project, Owner will, after posting a Notice of Intended Award, send a copy of the Notice to all Bidders.
- **5.1.5** If only one Bid is received, Owner will open and consider the Bid.
- **2.32.** In Section 5.2, insert the section number "5.2.1" before the words of the "The Owner" at the beginning of the sentence.
- **2.33.** *Insert the following Sections* 5.2.2 *and* 5.2.3:
  - **5.2.2** The reasons for which the Owner will reject Bids include, but are not limited to:
    - .1 Failure by a Bidder to be represented at a Mandatory Pre-Bid Conference or site visit;
    - **.2** Failure to deliver the Bid on time:
    - .3 Failure to comply with Bid Security requirements, except as expressly allowed by law;
    - .4 Listing an invalid electronic Bid Bond authorization number on the bid form;
    - .5 Failure to Bid an Alternate, except as expressly allowed by law;
    - **.6** Failure to list qualified Subcontractors as required by law;
    - .7 Showing any material modification(s) or exception(s) qualifying the Bid;
    - **.8** Faxing a Bid directly to the Owner or their representative; or
    - **.9** Failure to include a properly executed Power-of-Attorney with the bid bond.
  - **5.2.3** The Owner may reject a Bid as nonresponsive if the prices bid are materially unbalanced between line items or sub-line items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the Owner even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.
- **2.34.** *Delete Section 6.1 and substitute the following:*

#### 6.1 CONTRACTOR'S RESPONSIBILITY

Owner will make a determination of Bidder's responsibility before awarding a contract. Bidder shall provide all information and documentation requested by the Owner to support the Owner's evaluation of responsibility. Failure of Bidder to provide requested information is cause for the Owner, at its option, to determine the Bidder to be non-responsible

- **2.35.** Delete the language of Section 6.2 and insert the word "Reserved."
- **2.36.** Delete the language of Sections 6.3.2, 6.3.3, and 6.3.4 and insert the word "Reserved" after each Section Number.
- **2.37.** Insert the following Section 6.4

#### **6.4 CLARIFICATION**

Pursuant to Section 11-35-1520(8), the Procurement Officer may elect to communicate with a Bidder after opening for the purpose of clarifying either the Bid or the requirements of the Invitation for Bids. Such communications may be conducted only with Bidders who have submitted a Bid which obviously conforms in all material aspects to the Invitation for Bids and only in accordance with Appendix D (Paragraph A(6)) to the Manual for Planning and Execution of State Permanent Improvement, Part II. Clarification of a Bid must be documented in writing and included with the Bid. Clarifications may not be used to revise a Bid or the Invitation for Bids. [Section 11-35-1520(8); R.19-445.2080]

- **2.38.** *Delete Section 7.1.2 and substitute the following:* 
  - **7.1.2** The performance and payment bonds shall conform to the requirements of Section 11.4 of the General Conditions of the Contract. If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid.
- **2.39.** Delete the language of Section 7.1.3 and insert the word "Reserved."
- **2.40.** In Section 7.2, insert the words "CONTRACT, CERTIFICATES OF INSURANCE" into the caption after the word "Delivery."

#### Revised October 22, 2012 STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

#### **2.41.** *Delete Section 7.2.1 and substitute the following:*

7.2.1 After expiration of the protest period, the Owner will tender a signed Contract for Construction to the Bidder and the Bidder shall return the fully executed Contract for Construction to the Owner within seven days thereafter. The Bidder shall deliver the required bonds and certificate of insurance to the Owner not later than three days following the date of execution of the Contract. Failure to deliver these documents as required shall entitle the Owner to consider the Bidder's failure as a refusal to enter into a contract in accordance with the terms and conditions of the Bidder's Bid and to make claim on the Bid Security for re-procurement cost.

#### **2.42.** Delete the language of Section 7.2.2 and insert the word "Reserved."

#### **2.43.** *Delete the language of Article 8 and insert the following:*

Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on South Carolina Modified AIA Document A101, 2007, Standard Form of Agreement Between Owner and Contractor as modified by OSE Form 00501 – Standard Modification to Agreement Between Owner and Contractor.

#### **2.44.** *Insert the following Article 9:*

#### **ARTICLE 9 MISCELLANEOUS**

#### 9.1 NONRESIDENT TAXPAYER REGISTRATION AFFIDAVIT INCOME TAX WITHHOLDING IMPORTANT TAX NOTICE - NONRESIDENTS ONLY

Withholding Requirements for Payments to Nonresidents: Section 12-8-550 of the South Carolina Code of Laws requires persons hiring or contracting with a nonresident conducting a business or performing personal services of a temporary nature within South Carolina to withhold 2% of each payment made to the nonresident. The withholding requirement does not apply to (1) payments on purchase orders for tangible personal property when the payments are not accompanied by services to be performed in South Carolina, (2) nonresidents who are not conducting business in South Carolina, (3) nonresidents for contracts that do not exceed \$10,000 in a calendar year, or (4) payments to a nonresident who (a) registers with either the S.C. Department of Revenue or the S.C. Secretary of State and (b) submits a Nonresident Taxpayer Registration Affidavit - Income Tax Withholding, Form I-312 to the person letting the contract.

For information about other withholding requirements (e.g., employee withholding), contact the Withholding Section at the South Carolina Department of Revenue at 803-898-5383 or visit the Department's website at: www.sctax.org

This notice is for informational purposes only. This Owner does not administer and has no authority over tax issues. All registration questions should be directed to the License and Registration Section at 803-898-5872 or to the South Carolina Department of Revenue, Registration Unit, Columbia, S.C. 29214-0140. All withholding questions should be directed to the Withholding Section at 803-898-5383.

PLEASE SEE THE "NONRESIDENT TAXPAYER REGISTRATION AFFIDAVIT INCOME TAX WITHHOLDING" (FORM FORM NUMBER I-312) LOCATED AT: http://www.sctax.org/Forms+and+Instructions/withholding/default.htm .

#### 9.2 CONTRACTOR LICENSING

Contractors and Subcontractors listed in Section 7 of the Bid Form who are required by the South Carolina Code of Laws to be licensed, must be licensed at the time of bidding.

#### 9.3 SUBMITTING CONFIDENTIAL INFORMATION

For every document Bidder submits in response to or with regard to this solicitation or request, Bidder must separately mark with the word "CONFIDENTIAL" every page, or portion thereof, that Bidder contends contains information that is exempt from public disclosure because it is either (a) a trade secret as defined in Section 30-4-40(a)(1), or (b) privileged & confidential, as that phrase is used in Section 11-35-410. For every document Bidder submits in response to or with regard to this solicitation or request, Bidder must separately mark with the words "TRADE SECRET" every page, or portion thereof, that Bidder contends contains a trade secret as that term is defined by Section 39-8-20 of the Trade Secrets Act. For every document Bidder submits in response to or with regard to this solicitation or request, Bidder must separately mark with the word "PROTECTED" every page, or portion thereof, that Bidder contends is protected by Section 11-35-1810. All markings must be conspicuous; use color, bold, underlining, or some other method in order to conspicuously distinguish the mark from the other text. Do not mark your entire bid as confidential, trade secret, or protected! If your bid, or any part thereof, is improperly marked as confidential or trade

#### STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

secret or protected, the State may, in its sole discretion, determine it nonresponsive. If only portions of a page are subject to some protection, do not mark the entire page. By submitting a response to this solicitation, Bidder (1) agrees to the public disclosure of every page of every document regarding this solicitation or request that was submitted at any time prior to entering into a contract (including, but not limited to, documents contained in a response, documents submitted to clarify a response, & documents submitted during negotiations), unless the page is conspicuously marked "TRADE SECRET" or "CONFIDENTIAL" or "PROTECTED", (2) agrees that any information not marked, as required by these bidding instructions, as a "Trade Secret" is not a trade secret as defined by the Trade Secrets Act, & (3) agrees that, notwithstanding any claims or markings otherwise, any prices, commissions, discounts, or other financial figures used to determine the award, as well as the final contract amount, are subject to public disclosure. In determining whether to release documents, the State will detrimentally rely on Bidders's marking of documents, as required by these bidding instructions, as being either "Confidential" or "Trade Secret" or "PROTECTED". By submitting a response, Bidder agrees to defend, indemnify & hold harmless the State of South Carolina, its officers & employees, from every claim, demand, loss, expense, cost, damage or injury, including attorney's fees, arising out of or resulting from the State withholding information that Bidder marked as "confidential" or "trade secret" or "PROTECTED".

#### 9.4 POSTING OF INTENT TO AWARD

Notice of Intent to Award, SE-370, will be posted at the following location:

Room or Area of Posting: Reception

Building Where Posted: <u>Facilities Management Building</u>
Address of Building: <u>743 Greene Street</u>, <u>Columbia</u>, <u>SC 29208</u>
WEB site address (if applicable): http://purchasing.sc.edu

**Posting date will be announced at bid opening.** In addition to posting the notice, the Owner will promptly send all responsive bidders a copy of the notice of intent to award and the final bid tabulation

#### 9.5 PROTEST OF SOLICITATION OR AWARD

Any prospective bidder, offeror, contractor, or subcontractor who is aggrieved in connection with the solicitation of a contract shall protest within fifteen days of the date of issuance of the applicable solicitation document at issue. Any actual bidder, offeror, contractor, or subcontractor who is aggrieved in connection with the intended award or award of a contract shall protest within ten days of the date notification of intent to award is posted in accordance with Title 11, Chapter 35, Section 4210 of the South Carolina Code of Laws, as amended. A protest shall be in writing, shall set forth the grounds of the protest and the relief requested with enough particularity to give notice of the issues to be decided, and must be received by the State Engineer within the time provided.

Any protest must be addressed to the CPO, Office of State Engineer, and submitted in writing:

- (a) by email to protest-ose@mmo.sc.gov,
- (b) by facsimile at 803-737-0639, or
- (c) by post or delivery to 1201 Main Street, Suite 600, Columbia, SC 29201.

By submitting a protest to the foregoing email address, you (and any person acting on your behalf) consent to receive communications regarding your protest (and any related protests) at the e-mail address from which you sent your protest.

#### 9.6 SOLICITATION INFORMATION FROM SOURCES OTHER THAN OFFICIAL SOURCE

South Carolina Business Opportunities (SCBO) is the official state government publication for State of South Carolina solicitations. Any information on State agency solicitations obtained from any other source is unofficial and any reliance placed on such information is at the bidder's sole risk and is without recourse under the South Carolina Consolidated Procurement Code.

#### 9.7 BUILDER'S RISK INSURANCE

Bidder's are directed to Article 11.3 of the South Carolina Modified AIA Document A201, 2007 Edition, which, unless provided otherwise in the bid documents, requires the contractor to provide builder's risk insurance on the project.

**OSE FORM 00201** Revised October 22, 2012

#### STANDARD SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

#### 9.8 TAX CREDIT FOR SUBCONTRACTING WITH MINORITY FIRMS

Pursuant to Section 12-6-3350, taxpayers, who utilize certified minority subcontractors, may take a tax credit equal to 4% of the payments they make to said subcontractors. The payments claimed must be based on work performed directly for a South Carolina state contract. The credit is limited to a maximum of fifty thousand dollars annually. The taxpayer is eligible to claim the credit for 10 consecutive taxable years beginning with the taxable year in which the first payment is made to the subcontractor that qualifies for the credit. After the above ten consecutive taxable years, the taxpayer is no longer eligible for the credit. The credit may be claimed on Form TC-2, "Minority Business Credit." A copy of the subcontractor's certificate from the Governor's Office of Small and Minority Business (OSMBA) is to be attached to the contractor's income tax return. Taxpayers must maintain evidence of work performed for a State contract by the minority subcontractor. Questions regarding the tax credit and how to file are to be referred to: SC Department of Revenue, Research and Review, Phone: (803) 898-5786, Fax: (803) 898-5888. The subcontractor must be certified as to the criteria of a "Minority Firm" by the Governor's Office of Small and Minority Business Assistance (OSMBA). Certificates are issued to subcontractors upon successful completion of the certification process. Questions regarding subcontractor certification are to be referred to: Governor's Office of Small and Minority Business Assistance, Phone: (803) 734-0657, Fax: (803) 734-2498. Reference: SC §11-35-5010 – Definition for Minority Subcontractor & SC §11-35-5230 (B) – Regulations for Negotiating with State Minority Firms.

§ 9.9 OTHER SPECIAL CONDITIO	NS OF THE WORK
NONE	
	END OF DOCUMENT



#### **Bid Bond**

CONTRACTOR: (Name, legal status and address) TBD TBD  OWNER: (Name, legal status and address) TBD TBD  BOND AMOUNT:	SURETY: (Name, legal status and principal place of business) TBD TBD	This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.  Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.
PROJECT: (Name, location or address, and Project nur TBD TBD	• • •	et Number, if any:
The Contractor and Surety are bound to the Contractor and Surety bind themselves, their severally, as provided herein. The condition within the time specified in the bid documer Contractor, and the Contractor either (1) ent bid, and gives such bond or bonds as may be in the jurisdiction of the Project and otherwi and for the prompt payment of labor and ma difference, not to exceed the amount of this for which the Owner may in good faith cont obligation shall be null and void, otherwise an agreement between the Owner and Contractice by the Surety shall not apply to any e acceptance of bids specified in the bid document extension beyond sixty (60) days.	r heirs, executors, administrators, successors of this Bond are such that if the Owner and the state of the owner and the state of the owner in according to the owner of the state of the owner, for the faithful atterial furnished in the prosecution thereof Bond, between the amount specified in saturact with another party to perform the worst to remain in full force and effect. The Surfactor to extend the time in which the Owner extension exceeding sixty (60) days in the according to the owner of the owner of the owner owner.	ors and assigns, jointly and accepts the bid of the Contractor agreed to by the Owner and rdance with the terms of such aments, with a surety admitted all performance of such Contract (c); or (2) pays to the Owner the aid bid and such larger amount the covered by said bid, then this ety hereby waives any notice of aggregate beyond the time for
If this Bond is issued in connection with a sube deemed to be Subcontractor and the term		n Contractor in this Bond shall
When this Bond has been furnished to company provision in this Bond conflicting with a provisions conforming to such statutory or c furnished, the intent is that this Bond shall be	said statutory or legal requirement shall be other legal requirement shall be deemed in	e deemed deleted herefrom and corporated herein. When so
Signed and sealed this da	ay of	
	(Principal)	(Seal)
(Witness)	(Title)	
(III)	(Surety)	(Seal)
(Witness)	(Title)	

# $\begin{array}{c} \textbf{SE-330} - \textbf{LUMP SUM BID} \\ \textbf{BID FORM} \end{array}$

Bidders shall submit bids on only Bid Form SE-330.	
BID SUBMITTED BY:	
(Bidder's Name)	
BID SUBMITTED TO: University of South Carolina	
(Owner's Name)	
FOR PROJECT: PROJECT NAME Bull Street Garage LED Lighting Retrofit	
PROJECT NUMBER <u>H27-Z042</u>	
<u>OFFER</u>	
§ 1. In response to the Invitation for Construction Bids and in compliance with the Instructions to Bidders for the above-named Project, the undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contra with the Owner on the terms included in the Bidding Documents, and to perform all Work as specified or indicate in the Bidding Documents, for the prices and within the time frames indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.  § 2. Pursuant to Section 11-32-3030(1) of the SC Code of Laws, as amended, Bidder has submitted Bid Security	ed he
follows in the amount and form required by the Bidding Documents:	
☐ Bid Bond with Power of Attorney ☐ Electronic Bid Bond ☐ Cashier's Check  (Bidder check one)	
§ 3. Bidder acknowledges the receipt of the following Addenda to the Bidding Documents and has incorporated teffects of said Addenda into this Bid:	he
ADDENDUM No:	
§ 4. Bidder accepts all terms and conditions of the Invitation for Bids, including, without limitation, those dealing with the disposition of Bid Security. Bidder agrees that this Bid, including all Bid Alternates, if any, may not revoked or withdrawn after the opening of bids, and shall remain open for acceptance for a period of 60 Da following the Bid Date, or for such longer period of time that Bidder may agree to in writing upon request of towner.	be ys
§ 5. Bidder herewith offers to provide all labor, materials, equipment, tools of trades and labor, accessories appliances, warranties and guarantees, and to pay all royalties, fees, permits, licenses and applicable taxes necessar to complete the following items of construction work:	
§ 6.1 BASE BID WORK (as indicated in the Bidding Documents and generally described as follows): Replace existing	ng
HID light fixtures with LED fixtures in the Bull Street Parking Garage on the campus of the University of Sou	th
Carolina in Columbia, SC. Provide new lighting in northern half of garage, including: Level 1 - Section A, Level 2 Section A, Level 3 - Section A, Level 4 and Level 5.,	<u>2 -</u>
, which sum is hereafter called the Base Bi  (Bidder - insert Base Bid Amount on line above)	d.

# $\begin{array}{c} \textbf{SE-330} - \textbf{LUMP SUM BID} \\ \textbf{BID FORM} \end{array}$

§ 6.2 BID ALTERNATES - as indicated in the Bidding Documents and generally described as follows:
ALTERNATE # 1 (Brief Description): Replace existing HID fixtures with LED fixtures in the Bull Street Parking
Garage, on Level 1 - Section B & Level 2 - Section B.
ADD TO or □ DEDUCT FROM BASE BID:
(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)
<u>ALTERNATE # 2</u> (Brief Description): <u>Replace existing HID fixtures with LED fixtures in the Bull Street Parking</u>
Garage on Level 3 - Section B
<b>△</b> ADD TO or <b>□</b> DEDUCT FROM BASE BID:
(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)
<u>ALTERNATE # 3</u> (Brief Description): <u>Replace existing HID fixtures with LED fixtures in the Bull Street Parking</u>
Garage on Level L1 and Level L2
□ ADD TO or □ DEDUCT FROM BASE BID:
(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)

# SE-330 – LUMP SUM BID BID FORM

Rev. 9/21/2011

 $\S$  7. LISTING OF PROPOSED SUBCONTRACTORS PURSUANT TO SECTION 3020(b)(i), CHAPTER 35, TITLE 11 OF THE SOUTH CAROLINA CODE OF LAWS, AS AMENDED – (See Instructions on the following page BF-2A)

Bidder shall use the below-listed Subcontractors in the performance of the Subcontractor Specialty work listed:

SUBCONTRACTOR SPECIALTY By License Classification and/or Subclassification (Completed by Owner)	SUBCONTRACTOR'S PRIME CONTRACTOR'S NAME (Must be completed by Bidder) BASE BID	SUBCONTRACTOR'S PRIME CONTRACTOR'S SC LICENSE NUMBER
NO SUBCONTRACTOR LISTING REQUIRED		
	ALTERNATE 1	
NO SUBCONTRACTOR LISTING REQUIRED		
	ALTERNATE 2	
NO SUBCONTRACTOR LISTING REQUIRED		
	ALTERNATE 3	
NO SUBCONTRACTOR LISTING REQUIRED		

If a Bid Alternate is accepted, Subcontractors listed for the Bid Alternate shall be used for the work of both the Alternate and the Base Bid work.

#### SE-330 – LUMP SUM BID BID FORM

#### INSTRUCTIONS FOR SUBCONTRACTOR LISTING

- 1. Section 7 of the Bid Form sets forth a list of subcontractor specialties for which bidder is required to identify by name the subcontractor(s) Bidder will use to perform the work of each listed specialty. Bidder must identify only the subcontractor(s) who will perform the work and no others.
- **2.** For purposes of subcontractor listing, a Subcontractor is an entity who will perform work or render service to the prime contractor to or about the construction site. Material suppliers, manufacturers, and fabricators that will not perform physical work at the site of the project but will only supply materials or equipment to the bidder or proposed subcontractor(s) are not subcontractors and Bidder should not insert their names in the spaces provided on the bid form. Likewise, Bidder should not insert the names of sub-subcontractors in the spaces provided on the bid form but only the names of those entities with which bidder will contract directly.
- 3. Bidder must only insert the names of subcontractors who are qualified to perform the work of the listed specialties as specified in the Bidding Documents and South Carolina Licensing Laws.
- **4.** If under the terms of the Bidding Documents, Bidder is qualified to perform the work of a specialty listed and Bidder does not intend to subcontract such work but to use Bidder's own employees to perform such work, the Bidder must insert its own name in the space provided for that specialty.
- **5.** If Bidder intends to use multiple subcontractors to perform the work of a single specialty listing, Bidder must insert the name of each subcontractor Bidder will use, preferably separating the name of each by the word "and". If Bidder intends to use both his own employees to perform a part of the work of a single specialty listing and to use one or more subcontractors to perform the remaining work for that specialty listing, bidder must insert his own name and the name of each subcontractor, preferably separating the name of each with the word "and".
- 6. Bidder may not list subcontractors in the alternative nor in a form that may be reasonably construed at the time of bid opening as a listing in the alternative. A listing that requires subsequent explanation to determine whether or not it is a listing in the alternative is non-responsive. If bidder intends to use multiple entities to perform the work for a single specialty listing, bidder must clearly set forth on the bid form such intent. Bidder may accomplish this by simply inserting the word "and" between the name of each entity listed for that specialty. Owner will reject as non-responsive a listing that contains the names of multiple subcontractors separated by a blank space, the word "or", a virgule (that is a /), or any separator that the Owner may reasonably interpret as a listing in the alternative.
- **7.** If Bidder is awarded the contract, bidder must, except with the approval of the owner for good cause shown, use the listed entities to perform the work for which they are listed.
- 8. If bidder is awarded the contract, bidder will not be allowed to substitute another entity as subcontractor in place of a subcontractor listed in Section 7 of the Bid except for one or more of the reasons allowed by the SC Code of Laws.
- 9. Bidder's failure to insert a name for each listed specialty subcontractor will render the Bid non-responsive.

#### SE-330 – LUMP SUM BID BID FORM

§ 8. LIST OF MANUFACTURERS, MATERIAL SUPPLIERS, AND SUBCONTRACTORS OTHER THAN SUBCONTRACTORS LISTED IN SECTION 7 ABOVE (FOR INFORMATION ONLY): Pursuant to instructions in the Invitation for Bids, if any, Bidder will provide to Owner upon the Owner's request and within 24 hours of such request, a listing of manufacturers, material suppliers, and subcontractors, other than those listed in Section 7 above, that Bidder intends to use on the project. Bidder acknowledges and agrees that this list is provided for purposes of determining responsibility and not pursuant to the subcontractor listing requirements of SC Code Ann § 11-35-3020(b)(i).

#### § 9. TIME OF CONTRACT PERFORMANCE AND LIQUIDATED DAMAGES

- a. CONTRACT TIME: Bidder agrees that the Date of Commencement of the Work shall be established in a Notice to Proceed to be issued by the Owner. Bidder agrees to substantially complete the Work within <u>90</u> calendar days from the Date of Commencement, subject to adjustments as provided in the Contract Documents.
- b. LIQUIDATED DAMAGES: Bidder further agrees that from the compensation to be paid, the Owner shall retain as Liquidated Damages the sum of \$100.00 for each calendar day the actual construction time required to achieve Substantial Completion exceeds the specified or adjusted time for Substantial Completion as provided in the Contract Documents. This sum is intended by the parties as the predetermined measure of compensation for actual damages, not as a penalty for nonperformance.

#### § 10. AGREEMENTS

- a. Bidder agrees that this bid is subject to the requirements of the law of the State of South Carolina.
- b. Bidder agrees that at any time prior to the issuance of the Notice to Proceed for this Project, this Project may be canceled for the convenience of, and without cost to, the State.
- c. Bidder agrees that neither the State of South Carolina nor any of its agencies, employees or agents shall be responsible for any bid preparation costs, or any costs or charges of any type, should all bids be rejected or the Project canceled for any reason prior to the issuance of the Notice to Proceed.

#### § 11. ELECTRONIC BID BOND

By signing below, the Principal is affirming that the identified electronic bid bond has been executed and that the Principal and Surety are firmly bound unto the State of South Carolina under the terms and conditions of the AIA Document A310, Bid Bond, included in the Bidding Documents.

<b>Electronic Bid Bond</b>	Number:
Signature and Title:	

#### SE-330 – LUMP SUM BID BID FORM

212 1 014.1	
BIDDER'S TAXPAYER IDENTIFICATION	
FEDERAL EMPLOYER'S IDENTIFICATION NUMBER:	
OR	
SOCIAL SECURITY NUMBER:	
CONTRACTOR'S CLASSIFICATIONS AND SUBCLASSIFICATIONS WITH LIMI	ITATIONS
Classification(s)& Limits:	
Subclassification(s) & Limits:	
SC Contractor's License Number(s):	
BY SIGNING THIS BID, THE PERSON SIGNING REAFFIRMS ALL REPR CERTIFICATIONS MADE BY BOTH THE PERSON SIGNING AND THE BIDDER, II LIMITATION, THOSE APPEARING IN ARTICLE 2 OF THE INSTRUCTIONS INVITATION FOR BIDS, AS DEFINED IN THE INSTRUCTIONS TO BIDDI INCORPORATE BY REFERENCE.	NCLUDING WITHOUT S TO BIDDER. THE

# SIGNATURE BIDDER'S LEGAL NAME: \_\_\_\_\_\_ ADRESS: \_\_\_\_\_\_ BY: \_\_\_\_\_\_ DATE: \_\_\_\_\_ (Signature) TITLE: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_\_ EMAIL: \_\_\_\_\_

#### A101

# **Standard Form of Agreement Between Owner and Contractor**

Original AIA Document on file at the Office of Construction Services 743 Greene Street, Columbia, SC

#### **OSE FORM 00501**

Rev. 7/11/2011

## STANDARD MODIFICATIONS TO AGREEMENT BETWEEN OWNER AND CONTRACTOR

OWNER: <u>University of South Carolina</u> PROJECT NUMBER: <u>H27-Z042</u>

**PROJECT NAME:** Bull Street Garage LED Lighting Retrofit

#### 1. STANDARD MODIFICATIONS TO AIA A101-2007

**1.1.** These Standard Modifications amend or supplement the *Standard Form of Agreement Between Owner and Contractor* (AIA Document A101-2007) and other provisions of Bidding and Contract Documents as indicated below.

**1.2.** All provisions of A101-2007, which are not so amended or supplemented, remain in full force and effect.

#### 2. MODIFICATIONS TO A101

**2.1.** *Insert the following at the end of Article 1:* 

Any reference in this document to the Agreement between the Owner and Contractor, AIA Document A101, or some abbreviated reference thereof, shall mean the AIA A101, 2007 Edition as modified by OSE Form 00501 – Standard Modification to Agreement Between Owner and Contractor. Any reference in this document to the General Conditions of the Contract for Construction, AIA Document A201, or some abbreviated reference thereof, shall mean the AIA A201, 2007 Edition as modified by OSE Form 00811 – Standard Supplementary Conditions.

- **2.2.** *Delete Section 3.1 and substitute the following:* 
  - **3.1** The Date of Commencement of the Work shall be the date fixed in a Notice to Proceed issued by the Owner. The Owner shall issue the Notice to Proceed to the Contractor in writing, no less than seven days prior to the Date of Commencement. Unless otherwise provided elsewhere in the contract documents, and provided the contractor has secured all required insurance and surety bonds, the contractor may commence work immediately after receipt of the Notice to Proceed.
- **2.3.** *Delete Section 3.2 and substitute the following:* 
  - **3.2** The Contract Time shall be measured from the Date of Commencement as provided in Section 9(a) of the Bid Form (SE-330) for this Project. Contractor agrees that if the Contractor fails to achieve Substantial Completion of the Work within the Contract Time, the Owner shall be entitled to withhold or recover from the Contractor liquidated damages in the amounts set forth in Section 9(b) of the Bid Form (SE-330, subject to adjustments of this Contract Time as provided in the Contract Documents.
- **2.4.** In Section 5.1.1, insert the words "and Owner" after the phrase "Payment submitted to the Architect."
- **2.5.** *Delete Section 5.1.3 and substitute the following:* 
  - **5.1.3** The Owner shall make payment of the certified amount to the Contractor not later than 21 days after receipt of the Application for Payment.
- **2.6.** In Section 5.1.6, Insert the following after the phrase "Subject to other provisions of the Contract Documents":

and subject to Title 12, Chapter 8, Section 550 of the South Carolina Code of Laws, as amended (Withholding Requirements for Payments to Non-Residents)

In the spaces provided in Sub-Sections 1 and 2 for inserting the retainage amount, insert "three and one-half percent (3.5%)."

2011 Edition

Rev. 7/11/2011

#### **OSE FORM 00501**

# STANDARD MODIFICATIONS TO AGREEMENT BETWEEN OWNER AND CONTRACTOR

**2.7.** *In Section 5.1.8, delete the word "follows" and the colon and substitute the following:* 

set forth in S.C. Code Ann. § 11-35-3030(4).

- **2.8.** In Section 5.1.9, delete the words "Except with the Owner's prior approval, the" before the word "Contractor."
- 2.9. In Section 5.2.2, delete the number 30 and substitute the number 21, delete everything following the words "Certificate for Payment" and place a period at the end of the resulting sentence.
- **2.10.** Delete the language of Sections 6.1 and 6.2 and substitute the word "Reserved" for the deleted language of each Section .
- **2.11.** *Delete the language of Section 8.2 and substitute the word "Reserved."*
- **2.12.** In Section 8.3, make the word "Representative" in the title plural, delete everything following the title, and substitute the following:
  - **8.3.1** Owner designates the individual listed below as its Senior Representative ("Owner's Senior Representative"), which individual has the responsibility for and, subject to Section 7.2.1 of the General Conditions, the authority to resolve disputes under Section 15.6 of the General Conditions:

Name: Tom Opal

Title: Sr Project Manager

Address: 743 Greene Street, Columbia, SC 29208

**Telephone:** 803-777-7076 **FAX:** \_\_\_\_\_

Email: tnopal@fmc.sc.edu

**8.3.2** Owner designates the individual listed below as its Owner's Representative, which individual has the authority and responsibility set forth in Section 2.1.1 of the General Conditions:

Name: <u>Troy Nelson</u> **Title:** Project Manager

Address: 743 Greene Street, Columbia, SC 29208

**Telephone:** 803-777-4674 **FAX:** 

Email: tnelson@fmc.sc.edu

- **2.13.** In Section 8.4, make the word "Representative" in the title plural, delete everything following the title, and substitute the following:
  - **8.4.1** Contractor designates the individual listed below as its Senior Representative ("Contractor's Senior Representative"), which individual has the responsibility for and authority to resolve disputes under Section 15.6 of the General Conditions:

Name:	
Title:	
Address:	
Telephone:	<b>FAX:</b>
Fmail·	·

2011 Edition

#### **OSE FORM 00501** Rev. 7/11/2011

## STANDARD MODIFICATIONS TO AGREEMENT BETWEEN OWNER AND CONTRACTOR

**8.4.2** Contractor designates the individual listed below as its Contractor's Representative, which individual has the authority and responsibility set forth in Section 3.1.1 of the General Conditions:

Name:	
Title:	
Address:	
Telephone:	<b>FAX:</b>
Email:	

**2.14**. Add the following Section 8.6.1:

**8.6.1** The Architect's representative:

Name: <u>Tom White</u> Title: <u>Electrical Engineer</u>

**Address:** <u>1201 Main Street, Columbia, SC 29201</u> **Telephone:** <u>803-667-9906</u> **FAX:** <u>803-667-9907</u>

Email: twhite@dwginc.com

**2.15.** In Section 9.1.7, Sub-Section 2, list the following documents in the space provided for listing documents:

Invitation for Construction Bids (SE-310)

Instructions to Bidders (AIA Document A701-1997)

Standard Supplemental Instructions to Bidders (OSE Form 00201)

Contractor's Bid (Completed SE-330)

Notice of Intent to Award (Completed SE-370)

Certificate of procurement authority issued by the SC Budget & Control Board

**2.16.** *In Article 10, delete everything after the first sentence.* 

#### **END OF DOCUMENT**

#### **A201**

# **General Conditions of the Contract for Construction**

Original AIA Document on file at the Office of Construction Services 743 Greene Street, Columbia, SC OSE FORM 00811

Rev. 9/7/2011

STANDARD SUPPLEMENTARY CONDITIONS

OWNER: <u>University of South Carolina</u> PROJECT NUMBER: H27-Z042

PROJECT NAME: Bull Street Garage LED Lighting Retrofit

#### 1 GENERAL CONDITIONS

The *General Conditions of the Contract for Construction*, AIA Document A201, 2007 Edition, Articles 1 through 15 inclusive, is a part of this Contract and is incorporated as fully as if herein set forth. For brevity, AIA Document A201 is also referred to in the Contract Documents collectively as the "General Conditions."

#### 2 STANDARD SUPPLEMENTARY CONDITIONS

- 2.1 The following supplements modify, delete and/or add to the General Conditions. Where any portion of the General Conditions is modified or any paragraph, Section or clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of the General Conditions shall remain in effect.
- 2.2 Unless otherwise stated, the terms used in these Standard Supplementary Conditions which are defined in the General Conditions have the meanings assigned to them in the General Conditions.

#### 3 MODIFICATIONS TO A201-2007

3.1 *Insert the following at the end of Section 1.1.1:* 

Any reference in this document to the Agreement between the Owner and Contractor, AIA Document A101, or some abbreviated reference thereof, shall mean the AIA A101, 2007 Edition as modified by OSE Form 00501 – Standard Modification to Agreement Between Owner and Contractor. Any reference in this document to the General Conditions of the Contract for Construction, AIA Document A201, or some abbreviated reference thereof, shall mean the AIA A201, 2007 Edition as modified by OSE Form 00811 – Standard Supplementary Conditions.

- 3.2 Delete the language of Section 1.1.8 and substitute the word "Reserved."
- 3.3 Add the following Section 1.1.9:

#### 1.1.9 NOTICE TO PROCEED

Notice to Proceed is a document issued by the Owner to the Contractor, with a copy to the Architect, directing the Contractor to begin prosecution of the Work in accordance with the requirements of the Contract Documents. The Notice to Proceed shall fix the date on which the Contract Time will commence.

3.4 *Insert the following at the end of Section 1.2.1:* 

In the event of patent ambiguities within or between parts of the Contract Documents, the contractor shall 1) provide the better quality or greater quantity of Work, or 2) comply with the more stringent requirement, either or both in accordance with the Architect's interpretation.

- **3.5** *Delete Section 1.5.1 and substitute the following:* 
  - **1.5.1** The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as a violation of the Architect's or Architect's consultants' reserved rights.

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- **3.6** *Delete Section 2.1.1 and substitute the following:* 
  - **2.1.1** The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization, except as provided in Section 7.1.2. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's Representative. [Reference § 8.2 of the Agreement.]
- 3.7 Delete Section 2.1.2 and substitute the following:
  - **2.1.2** The Owner shall furnish to the Contractor within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to post Notice of Project Commencement pursuant to Title 29, Chapter 5, Section 23 of the South Carolina Code of Laws, as amended..
- **3.8** *Delete Section 2.2.3 and substitute the following:* 
  - **2.2.3** The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. Subject to the Contractor's obligations, including those in Section 3.2, the Contractor shall be entitled to rely on the accuracy of information furnished by the Owner pursuant to this Section but shall exercise proper precautions relating to the safe performance of the Work.
- **3.9** Replace the period at the end of the last sentence of Section 2.2.4 with a semicolon and insert the following after the inserted semicolon:

"however, the Owner does not warrant the accuracy of any such information requested by the Contractor that is not otherwise required of the Owner by the Contract Documents. Neither the Owner nor the Architect shall be required to conduct investigations or to furnish the Contractor with any information concerning subsurface characteristics or other conditions of the area where the Work is to be performed beyond that which is provide in the Contract Documents."

- **3.10** *Delete Section 2.2.5 and substitute the following:* 
  - **2.2.5** Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor with ten copies of the Contract Documents. The Contractor may make reproductions of the Contract Documents pursuant to Section 1.5.2. All copies of the drawings and specifications, except the Contractor's record set, shall be returned or suitably accounted for to the Owner, on request, upon completion of the Work.
- 3.11 Add the following Sections 2.2.6 and 2.2.7:
  - **2.2.6** The Owner assumes no responsibility for any conclusions or interpretation made by the Contractor based on information made available by the Owner.
  - **2.2.7** The Owner shall obtain, at its own cost, general building and specialty inspection services as required by the Contract Documents. The Contractor shall be responsible for payment of any charges imposed for reinspections.
- **3.12** *Delete Section 2.4 and substitute the following:* 
  - **2.4** If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect, including but not limited to providing necessary resources, with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Directive shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

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**3.13** *Insert the following at the end of Section 3.2.1:* 

The Contractor acknowledges that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Owner, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Owner.

- 3.14 In the third sentence of Section 3.2.4, insert the word "latent" before the word "errors."
- 3.15 In the last sentence of Section 3.3.1, insert the words "by the Owner in writing" after the word "instructed."
- **3.16** *Delete the third sentence of Section 3.5 and substitute the following sentences:*

Work, materials, or equipment not conforming to these requirements shall be considered defective. Unless caused by the Contractor or a subcontractor at any tier, the Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

3.17 *Insert the following at the end of Section 3.6:* 

The Contractor shall comply with the requirements of Title 12, Chapter 9 of the South Carolina Code of Laws, as amended, regarding withholding tax for nonresidents, employees, contractors and subcontractors.

3.18 In Section 3.7.1, delete the words "the building permit as well as for other" and insert the following sentence at the end of this section:

Pursuant to Title 10, Chapter 1, Section 180 of the South Carolina Code of Laws, as amended, no local general or specialty building permits are required for state buildings.

**3.19** *Delete the last sentence of Section 3.7.5 and substitute the following:* 

Adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 7.3.3.

**3.20** *Delete the last sentence of Section 3.8.2.3 and substitute the following:* 

The amount of the Change Order shall reflect the difference between actual costs, as documented by invoices, and the allowances under Section 3.8.2.1.

3.21 In Section 3.9.1, insert a comma after the word "superintendent" in the first sentence and insert the following after the inserted comma:

acceptable to the Owner,

*Delete Section 3.9.2 and substitute the following:* 

**3.9.2** The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner the name and qualifications of a proposed superintendent. The Owner may reply within 14 days to the Contractor in writing stating (1) whether the Owner has reasonable objection to the proposed superintendent or (2) that the

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Owner requires additional time to review. Failure of the Owner to reply within the 14-day period shall constitute notice of no reasonable objection.

3.23 After the first sentence in Section 3.9.3, insert the following sentence:

The Contractor shall notify the Owner, in writing, of any proposed change in the superintendent, including the reason therefore, prior to making such change.

**3.24** *Delete Section 3.10.3 and substitute the following:* 

**3.10.3** Additional requirements, if any, for the constructions schedule are as follows: (*Check box if applicable to this Contract*))

The construction schedule shall be in a detailed precedence-style critical path management (CPM) or primavera-type format satisfactory to the Owner and the Architect that shall also (1) provide a graphic representation of all activities and events that will occur during performance of the work; (2) identify each phase of construction and occupancy; and (3) set forth dates that are critical in ensuring the timely and orderly completion of the Work in accordance with the requirements of the Contract Documents (hereinafter referred to as "Milestone Dates"). Upon review and acceptance by the Owner and the Architect of the Milestone Dates, the construction schedule shall be deemed part of the Contract Documents and attached to the Agreement as Exhibit "A." If not accepted, the construction schedule shall be promptly revised by the Contractor in accordance with the recommendations of the Owner and the Architect and resubmitted for acceptance. The Contactor shall monitor the progress of the Work for conformance with the requirements of the construction schedule and shall promptly advise the Owner of any delays or potential delays. Whenever the approved construction schedule no longer reflects actual conditions and progress of the work or the Contract Time is modified in accordance with the terms of the Contract Documents, the Contractor shall update the accepted construction schedule to reflect such conditions. In the event any progress report indicates any delays, the Contractor shall propose an affirmative plan to correct the delay, including overtime and/or additional labor, if necessary. In no event shall any progress report constitute an adjustment in the Contract Time, any Milestone Date, or the Contract Sum unless any such adjustment is agreed to by the Owner and authorized pursuant to Change Order.

3.25 Add the following Section 3.10.4:

**3.10.4** Owner's review and acceptance of Contractor's schedule is not conducted for the purpose of either determining its accuracy and completeness or approving the construction means, methods, techniques, sequences or procedures. The Owner's approval shall not relieve the Contractor of any obligations. Unless expressly addressed in a Modification, the Owner's approval of a schedule shall not change the Contract Time.

**3.26** Add the following Section 3.12.5.1:

**3.12.5.1** The fire sprinkler shop drawings shall be prepared by a licensed fire sprinkler contractor and shall accurately reflect actual conditions affecting the required layout of the fire sprinkler system. The fire sprinkler contractor shall certify the accuracy of his shop drawings prior to submitting them for review and approval. The fire sprinkler shop drawings shall be reviewed and approved by the Architect's engineer of record who, upon approving the sprinkler shop drawings will submit them to the State Fire Marshal or other authorities having jurisdiction for review and approval. The Architect's engineer of record will submit a copy of the State Fire Marshal's approval letter to the Contractor, Architect, and OSE. Unless authorized in writing by OSE, neither the Contractor nor subcontractor at any tier shall submit the fire sprinkler shop drawings directly to the State Fire Marshal or other authorities having jurisdiction for approval.

3.27 In the fourth sentence of Section 3.12.10, after the comma following the words "licensed design professional," insert the following:

who shall comply with reasonable requirements of the Owner regarding qualifications and insurance and

3.28 In Section 3.13, insert the section number "3.13.1" before the before the opening words "The Contractors shall."

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- **3.29** Add the following Sections 3.13.2 and 3.13.3:
  - **3.13.2** Protection of construction materials and equipment stored at the Project site from weather, theft, vandalism, damage, and all other adversity is solely the responsibility of the Contractor. The Contractor shall perform the work in a manner that affords reasonable access, both vehicular and pedestrian, to the site of the Work and all adjacent areas. The Work shall be performed, to the fullest extent reasonably possible, in such a manner that public areas adjacent to the site of the Work shall be free from all debris, building materials, and equipment likely to cause hazardous conditions.
  - **3.13.3** The Contractor and any entity for whom the Contractor is responsible shall not erect any sign on the Project site without the prior written consent of the Owner.
- 3.30 In the first sentence of Section 3.18.1, after the parenthetical "...(other than the Work itself),..." and before the word "...but...", insert the following:

including loss of use resulting therefrom,

- **3.31** *Delete Section 4.1.1 and substitute the following:* 
  - **4.1.1** The Architect is that person or entity identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.
- **3.32** *Insert the following at the end of Section 4.2.1:*

Any reference in the Contract Documents to the Architect taking action or rendering a decision with a "reasonable time" is understood to mean no more than fourteen days, unless otherwise specified in the Contract Documents or otherwise agreed to by the parties.

**3.33** *Delete the first sentence of Section 4.2.2 and substitute the following:* 

The Architect will visit the site as necessary to fulfill its obligation to the Owner for inspection services, if any, and, at a minimum, to assure conformance with the Architect's design as shown in the Contract Documents and to observe the progress and quality of the various components of the Contractor's Work, and to determine if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents.

**3.34** *Delete the first sentence of Section 4.2.3 and substitute the following:* 

On the basis of the site visits, the Architect will keep the Owner informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work.

3.35 In Section 4.2.5, after the words "evaluations of the" and before the word "Contractor's," insert the following:

Work completed and correlated with the

- **3.36** *Delete the first sentence of Section 4.2.11 and substitute the following:* 
  - **4.2.11** The Architect will, in the first instance, interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. Upon receipt of such request, the Architect will promptly provide the non-requesting party with a copy of the request.

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**3.37** *Insert the following at the end of Section 4.2.12:* 

If either party disputes the Architects interpretation or decision, that party may proceed as provided in Article 15. The Architect's interpretations and decisions may be, but need not be, accorded any deference in any review conducted pursuant to law or the Contract Documents.

**3.38** *Delete Section 4.2.14 and substitute the following:* 

The Architect will review and respond to requests for information about the Contract Documents so as to avoid delay to the construction of the Project. The Architect's response to such requests will be made in writing with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information. Any response to a request for information must be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. Unless issued pursuant to a Modification, supplemental Drawings or Specifications will not involve an adjustment to the Contract Sum or Contract Time.

- **3.39** *Delete Section 5.2.1 and substitute the following:* 
  - **5.2.1** Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, within fourteen days after posting of the Notice of Intent to Award the Contract, shall furnish in writing to the Owner through the Architect the names of persons or entities (excluding Listed Subcontractors but including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Owner may reply within 14 days to the Contractor in writing stating (1) whether the Owner has reasonable objection to any such proposed person or entity. Failure of the Owner to reply within the 14 day period shall constitute notice of no reasonable objection.
- **3.40** *Delete Section 5.2.2 and substitute the following:* 
  - **5.2.2** The Contractor shall not contract with a proposed person or entity to whom the Owner has made reasonable and timely objection. The Owner shall not direct the Contractor to contract with any specific individual or entity for supplies or services unless such supplies and services are necessary for completion of the Work and the specified individual or entity is the only source of such supply or services.
- 3.41 In the first sentence of Section 5.2.3, delete the words "...or Architect..." in the two places they appear.
- 3.42 Delete the words "... or Architect..." in the in the first sentence of Section 5.2.4 and insert the following sentence at the end of Section 5.2.4:

The Contractor's request for substitution must be made to the Owner in writing accompanied by supporting information.

- **3.43** *Add the following Section 5.2.5:* 
  - **5.2.5** A Subcontractor identified in the Contractor's Bid in response the specialty subcontractor listing requirements of Section 7 of the Bid Form (SE-330) may only be substituted in accordance with and as permitted by the provisions of Title 11, Chapter 35, Section 3021 of the South Carolina Code of Laws, as amended. A proposed substitute for a Listed Subcontractor shall be subject to the Owner's approval as set forth is Section 5.2.3.
- 3.44 In Section 5.3, delete everything following the heading "SUBCONTRACTUAL RELATIONS" and insert the following Sections 5.3.1, 5.3.2, 5.3.3, and 5.3.4:
  - **5.3.1** By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not

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prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise herein or in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

- § 5.3.2 Without limitation on the generality of Section 5.3.1, each Subcontract agreement and each Sub-subcontract agreement shall include, and shall be deemed to include, the following Sections of these General Conditions: 3.2, 3.5, 3.18, 5.3, 5.4, 6.2.2, 7.3.3, 7.5, 7.6, 13.1, 13.12, 14.3, 14.4, and 15.1.6.
- § 5.3.3 Each Subcontract Agreement and each Sub-subcontract agreement shall exclude, and shall be deemed to exclude, Sections 13.2.1 and 13.6 and all of Article 15, except Section 15.1.6, of these General Conditions. In the place of these excluded sections of the General Conditions, each Subcontract Agreement and each Sub-subcontract may include Sections 13.2.1 and 13.6 and all of Article 15, except Section 15.1.6, of AIA Document A201-2007, Conditions of the Contract, as originally issued by the American Institute of Architects.
- § 5.3.4 The Contractor shall assure the Owner that all agreements between the Contractor and its Subcontractor incorporate the provisions of Subparagraph 5.3.1 as necessary to preserve and protect the rights of the Owner and the Architect under the Contract Documents with respect to the work to be performed by Subcontractors so that the subcontracting thereof will not prejudice such rights. The Contractor's assurance shall be in the form of an affidavit or in such other form as the Owner may approve. Upon request, the Contractor shall provide the Owner or Architect with copies of any or all subcontracts or purchase orders.
- **3.45** *Delete the last sentence of Section 5.4.1.*
- **3.46** *Add the following Sections 5.4.4, 5.4.5 and 5.4.6:* 
  - § 5.4.4 Each subcontract shall specifically provide that the Owner shall only be responsible to the subcontractor for those obligations of the Contractor that accrue subsequent to the Owner's exercise of any rights under this conditional assignment.
  - § 5.4.5 Each subcontract shall specifically provide that the Subcontractor agrees to perform portions of the Work assigned to the Owner in accordance with the Contract Documents.
  - § 5.4.6 Nothing in this Section 5.4 shall act to reduce or discharge the Contractor's payment bond surety's obligations to claims arising prior to the Owner's exercise of any rights under this conditional assignment.
- 3.47 Delete the language of Section 6.1.4 and substitute the word "Reserved."
- **3.48** *Insert the following at the end of Section 7.1.2:*

If the amount of a Modification exceeds the limits of the Owner's Construction Change Order Certification (reference Section 9.1.7.2 of the Agreement), then the Owner's agreement is not effective, and Work may not proceed, until approved in writing by the Office of State Engineer.

- **3.49** *Delete Section 7.2.1 and substitute the following:* 
  - **7.2.1** A Change Order is a written instrument prepared by the Architect (using State Form SE-480 "Construction Change Order") and signed by the Owner, Contractor and Architect stating their agreement upon all of the following:
    - .1 The change in the Work;

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- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.
- **3.50** *Add the following Sections* 7.2.2, 7.2.3, 7.2.4, *and* 7.2.5:
  - **7.2.2** If a Change Order provides for an adjustment to the Contract Sum, the adjustment must be calculated in accordance with Section 7.3.3.
  - **7.2.3** At the Owner's request, the Contractor shall prepare a proposal to perform the work of a proposed Change Order setting forth the amount of the proposed adjustment, if any, in the Contract Sum; and the extent of the proposed adjustment, if any, in the Contract Time. Any proposed adjustment in the Contract sum shall be prepared in accordance with Section 7.2.2. The Owner's request shall include any revisions to the Drawings or Specifications necessary to define any changes in the Work. Within fifteen days of receiving the request, the Contractor shall submit the proposal to the Owner and Architect along with all documentation required by Section 7.6.
  - **7.2.4** If the Contractor requests a Change Order, the request shall set forth the proposed change in the Work and shall be prepared in accordance with Section 7.2.3. If the Contractor requests a change to the Work that involves a revision to either the Drawings or Specifications, the Contractor shall reimburse the Owner for any expenditures associated with the Architects' review of the proposed revisions, except to the extent the revisions are accepted by execution of a Change Order.
  - **7.2.5** Agreement on any Change Order shall constitute a final settlement of all matters relating to the change in the Work that is the subject of the Change Order, including, but not limited to, any adjustments to the Contract Sum or the Contract Time.
- **3.51** *Delete* 7.3.3 and substitute the following:

#### 7.3.3 PRICE ADJUSTMENTS

- § 7.3.3.1 If any Modification, including a Construction Change Directive, provides for an adjustment to the Contract Sum, the adjustment shall be based on whichever of the following methods is the most valid approximation of the actual cost to the contractor, with overhead and profit as allowed by Section 7.5:
  - .1 Mutual acceptance of a lump sum;
  - **.2** Unit prices stated in the Contract Documents, except as provided in Section 7.3.4, or subsequently agreed upon;
  - .3 Cost attributable to the events or situations under applicable clauses with adjustment of profits or fee, all as specified in the contract, or subsequently agreed upon by the parties, or by some other method as the parties may agree; or
  - **.4** As provided in Section 7.3.7.
- § 7.3.3.2 Consistent with Section 7.6, costs must be properly itemized and supported by substantiating data sufficient to permit evaluation before commencement of the pertinent performance or as soon after that as practicable. All costs incurred by the Contractor must be justifiably compared with prevailing industry standards. Except as provided in Section 7.5, all adjustments to the Contract Price shall be limited to job specific costs and shall not include indirect costs, overhead, home office overhead, or profit.
- **3.52** *Delete Section 7.3.7 and substitute the following:* 
  - **7.3.7** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall make an initial determination, consistent with Section 7.3.3, of the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in Section 7.5. In such case, and also under Section 7.3.3.1.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.7 shall be limited to the following:

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- .1 Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance;
- .2 Costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others; and
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work.
- **3.53** *Delete Section 7.3.8 and substitute the following:* 
  - **7.3.8** Using the percentages stated in Section 7.5, any adjustment to the Contract Sum for deleted work shall include any overhead and profit attributable to the cost for the deleted Work.
- **3.54** *Add the following Sections 7.5 and 7.6:*

#### 7.5 AGREED OVERHEAD AND PROFIT RATES

- **7.5.1** For any adjustment to the Contract Sum for which overhead and profit may be recovered, other than those made pursuant to Unit Prices stated in the Contract Documents, the Contractor agrees to charge and accept, as full payment for overhead and profit, the following percentages of costs attributable to the change in the Work. The percentages cited below shall be considered to include all indirect costs including, but not limited to: field and office managers, supervisors and assistants, incidental job burdens, small tools, and general overhead allocations. The allowable percentages for overhead and profit are as follows:
  - .1 To the Contractor for work performed by the Contractor's own forces, 17% of the Contractor's actual costs.
  - .2 To each Subcontractor for work performed by the Subcontractor's own forces, 17% of the subcontractor's actual costs.
  - .3 To the Contractor for work performed by a subcontractor, 10% of the subcontractor's actual costs (not including the subcontractor's overhead and profit).

#### 7.6 PRICING DATA AND AUDIT

#### § 7.6.1 Cost or Pricing Data.

Upon request of the Owner or Architect, Contractor shall submit cost or pricing data prior to execution of a Modification which exceeds \$500,000. Contractor shall certify that, to the best of its knowledge and belief, the cost or pricing data submitted is accurate, complete, and current as of a mutually determined specified date prior to the date of pricing the Modification. Contractor's price, including profit, shall be adjusted to exclude any significant sums by which such price was increased because Contractor furnished cost or pricing data that was inaccurate, incomplete, or not current as of the date specified by the parties. Notwithstanding Subparagraph 9.10.4, such adjustments may be made after final payment to the Contractor.

§ 7.6.2 Cost or pricing data means all facts that, as of the date specified by the parties, prudent buyers and sellers would reasonably expect to affect price negotiations significantly. Cost or pricing data are factual, not judgmental; and are verifiable. While they do not indicate the accuracy of the prospective contractor's judgment about estimated future costs or projections, they do include the data forming the basis for that judgment. Cost or pricing data are more than historical accounting data; they are all the facts that can be reasonably expected to contribute to the soundness of estimates of future costs and to the validity of determinations of costs already incurred.

#### § 7.6.3 Records Retention.

As used in Section 7.6, the term "records" means any books or records that relate to cost or pricing data that Contractor is required to submit pursuant to Section 7.6.1. Contractor shall maintain records for three years from the date of final payment, or longer if requested by the chief procurement officer. The Owner may audit Contractor's records at reasonable times and places.

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- Delete Section 8.2.2 and substitute the following:
  - **8.2.2** The Contractor shall not knowingly commence operations on the site or elsewhere prior to the effective date of surety bonds and insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such surety bonds or insurance.
- 3.56 *Delete Section 8.3.1 and substitute the following:* 
  - **8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner; or by changes ordered in the Work; or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the control of the Contractor and any subcontractor at any tier; or by delay authorized by the Owner pending dispute resolution; or by other causes that the Architect determines may justify delay, then to the extent such delay will prevent the Contractor from achieving Substantial Completion within the Contract Time and provided the delay (1) is not caused by the fault or negligence of the Contractor or a subcontractor at any tier and (2) is not due to unusual delay in the delivery of supplies, machinery, equipment, or services when such supplies, machinery, equipment, or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery, the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.
- 3.57 *Insert the following at the end of Section 9.1:*

All changes to the Contract Sum shall be adjusted in accordance with Section 7.3.3.

3.58 Delete Section 9.2 and substitute the following:

## 9.2 SCHEDULE OF VALUES

9.2.1 The Contractor shall submit to the Architect, within ten days of full execution of the Agreement, a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. As requested by the Architect, the Contractor and each Subcontractor shall prepare a trade payment breakdown for the Work for which each is responsible, such breakdown being submitted on a uniform standardized format approved by the Architect and Owner. The breakdown shall be divided in detail, using convenient units, sufficient to accurately determine the value of completed Work during the course of the Project. The Contractor shall update the schedule of values as required by either the Architect or Owner as necessary to reflect:

- the description of Work (listing labor and material separately); .1
- .2 the total value;
- .3 the percent and value of the Work completed to date;
- .4 the percent and value of previous amounts billed; and
- .5 the current percent completed and amount billed.
- 9.2.2 Any schedule of values or trade breakdown that fails to include sufficient detail, is unbalanced, or exhibits "front-loading" of the value of the Work shall be rejected. If a schedule of values or trade breakdown is used as the basis for payment and later determined to be inaccurate, sufficient funds shall be withheld from future Applications for Payment to ensure an adequate reserve (exclusive of normal retainage) to complete the Work.
- 3.59 *Delete Section 9.3.1 and substitute the following:*

Monthly, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2., for completed portions of the Work. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require (such as copies of requisitions from Subcontractors and material suppliers) and shall reflect retainage and any other adjustments provided in Section 5 of the Agreement. If required by the Owner or Architect, the Application for Payment shall be accompanied by a current construction schedule.

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**3.60** In Section 9.3.2, add the following words to the end of the second sentence:

provided such materials or equipment will be subsequently incorporated in the Work

*Insert the following at the end of Section 9.3.2:* 

The Contractor shall 1) protect such materials from diversion, vandalism, theft, destruction, and damage, 2) mark such materials specifically for use on the Project, and 3) segregate such materials from other materials at the storage facility. The Architect and the Owner shall have the right to make inspections of the storage areas at any time.

**3.61** *In Section 9.4.2, in the first sentence, after the words "Work has progressed to the point indicated," insert the following:* 

in both the Application for Payment and, if required to be submitted by the Contractor, the accompanying current construction schedule

In the last sentence, delete the third item starting with "(3) reviewed copies" and ending with "Contractor's right to payment,"

3.62 In Section 9.5.1, in the first sentence, delete the word "may" after the opening words "The Architect" and substitute the word "shall."

*In Section 9.5.1, insert the following sentence after the first sentence:* 

The Architect shall withhold a Certificate of Payment if the Application for Payment is not accompanied by the current construction schedule required by Section 3.10.1.

3.63 In Section 9.6.2, delete the word "The..." at the beginning of the first sentence and substitute the following:

Pursuant to Chapter 6 of Title 29 of the South Carolina Code of Laws, as amended, the

**3.64** *Delete Section 9.7 and substitute following:* 

## 9.7 FAILURE OF PAYMENT

If the Architect does not issue a Certificate for Payment to the Owner, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the time established in the Contract Documents the amount certified by the Architect or awarded by a final dispute resolution order, then the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased, in accordance with the provisions of Section 7.3.3, by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

**3.65** *Insert the following words at the end of the sentence in Section 9.8.1:* 

and when all required occupancy permits, if any, have been issued and copies of same have been delivered to the Owner.

- 3.66 In Section 9.8.2, insert the word "written" after the word "comprehensive" and before the word "list."
- **3.67** *Delete Section 9.8.3 and substitute the following:* 
  - **9.8.3.1** Upon receipt of the Contractor's list, the Architect, with the Owner and any other person the Architect or the Owner choose, will make an inspection on a date and at a time mutually agreeable to the Architect, Owner, and Contractor, to determine whether the Work or designated portion thereof is substantially complete. The Contractor shall furnish access for the inspection and testing as provided in this Contract. The inspection shall include a

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demonstration by the Contractor that all equipment, systems and operable components of the Work function properly and in accordance with the Contract Documents. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion. If more than one Substantial Completion inspection is required, the Contractor shall reimburse the Owner for all costs of reinspections or, at the Owner's option, the costs may be deducted from payments due to the Contractor.

**9.8.3.2** If the Architect and Owner concur in the Contractor's assessment that the Work or a portion of the Work is safe to occupy, the Owner and Contractor may arrange for a Certificate of Occupancy Inspection by OSE. The Owner, Architect, and Contractor shall be present at OSE's inspection. Upon verifying that the Work or a portion of the Work is substantially complete and safe to occupy, OSE will issue, as appropriate, a Full or Partial Certificate of Occupancy.

- 3.68 In the second sentence of Section 9.8.5, delete the words "and consent of surety, if any."
- 3.69 In the first sentence of Section 9.9.1, delete the words "Section 11.3.1.5" and substitute the words "Section 11.3.1.3."
- **3.70** *Delete Section 9.10.1 and substitute the following:*

9.10.1 Unless the parties agree otherwise in the Certificate of Substantial Completion, the Contractor shall achieve Final Completion no later than thirty days after Substantial Completion. Upon receipt of the Contractor's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect, with the Owner and any other person the Architect or the Owner choose, will make an inspection on a date and at a time mutually agreeable to the Architect, Owner, and Contractor, and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled. If more than one Final Completion inspection is required, the Contractor shall reimburse the Owner for all costs of reinspections or, at the Owner's option, the costs may be deducted from payments due to the Contractor. If the Contractor does not achieve final completion within thirty days after Substantial Completion or the timeframe agreed to by the parties in the Certificate of Substantial Completion, whichever is greater, the Contractor shall be responsible for any additional Architectural fees resulting from the delay.

**3.71** *Delete the first sentence of Section 9.10.2 and substitute the following:* 

Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner, (6) required Training Manuals, (7) equipment Operations and Maintenance Manuals, (8) any certificates of testing, inspection or approval required by the Contract Documents and not previously provided (9) all warranties and guarantees required under or pursuant to the Contract Documents, and (10) one copy of the Documents required by Section 3.11.

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# 3.72 Delete the first sentence of Section 9.10.3 and substitute the following:

If, after Substantial Completion of the Work, final completion thereof is delayed 60 days through no fault of the

Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted.

3.73 Delete Section 9.10.5 and substitute the following:

**§9.10.5** Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those specific claims in stated amounts that have been previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

**3.74** Add the following Section 9.10.6:

**9.10.6** If OSE has not previously issued a Certificate of Occupancy for the entire Project, the Parties shall arrange for a representative of OSE to participate in the Final Completion Inspection. Representatives of the State Fire Marshal's Office and other authorities having jurisdiction may be present at the Final Completion Inspection or otherwise inspect the completed Work and advise the Owner whether the Work meets their respective requirements for the Project.

3.75 Delete Section 10.3.1 and substitute the following:

10.3.1 If the Contractor encounters a hazardous material or substance which was not discoverable as provided in Section 3.2.1 and not required by the Contract Documents, and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons or serious loss to real or personal property resulting from such material or substance encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing. Hazardous materials or substances are those hazardous, toxic, or radioactive materials or substances subject to regulations by applicable governmental authorities having jurisdiction, such as, but not limited to, the S.C. Department of Health and Environmental Control, the U.S. Environmental Protection Agency, and the U.S. Nuclear Regulatory Commission.

**3.76** *Insert the following at the end of Section 10.3.2:* 

In the absence of agreement, the Architect will make an interim determination regarding any delay or impact on the Contractor's additional costs. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15. Any adjustment in the Contract Sum shall be determined in accordance with Section 7.3.3.

**3.77** *Delete Section 10.3.3 and substitute the following:* 

10.3.3 The Work in the affected area shall be resumed immediately following the occurrence of any one of the following events: (a) the Owner causes remedial work to be performed that results in the absence of hazardous materials or substances; (b) the Owner and the Contractor, by written agreement, decide to resume performance of the Work; or (c) the Work may safely and lawfully proceed, as determined by an appropriate governmental authority or as evidenced by a written report to both the Owner and the Contractor, which is prepared by an environmental engineer reasonably satisfactory to both the Owner and the Contractor.

3.78 In Section 10.3.5, delete the word "The" at the beginning of the sentence and substitute the following:

In addition to its obligations under Section 3.18, the

**3.79** Delete the language of Section 10.3.6 and substitute the word "Reserved."

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**3.80** *Insert the following at the end of Section 10.4:* 

The Contractor shall immediately give the Architect notice of the emergency. This initial notice may be oral followed within five days by a written notice setting forth the nature and scope of the emergency. Within fourteen days of the start of the emergency, the Contractor shall give the Architect a written estimate of the cost and probable effect of delay on the progress of the Work.

#### **3.81** *Delete 11.1.2 and substitute the following:*

**11.1.2** The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified below or required by law, whichever coverage is greater. Coverages shall be written on an occurrence basis and shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment, and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

## (1) COMMERCIAL GENERAL LIABILITY:

(a) General Aggregate (per project)	\$1,000,000
<b>(b)</b> Products/Completed Operations	\$1,000,000
(c) Personal and Advertising Injury	\$1,000,000
(d) Each Occurrence	\$1,000,000
(e) Fire Damage (Any one fire)	\$50,000
(f) Medical Expense (Any one person)	\$5,000

(2) BUSINESS AUTO LIABILITY (including All Owned, Non-owned, and Hired Vehicles):

(a) Combined Single Limit \$1,000,000

# (3) WORKER'S COMPENSATION:

(a) State Statutory

<b>(b)</b> Employers Liability	\$100,000 Per Acc.
	\$500,000 Disease, Policy Limit
	\$100,000 Disease, Each Employee

In lieu of separate insurance policies for Commercial General Liability, Business Auto Liability, and Employers Liability, the Contractor may provide an umbrella policy meeting or exceeding all coverage requirements set forth in this Section 11.1.2. The umbrella policy limits shall not be less than \$3,000,000.

# **3.82** *Delete Section 11.1.3 and substitute the following:*

**11.1.3** Prior to commencement of the Work, and thereafter upon replacement of each required policy of insurance, Contractor shall provide to the Owner a written endorsement to the Contractor's general liability insurance policy that:

- (i) names the Owner as an additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations;
- (ii) provides that no material alteration, cancellation, non-renewal, or expiration of the coverage contained in such policy shall have effect unless all additional insureds have been given at least ten (10) days prior written notice of cancellation for non-payment of premiums and thirty (30) days prior written notice of cancellation for any other reason; and
- (iii) provides that the Contractor's liability insurance policy shall be primary, with any liability insurance of the Owner as secondary and noncontributory.

Prior to commencement of the Work, and thereafter upon renewal or replacement of each required policy of insurance, Contractor shall provide to the Owner a signed, original certificate of liability insurance (ACORD 25). Consistent with this Section 11.1, the certificate shall identify the types of insurance, state the limits of liability for each type of coverage, name the Owner a Consultants as Certificate Holder, provide that the general aggregate limit applies per project, and provide that coverage is written on an occurrence basis. Both the certificates and the

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endorsements must be received directly from either the Contractor's insurance agent or the insurance company. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, naming the Owner as an additional insured for claims made under the Contractor's completed operations, and otherwise meeting the above requirements, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness.

- **3.83** *Delete Section 11.1.4 and substitute the following:* 
  - **11.1.4** A failure by the Owner either (i) to demand a certificate of insurance or written endorsement required by Section 11.1, or (ii) to reject a certificate or endorsement on the grounds that it fails to comply with Section 11.1 shall not be considered a waiver of Contractor's obligations to obtain the required insurance.
- **3.84** *In Section 11.3.1, delete the first sentence and substitute the following:*

Unless otherwise provided in the Contract Documents, the Contractor shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract Modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis.

- **3.85** Delete the language of Section 11.3.1.2 and substitute the word "Reserved."
- **3.86** Delete the language of Section 11.3.1.3 and substitute the word "Reserved."
- **3.87** *Delete Section 11.3.2 and substitute the following:*

#### 11.3.2 BOILER AND MACHINERY INSURANCE

The Contractor shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall both be named insureds.

**3.88** *Delete Section 11.3.3 and substitute the following:* 

# 11.3.3 LOSS OF USE INSURANCE

The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. To the extent any losses are covered and paid for by such insurance, the Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.

- **3.89** *Delete Section 11.3.4 and substitute the following:* 
  - **11.3.4** If the Owner requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Contractor shall, if possible, include such insurance, and the cost thereof shall be charged to the Owner by appropriate Change Order.
- **3.90** Delete the language of Section 11.3.5 and substitute the word "Reserved."
- **3.91** *Delete Section 11.3.6 and substitute the following:* 
  - 11.3.6 Before an exposure to loss may occur, the Contractor shall file with the Owner a copy of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Owner.

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3.92 Delete the first sentence of Section 11.3.7 and substitute the following:

The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, subsubcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent the property insurance provided by the Contractor pursuant to this Section 11.3 covers and pays for the damage, except such rights as they have to proceeds of such insurance held by the Contractor as fiduciary.

**3.93** *Delete the first sentence of Section 11.3.8 and substitute the following:* 

A loss insured under the Contractor's property insurance shall be adjusted by the Contractor as fiduciary and made payable to the Contractor as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.3.10.

**3.94** *Delete Section 11.3.9 and substitute the following:* 

11.3.9 If required in writing by a party in interest, the Contractor as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Contractor's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Contractor shall deposit in a separate account proceeds so received, which the Contractor shall distribute in accordance with such agreement as the parties in interest may reach. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor.

**3.95** *Delete Section 11.3.10 and substitute the following:* 

**11.3.10** The Contractor as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Contractor's exercise of this power; if such objection is made, the dispute shall be resolved in the manner provided in the contract between the parties in dispute as the method of binding dispute resolution. The Contractor as fiduciary shall make settlement with insurers or, in the case of a dispute over distribution of insurance proceeds, in accordance with a final order or determination issued by the appropriate authority having jurisdiction over the dispute..

**3.96** *Delete Section 11.4.1 and substitute the following:* 

11.4.1 Before commencing any services hereunder, the Contractor shall provide the Owner with Performance and Payment Bonds, each in an amount not less than the Contract Price set forth in Article 4 of the Agreement. The Surety shall have, at a minimum, a "Best Rating" of "A" as stated in the most current publication of "Best's Key Rating Guide, Property-Casualty". In addition, the Surety shall have a minimum "Best Financial Strength Category" of "Class V", and in no case less than five (5) times the contract amount. The Performance Bond shall be written on Form SE-355, "Performance Bond" and the Payment Bond shall written on Form SE-357, "Labor and Material Payment Bond", and both shall be made payable to the Owner.

**3.97** *Delete Section 11.4.2 and substitute the following:* 

**11.4.2** The Performance and Labor and Material Payment Bonds shall:

- .1 be issued by a surety company licensed to do business in South Carolina;
- .2 be accompanied by a current power of attorney and certified by the attorney-in-fact who executes the bond on the behalf of the surety company; and
- .3 remain in effect for a period not less than one (1) year following the date of Substantial Completion or the time required to resolve any items of incomplete Work and the payment of any disputed amounts, whichever time period is longer.

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# STANDARD SUPPLEMENTARY CONDITIONS

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- **3.98** *Add the following Sections 11.4.3 and 11.4.4:* 
  - **11.4.3** Any bonds required by this Contract shall meet the requirements of the South Carolina Code of Laws and Regulations, as amended.
  - **11.4.4** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.
- **3.99** *Delete Section 12.1.1 and substitute the following:* 
  - **12.1.1** If a portion of the Work is covered contrary to the to requirements specifically expressed in the Contract Documents, including inspections of work-in-progress required by all authorities having jurisdiction over the Project, it must, upon demand of the Architect or authority having jurisdiction, be uncovered for observation and be replaced at the Contractor's expense without change in the Contract Time.
- **3.100** In Section 12.2.2.1, delete the words "and to make a claim for breach of warranty" at the end of the third sentence.
- **3.101** *In Section 12.2.2.3, add the following to the end of the sentence:*

unless otherwise provided in the Contract Documents.

**3.102** *Insert the following at the end of Section 12.2.4:* 

If, prior to the date of Substantial Completion, the Contractor, a Subcontractor, or anyone for whom either is responsible, uses or damages any portion of the Work, including, without limitation, mechanical, electrical, plumbing, and other building systems, machinery, equipment, or other mechanical device, the Contractor shall cause such item to be restored to "like new" condition at no expense to the Owner.

**3.103** *Delete Section 13.1 and substitute the following:* 

#### 13.1 GOVERNING LAW

The Contract, any dispute, claim, or controversy relating to the Contract, and all the rights and obligations of the parties shall, in all respects, be interpreted, construed, enforced and governed by and under the laws of the State of South Carolina, except its choice of law rules.

**3.104** Delete Section 13.2, including its Sub-Sections 13.2.1 and 13.2.2, and substitute the following:

# 13.2 SUCCESSORS AND ASSIGNS

The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole, or in part, without written consent of the other and then only in accordance with and as permitted by Regulation 19-445.2180 of the South Carolina Code of Regulations, as amended. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

**3.105** *Delete Section 13.3 and substitute the following:* 

# 13.3 WRITTEN NOTICE

Unless otherwise permitted herein, all notices contemplated by the Contract Documents shall be in writing and shall be deemed given:

- .1 upon actual delivery, if delivery is by hand;
- .2 upon receipt by the transmitting party of confirmation or reply, if delivery is by electronic mail, facsimile, telex or telegram;
- .3 upon receipt, if delivery is by the United States mail.

Notice to Contractor shall be to the address provided in Section 8.3.2 of the Agreement. Notice to Owner shall be to the address provided in Section 8.2.2 of the Agreement. Either party may designate a different address for notice by giving notice in accordance with this paragraph.

**3.106** *In Section 13.4.1, insert the following at the beginning of the sentence:* 

Unless expressly provided otherwise,

**3.107** *Add the following Section 13.4.3:* 

**13.4.3** Notwithstanding Section 9.10.4, the rights and obligations which, by their nature, would continue beyond the termination, cancellation, rejection, or expiration of this contract shall survive such termination, cancellation, rejection, or expiration, including, but not limited to, the rights and obligations created by the following clauses:

1.5 Ownership and Use of Drawings, Specifications and Other Instruments of Service;

3.5 Warranty

3.17 Royalties, Patents and Copyrights

3.18 Indemnification

**7.6** Cost or Pricing Data

11.1 Contractor's Liability Insurance

11.4 Performance and Payment Bond

15.1.6 Claims for Listed Damages

15.1.7 Waiver of Claims Against the Architect

**15.6** Dispute Resolution

15.4 Service of Process

**3.108** *Delete Section 13.6 and substitute the following:* 

# 13.6 INTEREST

Payments due to the Contractor and unpaid under the Contract Documents shall bear interest only if and to the extent allowed by Title 29, Chapter 6, Article 1 of the South Carolina Code of Laws. Amounts due to the Owner shall bear interest at the rate of one percent a month or a pro rata fraction thereof on the unpaid balance as may be due.

- **3.109** *Delete the language of Section 13.7 and substitute the word "Reserved."*
- **3.110** Add the following Sections 13.8 through 13.16:

## 13.8 PROCUREMENT OF MATERIALS BY OWNER

The Contractor accepts assignment of all purchase orders and other agreements for procurement of materials and equipment by the Owner that are identified as part of the Contract Documents. The Contractor shall, upon delivery, be responsible for the storage, protection, proper installation, and preservation of such Owner purchased items, if any, as if the Contractor were the original purchaser. The Contract Sum includes, without limitation, all costs and expenses in connection with delivery, storage, insurance, installation, and testing of items covered in any assigned purchase orders or agreements. Unless the Contract Documents specifically provide otherwise, all Contractor warranty of workmanship and correction of the Work obligations under the Contract Documents shall apply to the Contractor's installation of and modifications to any Owner purchased items,.

# 13.9 INTERPRETATION OF BUILDING CODES

As required by Title 10, Chapter 1, Section 180 of the South Caroline Code of Laws, as amended, OSE shall determine the enforcement and interpretation of all building codes and referenced standards on state buildings. The Contractor shall refer any questions, comments, or directives from local officials to the Owner and OSE for resolution.

# **OSE FORM 00811**

# STANDARD SUPPLEMENTARY CONDITIONS

## 13.10 MINORITY BUSINESS ENTERPRISES

Contractor shall notify Owner of each Minority Business Enterprise (MBE) providing labor, materials, equipment, or supplies to the Project under a contract with the Contractor. Contractor's notification shall be via the first monthly status report submitted to the Owner after execution of the contract with the MBE. For each such MBE, the Contractor shall provide the MBE's name, address, and telephone number, the nature of the work to be performed or materials or equipment to be supplied by the MBE, whether the MBE is certified by the South Carolina Office of Small and Minority Business Assistance, and the value of the contract.

# 13.11 SEVERABILITY

If any provision or any part of a provision of the Contract Documents shall be finally determined to be superseded, invalid, illegal, or otherwise unenforceable pursuant to any applicable Legal Requirements, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which shall remain in full force and effect as if the unenforceable provision or part were deleted.

## 13.12 ILLEGAL IMMIGRATION

Contractor certifies and agrees that it will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws and agrees to provide to the State upon request any documentation required to establish either: (a) that Title 8, Chapter 14 is inapplicable both to Contractor and its subcontractors or subsubcontractors; or (b) that Contractor and its subcontractors or subsubcontractors; or (b) that Contractor and its subcontractors or subsubcontractors are in compliance with Title 8, Chapter 14. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony, and, upon conviction, must be fined within the discretion of the court or imprisoned for not more than five years, or both." Contractor agrees to include in any contracts with its subcontractors language requiring its subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in their contracts with the sub-subcontractors language requiring the sub-subcontractors to comply with the applicable requirements of Title 8, Chapter 14. (An overview is available at <a href="https://www.procurement.sc.gov">www.procurement.sc.gov</a>)

# **13.13 SETOFF**

The Owner shall have all of its common law, equitable, and statutory rights of set-off.

# 13.14 DRUG-FREE WORKPLACE

The Contractor certifies to the Owner that Contractor will provide a Drug-Free Workplace, as required by Title 44, Chapter 107 of the South Carolina Code of Laws, as amended.

# 13.15 FALSE CLAIMS

According to the S.C. Code of Laws § 16-13-240, "a person who by false pretense or representation obtains the signature of a person to a written instrument or obtains from another person any chattel, money, valuable security, or other property, real or personal, with intent to cheat and defraud a person of that property is guilty" of a crime.

## 13.16 NON-INDEMNIFICATION:

Any term or condition is void to the extent it requires the State to indemnify anyone. It is unlawful for a person charged with disbursements of state funds appropriated by the General Assembly to exceed the amounts and purposes stated in the appropriations. (§ 11-9-20) It is unlawful for an authorized public officer to enter into a contract for a purpose in which the sum is in excess of the amount appropriated for that purpose. It is unlawful for an authorized public officer to divert or appropriate the funds arising from any tax levied and collected for any one fiscal year to the payment of an indebtedness contracted or incurred for a previous year. (§ 11-1-40)

## **3.111** *Delete Section 14.1.1 and substitute the following:*

- **14.1.1** The Contractor may terminate the Contract if the Work is stopped for a period of 45 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:
  - .1 Issuance of an order of a court or other public authority having jurisdiction that requires substantially all Work to be stopped; or

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- An act of government, such as a declaration of national emergency that requires substantially all Work to be stopped.
- .3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents and the Contractor has stopped work in accordance with Section 9.7
- **3.112** *Insert the following at the end of Section 14.1.3:*

Any adjustment to the Contract Sum pursuant to this Section shall be made in accordance with the requirements of Article 7.

- 3.113 In Section 14.1.4, replace the word "repeatedly" with the word "persistently."
- **3.114** *Delete Section 14.2.1 and substitute the following:* 
  - **14.2.1** The Owner may terminate the Contract if the Contractor
    - .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials, or otherwise fails to prosecute the Work, or any separable part of the Work, with the diligence, resources and skill that will ensure its completion within the time specified in the Contract Documents, including any authorized adjustments;
    - .2 fails to make payment to Subcontractors for materials or labor in accordance with the Contract Documents and the respective agreements between the Contractor and the Subcontractors;
    - .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
    - .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.
- 3.115 In Section 14.2.2, delete the parenthetical statement ", upon certification by the Initial Decision Maker that sufficient cause exists to justify such action," immediately following the word "Owner" in the first line.
- 3.116 In Section 14.2.4, replace the words "Initial Decision Maker" with the word "Architect"
- **3.117** *Add the following Section 14.2.5:* 
  - **14.2.5** If, after termination for cause, it is determined that the Owner lacked justification to terminate under Section 14.2.1, or that the Contractor's default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Owner under Section 14.4.
- **3.118** *Delete the second sentence of Section 14.3.2 and substitute the following:*

Any adjustment to the Contract Sum made pursuant to this section shall be made in accordance with the requirements of Article 7.3.3.

- **3.119** *Delete Section 14.4.1 and substitute the following:* 
  - **14.4.1** The Owner may, at any time, terminate the Contract, in whole or in part for the Owner's convenience and without cause. The Owner shall give written notice of the termination to the Contractor specifying the part of the Contract terminated and when termination becomes effective.
- **3.120** *Delete Section 14.4.2 and substitute the following:* 
  - **14.4.2** Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall
    - .1 cease operations as directed by the Owner in the notice;
    - .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work;

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- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders; and
- .4 complete the performance of the Work not terminated, if any.
- **3.121** *Delete Section 14.4.3 and substitute the following:* 
  - **14.4.3** In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, costs incurred by reason of such termination, and any other adjustments otherwise allowed by the Contract. Any adjustment to the Contract Sum made pursuant to this Section 14.4 shall be made in accordance with the requirements of Article 7.3.3.
- **3.122** Add the following Sections 14.4.4, 14.4.5, and 14.5:
  - **14.4.4** Contractor's failure to include an appropriate termination for convenience clause in any subcontract shall not (i) affect the Owner's right to require the termination of a subcontract, or (ii) increase the obligation of the Owner beyond what it would have been if the subcontract had contained an appropriate clause.
  - **14.4.5** Upon written consent of the Contractor, the Owner may reinstate the terminated portion of this Contract in whole or in part by amending the notice of termination if it has been determined that:
    - the termination was due to withdrawal of funding by the General Assembly, Governor, or Budget and Control Board or the need to divert project funds to respond to an emergency as defined by Regulation 19-445.2110(B) of the South Carolina Code of Regulations, as amended;
    - .2 funding for the reinstated portion of the work has been restored;
    - .3 circumstances clearly indicate a requirement for the terminated work; and
    - .4 reinstatement of the terminated work is advantageous to the Owner.

# 14.5 CANCELLATION AFTER AWARD BUT PRIOR TO PERFORMANCE

Pursuant to Title 11, Chapter 35 and Regulation 19-445.2085 of the South Carolina Code of Laws and Regulations, as amended, this contract may be canceled after award but prior to performance.

**3.123** *Insert the following sentence after the second sentence of Section 15.1.1:* 

A voucher, invoice, payment application or other routine request for payment that is not in dispute when submitted is not a Claim under this definition.

**3.124** *Delete Section 15.1.2 and substitute the following:* 

#### 15.1.2 NOTICE OF CLAIMS

Claims by either the Owner or Contractor must be initiated by written notice to the other party and to the Architect. Such notice shall include sufficient information to advise the Architect and other party of the circumstances giving rise to the claim, the specific contractual adjustment or relief requested and the basis of such request. Claims by either party arising prior to the date final payment is due must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later except as stated for adverse weather days in Section 15.1.5.2. By failing to give written notice of a Claim within the time required by this Section, a party expressly waives its claim.

**3.125** *Delete Section 15.1.3 and substitute the following:* 

## 15.1.3 CONTINUING CONTRACT PERFORMANCE

Pending final resolution of a Claim, including any administrative review allowed under Section 15.6, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Architect will issue Certificates for Payment in accordance with the initial decisions and determinations of the Architect.

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3.126 *Insert the following at the end of Section 15.1.5.1:* 

Claims for an increase in the Contract Time shall be based on one additional calendar day for each full calendar day that the Contractor is prevented from working.

- **3.127** *Insert the following Sub-Sections at the end of Section 15.1.5.2:* 
  - .1 Claims for adverse weather shall be based on actual weather conditions at the job site or other place of performance of the Work, as documented in the Contractor's job site log.
  - .2 For the purpose of this Contract, a total of five (5) calendar days per calendar month (non-cumulative) shall be anticipated as "adverse weather" at the job site, and such time will not be considered justification for an extension of time. If, in any month, adverse weather develops beyond the five (5) days, the Contractor shall be allowed to claim additional days to compensate for the excess weather delays only to the extent of the impact on the approved construction schedule. The remedy for this condition is for an extension of time only and is exclusive of all other rights and remedies available under the Contract Documents or imposed or available by law.
  - .3 The Contractor shall submit monthly with their pay application all claims for adverse weather conditions that occurred during the previous month. The Architect shall review each monthly submittal in accordance with Section 15.5 and inform the Contractor and the Owner promptly of its evaluation. Approved days shall be included in the next Change Order issued by the Architect. Adverse weather conditions not claimed within the time limits of this Subparagraph shall be considered to be waived by the Contractor. Claims will not be allowed for adverse weather days that occur after the scheduled (original or adjusted) date of Substantial Completion.
- **3.128** *Delete Section 15.1.6 and substitute the following:*

# 15.1.6 CLAIMS FOR LISTED DAMAGES

Notwithstanding any other provision of the Contract Documents, including Section 1.2.1, but subject to a duty of good faith and fair dealing, the Contractor and Owner waive Claims against each other for listed damages arising out of or relating to this Contract.

- **15.1.6.1** For the Owner, listed damages are (i) lost revenue and profit, (ii) losses resulting from injury to business or reputation, (iii) additional or escalated overhead and administration expenses, (iv) additional financing costs, (v) costs suffered by a third party unable to commence work, (vi) attorney's fees, (vii) any interest, except to the extent allowed by Section 13.6 (Interest), (viii) lost revenue and profit for lost use of the property, (ix) costs resulting from lost productivity or efficiency.
- **15.1.6.2** For the Contractor, listed damages are (i) lost revenue and profit, (ii) losses resulting from injury to business or reputation, (iii) additional or escalated overhead and administration expenses, (iv) additional financing costs, (v) attorney's fees, (vi) any interest, except to the extent allowed by Section 13.6 (Interest); (vii) unamortized equipment costs; and, (viii) losses incurred by subcontractors for the types of damages the Contractor has waive as against the Owner. Without limitation, this mutual waiver is applicable to all damages due to either party's termination in accordance with Article 14. Nothing contained in this Section shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents. This mutual waiver is not applicable to amounts due or obligations under Section 3.18 (Indemnification).
- **3.129** *Add the following Section 15.1.7:*

## 15.1.7 WAIVER OF CLAIMS AGAINST THE ARCHITECT

Notwithstanding any other provision of the Contract Documents, including Section 1.2.1, but subject to a duty of good faith and fair dealing, the Contractor waives all claims against the Architect and any other design professionals who provide design and/or project management services to the Owner, either directly or as independent contractors or subcontractors to the Architect, for listed damages arising out of or relating to this Contract. The listed damages are (i) lost revenue and profit, (ii) losses resulting from injury to business or reputation, (iii) additional or escalated overhead and administration expenses, (iv) additional financing costs, (v)

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attorney's fees, (vi) any interest; (vii) unamortized equipment costs; and, (viii) losses incurred by subcontractors for the types of damages the Contractor has waive as against the Owner. This mutual waiver is not applicable to amounts due or obligations under Section 3.18 (Indemnification).

- 3.130 Delete the language of Sections 15.2, 15.3, and 15.4, including all Sub-Sections, and substitute the word "Reserved" for the deleted language of each Section and Sub-Section.
- **3.131** Add the following Sections 15.5 and 15.6 with their sub-sections:

# 15.5 CLAIM AND DISPUTES - DUTY OF COOPERATION, NOTICE, AND ARCHITECTS INITIAL DECISION

- **15.5.1** Contractor and Owner are fully committed to working with each other throughout the Project to avoid or minimize claims. To further this goal, Contractor and Owner agree to communicate regularly with each other and the Architect at all times notifying one another as soon as reasonably possible of any issue that if not addressed may cause loss, delay, and/or disruption of the Work. If claims do arise, Contractor and Owner each commit to resolving such claims in an amicable, professional, and expeditious manner to avoid unnecessary losses, delays, and disruptions to the Work.
- **15.5.2** Claims shall first be referred to the Architect for initial decision. An initial decision shall be required as a condition precedent to resolution pursuant to Section 15.6 of any Claim arising prior to the date of final payment, unless 30 days have passed after the Claim has been referred to the Architect with no decision having been rendered, or after all the Architect's requests for additional supporting data have been answered, whichever is later. The Architect will not address claims between the Contractor and persons or entities other than the Owner.
- **15.5.3** The Architect will review Claims and within ten days of the receipt of a Claim (1) request additional supporting data from the claimant or a response with supporting data from the other party or (2) render an initial decision in accordance with Section 15.5.5.
- **15.5.4** If the Architect requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either (1) provide a response on the requested supporting data, (2) advise the Architect when the response or supporting data will be furnished or (3) advise the Architect that all supporting data has already been provided. Upon receipt of the response or supporting data, the Architect will render an initial decision in accordance with Section 15.5.5.
- **15.5.5** The Architect will render an initial decision in writing; (1) stating the reasons therefor; and (2) notifying the parties of any change in the Contract Sum or Contract Time or both. The Architect will deliver the initial decision to the parties within two weeks of receipt of any response or supporting data requested pursuant to Section 16.4, or within such longer period as may be mutually agreeable to the parties. If the parties accept the initial decision, the Architect shall prepare a Change Order with appropriate supporting documentation for the review and approval of the parties and the Office of State Engineer. If either the Contractor, Owner, or both, disagree with the initial decision, the Contractor and Owner shall proceed with dispute resolution in accordance with the provisions of Section 15.6.
- **15.5.6** In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

# 15.6 DISPUTE RESOLUTION

**15.6.1** If a claim is not resolved pursuant to Section 15.5 to the satisfaction of either party, both parties shall attempt to resolve the dispute at the field level through discussions between Contractor's Representative and Owner's Representative. If a dispute cannot be resolved through Contractor's Representative and Owner's Representative, then the Contractor's Senior Representative and the Owner's Senior Representative, upon the request of either party, shall meet as soon as conveniently possible, but in no case later than twenty-one days after such a request is made, to attempt to resolve such dispute. Prior to any meetings between the Senior Representatives, the parties will exchange relevant information that will assist the parties in resolving their dispute. The meetings required by this Section are a condition precedent to resolution pursuant to Section 15.6.2.

**15.6.2** If after meeting in accordance with the provisions of Section 15.6.1, the Senior Representatives determine that the dispute cannot be resolved on terms satisfactory to both the Contractor and the Owner, then either party may submit the dispute by written request to South Carolina's Chief Procurement Officer for Construction (CPOC). Except as otherwise provided in Article 15, all claims, claims, or controversies relating to the Contract shall be resolved exclusively by the appropriate Chief Procurement Officer in accordance with Title 11, Chapter 35, Article 17 of the South Carolina Code of Laws, or in the absence of jurisdiction, only in the Court of Common Pleas for, or in the absence of jurisdiction a federal court located in, Richland County, State of South Carolina. Contractor agrees that any act by the State regarding the Contract is not a waiver of either the State's sovereign immunity or the State's immunity under the Eleventh Amendment of the United State's Constitution.

**15.6.3** If any party seeks resolution to a dispute pursuant to Section 15.6.2, the parties shall participate in non-binding mediation to resolve the claim. If the claim is governed by Title 11, Chapter 35, Article 17 of the South Carolina Code of Laws as amended and the amount in controversy is \$100,000.00 or less, the CPOC shall appoint a mediator, otherwise, the mediation shall be conducted by an impartial mediator selected by mutual agreement of the parties, or if the parties cannot so agree, a mediator designated by the American Arbitration Association ("AAA") pursuant to its Construction Industry Mediation Rules. The mediation will be governed by and conducted pursuant to a mediation agreement negotiated by the parties or, if the parties cannot so agree, by procedures established by the mediator.

**15.6.4** Without relieving any party from the other requirements of Sections 15.5 and 15.6, either party may initiate proceedings in the appropriate forum prior to initiating or completing the procedures required by Sections 15.5 and 15.6 if such action is necessary to preserve a claim by avoiding the application of any applicable statutory period of limitation or repose.

#### 15.6.5 SERVICE OF PROCESS

Contractor consents that any papers, notices, or process necessary or proper for the initiation or continuation of any claims, claims, or controversies relating to the Contract; for any court action in connection therewith; or for the entry of judgment on any award made, may be served on Contractor by certified mail (return receipt requested) addressed to Contractor at the address provided for the Contractor's Senior Representative or by personal service or by any other manner that is permitted by law, in or outside South Carolina. Notice by certified mail is deemed duly given upon deposit in the United States mail.

**3.132** *Add the following Article 16:* 

ARTICLE 16 PROJECT-SPECIFIC REQUIREMENTS AND INFORMATION
<b>16.1. Inspection Requirements:</b> (Indicate the inspection services required by the Contract)
Special Inspections are required and are not part of the Contract Sum. (see section 01400)
Building Inspections are required and are not part of the Contract Sum. (see section 01400)
Building Inspections are required and are part of the Contract Sum. The inspections required for this Work
are: (Indicate which services are required and the provider)
☐ Civil:
Structural:
Mechanical:
Plumbing:
Electrical:
Gas:
Other ( <i>list</i> ):
Remarks: NONE.

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- **16.1.1** Contractor shall schedule and request inspections in an orderly and efficient manner and shall notify the Owner whenever the Contractor schedules an inspection in accordance with the requirements of Section 16.1. Contractor shall be responsible for the cost of inspections scheduled and conducted without the Owner's knowledge and for any increase in the cost of inspections resulting from the inefficient scheduling of inspections.
- **16.2** List Cash Allowances, if any. (*Refer to attachments as needed* If *none, enter NONE*) NONE.
- **16.3.** Requirements for Record Drawings, if any. (*Refer to attachments as needed*. If *none, enter NONE*) Refer to Specification Sections 010720 "Project Record Documents" and 260511 "Electrical Work Closeout".
- **16.4.** Requirements for Shop Drawings and other submittals, if any, including number, procedure for submission, list of materials to be submitted, etc. (*Refer to attachments as needed. If none, enter NONE*)

  Refer to Specification Sections 010300 "Submittals" and 260510 "Electrical Submittals".
- **16.5.** Requirements for signage, on-site office or trailer, utilities, restrooms, etc., in addition to the Contract, if any. (*Refer to attachments as needed. If none, enter NONE*)
  - Refer to Specification Section 010500 "On Site Temporary Facilities", and "USC Supplemental General Conditions for Construction Projects".
- **16.6.** Requirements for Project Cleanup in addition to the Contract, if any. (*Refer to attachments as needed. If none, enter NONE*)

Refer to Specification Section 010010 "Summary of the Work" and "USC Supplemental General Conditions for Construction Projects"...

**16.7.** List all attachments that modify these General Conditions. (*If none, enter NONE*) Refer to "USC Supplemental General Conditions for Construction Projects".

# USC SUPPLEMENTAL GENERAL CONDITIONS FOR CONSTRUCTION PROJECTS

- 1. Contractor's employees shall take all reasonable means not to interrupt the flow of student traffic in building corridors, lobbies and stairs. All necessary and reasonable safety precautions shall be taken to prevent injury to building occupants while transporting materials and equipment through the building to the work area. Providing safe, accessible, plywood pedestrian ways around construction may be required if a suitable alternative route is not available.
- 2. Fraternization between Contractor's employees and USC students, faculty or staff is strictly prohibited-zero tolerance!
- 3. USC will not tolerate rude, abusive or degrading behavior on the job site. Heckling and cat-calling directed toward students, faculty or staff or any other person on USC property is strictly prohibited. Any contractor whose employees violate this requirement will be assessed a fine of up to \$500 per violation.
- 4. Contractor's employees must adhere to the University's policy of maintaining a drug-free and smoke-free/tobacco free workplace.
- 5. Contractor must sign a Contractor Key Receipt/Return form before any keys are issued. Keys must be returned immediately upon the completion of the work. The Contractor will bear the cost of any re-keying necessary due to the loss of or failure to return keys.
- 6. A welding permit must be issued by the University Fire Marshall before any welding can begin inside a building. Project Manager will coordinate.
- 7. Contractor must notify the University immediately upon the discovery of suspect material such as those potentially containing asbestos or other such hazardous materials. These materials **must not** be disturbed until approved by the USC Project Manager.
- 8. At the beginning of the project, the USC Project Manager will establish the Contractor's lay-down area. This area will also be used for the Contractor's work vehicles. No personal vehicles will be allowed in this area, or in any areas surrounding the construction site that are not regular or authorized parking lots. Personal vehicles must be parked in the perimeter parking lots. Parking permits can be obtained at the USC Parking Office located in the Pendleton Street parking garage. The lay down area will be clearly identified to the contractor by the PM, with a sketch or drawing provided to Parking. In turn, the contractor will mark off this area with a sign containing the project name, PM name, Contractor name and contact number, and end date. Where this area is subject to foot traffic, protective barriers will be provided as specified by the PM. The area will be maintained in a neat and orderly fashion. Vehicles parked in the lay down area (or designated parking areas) will be clearly marked or display a CPC furnished placard for identification.

- 9. Contractor will be responsible for providing its own temporary toilet facilities, unless prior arrangements are made with the USC Project Manager.
- 10. Use of USC communications facilities (telephones, computers, etc.) by the Contractor is prohibited, unless prior arrangements are made with the USC Project Manager.
- 11. For all projects over \$100,000, including IDC's, an SE-395, Contractor Performance Evaluation, will be completed by the USC Project Manager and reviewed with the GC at the beginning of the project and a copy given to the GC. At the end of the project the form will be completed and a Construction Performance rating will be established.
- 12. Contractor is responsible for removal of all debris from the site, and is required to provide the necessary dumpsters which will be emptied at least <u>one</u> time per week. Construction waste must not be placed in University dumpsters. THE CONSTRUCTION SITE MUST BE THOROUGHLY CLEANED WITH ALL TRASH PICKED UP AND PROPERLY DISPOSED OF ON A DAILY BASIS AND THE SITE MUST BE LEFT IN A SAFE AND SANITARY CONDITION EACH DAY. THE UNIVERSITY WILL INSPECT JOB SITES REGULARLY AND WILL FINE ANY CONTRACTOR FOUND TO BE IN VIOLATION OF THIS REQUIREMENT AN AMOUNT OF UP TO \$1,000 PER VIOLATION.
- 13. Contractor must provide all O&M manuals, as-built drawings, and training of USC personnel on new equipment, controls, etc. prior to Substantial Completion. Final payment will not be made until this is completed.
- 14. Tree protection fencing is required to protect existing trees and other landscape features to be preserved within a construction area. The limits of this fence will be evaluated for each situation with the consultant, USC Arborist and USC Project Manager. The tree protection fence shall be 5' high chain link fence unless otherwise approved by USC Project Manager. No entry or materials storage will be allowed inside the tree protection zone. A 4" layer of mulch shall be placed over the tree protection area to maintain moisture in the root zone.
- 15. Where it is necessary to cross walks, tree root zones (i.e., under canopy) or lawns the following measures shall be taken: For single loads up to 9,000 lbs., a 3/4" minimum plywood base shall be placed over areas impacted. For single loads over 9,000 lbs., two layers of 3/4" plywood is required.
- 16. For projects requiring heavy loads to cross walks tree root zones or lawns. A construction entry road consisting of 10' X 16' oak logging mates on 12" coarse, chipped, hardwood base. Mulch and logging mats shall be supplemented throughout the project to keep matting structurally functional.
- 17. Any damage to existing landscaping (including lawn areas) will be remediated before final payment is made.
- **18.** Orange safety fence to be provided by the contractor.

# **Campus Vehicle Expectations**

- 1. All motorized vehicles on the University campus are expected to travel and park on roadways and/or in parking stalls.
- 2. All motorized vehicle traffic on USC walkways must first receive the Landscape Manager's authorization. Violators may be subject to fines and penalties.
- 3. All motorized vehicles that leak or drip liquids are prohibited from traveling or parking on walks or landscaped areas.
- 4. Contractors, vendors, and delivery personnel are required to obtain prior parking authorization before parking in a designated space. Violators may be subject to fines and/or penalties. See Item 10 below.
- 5. Drivers of equipment or motor vehicles that damage university hardscape or landscape will be held personally responsible for damages and restoration expense.
- 6. Vehicle drivers who park on landscape or drives must be able to produce written evidence of need or emergency requiring parking on same.
- 7. All vehicles parked on landscape, hardscape, or in the process of service delivery, must display adequate safety devices, i.e. flashing lights, cones, signage, etc.
- 8. All drivers of equipment and vehicles will be respectful of University landscape, equipment, structures, fixtures and signage.
- 9. All incidents of property damage will be reported to Parking Services or the Work Management Center.
- 10. Parking on campus is restricted to spaces designated by Parking Services at the beginning of the project. Once the project manager and contractor agree on how many spaces are needed, the project manager will obtain a placard for each vehicle. This placard must be hung from the mirror of the vehicle, otherwise a ticket will be issued and these tickets cannot be affixed. Parking spaces are restricted to work vehicles only; no personal vehicles.

Project Name: Bull Street Parking Garage LED Lighting Retrofit

Project Number: H27-Z042

University of South Carolina

# **CONTRACTOR'S ONE YEAR GUARANTEE**

STATE OF
COUNTY OF
WE
as Contractor on the above-named project, do hereby guarantee that all work executed under the requirements of the Contract Documents shall be free from defects due to faulty materials and /or workmanship for a period of one (1) year from date of acceptance of the work by the Owner and/or Architect/Engineer; and hereby agree to remedy defects due to faulty materials and/or workmanship, and pay for any damage resulting wherefrom, at no cost to the Owner, provided; however, that the following are excluded from this guarantee;
Defects or failures resulting from abuse by Owner.
Damage caused by fire, tornado, hail, hurricane, acts of God, wars, riots, or civil commotion.
[Name of Contracting Firm]
*By
Title
*Must be executed by an office of the Contracting Firm.
SWORN TO before me this day of, 2 (seal)
State
My commission expires

SE-355 2011 Edition

# **Performance Bond**

KNOW ALL MEN BY THESE PRESENTS, that (Insert	full name or legal title and address of Contractor)
Name:	
Address:	
hereinafter referred to as "Contractor", and (Insert full name of	and address of principal place of business of Surety)
Name: Address:	
hereinafter called the "surety", are jointly and severally he	eld and firmly bound unto (Insert full name and address of Agency)
Name: <u>University of South Carolina</u>	
Address: <u>743 Greene Street</u> Columbia, SC 29208	
hereinafter referred to as "Agency", or its successors or as	ssigns, the sum of (\$ ), being the sum of the
	ntractor and Surety bind themselves, their heirs, executors,
WHEREAS, Contractor has by written agreement dated _	entered into a contract with Agency to construct
State Project Name: Bull Street Garage LED Lig	
State Project Number: <u>H27-Z042</u>	
-	the SE-330, Bid Form: Replace existing HID light Garage on the campus of the University of South
Carolina in Columbia, SC.	ang Garage on the earlpus of the University of South
in accordance with Drawings and Specifications prepared	by (Insert full name and address of A/E)
Name: <u>DWG, Inc. Consulting Engineers</u>	
Address: 1201 Main Street, Suite 1850	
Columbia, SC 29201	
which agreement is by reference made a part hereof, and i	s hereinafter referred to as the Contract.
	tending to be legally bound hereby, subject to the terms duly executed on its behalf by its authorized officer, agent
DATED this day of 2 BOL	ND NUMBER
DATED thisday of, 2 BOI	W Nember
CONTRACTOR	SURETY
By:	By:
(Seal)	(Seal)
Print Name:	Print Name:
Print Title:	Print Title:
	(Attach Power of Attorney)
Witness:	Witness:

 $(Additional\ Signatures,\ if\ any,\ appear\ on\ attached\ page)$ 

# **Performance Bond**

# Performance Bond

# NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

- 1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Agency for the full and faithful performance of the contract, which is incorporated herein by reference
- **2.** If the Contractor performs the contract, the Surety and the Contractor have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.
- 3. The Surety's obligation under this Bond shall arise after:
- **3.1** The Agency has notified the Contractor and the Surety at the address described in paragraph 10 below, that the Agency is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If the Agency, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive the Agency's right, if any, subsequently to declare a Contractor Default; or
- **3.2** The Agency has declared a Contractor Default and formally terminated the Contractor's right to complete the Contract.
- **4.** The Surety shall, within 15 days after receipt of notice of the Agency's declaration of a Contractor Default, and at the Surety's sole expense, take one of the following actions:
- **4.1** Arrange for the Contractor, with consent of the Agency, to perform and complete the Contract; or
- **4.2** Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
- **4.3** Obtain bids or negotiated proposals from qualified contractors acceptable to the Agency for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the Agency and the contractor selected with the Agency's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to the Agency the amount of damages as described in paragraph 7 in excess of the Balance of the Contract Sum incurred by the Agency resulting from the Contractor Default; or
- **4.4** Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and:
- **4.4.1** After investigation, determine the amount for which it may be liable to the Agency and, within 60 days of waiving its rights under this paragraph, tender payment thereof to the Agency; or
- **4.4.2** Deny liability in whole or in part and notify the Agency, citing the reasons therefore.
- **5.** Provided Surety has proceeded under paragraphs 4.1, 4.2, or 4.3, the Agency shall pay the Balance of the Contract Sum to either:
- **5.1** Surety in accordance with the terms of the Contract; or
- **5.2** Another contractor selected pursuant to paragraph 4.3 to perform the Contract.
- **5.3** The balance of the Contract Sum due either the Surety or another contractor shall be reduced by the amount of damages as described in paragraph 7.
- **6.** If the Surety does not proceed as provided in paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond 15 days after receipt of written notice from the Agency to the Surety demanding that the Surety perform its obligations under this Bond, and the Agency shall be entitled to enforce any remedy available to the Agency.
- **6.1** If the Surety proceeds as provided in paragraph 4.4, and the

- Agency refuses the payment tendered or the Surety has denied liability, in whole or in part, then without further notice the Agency shall be entitled to enforce any remedy available to the Agency.
- **6.2** Any dispute, suit, action or proceeding arising out of or relating to this Bond shall be governed by the Dispute Resolution process defined in the Contract Documents and the laws of the State of South Carolina.
- 7. After the Agency has terminated the Contractor's right to complete the Contract, and if the Surety elects to act under paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Agency shall be those of the Contractor under the Contract, and the responsibilities of the Agency to the Surety shall those of the Agency under the Contract. To a limit of the amount of this Bond, but subject to commitment by the Agency of the Balance of the Contract Sum to mitigation of costs and damages on the Contract, the Surety is obligated to the Agency without duplication for:
- **7.1** The responsibilities of the Contractor for correction of defective Work and completion of the Contract; and
- **7.2** Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under paragraph 4; and
- **7.3** Damages awarded pursuant to the Dispute Resolution Provisions of the Contract. Surety may join in any Dispute Resolution proceeding brought under the Contract and shall be bound by the results thereof; and
- **7.4** Liquidated Damages, or if no Liquidated Damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- **8.** The Surety shall not be liable to the Agency or others for obligations of the Contractor that are unrelated to the Contract, and the Balance of the Contract Sum shall not be reduced or set-off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Agency or its heirs, executors, administrators, or successors.
- **9.** The Surety hereby waives notice of any change, including changes of time, to the contract or to related subcontracts, purchase orders and other obligations.
- **10.** Notice to the Surety, the Agency or the Contractor shall be mailed or delivered to the address shown on the signature page.
- 11. Definitions
- 11.1 Balance of the Contract Sum: The total amount payable by the Agency to the Contractor under the Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts to be received by the Agency in settlement of insurance or other Claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Contract.
- **11.2** Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform the Contract or otherwise to comply with the terms of the Contract.

# SE-357 Labor and Material Payment Bond

Rev. 8/9/2011

Bubbl und Muterial Layment Bond	
KNOW ALL MEN BY THESE PRESENTS, that (Insert	t full name or legal title and address of Contractor)
Name:	
Address:	
hereinafter referred to as "Contractor", and (Insert full name $$	and address of principal place of business of Surety)
Name:	
Address:	
hereinafter called the "surety", are jointly and severally he	eld and firmly bound unto (Insert full name and address of Agency)
Name: <u>University of South Carolina</u>	
Address: 743 Greene Street	
Columbia, SC 29208	
hereinafter referred to as "Agency", or its successors or as	ssigns, the sum of(\$), being the sum of the
	ontractor and Surety bind themselves, their heirs, executors,
administrators, successors and assigns, jointly and several	lly, firmly by these presents.
WHEREAS, Contractor has by written agreement dated	entered into a contract with Agency to construct
Project Name: <u>Bull Street Garage LED Lighting</u> Project Number: <u>H27-Z042</u>	<u>Retroft</u>
	n the SE-330, Bid Form: Replace existing HID light
	king Garage on the campus of the University of South
Carolina in Columbia, SC.	
in accordance with Drawings and Specifications prepared	by (Insert full name and address of A/E)
Name: <u>DWG, Inc. Consulting Engineers</u>	- <b>y</b> ( <b>y</b>
Address: 1201 Main Street, Suite 1850	
Columbia, SC 29201	
which agreement is by reference made a part hereof, and	is hereinafter referred to as the Contract.
, i	
	tending to be legally bound hereby, subject to the terms
	Payment Bond to be duly executed on its behalf by its
authorized officer, agent or representative.	
DATED this day of 2 PO	NID NII IMDED
DATED thisday of, 2 BO	ND NUMBER
(shall be no curter than Date of Contract)	
CONTRACTOR	SURETY
CONTRACTOR	SURLIT
D	D
By:(Seal)	By:(Seal)
(Seal)	(Seal)
Print Name:	Print Name:
Print Title:	Print Title:
	(Attach Power of Attorney)
Witness:	Witness:
(Additional Signatures, if any, appear on attached page)	
1. Landing Digitalian Co, if any, appear on anacida page	

SE-357

# **Labor and Material Payment Bond**

# NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

- 1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Agency to pay for all labor, materials and equipment required for use in the performance of the Contract, which is incorporated herein by reference.
- 2. With respect to the Agency, this obligation shall be null and void if the Contractor:
- **2.1** Promptly makes payment, directly or indirectly, for all sums due Claimants; and
- **2.2** Defends, indemnifies and holds harmless the Agency from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Contract.
- 3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
- **4.** With respect to Claimants, and subject to the provisions of Title 29, Chapter 5 and the provisions of §11-35-3030(2)(c) of the SC Code of Laws, as amended, the Surety's obligation under this Bond shall arise as follows:
- **4.1** Every person who has furnished labor, material or rental equipment to the Contractor or its subcontractors for the work specified in the Contract, and who has not been paid in full therefore before the expiration of a period of ninety (90) days after the date on which the last of the labor was done or performed by him or material or rental equipment was furnished or supplied by him for which such claim is made, shall have the right to sue on the payment bond for the amount, or the balance thereof, unpaid at the time of institution of such suit and to prosecute such action for the sum or sums justly due him.
- **4.2** A remote claimant shall have a right of action on the payment bond upon giving written notice by certified or registered mail to the Contractor within ninety (90) days from the date on which such person did or performed the last of the labor or furnished or supplied the last of the material or rental equipment upon which such claim is made.
- **4.3** Every suit instituted upon a payment bond shall be brought in a court of competent jurisdiction for the county or circuit in which the construction contract was to be performed, but no such suit shall be commenced after the expiration of o ne year after the day on which the last of the labor was performed or material or rental equipment was supplied by the person bringing suit.
- **5.** When the Claimant has satisfied the conditions of paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
- **5.1** Send an answer to the Claimant, with a copy to the Agency, within sixty (60) days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
- **5.2** Pay or arrange for payment of any undisputed amounts.
- **5.3** The Surety's failure to discharge its obligations under this paragraph 5 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a claim. However, if the Surety fails to discharge its obligations under this paragraph 5, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs to recover any sums found to be due and owing to the Claimant.
- 6. Amounts owed by the Agency to the Contractor under the

- Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any Performance Bond. By the Contractor furnishing and the Agency accepting this Bond, they agree that all funds earned by the contractor in the performance of the Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Agency's prior right to use the funds for the completion of the Work.
- 7. The Surety shall not be liable to the Agency, Claimants or others for obligations of the Contractor that are unrelated to the Contract. The Agency shall not be liable for payment of any costs or expenses of any claimant under this bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- **8.** The Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.
- 9. Notice to the Surety, the Agency or the Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, the Agency or the contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
- 10. By the Contractor furnishing and the Agency accepting this Bond, they agree that this Bond has been furnished to comply with the statutory requirements of the South Carolina Code of Laws, as amended, and further, that any provision in this Bond conflicting with said statutory requirements shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.
- 11. Upon request of any person or entity appearing to be a potential beneficiary of this bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.
- 12. Any dispute, suit, action or proceeding arising out of or relating to this Bond shall be governed by the laws of the State of South Carolina.

#### 13. DEFINITIONS

- 13.1 Claimant: An individual or entity having a direct contract with the Contractor or with a Subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of the Contractor and the Contractor's Subcontractors, and all other items for which a mechanic's lien might otherwise be asserted.
- **13.2** Remote Claimant: A person having a direct contractual relationship with a subcontractor of the Contractor or subcontractor, but no contractual relationship expressed or implied with the Contractor.
- **13.3** Contract: The agreement between the Agency and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

## SECTION 010010 - SUMMARY OF THE WORK

## PART ONE - GENERAL:

The following General Requirements, are included to cover the special requirements of this Project and will note the special requirements that are in addition to the General Conditions and Supplementary Conditions.

# 1.01 PROJECT DESCRIPTION:

The work generally includes, but is not limited to:

Provide all labor, equipment and materials to replace existing HID fixtures with new LED fixtures for the Bull Street Parking Garage at the University of South Carolina.

# 1.02 CONTRACT DOCUMENTS

A. DRAWINGS: DATED – March 27, 2013

	COVER
E0.1	CAMPUS MAP
E0.2	ELECTRICAL LEGEND, NOTES AND SCHEDULE
E1.1	LIGHTING DEMOLITION PLAN – LEVEL L2
E1.2	LIGHTING DEMOLITION PLAN – LEVEL L1
E1.3	LIGHTING DEMOLITION PLAN – LEVEL 1
E1.4	LIGHTING DEMOLITION PLAN – LEVEL 2
E1.5	LIGHTING DEMOLITION PLAN – LEVEL 3
E1.6	LIGHTING DEMOLITION PLAN – LEVEL 4
E1.7	LIGHTING DEMOLITION PLAN – LEVEL 5
E2.1	LIGHTING INSTALLATION PLAN – LEVEL L2
E2.2	LIGHTING INSTALLATION PLAN – LEVEL L1
E2.3	LIGHTING INSTALLATION PLAN – LEVEL 1
E2.4	LIGHTING INSTALLATION PLAN – LEVEL 2
E2.5	LIGHTING INSTALLATION PLAN – LEVEL 3
E2.6	LIGHTING INSTALLATION PLAN – LEVEL 4
E2.7	LIGHTING INSTALLATION PLAN – LEVEL 5
E3.1	PHOTOMETRIC LAYOUT – LEVEL L2
E3.2	PHOTOMETRIC LAYOUT – LEVEL L1
E3.3	PHOTOMETRIC LAYOUT – LEVEL 1
E3.4	PHOTOMETRIC LAYOUT – LEVEL 2
E3.5	PHOTOMETRIC LAYOUT – LEVEL 3
E3.6	PHOTOMETRIC LAYOUT – LEVEL 4
E3.7	PHOTOMETRIC LAYOUT – LEVEL 5

# B. PROJECT MANUAL: DATED – March 27, 2013 entitled:

Bull Street Garage LED Lighting Retrofit

SC PROJECT # H27-Z042

# 1.03 TIME OF COMPLETION AND LIQUIDATED DAMAGES

- A. Time of Completion: Unless an extension of time is granted, as provided for in Paragraph 14.3 of General Conditions of this contract, work under this contract shall be substantially complete within 90 consecutive calendar days from "Notice to Proceed" or from dates mutually agreed upon between Owner and Contractor.
- B. Liquidated Damages: Should the Contractor fail to complete the work under this contract by the stipulated Final Completion Date, the Contractor shall forfeit all remaining unpaid contract fees, including that amount equivalent to remaining contract work and materials to be provided, plus all retainage.

#### 1.04 MANNER OF CONDUCT ON THE WORK

- A. The existing buildings will be occupied during the "life of the contract". The work shall be done, and such temporary facilities provided, so as not to interfere with the daily operation of the building or any essential service thereof.
- B. Noisy operations, such as drilling, etc., shall be restricted by the Owner to avoid disruption of daily activities. The Schedule of Operations shall be approved by the Owner.
- C. No work shall be undertaken and no service shall be interrupted, which does not have the prior approval of the Owner. Every request from the Contractor to begin work in a new area or on another floor level or to interrupt any service or function must be made to the Owner sufficiently far in advance to allow review, approval and concurrence by the Owner's Administrative Staff.
- D. No jack hammering will be allowed unless written permission is received from the Owner. All holes will be core drilled using a diamond core drill.
- E. Responsibility for enforcing coordination requirements and close adherence to time schedule rests solely with the general contractor.

#### 1.05 SPECIAL SITE CONDITIONS

- A. Bidders are specifically advised that storage and work space will be restricted to the Boiler Room only. Encroachment beyond these limits by the Contractor shall be strictly avoided. Material must be kept in neat and orderly fashion and work area must be kept clean.
- B. Trash and debris shall be removed by Contractor daily.

#### 1.06 ACCESS TO THE BUILDING AND STORAGE

- A. Materials shall arrive on the site only as they are needed and immediately delivered to the construction area.
- B. Supplies, equipment and materials are to be delivered to the construction area in closed containers, sized to be conveniently transported through existing corridors and door openings.
- C. The Contractor shall remove all waste material via the same route.
- D. Remove all waste material from Owner's property and legally dispose of it.

E. Debris, trash and unused materials shall be removed from the construction area in closed containers sized to be conveniently transported through existing corridors and door openings.

## 1.07 WORK SCHEDULE

- A. The Contractor will be permitted to carry out all phases of his work during normal daily working hours (7:00 a.m. to 5:00 p.m. on weekdays). Nothing in the above work schedule shall void the Contractor's option to perform overtime work (5:00 P.M. Friday to 7:00 a.m. Monday) if so desired. However, the Contractor shall receive no additional compensation for overtime work performed.
  - 1. The Contractor shall advise the College authorities of the intended work schedule and obtain their approval.
  - 2. The Contractor shall not do any electrical or mechanical work at any time that would interfere with any College service, system of facility without first advising University authorities of the nature, proposed time and duration of the interruption and obtaining approval thereof.
- B. The contractor shall present all requests for approval to the College authorities not less than five working days before proposed work is scheduled to be done.
- C. Nothing in the above-mentioned work schedule shall void the Contractor's option to perform overtime work if so desired and if approved by the College authorities. However, the Contractor shall receive no additional compensation for overtime work performed.

#### 1.08 SAFETY COMPLIANCE

A. In addition to any detailed requirements of this specification, the contractor shall meet the requirements of federal and state standards referenced in Applicable Publication, whichever is more restrictive. Matters of interpretation of these standards shall be submitted by the contractor to the respective administrative agency for resolution before starting work.

# 1.09 SEQUENCING OF CONSTRUCTION

- A. It is the intent of these Specifications that the work shall commence within ten (10) working days of the date of commencement as set forth in the "Notice to Proceed," and that all work shall be completed within the number of days specified.
- B. The Contractor shall schedule the work in such a manner that will allow the Owner to fully occupy all spaces within the time frame specified. No time extension shall be granted for equipment delivery.

<u>PART TWO – PRODUCTS</u> NOT USED.

<u>PART THREE – EXECUTION</u> NOT USED.

END OF SECTION

## SECTION 010070 - MISCELLANEOUS CUTTING AND PATCHING

#### PART ONE - GENERAL

- 1.01 WORK INCLUDED: This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:
  - A. Make the several parts fit properly.
  - B. Uncover Work to provide for installation, inspection, or both, of ill-timed Work.
  - C. Remove and replace Work not conforming to requirements of the Contract Documents.
  - D. Remove and replace defective Work.
  - E. The Work of this section shall include all patching of any existing substrate or finish material which is displaced, disturbed, marred or otherwise damaged by the operations of the work of this contract.
  - F. Patching is herein further understood to include replacement of certain materials, which, by their nature, cannot be patched such as resilient base, resilient flooring, etc. This statement primarily concerns itself with finishes in existing areas indicated to remain as part of the finished project.
  - G. For alterations and additions the repair of all damages made by cutting shall include restoring those surfaces to their original state of finish, including surface texture, design color, etc., unless new finishes are called for. All such repairs shall be performed by personnel trained and proficient in the particular trades involved; i.e., plaster repairs by plasterers, masonry repairs by masons, tile repairs by tile setters, etc. Masonry and tile repairs shall be toothed to maintain bond or pattern. It is the intent of these specifications that all areas requiring repairs shall be restored to a completely finished condition, acceptable to the Owner.

# 1.02 INSPECTION

- A. The contractor shall visit the building, inspect the areas in which work is to be performed and determine for himself the types and extent of finishing materials existing.
- B. He shall determine which materials will probably require patching and which will probably require replacement and to what extent.
- C. Failure to do so will not relieve him from this responsibility to conform to the requirements of this section.

## 1.03 RELATED WORK DESCRIBED ELSEWHERE:

- A. In addition to other requirements specified, upon the Owner's request, uncover Work to provide for inspection by the Owner of covered Work; and remove samples of installed materials for testing.
- B. Do not cut or alter work performed under separate contract without the Owner's written permission.

# 1.04 QUALITY ASSURANCE:

A. Perform all cutting and patching in strict accordance with pertinent requirements of these

Specifications and, in the event no such requirements are determined, in conformance with the Owner's written direction.

## 1.05 SUBMITTALS:

- A. Request for the Owner's consent:
  - 1. Prior to cutting which affects structural safety, submit written request to the Owner for permission to proceed with cutting.
  - 2. Should conditions of the Work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Owner and secure his written permission prior to proceeding.

#### B. Notices to the Owner:

- 1. Prior to cutting and patching pursuant to the Owner's instructions, submit cost estimate to the Owner. Secure the Owner's approval of cost estimate and type of cost reimbursement before proceeding with cutting and patching.
- 2. Submit written notice to the Owner designating time the Work will be uncovered, to provide for the Owner's observation.

## PART TWO - PRODUCTS

#### 2.01 MATERIALS:

A. For replacement of Work removed, use materials, which comply with the pertinent Sections of these Specifications.

#### 2.02 PAYMENT FOR COSTS:

A. The Owner will reimburse the Contractor for cutting and patching performed pursuant the Owner's written request after claim for such reimbursement is submitted by the Contractor. Perform all other cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner.

# 2.03 EXISTING ADJACENT FINISHES:

A. The intent of this specification is that all finished surfaces shall present an unblemished finished appearance conforming to existing adjoining materials and colors.

## PART THREE - EXECUTION

# 3.01 CONDITIONS

# A. Inspection:

1. Inspect existing conditions, including elements subject to movement or damage during cutting and patching.

2. After uncovering the Work, inspect conditions affecting installation of new Work.

# B. Discrepancies:

 If uncovered conditions are not as anticipated, immediately notify the Owner and secure needed directions.

## 3.02 PREPARATION PRIOR TO CUTTING:

A. Provide all required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work.

# 3.03 PERFORMANCE:

A. Perform cutting and demolition by methods which will prevent damage to other portions of the Work and will provide proper surfaces to receive installation of repair and new work. Perform fitting and adjustment of products to provide finished installation complying with the specified tolerances and finishes.

## 3.04 CONCRETE:

A. Concrete shall be patched by cutting out old concrete to remove loose aggregate or inform cement. Apply approved bonding agent to old concrete to insure firm juncture of new and old.

## 3.05 CLEAN UP:

A. Remove all debris and excess material from the site and legally dispose of same.

**END OF SECTION** 

# SECTION 010153 - CHANGES IN THE WORK

#### PART 1 - GENERAL

- 1.01 WORK INCLUDED: This Section establishes additional requirements pertaining to Changes in the Work initiated by the Owner or Contractor.
- 1.02 RELATED WORK DESCRIBED ELSEWHERE:
  - A. AIA Document A201 2007 General Conditions of the Contract for Construction, Article 7.
  - B. Supplementary Conditions
- 1.03 QUALITY ASSURANCE:
  - A. The Owner shall submit request for Changes in the Work, in writing to the Contractor, stating the specific scope of the change.
  - B. The Contractor shall review the Owner's request and provide a price and time requirement (if any) in a timely manner.

## PART TWO - PRODUCTS

- 2.01 QUOTATIONS:
  - A. All quotes shall be itemized as follows:

## DESCRIPTION QUANTITY UNIT PRICE MATERIAL LABOR TOTAL

- 2.02 COST: Costs shall be limited to the following:
  - A. Material Cost, including sales tax and delivery.
  - B. Labor Cost, including social security and fringe benefits.
  - C. Bond premiums.
  - D. Rental Value of Equipment and Machinery.
- 2.03 CREDIT: The amount of credit to be allowed by the Contractor which result in a net decrease of the Contract Sum will be the amount of the actual net cost as confirmed by the Owner.
- 2.04 COMBINATION ADDITION AND CREDITS: When both additions and credits covering related work on substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of net increase.
- 2.05 ALLOWANCES: Overhead and profit combined shall not exceed the following percentages:
  - A. For the Prime Contractor, for any work by his own forces, 15% of the cost.
  - B. For each Subcontractor involved, work performed by his own forces, 15% of the cost.
  - C. For the Prime Contractor, for work performed by his Subcontractor, 7% of the amount due to the Subcontractor.

# PART THREE - EXECUTION

3.01 PREPARATION: Immediately after receipt of Written approval from the Owner notify all subcontractors and suppliers affected by the change and proceed with work promptly.

END OF SECTION 01153

## SECTION 010200 - PROJECT MEETINGS

#### PART ONE - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: To enable orderly review during progress of the work, and to provide for systematic discussion of problems, the Contractor shall conduct project meetings throughout the construction period. Meeting times and dates shall be set at the Pre-construction conference with the Owner's Representative and Engineer present.
- B. Related Work: (1) Documents affecting the work of this section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division One of these specifications. (2) The Contractor's relations with his subcontractors and material suppliers, and discussions relative thereto, are the Contractor's responsibility and normally are not part of the project meetings content.

# 1.02 QUALITY ASSURANCE

A. For those persons designated by the Contractor to attend and participate in project meetings, provide required authority to commit the Contractor to solutions agreed upon in the project meetings.

## 1.03 SUBMITTALS

- A. Agenda items: To the maximum extent practicable, advise the Owner's representative at least 24 hours in advance of project meetings regarding items to be added to the agenda.
- B. Minutes: (1) The Contractor shall compile minutes of each project meeting and will furnish copies to the Owner, Architect/Engineer, and Sub-contractors. (2) Recipients of copies may make and distribute such other copies as they wish. Meeting minutes shall include a complete synopsis of all discussions, decisions, and/or problems being encountered on the project, as well as an update of the schedule.

# <u>PART TWO – PRODUCTS</u> NOT USED.

#### PART THREE - EXECUTION

- 3.01 MEETING SCHEDULE
- A. Except as noted below for Preconstruction Meeting, project meetings will be held biweekly.
- B. Coordinate as necessary to establish mutually acceptable schedule for meetings.
- 3.02 MEETING LOCATION
- A. The Contractor shall establish meeting location. To the maximum extent practicable, meetings will be held at the job site.
- 3.03 PRECONSTRUCTION MEETING
- A. Preconstruction meeting will be scheduled to be held within 10 working days after the Owner has issued the Notice To Proceed.
  - 1. Provide attendance by authorized representatives of the Contractor and major Subcontractors.

- 2. The Owner will advise other interested parties, and request their attendance.
- B. Minimum agenda: Data will be distributed and discussed on at least the following items:
  - 1. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers and Owner.
  - 2. Channels and procedures for communication.
  - 3. Construction schedule, including sequence of critical work.
  - 4. Contract Documents, including distribution of required copies of original documents and revisions.
  - 5. Processing of shop drawings and other data submitted to the Owner for review.
  - 6. Processing of bulletins, field decisions, and change orders.
  - 7. Rules and regulations governing performance of the work.
  - 8. Procedures for safety and first aid, security, quality control, housekeeping, and related matters.

#### 3.04 PROJECT MEETINGS

#### A. Attendance

- 1. To the maximum extent practicable, assign the same person or persons to represent the Contractor at project meetings throughout progress of work.
- 2. Subcontractors, materials suppliers, and others may be invited to attend those project meetings in which their aspect of the work is involved.

## B. Minimum agenda:

- 1. Review, revise as necessary, and approve discussions, agreements and understanding of the previous meeting.
- 2. Review progress of the work since last meeting, including status of submittals for approval.
- 3. Identify problems that impede planned progress.
- 4. Develop corrective measures and procedures to regain planned schedule.
- 5. Complete other current business.

# **END OF SECTION**

#### SECTION 010300 - SUBMITTALS

#### PART ONE – GENERAL

- 1.01 Submit shop drawings, product data as required to the Owner in sufficient number to allow the Owner to retain two copies. Make all submittals at one time, no later than two weeks after receipt of the "Notice to Proceed."
  - A. Shop drawings shall be submitted in a clear and thorough manner. Details shall be identified by reference to sheets and details, schedules and room numbers shown on the Contract Drawings and Division of the specification and indexed accordingly.
  - B. Product Data, shall clearly identify pertinent products and models on each copy. Show performance characteristics, capacities, dimensions, clearances wiring piping diagrams and controls as required. Modify manufacturer's standard schematic drawings and diagrams to delete information to provide information specifically applicable to the work.
  - C. Samples, shall be of sufficient size and quantity to clearly illustrate, functional characteristics of the product, with integrally related parts and attachment devices present a full range of color, texture and pattern.

#### 1.02 CONTRACTOR RESPONSIBILITIES:

- A. Review Shop Drawings, Product Data and Samples prior to submission.
- B. Determine and verify:
  - 1. Field measurements.
  - 2. Field construction criteria.
  - 3. Catalog numbers and similar data.
  - 4. Conformance with specifications.
- C. Coordinate each submitted with requirements of the work and of the Contract Documents.
- D. Notify the Owner in writing, at time of submission, of any deviations in the submittals from requirements of the Contract Documents.
- E. Begin no fabrication or work which requires submittals until return of submittals with the Owner's approval.

## 1.03 SUBMISSION REQUIREMENTS:

- A. Make submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in the Work or in the work of any other Contractor.
- B. Number of submittals required:
  - 1. Shop Drawings: Submit one reproducible transparency and one opaque reproduction.
  - 2. Product Data: Submit the number of copies which the Contractor requires, plus two which will be retained by the Owner.

3. Samples: Submit the number stated in each specification Division.

#### C. Submittals shall contain:

- 1. The date of submission and the dates of any previous submissions.
- 2. The project title and number.
- 3. Contract identification.
- 4. The names of:
  - a. Contractor.
  - b. Supplier.
- c. Manufacturer.
- 5. Identification of the product, with the specification Division number.
- 6. Field dimensions, clearly identified as such.
- 7. Relation to adjacent or critical features of the Work or materials.
- 8. Applicable standards, such as ASTM or Federal Specification numbers.
- 9. Identification of deviations from Contract Documents.
- 10. Identification of revisions on re-submittals.
- 11. An 8 in. x 3 in. blank space for Contractor and Owner stamps.
- 12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and of Contract Documents.

# 1.04 RESUBMISSION REQUIREMENTS:

- A. Make any corrections or changes in the submittals required by the Owner and resubmit until approved.
- B. Shop Drawings and Product Data:
  - 1. Revise initial drawings or data, and resubmit as specified for the initial submittal.

# 1.05 DISTRIBUTION:

- A. Distribute reproductions of Shop Drawings and copies of Product Data that carry the Owner stamp of approval to:
  - 1. Job site file.
  - 2. Record Documents file.
  - 3. Other affected contractors.
  - 4. Subcontractors.
  - 5. Supplier or Fabricator.

# 1.06 OWNER DUTIES:

- A. Review submittals with reasonable promptness and in accordance with approved schedule.
- B. Affix stamp and initials or signature, and indicate requirements for re-submittal, or approval of submittals.
- C. Return submittals to Contractor for distribution, or for resubmission.

<u>PART TWO – PRODUCTS</u> NOT USED.

<u>PART THREE – EXECUTION</u> NOT USED.

## SECTION 010320 - CONSTRUCTION SCHEDULES

#### PART 1 - GENERAL

1.01 WORK INCLUDED: To assure adequate planning and execution of the Work so that the Work is completed within the number of calendar days allowed in the Contract, and to assist the Owner in evaluating progress of the Work, prepare and maintain the schedules and reports described in this Section.

#### 1.02 RELATED WORK:

- A. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions and Sections in Division One of these specifications.
- B. Requirements for progress schedule: General Conditions.
- C. Construction period: Form of Agreement.
- 1.03 DEFINITIONS: "Day" as used throughout the Contract unless otherwise stated, means "calendar day".

#### 1.05 SUBMITTALS:

- A. Comply with pertinent provisions of Section 010300.
- B. Construction schedule: Within 10 calendar days after the Contractor has received the Owner's Notice to Proceed, submit one reproducible copy and four prints of a construction schedule.
- C. Periodic revisions and reports: Submit four prints of the construction schedule updated along with the monthly payment request.

### PART TWO - PRODUCTS

2.01 CONSTRUCTION ANALYSIS: Graphically show by bar-chart the order and interdependence of all activities necessary to complete the work, and the sequence in which each activity is to be accomplished, as planned by the Contractor and his project field superintendent in coordination with all subcontractors whose work is shown on the diagram.

### PART THREE - EXECUTION

- 3.01 CONSTRUCTION SCHEDULE: As soon as practicable after receipt of Notice to Proceed, complete the construction analysis in preliminary form, meet with the Owner, review contents of the proposed construction schedule, and make all revisions agreed upon.
- 3.02 PERIODIC REVISIONS AND REPORTS: As required under Paragraph 1.05-C above, update the approved construction schedule along with each payment certificate.
  - Indicate "actual" progress in percent completion for each activity in blank space provided below listed activity.
  - 2. Provide written narrative summary of revisions causing delay in the program, and an explanation of corrective actions taken or proposed.
- 3.03 REVISIONS: Make only those revisions to approved construction schedule as are approved in advance by the Owner.

### SECTION 010350 - SUBSTITUTIONS

#### PART ONE - GENERAL

- 1.01 WORK INCLUDED: To establish a mandatory method or system of submitting and approval or disapproval of various items, materials, equipment, products, etc., in lieu of those specified or indicated.
- 1.02 RELATED WORK: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division One of these Specifications.

#### 1.03 QUALITY ASSURANCE

- A. The contract is based on the standards of quality established in the Contract Documents but specific reference in the specifications to any article, device, product, materials, fixture, form or type of construction, etc., by name, make, or catalog number, with or without the words "or equal", shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition and the Contractor in such cases may, at his option, use any article, device, product, material, fixture, form or type of construction which, in the judgment of the Owner expressed in writing, is equal to that named.
- B. Where quality and other characteristics are very nearly the same, the question of determining equal materials and readily available service sometime resolves itself to a matter of personal opinion and judgment and in these and all other cases involving the approval of materials, the opinion, judgment and decision of the Owner shall be final and bind all parties concerned.
- C. The following products do not require further approval except for interface within the work:
  - 1. Products specified by reference to standard specifications such as ASTM and similar standards.
  - 2. Products specified by the manufacturer's name and catalog model number.
- 1.04 REQUEST FOR SUBSTITUTION: Requests for written approval to substitute materials or equipment considered by the Contractor as equal to those specified must have been submitted for approval ten (10) calendar days prior to bid opening date to the Owner. Requests must have been accompanied by samples, descriptive literature, and engineering information as necessary to fully identify and allow appraisal of the product. Requests must have been made in writing.

### 1.05 APPROVED SUBSTITUTIONS:

- A. Approval of the Owner to use materials and/or equipment, if granted, will have been in the form of a written addendum and will have been issued to all bidders of record. Approved substitutions may be used at Contractor's option.
- B. No substitutions will be allowed, nor will an increase in Contract be allowed (for using materials specified) if substitutions have been requested later than ten (10) days prior to bid opening date.

<u>PART TWO – PRODUCTS</u> NOT USED.

PART THREE – EXECUTION NOT USED.

## SECTION 010370 - SCHEDULE OF VALUES

#### PART 1 - GENERAL

1.01 WORK INCLUDED: Provide a detailed breakdown of the agreed Contract Sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract documents.

#### 1.02 RELATED WORK:

- A. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division One of these specifications.
- B. Schedule of values is required to be compatible with the "continuation sheet" accompanying application for payment.

#### 1.03 QUALITY ASSURANCE:

- A. Use required means to assure arithmetical accuracy of the sums described.
- B. When so required by the Owner, provide copies of the subcontracts or other data acceptable to the Owner, substantiating the sums described.
- 1.04 SUBMITTALS: Prior to first application for payment, submit proposed schedule of values to the Owner.
  - A. Meet with the Owner's representative and determine additional data, if any, required to be submitted if requested.
  - B. Secure the Owner's approval of the schedule of values prior to submitting first application for payment.

<u>PART TWO – PRODUCTS</u> NOT USED.

PART THREE – EXECUTION NOT USED.

#### SECTION 010400 - QUALITY REQUIREMENTS

#### PART ONE - GENERAL:

The following General Requirements, are included to cover the special requirements of this Project and will note the special requirements that are in addition to the General Conditions and Supplementary Conditions.

#### 1.01 RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.02 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner or authorities having jurisdiction are not limited by provisions of this Section.
  - 4. Specific test and inspection requirements are not specified in this Section.

### 1.03 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- D. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.

- E. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- F. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- G. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- H. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
- 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- I. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of **five** previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

## 1.04 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

#### 1.05 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Qualification Data: For Contractor's quality-control personnel.
- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:
  - 1. Seismic-force-resisting system, designated seismic system, or component listed in the designated seismic system quality-assurance plan prepared by Architect.
  - 2. Main wind-force-resisting system or a wind-resisting component listed in the wind-force-resisting system quality-assurance plan prepared by Architect.

- D. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- E. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  - 1. Specification Section number and title.
  - 2. Entity responsible for performing tests and inspections.
  - 3. Description of test and inspection.
  - 4. Identification of applicable standards.
  - 5. Identification of test and inspection methods.
  - 6. Number of tests and inspections required.
  - 7. Time schedule or time span for tests and inspections.
  - 8. Requirements for obtaining samples.
  - 9. Unique characteristics of each quality-control service.

# 1.06 CONTRACTOR'S QUALITY CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- C. Testing and Inspection: In quality-control plan, include a comprehensive schedule of Work requiring testing or inspection, including the following:
  - Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
  - 2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
- D. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- E. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

## 1.07 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
  - 1. Date of issue.
  - 2. Project title and number.
  - 3. Name, address, and telephone number of testing agency.
  - 4. Dates and locations of samples and tests or inspections.
  - 5. Names of individuals making tests and inspections.
  - 6. Description of the Work and test and inspection method.
  - 7. Identification of product and Specification Section.
  - 8. Complete test or inspection data.
  - 9. Test and inspection results and an interpretation of test results.
  - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
  - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  - 12. Name and signature of laboratory inspector.
  - 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
  - 1. Name, address, and telephone number of technical representative making report.
  - 2. Statement on condition of substrates and their acceptability for installation of product.
  - 3. Statement that products at Project site comply with requirements.
  - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 6. Statement whether conditions, products, and installation will affect warranty.
  - 7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
  - 1. Name, address, and telephone number of factory-authorized service representative making report.
  - 2. Statement that equipment complies with requirements.
  - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 4. Statement whether conditions, products, and installation will affect warranty.
  - 5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.
- 1.08 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
  - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

## 1.09 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
  - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  - 2. Payment for these services will be made by owners..
  - Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.

- 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
- 2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
  - Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
- Notify testing agencies at least 48 hours in advance of time when Work that requires testing or inspecting will be performed.
- 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
- 5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
- 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 "Submittal Procedures."
- D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  - 3. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  - 4. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 5. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
  - 1. Access to the Work.
  - 2. Incidental labor and facilities necessary to facilitate tests and inspections.

- 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
- 4. Preliminary design mix proposed for use for material mixes that require control by testing agency.
- 5. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.
  - 1. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

### 1.10 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: **Owner will engage** a qualified **testing agency** to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:
- B. Special Tests and Inspections: Conducted by a qualified **testing agency** as required by authorities having jurisdiction, as indicated in individual Specification Sections and as follows:
  - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
  - 2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
  - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
  - 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
  - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
  - 6. Retesting and reinspecting corrected work.

## <u>PART TWO – PRODUCTS</u> NOT USED.

### PART THREE - EXECUTION

- 3.01 ACCEPTABLE TESTING AGENCIES
  - A. Terracon
  - B. SAFEbuilt

C. Accepted equal

#### 3.02 TEST AND INSPECTION LOG

- A. Prepare a record of tests and inspections. Include the following:
  - 1. Date test or inspection was conducted.
  - 2. Description of the Work tested or inspected.
  - 3. Date test or inspection results were transmitted to Architect.
  - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

#### 3.03 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

## SECTION 010500 - ON SITE TEMPORARY FACILITIES

#### PART 1 - GENERAL

- 1.01 CONTRACTOR'S TEMPORARY EQUIPMENT: Contractor shall furnish, maintain and remove at completion, all temporary equipment that is required for proper execution of work of all trades.
- 1.02 LIFTING DEVICES AND HOISTING FACILITIES: Contractor shall provide all necessary lifting and hoisting equipment to accomplish the work.
- 1.03 TEMPORARY WATER DURING CONSTRUCTION: The Contractor shall make arrangements to provide all water required during construction. Water shall be furnished by the Owner. All necessary piping, valves, cut-offs, etc., required to keep Owner's system in continuous operation shall be furnished and installed by Contractor. All surplus materials and equipment shall be removed at completion of project.
- 1.04 TEMPORARY ELECTRICITY DURING CONSTRUCTION: The Contractor shall make the necessary arrangements and provide all temporary electrical services and lighting required during construction. Electricity at its source shall be furnished to Contractor by Owner.
- 1.05 TEMPORARY TOILET FACILITIES: Permanent toilet facilities may be used by the construction personnel upon written permission of the Owner and subject to conditions mutually agreed to in writing.
- 1.06 WEATHER PROTECTION, TEMPORARY HEAT AND VENTILATION:
  - A. The Contractor shall provide all weather protection and temporary heat as necessary to carry on the work and materials against injury from dampness and cold, to dry out the building and to provide suitable working conditions for the installation and curing of materials until final acceptance by the Owner.
  - B. The Contractor may utilize the existing mechanical equipment with the qualifications herein stipulated; he shall, however, supply any additional equipment required.
  - C. At completion of the work, when existing equipment has been utilized, the Contractor shall restore all equipment to "Original Condition." This shall include replacement of all filters, painting, and other servicing as required.

PART TWO – PRODUCTS NOT USED.

<u>PART THREE – EXECUTION</u> NOT USED.

#### SECTION 010701 - CONTRACT CLOSE OUT

### PART ONE - GENERAL:

#### PRIOR TO APPLYING FOR FINAL INSPECTION AND FINAL PAYMENT

- 1.01 Materials List: Furnish the Owner, a typewritten list in triplicate showing every manufactured item/material used in job. Include catalog number, manufacturer's name and address, distributor's name and address. Type lists neatly and index according to respective specification sections of work.
- 1.02 Maintenance Instructions: Arrange to instruct operating and maintenance personnel of Owner in use and maintenance of mechanical systems and associated control systems and specialty equipments, provided under this contract. Submit letter showing when training was held and who attended.
- 1.03 Certificate of Substantial Completion, AIA Doc G704.
- 1.04 Contractor's Affidavit of Payment of Debts and Claims on AIA Document G706.
- 1.05 1 clean, readable set of Project Record Documents showing all deviations or changes in routing, location, or installation procedures made during the course of construction.
- 1.06 Consent of Surety to Final Payment on AIA Document G-707, latest edition.
- 1.07 Contractor's Release or Waiver of Liens, conditional upon receipt of final payment. Submit in letter form on Contractor's letterhead.
- 1.08 Contractor's Identification Badges and any keys shall be returned prior to receipt of final payment.
- 1.09 Certification that all items of work on the punchlist are complete. Submit in letter form on Contractor's Letterhead See SCPI, Paragraph 9.10.1.1 for the exact wording required.
- 1.10 Contractor shall submit OSE forms SE-550C & SE-560C before requesting Substantial and final Completion inspections. The A/E shall submit OSE form SE-550A before Substantial Completion inspection.

<u>PART TWO - PRODUCTS</u> NOT USED.

PART THREE- EXECUTION NOT USED.

## SECTION 010720 - PROJECT RECORD DOCUMENTS

#### PART 1 - GENERAL

#### 1.01 WORK INCLUDED:

- A. Throughout progress of the Work of this Contract, maintain an accurate record of all changes in the Contract Documents, as described in Article 3.0l below.
- B. Upon completion of the Work of this Contract, transfer the recorded changes to a set of Record Documents, as described in Article 3.02 below.

## 1.02 RELATED WORK DESCRIBED ELSEWHERE:

A. Submittals: Section 010300

#### 1.03 QUALITY ASSURANCE:

- A. General: Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff as approved in advance by the Owner.
- B. Accuracy of records: Thoroughly coordinate all changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to properly show the change. Accuracy of records shall be such that future search for items shown in the Contract Documents may reasonably rely on information obtained from the approved Record Documents.
- C. Timing of entries: Make all entries within 24 hours after receipt of information.
- 1.04 SUBMITTALS: General: The Owner's approval of the current status of Record Documents will be a prerequisite to the approval of requests for progress payment and request for final payment under the Contract.
- 1.05 PRODUCT HANDLING: Use all means necessary to maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of the recorded data to the final Record Documents. In the event of loss of recorded data, use all means necessary to secure data to the Owner's approval; such means include, if necessary in the opinion of the Owner, removal and replacement of concealing materials and, in such case, all replacements shall be to the standards originally specified in the Contract Documents.

## PART TWO - PRODUCTS

#### 2.01 RECORD DOCUMENTS:

- A. Job set: Promptly following award of contract, secure from the Owner, at no charge to the Contractor, one complete set of all Documents comprising the Contract.
- B. Final record documents: At a time near the completion of the Work, secure from the Owner at no charge to the Contractor, one complete set of sepia transparencies of all Drawings included in the Contract.

#### PART THREE - EXECUTION

#### 3.01 MAINTENANCE OF JOB SET:

A. Identification: Immediately upon receipt of the job set described in Paragraph 2.0.1 above, identify each of the Documents with the title "RECORD DOCUMENTS \_ JOB SET."

#### B. Preservation:

- 1. Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set to the approval of the Owner.
- 2. Do not use the job set for any purpose except entry of new data and for review by the Owner, until start of transfer of data to final Record Documents.
- 3. Maintain the job set at the site of Work as that site is designated by the Architect.
- C. Making entries on Drawings: Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by note and by graphic line, as required. Date all entries. Call attention to the entry by a "cloud" around the area or areas affected. In the event of overlapping changes, different colors may be used for each of the changes.
- D. Making entries on other Documents:
  - 1. Where changes are caused by directives issued by the Owner, clearly indicate the change by note in ink, colored pencil, or rubber stamp.
  - 2. When changes are caused by Contractor originated proposals approved by the Owner, including inadvertent errors by the Contractor which have been accepted by the Owner, clearly indicate the change by note in erasable colored pencil.
  - 3. Make entries in the pertinent Documents as approved by the Owner.

#### E. Conversion of schematic layouts:

- In most cases on the Drawings, arrangements of conduits and circuits, piping, ducts, and
  other similar items, is shown schematically and is not intended to portray precise physical
  layout. Final physical arrangement is determined by the Contractor, subject to the
  Owner's approval. However, design of future modifications of the facility may require
  accurate information as to the final physical arrangement of items which are shown only
  schematically on the Drawings.
- 2. Shown on the job set of Record Drawings, by dimension accurate to within 24 mm (l"), the center line of each run of items such as are described in Paragraph 3.01E.1 above. Clearly identify the item by accurate note such as "cast iron drain", "galv. water", etc. Show, by symbol or note, the vertical location of the item ("under slab", "in ceiling plenum", "exposed", etc.). Make all identification sufficiently descriptive that it may be related reliably to the Specifications.
- 3. The Owner may waive the requirements for conversion of schematic data where, in the Owner's judgment such conversion serves no beneficial purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the Owner.
- 4. Timing of entries: Be alert to changes in the Work from how it is shown in the Contract Documents. Promptly, and in no case later than 24 hours after the change has occurred and been made known to the Contractor, make the entry or entries required.
- F. Accuracy of entries: Use all means necessary, including the proper tools for measurement, to determine actual locations of the installed items.

#### 3.02 FINAL RECORD DOCUMENTS:

- A. General: The purpose of the final Record Documents is to provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modification of design to proceed without lengthy and expensive site measurement, investigation, and examination.
- B. Approval of recorded data prior to transfer: Following receipt of the sepia transparencies described in Paragraph 2.0l.B above, and prior to start of transfer of recorded data thereto, secure a review by the Owner of all recorded data. Make all required revisions.
- C. Approval of recorded data prior to transfer: Carefully transfer all change data shown on the job set of Record Drawings to the corresponding sepias, coordinating the changes as required, and clearly indicating at each affected detail and other drawing the full description of all changes made during construction and the actual location of items described in Paragraph 3.0l.E.1 above. Call attention to each entry by drawing a "cloud" around the area or areas affected. Make all change entries on the sepias neatly, consistently, and in ink or crisp black pencil.
- D. Transfer of data to other Documents: If the Documents other than Drawings have been kept clean successfully during progress of the Work, and if entries have been sufficiently orderly thereon to the approval of the Owner, the job set of those Documents (other than Drawings) will be accepted by the Owner as final Record Documents for those Documents. If any such Document is not so approved by the Owner, secure a new copy of that Document from the Owner and carefully transfer the change data to the new copy.
- E. Review and approval: Submit the completed total set of Record Documents to the Owner as described in Paragraph 1.04 above. Participate in review meeting or meetings as required by the Owner, make all required changes in the Record Documents and promptly deliver the final Record Documents to the Owner.
- 3.03 CHANGES SUBSEQUENT TO ACCEPTANCE: The Contractor shall have no responsibility for recording changes in the Work subsequent to acceptance of the Work by the Owner, except for changes resulting from replacements, repairs, and alterations made by the Contractor as part of this guarantee.

#### SECTION 260500 COMMON WORK RESULTS FOR ELECTRICAL

### PART 1 - GENERAL

#### 1.1 IMPOSED REGULATIONS

A. Applicable provisions of the State and Local Codes and of the following codes and standards in addition to those listed elsewhere in the specifications are hereby imposed on a general basis for electrical work: codes and standards listed on the electrical drawings.

## 1.2 SCOPE OF WORK

A. Provide all labor, materials, equipment and supervision to construct complete and operable electrical systems as indicated on the drawings and specified herein. All materials and equipment used shall be new, undamaged and free from any defects.

#### 1.3 RELATED DOCUMENTS AND OTHER INFORMATION

A. The general provisions of the Contract, including General and Supplementary Conditions and General Requirements, apply to the portions of work specified in each and every Section of this Division, individually and collectively.

#### 1.4 EXISTING SERVICES AND FACILITIES

- A. Damage to Existing Services: Existing services and facilities damaged by the Contractor through negligence or through use of faulty materials or workmanship shall be promptly repaired, replaced, or otherwise restored to previous conditions by the Contractor without additional cost to the Owner.
- B. Interruption of Services: Interruptions of services necessary for connection to or modification of existing systems or facilities shall occur only at prearranged times approved by the Owner. Interruptions shall only occur after the provision of all temporary work and the availability of adequate labor and materials will assure that the duration of the interruption will not exceed the time agreed upon.
- C. Removed Materials: Existing materials made unnecessary by the new installation shall be stored on site. They shall remain the property of the Owner and shall be stored at a location and in a manner as directed by the Owner. If classified by the Owner's authorized representative as unsuitable for further use, the material shall become the property of the Contractor and shall be removed from the site at no additional cost to the owner.

### 1.5 PRODUCT WARRANTIES

A. Provide manufacturer's standard printed commitment in reference to a specific product and normal application, stating that certain acts of restitution will be performed for the Purchaser or Owner by the manufacturer, when and if the product fails within certain operational conditions and time limits. Where the warranty requirements of a specific specification section exceeds the manufacturer's standard warranty, the more stringent requirements will apply and modified manufacturer's warranty shall be provided. In no case shall the manufacturer's warranty be less than one (1) year.

#### 1.6 PRODUCT SUBSTITUTIONS

A. General: Materials specified by manufacturer's name shall be used unless prior approval of an alternate is given by addenda. Requests for substitutions must be received in the office of the Engineer at least 10 days prior to opening of bids.

#### 1.7 ELECTRICAL DRAWINGS

- A. Electrical contract drawings are diagrammatic and indicate the general arrangement of electrical equipment. Do not scale electrical plans. Obtain all dimensions from the Architect's dimensioned drawings and field measurements. The Contractor shall review Architectural plans for door swings and built-in equipment; conditions indicated on those plans shall govern for this work.
- B. Coordinate installation of electrical equipment with the structural and mechanical equipment and access thereto. Coordinate exterior electrical work with civil and landscaping work.
- C. Discrepancies shown on different drawings, between drawings and specifications or between documents and field conditions shall be installed to provide the better quality or greater quantity of work; or, comply with the more stringent requirement; either or both in accordance with the A/E's interpretation.

## 1.8 SYSTEMS REQUIRING ROUGH-IN

- A. Rough-in shall consist of all outlet boxes/raceway systems/supports and sleeves required for the installation of cables/devices by other Divisions and by the Owner. It shall be the responsibility of this Contractor to determine the requirements by reviewing the contract documents and meeting with the Superintendent of the trade involved and Owner's representative to review submittal data, shop drawings, etc.
- B. Sealing of all sleeves, to meet the fire rating of the assembly, whether active or not, is work of this Division.

#### 1.9 SUBMITTALS

A. Refer to section 260510

## PART 2 - PRODUCTS

#### 2.1 FIRESTOPPING:

- A. Refer to section 078413 for additional requirements.
- B. A firestop system shall be used to seal penetrations of electrical conduits and cables through fire-rated partitions per NEC 300.21 and NEC 800.26 (2008). The firestop system shall be qualified by formal performance testing in accordance with ASTM E-814, or UL 1479.
- C. The firestop system shall consist of a fire-rated caulk type substance and a high temperature fiber insulation. It shall be permanently flexible, waterproof, non-toxic, smoke and gas tight and have a high adhesion to all solids so damming is not required. Only metal conduit shall be used in conjunction with this system to penetrate fire rated partitions. Install in strict compliance with manufacturer's recommendations. 3M or approved equal.
- D. Comply with TIA/EIA-569-A, Annex A, "Firestopping."
- E. Comply with BICSI TDMM, "Firestopping Systems" Article.

### PART 3 - EXECUTION

## 3.1 PRODUCT INSTALLATION, GENERAL

- A. Except where more stringent requirements are indicated, comply with the product manufacturer's installation instructions and recommendations, including handling, anchorage, assembly, connections, cleaning and testing, charging, lubrication, startup, test operation and shut-down of operating equipment. Consult with manufacturer's technical experts, for specific instructions on unique product conditions and unforeseen problems.
- B. Protection and Identification: Deliver products to project properly identified with names, models numbers, types, grades, compliance labels and similar information needed for distinct identifications; adequately packaged or protected to prevent deterioration during shipment, storage and handling. Store in a dry, well ventilated, indoor space, except where prepared and protected by the manufacturer specifically for exterior storage.
- C. Permits and Tests: Provide labor, material and equipment to perform all tests required by the governing agencies and submit a record of all tests to the Owner or his representative. Notify the Architect five days in advance of any testing.
- D. Install temporary protective covers over equipment enclosures, outlet boxes and similar items after interiors, conductors, devices, etc. are installed, to prevent the entry of construction debris and to protect the installation during finish work performed by others. Do not install device plates, equipment covers or trims until finish work is complete.
- E. Clean all equipment, inside and out, upon completion of the work. Scratched or marred surfaces shall be touched-up with touch-up paint furnished by the equipment manufacturer.
- F. Replace all equipment and materials that become damaged.
- G. No more than three phase conductors, each of opposite phases for a three phase WYE system, shall be combined in a single raceway unless written approval is granted by the engineer or noted otherwise on the construction documents.. (120 volt and 277 volt receptacle and lighting circuits are except from this requirement, but must meet the requirements of the NEC)

### 3.2 LOW VOLTAGE CABLING SEPARATION FROM EMI SOURCES

- A. Comply with BICSI TDMM and TIA/EIA-569-A recommendations for separating unshielded copper voice and data communication cable from potential EMI sources, including electrical power lines and equipment.
- B. Separation between open communications cables or cables in nonmetallic raceways and unshielded power conductors and electrical equipment shall be as follows:
  - 1. Electrical Equipment Rating Less Than 2 kVA: A minimum of 5 inches
  - 2. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 12 inches
  - 3. Electrical Equipment Rating More Than 5 kVA: A minimum of 24 inches
- C. Separation between communications cables in grounded metallic raceways and unshielded power lines or electrical equipment shall be as follows:
  - 1. Electrical Equipment Rating Less Than 2 kVA: A minimum of 2-1/2 inches
  - 2. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 6 inches
  - 3. Electrical Equipment Rating More Than 5 kVA: A minimum of 12 inches
- D. Separation between communications cables in grounded metallic raceways and power lines and electrical equipment located in grounded metallic conduits or enclosures shall be as follows:
  - 1. Electrical Equipment Rating Less Than 2 kVA: No requirement.

- 2. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 3 inches
- 3. Electrical Equipment Rating More Than 5 kVA: A minimum of 6 inches
- E. Separation between Cables and Electrical Motors and Transformers, 5 kVA or HP and Larger: A minimum of 48 inches
- F. Separation between Cables and Fluorescent Fixtures: A minimum of 5 inches

# 3.3 EQUIPMENT PROTECTION

- A. Equipment and materials shall be protected during shipment and storage against physical damage, vermin, dirt, corrosive substances, fumes, moisture, cold and rain.
- B. Store equipment indoors in clean dry space with uniform temperature to prevent condensation. Equipment shall include but not be limited to switchgear, switchboards, panelboards, transformers, motor control centers, motor controllers, uninterruptible power systems, enclosures, controllers, circuit protective devices, cables, wire, light fixtures, electronic equipment, and accessories.
- C. During installation, equipment shall be protected against entry of foreign matter; and be vacuum-cleaned both inside and outside before testing and operating. Compressed air shall not be used to clean equipment. Remove loose packing and flammable materials from inside equipment.
- D. Damaged equipment shall be, as determined by the Resident Engineer, placed in first class operating condition or be returned to the source of supply for repair or replacement.
- E. Painted surfaces shall be protected with factory installed removable heavy kraft paper, sheet vinyl or equal.
- F. Damaged paint on equipment and materials shall be refinished with the same quality of paint and workmanship as used by the manufacturer so repaired areas are not obvious.

## SECTION 260501 - ELECTRICAL DEMOLITION

## PART 1 - GENERAL

1.1 Not Used

### PART 2 - PRODUCTS

2.1 Not Used

# PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Field verify measurements and circuiting arrangements are as shown on Drawings.
- B. Verify that abandoned wiring and equipment serve only abandoned facilities.
- C. Demolition drawings are based on casual field observation.
- D. Report discrepancies to Architect before disturbing existing installation.
- E. Beginning of demolition means installer accepts existing conditions.

#### 3.2 PREPARATION

- A. Provide temporary wiring and connections to maintain existing systems in service during construction.
- B. When work must be performed on energized equipment or circuits, use personnel experienced in such operations, submit verification of compliance with the contractor's safety procedures to the Engineer, and notify the USC Project Manager in writing a minimum of 24 hours prior to work.
- C. Existing Fire Alarm System: Maintain existing system in service until new system is installed and tested. Disable system only to make switchovers and connections. Minimize outage duration. Notify owner before partially or completely disabling system.
- D. The existing lighting system shall remain operable during construction. Plan and execute the work accordingly. Provide temporary wiring and facilities as may be required.

#### 3.3 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

- A. Maintain electrical service to areas oust side of the construction area.
- B. Remove, relocate, and extend existing installations to accommodate new construction.
- C. Remove abandoned wiring to source of supply.
- D. Remove exposed abandoned conduit. Cut conduit flush with walls and floors, and patch surfaces.
- E. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets that are not removed.
- F. Disconnect and remove abandoned luminaries. Remove brackets, stems, hangers, and other accessories.

- G. Repair adjacent construction and finishes damaged during demolition and extension work.
- H. Maintain access to existing electrical installations that remain active. Modify installation or provide access panel as appropriate.
- I. Extend existing installations using materials and methods compatible with existing electrical installations, or as specified.
- J. All demolished ballasts and lamps shall be recycled.
- K. Remove all abandoned conductors and cables within the construction area.

#### 3.4 CONSTRUCTION PHASING

A. Plan and execute the work in accordance with the construction phasing as approved by the USC Project Manager at the start of construction. Test and certify all systems, by phase of construction, so that "partial occupancy" can be obtained.

#### 3.5 REUSE OF EXISTING MATERIALS

- A. Where new devices are to replace existing, it shall be permissible to reuse existing outlet boxes and branch circuit conduits. It shall be the responsibility of the Contractor to ensure that existing outlet boxes and conduits that are reused comply with requirements for new.
- B. The reuse of conduits (not remaining in place), conductors, and devices is not permitted.

#### 3.6 CUTTING AND PATCHING

- A. Structural Limitations: Do not cut structural framing, walls, floors, decks, and other members intended to withstand stress, except with the USC Project Manager's written authorization. Authorization will be granted only when there is no other reasonable method for completing the electrical work, and where the proposed cutting clearly does not materially weaken the structure.
- B. Cutting Concrete: Where authorized, cut openings through concrete (for conduit penetrations and similar services) by core drilling or sawing. Do not cut by hammer-driven chisel or drill. Prior to cutting of existing concrete walls, floors, or ceilings x-ray existing concrete to locate existing hidden utilities.
- C. Patching: Where patching is required to restore other work, because of cutting or other damage inflicted during the installation of electrical work, execute the patching in the manner recommended by the original Installer. Restore the other work in every respect, including the elimination of visual defects in exposed finished, as judged by the Architect. Engage the original Installer to complete patching of various categories of work including: concrete and masonry finishing, waterproofing and roofing, exposed wall finishes, etc.

#### 3.7 CLEANING AND REPAIR

A. Clean and repair existing materials and equipment that remain or that are to be reused.

#### SECTION 260502 - ELECTRICAL ACCEPTANCE TESTS

#### PART 1 - GENERAL

#### 1.1 SUBMITTALS

A. Refer to section 260510

## 1.2 References

A. ANSI/NETA ATS, "Standard for Acceptance Testing Specifications".

#### 1.3 SCOPE OF WORK

- A. Acceptance tests shall be performed in accordance with the current version of ASNI/NETA ATS and by an independent testing agency.
- B. Tests shall be performed in accordance with applicable codes, standards, and equipment manufacturers' instruction.
- C. The Contractor shall provide all test equipment, materials and labor necessary to perform the tests, and shall coordinate with the other trades for necessary services, such as scaffolding and the uncoupling of motors.
- D. Tests shall consist of visual inspections, manual operations, and electrical testing under all normal and expected abnormal operating conditions.
- E. The Owner and Engineer shall be notified at least 2 weeks in advance of all tests. The Owner and Engineer may attend testing as they desire, or if requested.
- F. The Engineer shall be provided with a written test report, signed and dated, for all tests.
- G. Acceptance testing shall be provided and reviewed by the Engineer prior to proceeding to next phase of construction. Phasing may require multiple trips/tests/reports and after hours work.

#### 1.4 TESTING CRITERIA

- A. High potential tests shall be performed at the AC or DC voltage listed in ASNI/NETA ATS unless specified otherwise herein. Do not perform more than one high potential test on any item without authorization from the Owner.
- B. Dielectric absorption tests shall be performed with a 2,500 volt DC megger.
- C. Megger tests shall be performed at a DC voltage of 1,000 volts for 600 volt rated equipment, and at a DC voltage of 500 volts for 120-300 volt rated equipment.
- D. Continuity checks shall be performed with a low voltage DC meter, light or bell.
- E. The resistance to ground shall be measured using either the three point method or the fall of potential method.

- F. Test instruments shall be calibrated to national standards to insure the accuracy of tests. These calibration reports shall be made available to the Owner when requested. Depending upon frequency of use, the instruments shall be calibrated at least every 12 months.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION
- 3.1 VISUAL INSPECTIONS
  - A. Prior to manual operation and electrical testing, verify the following:
    - 1. The equipment is free from damage and defects.
    - 2. The equipment has been lubricated.
    - 3. The ventilation louvers are open and unobstructed.
    - 4. Electrical connections have been tightened.
    - 5. Voltages, phases, and rotation have been identified.
    - 6. Terminations have been identified.
    - 7. Equipment labels have been installed.
    - 8. The equipment has been calibrated.
    - 9. The equipment is ready to be electrically tested
- 3.2 ELECTRICAL ACCEPTANCE TESTS
  - A. Control Cable
    - 1. A continuity check shall be performed on control and instrumentation wiring.

## SECTION 260510 - ELECTRICAL SUBMITTALS

## PART 1 - GENERAL

### 1.1 RELATED REQUIREMENTS

A. Comply with the applicable requirements of the Division 1 specifications (010300) and the requirements of this Division of the specifications.

#### 1.2 SUBMITTALS

- A. Submit for review by the Engineer a schedule with engineering data of materials and equipment to be incorporated in the work. Submittals shall be supported by descriptive materials, i.e., catalog sheets, product data sheets, diagrams, performance curves and charts published by the manufacturer, warranties, etc., to show conformance to Specifications and Plan requirements; model numbers alone shall not be acceptable. Data submitted for review shall contain all information to indicate compliance with Contract Documents. Complete electrical characteristics shall be provided for all equipment. Submittals for lighting fixtures shall include Photometric Data.
- B. The purpose of shop drawing review is to demonstrate to the Engineer that the Contractor understands the design concept. The Engineer 's review of such drawings, schedules, or cuts shall not relieve the Contractor from responsibility for deviations from the drawings or specifications unless he has, in writing, called the Engineer's attention to such deviation at the time of submission, and received written permission from the Engineer for such deviations.
- C. Where cut sheets include an entire product family, mark all specific items to be utilized for this project on equipment cut sheets. Generic cut sheets with no indication of which items on the cut sheet shall be used will be rejected.
- D. Response to Submittals: Shop drawings shall be stamped and signed by the Electrical Engineer with the following classifications:
- E. "No Exceptions Taken": No corrections, no marks. Contractor shall submit copies for distribution
- F. "Make Corrections Noted": A few minor corrections. Items may be ordered as marked up without further resubmission. Submit copies for distribution.
- G. "Amend and Resubmit": Minor corrections. Item may be ordered at the Contractor's option. Contractor shall resubmit drawings with corrections noted.
- H. "Rejected Resubmit": Major corrections or not in accordance with the contract documents. No items shall be ordered. Contractor shall correct and resubmit drawings.
- I. Prior Approvals and Shop Drawings must be hand delivered, received by mail, or email.
- J. Submittal data received by facsimile will not be reviewed.
- K. Equipment and materials requiring submittals:
  - 1. Section 260500 Common Work Results for Electrical
    - a. Product Warranties

- 2. Section 260502 Electrical Acceptance Tests
  - a. Test Reports
- 3. Section 260511- Electrical Work Closeout
  - a. Record Drawings
  - b. Record Manuals
  - c. Close out submittals
  - d. Training verification
- 4. Section 260529 Hangers and Supports for Electrical Systems
  - a. Product Data
- 5. Section 260533 Raceway and Boxes for Electrical Systems
  - a. Raceway
  - b. Boxes
- 6. Section 260553 Identification for Electrical Systems
  - a. Product data for all labeling products
- 7. Section 260923 Lighting Control Devices
  - a. Lighting Contactors
  - b. Enclosures
  - c. Dimensional Data
  - d. Wiring Diagrams
  - e. Time Switches
  - f. PIR Motion Sensors
  - g. Photosensors
- 8. Section 265100 Interior Lighting
  - a. Lighting Fixtures
  - b. Ballasts
  - c. Lamps
  - d. LED Arrays
  - e. Integral Occupancy Sensors
  - f. Integral Daylighting Controls
  - g. Photometric Analysis Drawings
  - h. Warranty Information

## PART 2 - PRODUCTS

2.1 Not Used.

#### PART 3 - EXECUTION

### 3.1 MANUFACTURER'S DATA

A. Include the manufacturer's comprehensive product data sheet and installation instructions. Where operating ranges are shown, mark data to show portion of range required for project application. Where pre-printed data sheet covers more than one distinct product-size, type, material, trim, accessory group or other variations, delete or mark-out portions of the pre-printed data which are not applicable.

# 3.2 EQUIPMENT LIST

A. Where more than one type of a product is being used (i.e. starters, disconnects, breakers, etc.) provide a list with each submittal correlating the type and size of product to the load served.

## 3.3 TEST REPORTS

A. Submit test reports which have been signed and dated by the firm performing the tests, and prepare in the manner specified in the standard or regulation governing the tests procedure as indicated.

### SECTION 260511 - ELECTRICAL WORK CLOSEOUT

#### PART 1 - GENERAL

#### 1.1 SUBMITTALS

A. Refer to section 260510

## 1.2 RELATED SECTIONS

A. Refer to section 010701 for additional requirements.

#### PART 2 - PRODUCTS

#### 2.1 RECORD DRAWINGS

- A. Except where otherwise indicated, electrical drawings prepared by Engineer are diagrammatic in nature and may not show locations accurately for various components of electrical system. Shop drawings, including coordination drawings, prepared by the Contractor show portions of work more accurately to scale and location, and in greater detail. It is recognized that actual layout of installed work may vary substantially from both Contractor drawings and shop drawings.
- B. The electrical superintendent shall maintain a white set of contract documents and shop drawings in clean, undamaged condition, for mark-up of actual installations which vary substantially from the work as shown. Mark-up whatever drawings are most capable of showing installed conditions accurately. However, where shop drawings are marked, record a reference note on appropriate contract drawings. Mark with erasable pencil, and use multiple colors to aid in the distinction between work of separate electrical systems. These documents shall be used for no other purpose. In general, record every substantive installation of electrical work which previously is either not shown or shown inaccurately, but in any case record the following:
  - 1. Post all addenda prior to beginning work.
  - 2. Work concealed behind or within other work, in a non-accessible arrangement.
  - 3. Scope of each change order (C.O.), noting C.O. number.
- C. Upon each visit by the USC Project Manager or Engineer, the Contractor shall demonstrate that the record documents are being kept current, as specified hereinbefore.

#### 2.2 RECORD MANUALS

- A. Record manuals shall include the following the following:
  - 1. Manufacturer's operation and maintenance manuals for:
    - a. Light Fixtures
    - b. Lighting Controls
    - c. Light Fixture Warranty
  - 2. Shop drawings, revised to reflect all review comments, supplemented with the installation instructions shipped with equipment.
  - 3. All field test Reports
  - 4. Electrical Contractor's Warranty
- B. Submit record manuals in quantities and in the format prescribed in the Division 01 specifications.

# PART 3 - EXECUTION

#### 3.1 INSPECTIONS

A. At all construction observations by the USC Project Manager or Engineer, the Contractor shall demonstrate that all work is complete in accordance with the contract documents and that all systems have been tested and are fully operational. The Contractor shall furnish the personnel, tools and equipment required to inspect and test all systems.

## 3.2 TRAINING

- A. Train Owner's personnel on the operation and maintenance of the following systems:
  - 1. Lighting Control Systems 4 hours
- B. Training shall not be conducted until system has been tested by the Contractor and is 100% operational. Refer to the individual specification sections for additional requirements.

## SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This section includes the requirements for the following:
  - 1. Wire and cable for 600 volts and less.
  - 2. Wiring connectors and connections.

#### 1.2 SUBMITTALS

A. Refer to section 250510.

### 1.3 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

#### 1.4 REFERENCE STANDARDS

- A. NECA 1 Standard for Good Workmanship in Electrical Contracting; National Electrical Contractors Association; current edition.
- B. NETA STD ATS Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems; International Electrical Testing Association; current edition.
- C. NFPA 70 National Electrical Code; National Fire Protection Association, current edition.

## PART 2 - PRODUCTS

### 2.1 WIRING REQUIREMENTS

- A. Concealed Dry Interior Locations: Use only THHN, THHW, or XHHW wire in raceway.
- B. Exposed Dry Interior Locations: Use only THHN, THHW, or XHHW in raceway.
- C. Above Accessible Ceilings: Use only THHN, THHW, or XHHW in raceway.
- D. Wet or Damp Interior Locations: Use only THHW, or XHHW in raceway.
- E. Exterior locations (above or below grade) XHHW or USE in raceway.
- F. Use conductors not smaller than 12 AWG for power and lighting circuits.
- G. Use conductors not smaller than 14 AWG for control circuits.
- H. Metal Clad (MC) cable shall not be used.

### 2.2 BUILDING WIRE

A. Conductor: Copper.

B. Insulation Voltage Rating: 600 volts.

## PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Pull all conductors into raceway at same time.
- B. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips that will not damage cables or raceway.
- C. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- D. Clean conductor surfaces before installing lugs and connectors.
- E. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
- F. Use insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10 AWG and smaller.
- G. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values or UL 486A and UL 486B.
- H. Identify and color code wire and cable under provisions of Section 260553. Identify each conductor with its circuit number or other designation indicated.
- I. For each electrical connection/termination, provide a complete assembly of materials, including but not necessarily limited to, pressure connectors, terminals (lugs), electrical insulating tape, heat-shrinkable insulating tubing, cable ties, solderless wire nuts, and other materials necessary to complete splices and terminations. Torque all connections according to installation instructions.

### 3.2 LABELING

- A. Color Coding
  - 1. Color shall be green for grounding conductors.
  - 2. The color of the circuit conductors shall be as follows:

277/480 volt, 3-phase: Phase A - Brown

Phase B - Orange Phase C - Yellow Neutral - Gray

### 3.3 FIELD QUALITY CONTROL

- A. Inspect and test in accordance with NETA STD ATS, except Section 4.
- B. Perform inspections and tests listed in NETA STD ATS, Section 7.3.2.

#### SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

## PART 1 - GENERAL

#### 1.1 SUMMARY

A. Grounding and bonding components.

### 1.2 SUBMITTALS

A. Refer to section 260510.

#### 1.3 QUALITY ASSURANCE

A. Conform to requirements of NFPA 70.

#### 1.4 REFERENCES

- A. NETA STD ATS Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems; International Electrical Testing Association; current edition.
- B. NFPA 70 National Electrical Code; National Fire Protection Association; current edition.
- C. NFPA 99 Standard for Health Care Facilities; National Fire Protection Association; current edition.
- D. IEEE Standard 142 "Green Book" Recommended Practices for Grounding of industrial and Commercial Power Systems; current edition.

## PART 2 - PRODUCTS

#### 2.1 CONDUCTORS

A. Electrical Grounding conductors: Unless otherwise indicated, provide bare or green insulated stranded copper electrical grounding conductors sized according to NEC or as shown or specified. Provide green insulated for conductors sized No. 10 AWG and smaller.

# PART 3 - EXECUTION

#### 3.1 EXAMINATION

A. Verify existing conditions prior to beginning work.

#### 3.2 SECONDARY EQUIPMENT AND CIRCUITS

- A. Branch Circuits: Install equipment grounding conductors with all feeders and power and lighting branch circuits, sized in accordance with Article 250 of NFPA 70.
- B. Enclosures:
  - 1. Bond the equipment grounding conductor to each pullbox, junction box, outlet box, device box, and other enclosures through which the conductor passes.
  - 2. Provide lugs in each box and enclosure for equipment grounding conductor termination.

- C. Fixed electrical appliances and equipment shall be provided with a ground lug for termination of the equipment grounding conductor.
- D. Metallic Conduit: Metallic conduits which terminate without mechanical connection to an electrical equipment housing by means of locknut and bushings or adapters, shall be provided with grounding bushings. Connect bushings with a bare grounding conductor to the equipment ground bus.
- 3.3 INSTALLATION
- 3.4 FIELD QUALITY CONTROL
  - A. Inspect and test in accordance with NETA STD ATS except Section 4.
  - B. Perform inspections and tests listed in NETA STD ATS, Section 7.13.

## SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This section includes the requirements for the following:
  - 1. Conduit and equipment supports.
  - 2. Anchors and fasteners.

#### 1.2 SUBMITTALS

A. Refer to section 260510

### 1.3 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

#### 1.4 REFERENCE STANDARDS

A. NECA 1 - Standard Practices for Good Workmanship in Electrical Contracting; National Electrical Contractors Association; current edition.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Hangers, Supports, Anchors, and Fasteners General: Corrosion-resistant materials of size and type adequate to carry the loads of equipment and conduit, including weight of wire in conduit.
- B. Supports: Fabricated of structural steel or formed steel members; galvanized.
- C. Anchors and Fasteners:
  - 1. Do not use powder-actuated anchors.
  - 2. Concrete Structural Elements: Use precast inserts, expansion anchors, or preset inserts.
  - 3. Steel Structural Elements: Use beam clamps, steel spring clips, steel ramset fasteners, or welded fasteners.
  - 4. Concrete Surfaces: Use self-drilling anchors or expansion anchors.
  - 5. Hollow Masonry, Plaster, and Gypsum Board Partitions: Use toggle bolts or hollow wall fasteners.
  - 6. Solid Masonry Walls: Use expansion anchors or preset inserts.
  - 7. Sheet Metal: Use sheet metal screws.
  - 8. Wood Elements: Use wood screws.

# PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Install hangers and supports as required to adequately and securely support electrical system components, in a neat and workmanlike manner, as specified in NECA 1.
  - 1. Do not fasten supports to pipes, ducts, mechanical equipment, or conduit.

- B. Cutting or Holes:
  - Locate holes in advance where they are proposed in the structural sections such as ribs or beams.
  - 2. Cut holes through concrete and masonry in new and existing structures with a diamond core drill or concrete saw. Pneumatic hammer, impact electric, hand or manual hammer type drills are not allowed.
- C. Rigidly weld support members or use hexagon-head bolts to present neat appearance with adequate strength and rigidity. Use spring lock washers under all nuts.
- D. Support boxes independently of conduit, except cast box that is connected to two rigid metal conduits both supported within 12 inches of box.
- E. Support conduit using coated steel or malleable iron straps, lay-in adjustable hangers, clevis hangers, and split hangers.
- F. Do not support conduit with wire, wire ties, or perforated pipe straps. Remove wire used for temporary supports.
- G. Do not attach conduit to ceiling support wires.

## SECTION 260533 – RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

#### 1.1 SUBMITTALS

A. Refer to section 260510.

## 1.2 QUALITY ASSURANCE

A. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for purpose specified and shown.

#### 1.3 REFERENCE STANDARDS

- A. ANSI C80.1 American National Standard for Electrical Rigid Steel Conduit (ERSC); current edition
- B. ANSI C80.3 American National Standard for Steel Electrical Metallic Tubing (EMT); current edition
- C. ANSI C80.5 American National Standard for Electrical Rigid Aluminum Conduit (ERAC); current edition
- D. NECA 1 Standard Practices for Good Workmanship in Electrical Contracting; National Electrical Contractors Association; current edition
- E. NECA 101 Standard for Installing Steel Conduit (Rigid, IMC, EMT); National Electrical Contractors Association; current edition
- F. NEMA FB 1 Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; National Electrical Manufacturers Association; current edition

# 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Accept conduit on site. Inspect for damage
- B. Protect conduit from corrosion and entrance of debris by storing above grade. Provide appropriate covering.

## PART 2 - PRODUCTS

## 2.1 CONDUIT REQUIREMENTS

- A. Conduit Size: Comply with NFPA 70.
  - 1. Minimum Size: 1/2 inch
- B. Wet and Damp Locations:
  - 1. Exterior above ground: RMC or IMC
  - 2. Interior: RMC or IMC
- C. Dry Locations:
  - 1. Concealed: EMT.
  - 2. Exposed: EMT.
- D. Areas subject to physical damage: RMC or IMC.

## 2.2 METAL CONDUIT

- A. Rigid Steel Galvanized Conduit (RMC): ANSI C80.1.
- B. Intermediate Metal Conduit (IMC): ANSI C80.6.
- C. Fittings and Conduit Bodies: NEMA FB 1; material to match conduit.
  - 1. Fittings shall meet the requirements of UL 514B and ANSI/ NEMA FB1.
  - 2. Standard threaded couplings, locknuts, bushings, and elbows: Only steel or malleable iron materials are acceptable. Integral retractable type IMC couplings are also acceptable.
  - 3. Die-cast or pressure-cast zinc-alloy fittings or fittings made of "pot metal" are prohibited.
  - 4. Locknuts: Bonding type with sharp edges for digging into the metal wall of an enclosure.
  - 5. Bushings: Metallic insulating type, consisting of an insulating insert molded or locked into the metallic body of the fitting. Bushings made entirely of metal or nonmetallic material are not permitted.
  - 6. Sealing fittings: Threaded cast iron type. Use continuous drain type sealing fittings to prevent passage of water vapor. In concealed work, install fittings in flush steel boxes with blank cover plates having the same finishes as that of other electrical plates in the room.

## 2.3 ELECTRICAL METALLIC TUBING

- A. EMT Description: ANSI C80.3
- B. Fittings and Conduit Bodies: NEMA FB 1; steel compression type.
  - 1. Fittings shall meet the requirements of UL 514B and ANSI/ NEMA FB1.
  - 2. Only steel or malleable iron materials are acceptable.
  - 3. Die-cast or pressure-cast zinc-alloy fittings or fittings made of "pot metal" are prohibited.
  - 4. Couplings and connectors: Concrete tight and rain tight, with connectors having insulated throats. Use gland and ring compression type couplings and connectors for conduit sizes 50 mm (2 inches) and smaller. Use set screw type couplings with four set screws each for conduit sizes over 50 mm (2 inches). Use set screws of case-hardened steel with hex head and cup point to firmly seat in wall of conduit for positive grounding.
  - 5. Indent type connectors or couplings are prohibited.
- C. All EMT conduit shall be Anodized silver.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify routing and termination locations of conduit prior to rough-in.
- B. Conduit routing is shown on drawings in approximate locations unless dimensioned. Route as required to provide a complete wiring system.

#### 3.2 CONDUIT INSTALLATION

- A. Install conduit securely, in a neat and workmanlike manner, as specified in NECA 101.
- B. Waterproofing: At floor, exterior wall, and roof conduit penetrations, completely seal clearances around the conduit and make watertight.
- C. Arrange supports to prevent misalignment during wiring installation.

- D. Arrange conduit to maintain headroom and present neat appearance.
- E. Route exposed conduit parallel and perpendicular to walls.
- F. Route conduit installed above accessible ceilings parallel and perpendicular to walls.
- G. Maintain adequate clearance between conduit and piping.
- H. Maintain 12 inch (300 mm) clearance between conduit and surfaces with temperatures exceeding 104 degrees F (40 degrees C).
- I. Cut conduit square using saw or pipecutter; de-burr cut ends.
- J. Bring conduit to shoulder of fittings; fasten securely.
- K. For power conduits install no more than equivalent of three 90 degree bends between boxes. Use conduit bodies to make sharp changes in direction, as around beams. Use hydraulic one shot bender to fabricate bends in metal conduit larger than 2 inch (50 mm) size.
- L. Avoid moisture traps; provide junction box with drain fitting at low points in conduit system.
- M. Provide suitable fittings to accommodate expansion and deflection where conduit crosses seismic, control, and expansion joints.
- N. Provide suitable pull string in each empty conduit except sleeves and nipples.
- O. Use suitable caps to protect installed conduit against entrance of dirt and moisture.
- P. Wherever possible, install horizontal raceway runs above water and drain piping. Give the right-of-way in confined spaces to piping that must slope for drainage and to larger HVAC ductwork and similar services that are less conformable than electrical services.
- Q. Complete the installation of electrical raceways before starting installation of cables within raceways.
- R. Raceways shall be installed exposed on ceiling and walls of parking garage.

### 3.3 BOX INSTALLATION

- A. In addition to fixture outlet boxes, install additional boxes where needed to prevent damage to cables and wires during pulling in operations.
- B. Remove only knockouts as required and plug unused openings. Use threaded plugs for cast metal boxes and snap-in metal covers for sheet metal boxes.

### 3.4 IDENTIFICATION

A. On all junction box covers, identify the circuits with black marker.

## SECTION 260553 – IDENTIFICATION FOR ELECTRICAL SYSTEMS

# PART 1 - GENERAL

#### 1.1 SUBMITTALS

A. Refer to section 260510.

## PART 2 - PRODUCTS

#### 2.1 NAMEPLATES AND LABELS

- A. Nameplates: Engraved three-layer laminated plastic, black letters on white background unless noted otherwise.
- B. Locations:
  - 1. Each lighting contactor enclosure.
- C. Letter Size:
  - 1. Use 1/4 inch (6 mm) letters for identifying equipment and loads.
- D. Labels: Embossed adhesive tape, with 3/16 inch (5 mm) white letters on black background. Use only for identification of individual wall switches, receptacles, and control device stations.

# PART 3 - <u>EXECUTION</u>

#### 3.1 PREPARATION

A. Degrease and clean surfaces to receive nameplates and labels.

## 3.2 INSTALLATION

- A. Install nameplates and labels parallel to equipment lines.
- B. Secure nameplates to equipment front using corrosion resistant screws.

## SECTION 260923 – LIGHTING CONTROL DEVICES

# PART 1 - GENERAL

#### 1.1 SUBMITTALS

A. Refer to section 260510.

## 1.2 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Products: Provide products listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated
- D. UL Approvals: UL listed under UL 916 Energy Management Equipment.
- E. FCC Emissions: Compliance with FCC emissions Standards specified in Part 15 Subpart J for Class A application.

#### 1.3 REFERENCE STANDARDS

- A. NEMA ICS 4 Industrial Control and Systems: Terminal Blocks; National Electrical Manufacturers Association; current edition.
- B. NFPA 70 National Electrical Code; National Fire Protection Association, current edition.

# PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Leviton Manufacturing, Inc: www.leviton.com.
- B. Lutron Electronics Inc: www.lutron.com
- C. Wattstopper Inc: www.wattstopper.com
- D. Substitutions: See Section 010350.

### 2.2 CONTACTORS

- A. Contactors shall be rated 30A/600V and shall be installed in a NEMA 1 enclosure. Coil voltage shall be 277V, unless noted otherwise. Contactors shall be electrically operated, mechanically held type with coil clearing contacts. Contactors shall be field-convertible for use with maintained-contact (two-wire) or momentary-contact (three-wire) control devices. Provide three-wire control unless noted otherwise.
- B. Contactors shall be of the number of poles required to control the circuits indicated, plus a minimum of two spare poles. Where number of circuits controlled exceeds the maximum number of poles available, provide multiple contactors connected in parallel.
- C. Provide H-O-A switch in cover of enclosure for contactors serving exterior lighting. Connect switch to

- operate as indicated on the drawings.
- D. Contactors shall have capability of control by at least four exterior inputs, including time switch, photocell, and motion sensors.
- E. Contactors shall have silver alloy double-break contacts and coil clearing contacts for mechanically held contactor and shall require no arcing contacts.

#### 2.3 PHOTOCELLS

- A. Photocells shall have the following features:
  - 1. Quick-response, cadmium-sulfide type.
  - 2. A 15 to 30 second, built-in time delay to prevent response to momentary lightning flashes, car headlights or cloud movements.
  - 3. Energizes the system when the north sky light decreases to approximately 1.5 footcandles, and maintains the system energized until the north sky light increases to approximately 3 to 5 foot candles.

#### 2.4 TIME SWITCHES

A. Time switches shall be rated 40A for operation between 120V and 277V. Time switches shall be electronic, 24-hour/7-day type, with auto-voltage selection, LED power and status indicators, 3 or more preset programs, and 20 or more setpoint programs that can be programmed in any configuration. Time switches shall also include DPDT switching configuration (2 N.O. and 2 N.C. contacts), temporary manual override, and battery backup. Intermatic GM40AVE or approved equal.

#### 2.5 MOTION SENSORS

- A. Motion sensors shall be Passive Infrared type, with high immunity to false triggering from RFI and EMI sources. Sensors shall utilize automatically adjustable time delay and sensitivity settings. Coverage of sensors shall remain constant after sensitivity control has been set. Each sensor shall include manual override. All sensors shall have UL rated, 94V-0 plastic enclosures.
- B. Sensors shall operate on line voltage. Sensors shall provide output to lighting contactor for control of lighting as described on drawings.
- C. Products that react to noise or ambient sound are not acceptable.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Photocell Switch Aiming: Aim switch according to manufacturer's recommendations. Set adjustable window slide for proper footcandles photocell turn-on.
- B. Locate contactors controlling lighting circuits where indicated on drawings.
- C. Neutral and grounding conductors shall be routed through contactor enclosure with associated phase conductor(s) being switched. Group each branch circuit within enclosure using nylon tie straps.
- D. Do not splice conductors within contactor enclosure.

# 3.2 LABELING

A. All wiring shall be labeled clearly indicating which lighting control panel or device it connects to.

B. Use only properly color-coded, stranded wire as indicated on the drawings.

# 3.3 PROGRAMING

A. Program lighting controls as indicated on drawings and as directed by USC Project Manager.

#### 3.4 DEMONSTRATION

A. Demonstrate proper operation of system.

# 3.5 FIELD QUALITY CONTROL

- A. Perform field inspection, testing, and adjusting in accordance with Section 01 40 00.
- B. Inspect each device for defects.
- C. Operate each switch and verify proper operation.

## 3.6 ADJUSTING

- A. Adjust devices and wall plates to be flush and level.
- B. It shall be the contractor's responsibility to make all proper adjustments to assure owner's satisfaction with the lighting control system.

#### SECTION 265100 - INTERIOR LIGHTING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This section includes the requirements for the following:
  - 1. Interior luminaires and accessories.
  - 2. LED Engines.
  - 3. Fluorescent Ballasts.
  - 4. Fluorescent Lamps.

#### 1.2 SUBMITTALS

A. Refer to section 260510.

#### 1.3 EXTRA MATERIALS

- A. Furnish the following for owner's use in maintenance of project:
  - 1. Extra Plastic Lenses: Fluorescent fixtures two; LED fixtures ten.
  - 2. Extra Lamps: Twenty fluorescent lamps.
  - 3. Extra Ballasts: Fluorescent two.
  - 4. Extra Fixtures: LED two.

#### 1.4 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70 and NFPA 101.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

### 1.5 REFERENCE STANDARDS

- A. ANSI C78.379 American National Standard for Electric Lamps -- Reflector Lamps -- Classification of Beam Patterns; current edition.
- B. ANSI C78.377 American National Standard for Electric Lamps Specifications for the Chromaticity of Solid State Lighting Products.
- C. ANSI C82.1 American National Standard for Lamp Ballast Line Frequency Fluorescent Lamp Ballast; current edition.
- D. IESNA LM-63 ANSI Approved Standard File Format for Electronic Transfer of Photometric Data and Related Information; current edition.
- E. IESNA LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products.
- F. IESNA LM-80-08 Approved Method: Measuring Lumen Maintenance of LED Light Sources.
- G. NECA/IESNA 500 Standard for Installing Indoor Commercial Lighting Systems; National Electrical

Contractors Association; current edition.

- H. NEMA WD 6 Wiring Devices Dimensional Requirements; National Electrical Manufacturers Association; current edition.
- I. NFPA 70 National Electrical Code; National Fire Protection Association, current edition.
- J. NFPA 101 Code for Safety to Life from Fire in Buildings and Structures; National Fire Protection Association; current edition.

# PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

A. As scheduled.

#### 2.2 LUMINAIRES

- A. Furnish products as indicated in Schedule on plans.
- B. LED Luminaires
  - 1. Match branch circuit voltage; verify voltage in field prior to ordering.
  - 2. LED arrays shall be designed for color temperature, CRI, distribution and drive current as indicated on Schedule.
  - 3. Provide luminaires with integral PIR Occupancy Sensors and Daylighting Sensors as indicated on Schedule.
  - 4. Luminaires shall be provided with a manufacturer's 10-year parts warranty.

#### 2.3 BALLASTS AND CONTROL UNITS

- A. Fluorescent Ballasts: ANSI C82.1, high power factor type electronic ballast, suitable for lamps specified.
  - 1. Fluorescent fixtures shall be provided with (2) two-lamp ballasts for inboard/outboard control of lamps.
  - 2. Voltage: Match luminaire voltage.
  - 3. Ballast Factor: Shall be 1.15 or greater.
  - 4. Certify fluorescent ballast design and construction by Certified Ballast Manufacturers, Inc.

## 2.4 LAMPS

- A. Fluorescent Lamps: Provide 3100 initial lumen lamps, rated for extended life (36,000 hours). Lamps shall be low mercury type.
- B. Use lamp colors as indicated on the plans or to match existing lamp colors.

## PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Install fixtures securely, in a neat and workmanlike manner, as specified in NECA 500 (commercial lighting).
- B. Install surface mounted luminaires plumb and adjust to align with building lines and with each other. Secure to prevent movement.

- C. Install accessories furnished with each luminaire.
- D. Make wiring connections to branch circuit using building wire with insulation suitable for temperature conditions within luminaire.
- E. Bond products and metal accessories to branch circuit equipment grounding conductor.
- F. Install specified lamps in each luminaire.
- G. Program lighting control accessories on LED luminaires as described on drawings.
- H. Connect fluorescent lighting to lighting control devices as described on drawings.

## 3.2 FIELD QUALITY CONTROL

- A. Perform field inspection in accordance with Section 01 40 00.
- B. Operate each luminaire after installation and connection. Inspect for proper connection and operation.

## 3.3 ADJUSTING

- A. Aim and adjust luminaires as indicated.
- B. Adjust programming of controls to meet Owner requirements.

#### 3.4 CLEANING

- A. Clean electrical parts to remove conductive and deleterious materials.
- B. Remove dirt and debris from enclosures.
- C. Clean photometric control surfaces as recommended by manufacturer.
- D. Clean finishes and touch up damage.

## 3.5 CLOSEOUT ACTIVITIES

- A. Demonstrate luminaire operation for minimum of two hours.
- B. Provide warranty information for luminaires.

## 3.6 PROTECTION

A. Relamp luminaires that have failed lamps at Substantial Completion.