



# **SAVANNAH AIRPORT COMMISSION**

**BIDDING AND CONTRACT DOCUMENTS,  
GENERAL CONDITIONS, AND TECHNICAL  
SPECIFICATIONS**

**FOR**

**THRIFTY CAR WASH INSTALLATION**

**SAVANNAH/HILTON HEAD  
INTERNATIONAL AIRPORT**

**CITY OF SAVANNAH EVENT NO. 5509  
OCTOBER, 2017**

**SAVANNAH AIRPORT COMMISSION**

**THRIFTY CAR WASH INSTALLATION**

**TABLE OF CONTENTS**

**INDEX OF SPECIFICATIONS**

<b><u>TITLE</u></b>	<b><u>PAGE NUMBER</u></b>
NOTICE TO BIDDERS	N-1 TO N-2
INSTRUCTIONS TO BIDDERS	I-1 TO I-6
BIDDERS CHECKLIST	P-0
PROPOSAL FORM	P-1 TO P-18
BID BOND	P-19
BID SCHEDULE	P-20
CONTRACT	C-1 TO C-3
PAYMENT BOND	C-4 TO C-5
PERFORMANCE BOND	C-6 TO C-8
BOND AFFIDAVIT	C-9
GENERAL CONDITIONS OF THE CONTRACT	GC-1 TO GC-18

**TECHNICAL SPECIFICATIONS**

<b>DIVISION 9</b>	INTERIOR PAINTING	09912-1 TO 09912-5
<b>DIVISION 16</b>	BASIC ELECTRICAL REQUIREMENTS	16010-1 TO 16010-5
	RACEWAYS	16110-1 TO 16110-7
	WIRES AND CABLES	16120-1 TO 16120-4
	BOXES	16130-1 TO 16130-4
	ELECTRICAL CONNECTIONS FOR EQUIPMENT	16142-1 TO 16142-5
	WIRING DEVICES	16143-1 TO 16143-2
	CIRCUIT AND MOTOR DISCONNECTS	16170-1 TO 16170-4
	SUPPORTING DEVICES	16190-1 TO 16190-4
	ELECTRICAL IDENTIFICATION	16195-1 TO 16195-5
	PANELBOARDS – EXISTING	16470-1 TO 16470-3

**DRAWINGS**

	<b><u>SHEET NO.</u></b>
COVER WITH NOTES AND LAYOUT	1 OF 5
EQUIPMENT	2 OF 5
EQUIPMENT	3 OF 5
PLUMBING	4 OF 5
ELECTRICAL	5 OF 5

## **NOTICE TO BIDDERS**

Sealed proposals, in duplicate, will be received by the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission in the office of the City Purchasing Agent, Post Office Box 1027, (2 East Bay Street, 31401) Savannah, Georgia 31402 until October 31, 2017, 1:30 p.m. local time, at which time and place all proposals received will be publicly opened and read aloud.

Bidders are invited to submit proposals for:

### **THRIFTY CAR WASH INSTALLATION CITY OF SAVANNAH EVENT NO. 5509**

This project consists of providing all labor and materials to install a new car wash and liquid recovery system at Thrifty Car Rental's maintenance facility. The work includes, but is not limited to, a complete install of the system with electrical service, plumbing, metal panel installation, testing, and all other systems associated with the install.

Bidders are invited to submit proposals for this work on the proposal forms provided. Other proposal forms will not be accepted.

The complete examination and understanding of the construction plans, specifications, contract documents and site of the proposed work is necessary to properly submit a proposal. Construction plans, specifications and contract documents are available for examination and may be obtained from the offices of the Savannah Airport Commission, 400 Airways Avenue, Savannah / Hilton Head International Airport, Savannah, Georgia 31408, Phone (912) 964-0514, for a cost of \$25.00 per set. This cost is non-refundable. Please make checks payable to Savannah Airport Commission.

A pre-bid conference for bidders will be conducted in the Savannah Airport Commission Conference Room, Third Floor, Savannah / Hilton Head International Airport, Savannah, Georgia, on Tuesday, October 17, 2017, at 1:30 PM.

A Bid Bond in the form as bound in the contract documents or certified check in the amount of not less than five percent (5%) of the total amount bid must accompany each bid.

Successful bidder will be required to execute and to provide a Payment Bond and Performance Bond each in an amount of one hundred percent (100%) of the total value of the contract awarded to him with a satisfactory surety or sureties for the full and faithful performance of the work. If the total value of the contract is less than \$100,000.00, a Payment Bond or Performance Bond may not be required.

The Savannah Airport Commission, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that, in any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded equal opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Contractor agrees to ensure that Disadvantaged Business Enterprises that are presumed to be socially and economically disadvantaged as defined in 49 CFR Part 26.5 have an equal opportunity to participate in the performance of this contract. In this regard all Contractors shall take all necessary and reasonable steps to ensure that such Disadvantaged Business Enterprises have an equal opportunity to compete for and perform contracts. Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award or performance of this contract.

The Contractor, or any subcontractor, submitting a bid for utility contracting, as defined in O.C.G.A. Section 43-14-2 to a utility system as defined in said section, shall conform to O.C.G.A. Section 43-14-8.2 et seq. with reference to Utility Contractor's Licenses. Utility contracting means a proposal to perform utility work to a utility system as defined in O.C.G.A. Section 43-14-2(17).

No bid may be withdrawn after closing time for the receipt of proposals for a period of ninety (90) days.

This is a bid for construction and therefore the City's local vendor preference ordinance will not apply.

The Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission reserve the right to waive any informalities, irregularities, and/or technicalities in or reject any and all bids and/or to award or refrain from awarding the Contract for the Work.

Mayor and Aldermen of the  
City of Savannah and the  
Savannah Airport Commission

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Purchasing Director

## **INSTRUCTIONS TO BIDDERS**

### **I. GENERAL**

#### **A. State Licenses**

The successful bidder must be a licensed contractor as specified by the Georgia State Licensing Board, and will be required to obtain any necessary licenses or permits to conduct the work as may be prescribed by the State of Georgia and by the City of Savannah.

#### **B. Pre-Bid Conference**

A Pre-Bid Conference for bidders will be conducted in the Savannah Airport Commission Conference Room, Third Floor, Savannah / Hilton Head International Airport, Savannah, Georgia on Tuesday, October 17, 2017, at 1:30 PM.

#### **B. Examination of Conditions Affecting Work**

Prior to submitting a Proposal, each Bidder shall examine and thoroughly familiarize himself with all existing conditions including all applicable laws, codes, ordinances, rules and regulations that will affect his work. Bidders shall visit the site, examine the grounds and all existing buildings, utilities, and roads, and shall ascertain by any reasonable means all conditions that will in any manner affect the work. The drawings have been prepared on the basis of surveys and inspections of the site, and represent the best factual information available without being considered as a representation of the Owner. This, however, shall not relieve the Bidder of the necessity for fully informing himself as to existing physical conditions.

#### **C. Nondiscrimination and Segregated Facilities**

1. Bidders must comply with the President's Executive Order No. 11246 which prohibits discrimination in employment regarding race, creed, color, sex or national origin.
2. Each bidder shall complete, sign and include in his bid proposal the Equal Opportunity Report Statement. When a determination has been made to award a contract to a specific Contractor, such Contractor shall, prior to award, after award or both, furnish such other pertinent information regarding his own employment policies and practices as well as those of his proposed subcontractors as the Owner or the Secretary of Labor may require. All such information required of a subcontractor shall be furnished by the Contractor.



3. The Equal Opportunity Report Statement, Equal Opportunity Clause (41 CFR 60-741.5), and all other EEO requirements shall be included in all non-exempt subcontracts entered into by the Contractor. Subcontracts entered into by the Contractor shall also include all other applicable labor provisions. No subcontract shall be awarded to a non-complying subcontractor.
4. In addition, the Contractor will also insert in each of his subcontracts a clause requiring the subcontractor to include these provisions in any lower tier subcontracts that may in turn be made.

D. Compliance With Law

1. Bidders must comply with Title IV of the Civil Rights Act of 1964, the Davis-Bacon Act, the Anti-Kickback Act and the Contract Work Hours Standard Act.
2. Bidders must comply with all state laws and local ordinances, except that any preferential consideration of local in-state bidders is not allowed.
3. **Employment Eligibility Verification**  
Pursuant to the "Georgia Security and Immigration Compliance Act of 2006," O.C.G.A. Section 13-10-91, public employers and their contractors and subcontractors are required to verify the work eligibility of all newly hired employees through an electronic federal work authorization program. The Georgia Department of Labor has added a new Chapter 300-10-1, entitled "Public Employers, Their Contractors and Subcontractors Required to Verify New Employee Work Eligibility Through a Federal Work Authorization Program," to the Rules and Regulations of the State of Georgia. (See website: [http://www.dol.state.ga.us/pdf/rules/300\\_10\\_1.pdf](http://www.dol.state.ga.us/pdf/rules/300_10_1.pdf).) The new rules designate the "Employment Eligibility Verification (EEV) Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security as the electronic federal work authorization program to be utilized for these purposes. The EEV/Basic Pilot Program can be accessed at: <https://www.vis-dhs.com/EmployerRegistration>. Bidders shall comply with this new rule, and submit with their bid the form titled "Contractor Affidavit and Agreement", page I-2(a). After the contract has been awarded, the Contractor shall secure from all subcontractors the form titled "Subcontractor Affidavit and Agreement", page I-2(b), which must be submitted to the Savannah Airport Commission prior to the subcontractor beginning work at the site.

## CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the Savannah Airport Commission has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the Savannah Airport Commission, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Savannah Airport Commission the time the subcontractor(s) is retained to perform such service.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
EEV/Basic Pilot Program\* User Identification Number

\_\_\_\_\_  
BY: Authorized Officer or Agent  
(Contractor Name)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title of Authorized Officer or Agent of Contractor

\_\_\_\_\_  
Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_

Notary Public  
My Commission Expires: \_\_\_\_\_  
\_\_\_\_\_

\* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

## SUBCONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with \_\_\_\_\_ on behalf of the Savannah Airport Commission has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
EEV/Basic Pilot Program\* User Identification Number

\_\_\_\_\_  
BY: Authorized Officer or Agent  
(Contractor Name)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title of Authorized Officer

\_\_\_\_\_  
Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_

Notary Public  
My Commission Expires:  
\_\_\_\_\_

\* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).



E. General Bond Requirements

1. The Bid Bond shall be five percent (5%) of the total amount of the bid. Only the Bid Bond as bound within these documents or a Certified Check is acceptable. **No other form will be accepted.**
2. Payment Bond and Performance Bond shall be one hundred percent (100%) of the total value of the contract. Only the Payment and Performance Bond as bound within and made a part of the specifications and these documents are acceptable. **No other form will be accepted.** If the total value of the contract is less than \$100,000.00, a Payment Bond or Performance Bond may not be required.
3. The Bid Bond, Payment Bond and Performance Bond and Bond Affidavit shall be countersigned by a Georgia Resident. The Georgia Resident Agent shall furnish their Georgia License Number in the space provided.

F. Insurance Requirements

1. Insurance requirements shall be as specified in Article 12, General Conditions.

II. PREPARATION AND SUBMISSION OF BID PROPOSALS

- A. Sealed proposals for the construction of the project will be received until 1:30 P.M. local time, **October 31, 2017.**
- B. The proposal shall be in duplicate on the "Proposal Form" provided; no other forms are acceptable.
- C. Each Bidder shall present his Proposal in a sealed opaque envelope and marked at the lower left hand corner, **"THRIFTY CAR WASH INSTALLATION, Savannah / Hilton Head International Airport, City of Savannah Event No. 5509, with the name of the Bidder."**

Proposals in duplicate shall be delivered to the office of the Director of Purchasing, City of Savannah, 2 East Bay Street (31401), P.O. Box 1027, Savannah, GA 31402.

- D. The Bidder's envelope shall contain the signed original and one complete copy of the following documents:

Proposal Form  
Equal Employment Opportunity Statement  
Disadvantaged Business Enterprise Requirements  
Disadvantaged Business Enterprise Assurance Form  
Bidder Qualification Questionnaire  
Bid Bond or Certified Check  
Bid Schedule

- E. Proposals shall be submitted as indicated by the "Proposal Form" and shall be signed in ink by an official of the firm submitting the proposal.
- F. Erasures or other changes in a proposal shall be explained or noted over the signature of the bidder.
- G. Proposals containing reservations, conditions, omissions, unexplained erasures or alterations, items not required in the bid, or irregularities of any kind, may be rejected by the Owner as being incomplete and not qualified for consideration.
- H. Each proposal shall indicate the full business name and address of the bidder and shall be signed by him with the usual signature.
- I. A proposal submitted by a partnership shall list the names of all partners and shall be signed in the partnership name by one of the members of the partnership.
- J. A proposal submitted by a corporation shall be signed by the legal name of the corporation, followed by the state of incorporation and the title designation of the Corporation in legal matters. The name of each person signing the proposal shall be typed or printed below the signature.
- K. A Power of Attorney or other satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished for the Owner's records.
- L. The proposal must be accompanied by a Bid Bond executed on the form provided or a Certified Check payable to the Savannah Airport Commission in an amount equal to not less than five percent (5%) of the bid. If a bidder is awarded the contract, but fails, refuses, or neglects to execute the contract or to furnish the required payment and performance bonds within ten (10) days after receipt of written notice of award, then the

amount of this Bond or check shall be paid to, or retained by, the Owner as liquidated damages, although not as a penalty.

- M. Acknowledgement of receipt of all Addenda shall be made by each Bidder in the space provided in the Proposal Form.
- N. The bidder is required to fill in all the blank spaces on the proposal and all of the unit prices on the proposal.

### III. INTERPRETATIONS

- A. Each Bidder shall carefully examine the Contract Documents consisting of the Plans and Specifications, and all addenda or other revisions and thoroughly familiarize themselves with the detailed requirements prior to submitting a Proposal. Should a Bidder find discrepancies or ambiguities in, or omission from Contract Bidding Documents, or should the bidder be in doubt as to their meaning, he shall at once notify the Savannah Airport Commission who will send written addenda to all on SAC's Planholder List, but the Savannah Airport Commission will not issue or cause to be issued any addenda modifying plans and specifications (at the sole discretion of the Savannah Airport Commission) within a period of 72 hours prior to the advertised time for the opening of bids or proposals, excluding Saturdays, Sundays, and legal holidays. The City of Savannah normally posts addenda on the Purchasing Department's website. The Savannah Airport Commission will not be responsible for any oral instructions or Internet postings (or the lack thereof). All addenda will become a part of Contract Documents.
- B. All inquiries shall be directed to the Executive Director, Savannah Airport Commission, Savannah/Hilton Head International Airport, 400 Airways Avenue, Savannah, Georgia 31408, Telephone Number (912) 964-0514, FAX (912) 964-0877. No allowance will be made after Bids are received for oversight by Bidder.
- C. Where a discrepancy occurs between the prices quoted in words and/or in numbers, the unit price written in words shall govern the final costs or award of contract.

### IV. MODIFICATIONS AND/OR WITHDRAWALS OF PROPOSALS

- A. A bid may not be modified, withdrawn, or canceled by the bidder during a 90 calendar day period following the time and date designated for the receipt of bids, and each bidder so agrees in submitting his bid.

- B. Negligence on the part of the Bidder in the preparation of his proposal shall not be grounds for the modification or withdrawal of a proposal after the time set for bid opening.

V. ACCEPTANCE/REJECTION OF BIDS

- A. This is a bid for construction and therefore the City's local vendor preference ordinance will not apply.
- B. The Contractor, or any subcontractor, submitting a bid for utility contracting, as defined in O.C.G.A. Section 43-14-2 to a utility system as defined in said section, shall conform to O.C.G.A. Section 43-14-8.2 et seq. with reference to Utility Contractor's Licenses. Utility contracting means a proposal to perform utility work to a utility system as defined in O.C.G.A. Section 43-14-2(17).
- C. The Owner proposes to award the contract to the lowest qualified bidder (See Page I-3, Section II – Preparation and Submission of Bid Proposals) submitting a reasonable bid as determined at the sole discretion of the Commission.
- D. The Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission reserve the right to waive any informalities, irregularities, and/or technicalities in or reject any and all bids and/or to award or refrain from awarding the Contract for the Work.

### BIDDER'S CHECKLIST

THIS CHECKLIST MUST BE ATTACHED AS THE COVER SHEET TO YOUR BID PRIOR TO SEALING YOUR BID AND SUBMITTING IT TO THE OFFICE OF THE PURCHASING DIRECTOR. IF THIS CHECKLIST IS NOT ATTACHED, YOUR BID WILL BE DISQUALIFIED. IF THIS CHECKLIST IS INCOMPLETE OR IF ANY ITEM CANNOT BE VERIFIED AS BEING INCLUDED WITH YOUR BID, YOUR BID WILL BE DISQUALIFIED.

NAME AND ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CITY OF SAVANNAH EVENT NUMBER: 5509

PROJECT NAME: **THRIFTY CAR WASH INSTALLATION**

### INSTRUCTIONS TO BIDDERS

The contents of your bid package must be clearly marked and submitted IN THE FOLLOWING ORDER: 1) acknowledgement of addendum, 2) bid bond, and 3) the bid proposal page. Please place a check mark in the appropriate space and indicate the number of addendums received:

1) Addendum received? \_\_\_\_\_ Yes \_\_\_\_\_ No

Indicate number of addendums received: \_\_\_\_\_

2) Bid Bond enclosed? \_\_\_\_\_ Yes \_\_\_\_\_ No

Form of bid bond: \_\_\_\_ Surety Bond \_\_\_\_ Cashier's Check \_\_\_\_ Certified Check

3) Are all signature pages of the bid proposal signed? \_\_\_\_\_ Yes \_\_\_\_\_ No

4) Total Amount of Bid: \$ \_\_\_\_\_

### FOR CITY USE ONLY

Verification of Bid Package Content:

1) Addendum Acknowledged? \_\_\_\_\_ Yes \_\_\_\_\_ No

Number of Addendums Issued: \_\_\_\_\_

2) Bid Bond Enclosed: \_\_\_\_\_ Yes \_\_\_\_\_ No

Form of bid bond: \_\_\_\_ Surety Bond \_\_\_\_ Cashier's Check \_\_\_\_ Certified Check

3) Bid Proposal Pages Signed: \_\_\_\_\_ Yes \_\_\_\_\_ No

I certify that the above items were/were not included with the attached bid at the time and place of the bid opening.

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



## SAVANNAH AIRPORT COMMISSION

### PROPOSAL FORM

TO: Mayor and Aldermen of the  
City of Savannah and the  
Savannah Airport Commission

FROM: \_\_\_\_\_  
Bidder's Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State and Zip Code and Telephone Number

1. The undersigned, as Bidder, does hereby declare that he has familiarized himself with the local conditions affecting the cost of the work, the Contract Documents including the "Notice to Bidders," "Instructions to Bidders," "Proposal," "Bid Schedule," "General Conditions," "Supplementary Conditions", and the Specifications and Drawings and other related Construction Documents, together with any addenda to such Construction Documents as listed herein (paragraph 12) and hereby proposes to furnish all material and perform all work required in strict accordance with the provisions of documents noted above for the consideration of prices quoted in the "Bid Schedule" (see Page P-20) and attached hereto and incorporated by reference.

The undersigned understands that the quantities shown in the "Bid Schedule" are approximate only, are intended principally to serve as a guide in evaluating proposals, and are subject to either increase or decrease.

2. The undersigned affirms that in making such bid, neither he nor any company that he may represent, nor anyone on behalf of him or his company, directly or indirectly, has entered into any combination, collusion, undertaking or agreement with any other Bidder or Bidders to maintain the prices of said work, or any compact to prevent any other Bidder or Bidders from bidding on said contract or work and further affirms that such bid is made without regard or reference to any other Bidder or proposal and without any agreement or understanding or combination either directly or indirectly with any other person or persons with reference to such bidding in any way or manner whatsoever.
3. The undersigned, when notified of the acceptance of this proposal, does hereby agree to enter into a construction contract with the Owner, within ten (10) days from the date on the Notice of Acceptance, for the execution of the work described within the period of time prescribed, and he shall give 100%

Performance Bond and Payment Bond with good and sufficient surety to assure satisfactory completion thereof.

4. The undersigned further agrees that if awarded the contract he will commence the work within ten (10) calendar days after the date of the Notice to Proceed and that he will complete the work in accordance with the schedules and time frame set forth in the Contract or such amended time as may be granted. If the undersigned fails to complete any phase of the work within the given time frame and if he fails to complete all of the work on or before the expiration of the allowed calendar days, then and in that event, he further expressly agrees that, for each day that any phase of the work under this Contract remains uncompleted thereafter, the Owner may deduct from the Contract price herein specified the stipulated sum of liquidated damages as scheduled in the Contract and retain for failure of the undersigned to complete this Contract on or before the expiration of the scheduled critical time frames.

The undersigned agrees that the Owner's damages caused by delay are capable of being established but would be difficult to measure accurately and that the sums herein specified as liquidated damages listed in the General Conditions and Supplementary General Conditions are not a penalty, but represent that parties' estimate of the actual damages which the Owner would suffer per day if the work is not completed as scheduled.

5. In submitting this bid, it is understood that the right is reserved by the Owner to waive irregularities and informalities and to reject all bids and to negotiate with the apparent qualified low bidders if necessary. It is agreed that this bid may not be withdrawn for a period of ninety (90) days after the opening thereof.
6. The undersigned has attached hereto a Cashiers Check, or Bid Bond in the sum of \_\_\_\_\_ (\$ \_\_\_\_\_), payable to the Savannah Airport Commission, as required in the Notice to Bidders, and the undersigned agrees that in case he fails to fulfill his obligations under the foregoing Bid and Contract, the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission may, at its option, determine that the undersigned has abandoned his rights and interests in such bid and that the Cashiers Check, or Bid Bond accompanying his bid has been forfeited. Otherwise, the Check or Bid Bond shall be returned to the undersigned upon the execution of the contract and the acceptance of the bonds and insurance, or upon rejection of his bid.
7. The undersigned affirms that he has completed, signed and included in the bid proposal the following:
  - a. Equal Opportunity Report Statement
  - b. Disadvantaged Business Enterprise Requirements
  - c. Disadvantaged Business Enterprise Assurance Form
  - d. Bidder Qualifications Questionnaire
  - e. Bid Bond or Certified Check
  - f. Bid Schedule
  - g. Contractor Affidavit and Agreement (EEV)

**A bid shall be considered unqualified and shall be rejected if it fails to include these fully executed statements or if the Bidder fails to furnish required data.** When a determination has been made to award a contract to a specific contractor, such contractor shall, prior to award, furnish such other pertinent information regarding his own employment policies and practices as well as those of his proposed subcontractors as the City of Savannah, the Savannah Airport Commission, Secretary of Labor or the Office of Federal Contract Compliance (OFCC) may require.

The Bidder shall furnish similar statements executed by each of his first tier and second tier subcontractors whose contracts equal \$10,000 or more and shall obtain similar compliance by such subcontractors before awarding such subcontracts. No subcontract shall be awarded to any noncomplying subcontractor.

8. It is understood and agreed that all workmanship and materials under all items of work are guaranteed for one year from the date of final acceptance, unless otherwise specified.
9. The undersigned affirms that he has completed all of the blank spaces in the Bid Schedule with an amount in words and numbers and agrees that where a discrepancy occurs between the prices quoted in words and/or in numbers the unit price written in words, unless obviously incorrect, shall govern the final costs or award of Contract. In the case of a tie bid price, the Owner may negotiate a price with each low tie Bidder.
10. The undersigned agrees that the Contract lump sum shall be decreased or increased where planned quantities shown on the drawings are decreased or increased, and that such increase or decrease shall be determined by use of the appropriate unit price if shown on the Bid Schedule.
11. The undersigned affirms that wages not less than the minimum rates or wages, as predetermined for this project by the U. S. Secretary of Labor and City of Savannah, were used in the preparation of this proposal.
12. The undersigned acknowledges receipt of the following addenda:

<u>Addendum No.</u>	<u>Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

13. The legal status of the undersigned is:

The Bidder shall fill out the appropriate form (a, b, or c) and strike out the other two.

- a. A corporation duly organized and doing business under the laws of the State of \_\_\_\_\_, for whom \_\_\_\_\_, bearing official title of \_\_\_\_\_, whose signature is affixed to this bid, is duly authorized to execute contracts.

If Foreign Corporation or non State of Georgia corporation: date of qualification in \_\_\_\_\_ (State). Name and address of process agent: \_\_\_\_\_.

(Out of State contractor shall provide name and address of Agent for service of process in the State of Georgia.)

- b. A partnership, all of the members of which, with addresses are: (Designate general partners as such).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If all partners are nonresidents of Georgia: Designate name and address of agent for service of process located in Georgia.

- c. An individual, whose signature is affixed to this bid. (If nonresidents of Georgia, agent for the service of process in the State of Georgia must be designated.)

\_\_\_\_\_.

Dated and signed at \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, this \_\_\_\_\_ day of 2017

NAME OF BIDDER \_\_\_\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

BUSINESS ADDRESS \_\_\_\_\_

\_\_\_\_\_

PHONE: \_\_\_\_\_

GEORGIA TAX REGISTRATION NO. \_\_\_\_\_

WITNESS:

\_\_\_\_\_



## DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

THE FOLLOWING BID CONDITIONS APPLY TO THIS CONTRACT. SUBMISSION OF A PROPOSAL BY A PROSPECTIVE CONTRACTOR SHALL CONSTITUTE FULL ACCEPTANCE OF THESE BID CONDITIONS.

### A. DEFINITION (49 CFR Part 26.5)

Disadvantaged Business Enterprise (DBE) as used in this Contract shall have the same meaning as those firms that are presumed to be socially and economically disadvantaged as defined in Paragraph 26.5, 49 CFR Part 26. (Definition: Socially and economically disadvantaged individual).

### B. POLICY

It is the policy of the Savannah Airport Commission that Disadvantaged Business Enterprises shall have an equal opportunity to participate in the performance of all contracts and subcontracts.

### C. DBE OBLIGATION

All Bidders, Prospective Contractors, and Contractors shall take all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises have an equal opportunity to compete for and perform contracts. Bidders, Prospective Contractors, and Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of Contracts.

### D. COMPLIANCE

All Bidders, Prospective Contractors, and Contractors for this Contract are hereby notified that failure to carry out the Policy and DBE Obligation, as set forth above, may be considered by the Savannah Airport Commission as a breach of Contract which may result in termination of the Contract or other such action as deemed appropriate by the Savannah Airport Commission.

### E. SUBCONTRACT CLAUSES

All Bidders, Prospective Contractors, and Contractors hereby assure that they will include the above clauses in all subcontracts, which offer further subcontracting opportunities.

### F. CONTRACT AWARD ELIGIBILITY

1. Bidders, Prospective Contractors, and Contractors shall meet the DBE goal or provide the Commission with documentation of its good-faith effort(s) to meet the DBE goal to the satisfaction of, and as requested by the Savannah Airport Commission.



2. The Savannah Airport Commission has the right, at its sole discretion, to accept or reject any and all bids submitted, accept or reject any DBE participation (and/or percentage of) being proposed, and accept or reject any good-faith efforts.

#### G. SUBCONTRACT GOAL

1. The attainment of the goal established for this Contract is to be measured as a percentage of the total dollar value of the Contract.
  - a. The goal established for this Contract is as follows:

**Race-Neutral performed by DBEs.**

#### H. AVAILABLE ELIGIBLE DBEs

1. For this Contract, the Savannah Airport Commission will accept, as an eligible DBE, firms that are currently certified by any Federal, State, or municipal government agency or other organizations approved by the Commission and/or firms registered as a DBE (includes MBE/WBE firms) with and accepted by the City of Savannah or other municipality, or organizations approved by the Commission provided they are owned by individuals presumed to be socially and economically disadvantaged in accordance with paragraph A, Definition, of these requirements. Proof of certification/registration shall be provided to the Savannah Airport Commission as requested.
2. Bidders, Prospective Contractors, and Contractors are encouraged to inspect the Georgia Department of Transportation, City of Savannah, and other DBE directories to assist in locating possible DBEs for the work to be performed. Credit towards meeting the DBE goal will not be counted until the DBE(s) to be used is/are either certified or registered as outlined in paragraph 1 above and such certification(s) and/or registration(s) are accepted by the Commission.

#### I. BIDDER'S REQUIRED SUBMISSION

1. The following documents must be submitted with the Bid Proposal:
  - a. **DBE SUBCONTRACTORS LIST** – Bidders must complete and properly execute the DBE Subcontractor list (Page P- 8).
  - b. Bidders must complete and properly execute the “**DBE ASSURANCE FORM**” (Page P-14).
2. The following document must be submitted to the Commission prior to award of the contract.

- a. Bidders must complete **DBE NOTIFICATION OF INTENT TO SUBCONTRACT** for each DBE subcontractor (Page P-9).
- b. Good-faith efforts documentation (if applicable).

## SAVANNAH AIRPORT COMMISSION

### DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUBCONTRACTORS LIST (Reproduce if additional copies are needed)

Disadvantaged Business Enterprise Subcontractor (Company Name)	Description of Work/Materials	Dollar Value of Subcontract Work

Total Dollar Value of Subcontract Work      \$ \_\_\_\_\_

Total Dollar Value of Basic Bid      \$ \_\_\_\_\_

Percent of Total      \_\_\_\_\_ %

SAVANNAH AIRPORT COMMISSION

**DBE NOTIFICATION OF INTENT TO SUBCONTRACT**

Project Name: THRIFTY CAR WASH INSTALLATION

Bid Date: \_\_\_\_\_

Contractor: \_\_\_\_\_

Hereby intends to subcontract or purchase materials for the following work items to:

DBE: Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_ Phone \_\_\_\_\_

Item No.	Description of Work/Materials	Unit	Quantity	Unit Cost	Amount

Total amount of subcontract \$ \_\_\_\_\_

DBE Sub or Supplier Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Prime Contractor Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**This form must be signed by the Prime Contractor and the DBE Subcontractor. A separate form is required for each DBE Subcontractor. The form(s) shall be submitted whether or not DBE participation is being proposed. If DBE participation is not being proposed, Bidder, Prospective Contractor, or Contractor must indicate "NONE" beside DBE name and mark "O" in \$ value space. The proposed contract amounts specified on this form for a DBE firm must be the same (verify) as the amounts shown on the DBE Subcontractor's List for the same DBE firm unless the amounts are more favorable for the DBE or unless otherwise approved by the Commission. This form must be submitted with the Bid Proposal or within five (5) business days after bid opening.**

## J. GOOD-FAITH EFFORTS

Good-faith efforts are required by the Bidder, Prospective Contractor, and Contractor when the DBE goal established for a contract is not met, or any at any time during the contract when achievement of the DBE goal is in jeopardy. It is the Bidder's, Prospective Contractor's, and Contractor's responsibility to provide documentation as required by the Commission to ascertain the efforts made. Good-faith efforts include documented efforts made by Contractor to include personal contacts, follow-ups and earnest negotiations with DBEs. The Savannah Airport Commission reserves the right to accept or reject any and/or all effort(s) by Bidder, Prospective Contractor, and Contractor. The following are examples of effort(s) that are acceptable by the Savannah Airport Commission.

- a. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract.
- b. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved.
- c. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- d. Negotiating in good faith with interested DBEs.
- e. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities.
- f. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- g. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- h. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

## K. CONTRACTOR ASSURANCES

Agreements between Bidder, Prospective Contractor, and Contractor and a DBE in which the DBE promises not to provide subcontracting quotations to other Bidders are prohibited. The Bidder, Prospective Contractor, and Contractor shall make a



good-faith effort to replace a DBE subcontractor, which is unable to perform successfully, with another DBE subcontractor. Substitutions must be coordinated with and approved by the Commission.

The Bidder, Prospective Contractor, and Contractor shall establish and maintain records and submit reports and cancelled checks, as required, which will identify and assess progress in achieving the DBE subcontract goal and other DBE affirmative action efforts.

In order to properly monitor payments to DBEs, the Savannah Airport Commission will require that the prime contractor send along with each payment to their DBE subcontractor or supplier a "Verification of Payments Received Letter", (Page P-12) which the DBE(s) must sign and return to the Commission's DBELO for monitoring and DBE Program record keeping purposes.

The Savannah Airport Commission will also require each prime contractor to submit to the Commission a monthly pay request that shall be accompanied by a "DBE Utilization Form" (Page p-13) which is a report of DBE expenditures. The report shall show all DBE subcontractors, and non-DBE subcontractors if and as required by the Commission, the amount of their subcontract, the amount earned to date, the amount earned for that respective pay request and the amount remaining to be earned. At the sole discretion of the Commission, the contractor's future pay requests will be withheld or disapproved until the DBE Utilization Form is submitted as required, and until DBEs are promptly and properly paid as verified by receipt of the Verification of Payments Received Letter (Page P-12).

Prior to the close out of the project, if and as required, the Prime Contractor shall furnish the Savannah Airport Commission copies of cancelled checks, invoices, and any other information from all DBE subcontractors utilized on the project.

Failure by the prime contractor to comply with these requirements may result in the prime contractor being placed in default of its contract. In addition, violation of this provision by the prime contractor entitles the Commission to exercise any other rights it has by law or under the Contract.

## END OF DBE REQUIREMENTS

VERIFICATION OF PAYMENTS RECEIVED

\_\_\_\_\_ (Date)

Mr. Dawoud Stevenson  
Disadvantaged Business Enterprise Liaison Officer  
Savannah Airport Commission  
400 Airways Avenue  
Savannah, GA 31408

RE: Verification of Payments Received  
THRIFTY CAR WASH INSTALLATION

Dear Sir:

This letter is to certify that \_\_\_\_\_ (name of DBE firm) has received \$ \_\_\_\_\_ (dollar amount) from \_\_\_\_\_ (prime contractor). This amount represents payment for work performed from \_\_\_\_\_ (M/D/Y) to \_\_\_\_\_ (M/D/Y) which is \_\_\_\_\_% of the total contract amount of \$ \_\_\_\_\_.

Sincerely,

(Type or Print name of person signing letter) \_\_\_\_\_

\_\_\_\_\_  
Title

Personally appeared before me, the Undersigned Authority, \_\_\_\_\_ who is known to me to be an official of the firm of \_\_\_\_\_ who after being duly sworn stated his/her oath that he/she had read the above statement and that the same is true and correct.

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Notary Public

State of \_\_\_\_\_

My Commission Expires \_\_\_\_\_

# DBE UTILIZATION FORM

Project Name: **THRIFTY CAR WASH INSTALLATION**

Contractor (Company): \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Pay Request #: \_\_\_\_\_ From \_\_\_\_\_ To: \_\_\_\_\_

Subcontractor	DBE/Non-DBE	Work Item	Subcontract Amount	Amount Earned To Date	Amount This Pay Request	Amount Remaining

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Type or Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Personally appeared before me, the Undersigned Authority, \_\_\_\_\_ who is known to me to be an official of the firm of \_\_\_\_\_ who after being duly sworn, stated of his oath that he had read the above statement and that the same is true and correct.

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

Notary Public: \_\_\_\_\_

State of \_\_\_\_\_

## DISADVANTAGED BUSINESS ENTERPRISE ASSURANCE FORM

The Bidder, Prospective Contractor, or Contractor shall complete the following statement by checking the appropriate box (check one only). Failure to complete this statement shall be grounds for rejection of Bid.

\_\_\_\_\_ The Bidder, Prospective Contractor, or Contractor is able to assure meeting the requirements of the DBE Provisions, included under the DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS, and shall utilize \_\_\_\_\_% (percent) Race-Neutral DBE participation.

\_\_\_\_\_  
(Company Name of Bidder/Prospective  
Contractor/Contractor)  
(Printed or Typed)

IRS Number: \_\_\_\_\_

\_\_\_\_\_  
(Printed Name of Person Signing)

By: \_\_\_\_\_  
(Signature)\*

Title: \_\_\_\_\_

Date: \_\_\_\_\_

\* - Must be same signature of Bid Proposal.

**END OF DBE ASSURANCE**

**SAVANNAH AIRPORT COMMISSION**

**EQUAL OPPORTUNITY REPORT STATEMENT**

**as Required by**  
**41 CFR 60-1.7(b)**

The Bidder (Proposer) shall complete the following statement by checking the appropriate boxes. Failure to complete these blanks may be grounds for rejection of bid:

1. The Bidder (Proposer) has \_\_\_\_\_ has not \_\_\_\_\_ developed and has on file at each establishment affirmative action programs pursuant to 41 CFR 60-1.40 and 41 CFR 60-2.
2. The Bidder (Proposer) has \_\_\_\_\_ has not \_\_\_\_\_ participated in any previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Order 11246, as amended.
3. The Bidder (Proposer) has \_\_\_\_\_ has not \_\_\_\_\_ filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).
4. The Bidder (Proposer) does \_\_\_\_\_ does not \_\_\_\_\_ employ fifty (50) or more employees.

NAME OF BIDDER: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_



**SAVANNAH AIRPORT COMMISSION**  
**BIDDER QUALIFICATION QUESTIONNAIRE**

Submitted by \_\_\_\_\_  
Name of Bidder

( ) An Individual \_\_\_\_\_

( ) A Partnership \_\_\_\_\_

( ) A Corporation \_\_\_\_\_

Principal Office Address:

\_\_\_\_\_  
\_\_\_\_\_

The undersigned guarantees the truth and accuracy of all statements and all answers to questions hereinafter made.

1. How many years has your organization been in business as a contractor under your present name?

\_\_\_\_\_

2. How many years experience in construction work has your organization had as a general contractor?

\_\_\_\_\_

As a subcontractor?

\_\_\_\_\_

3. List below the requested information concerning projects your organization has completed in the last five (5) years for the type of work required in this project.

\_\_\_\_\_

Project Title	Contract Amount	Required Completion Date	Actual Completion Date	Name and Address of Owner
------------------	--------------------	--------------------------------	------------------------------	---------------------------------

\_\_\_\_\_

\_\_\_\_\_

---

---

---

---

4. Have you ever failed to complete any work awarded to you? If so, where and why?

---

---

---

5. Has any officer or partner of your organization ever been an officer or partner of some other organization that failed to complete a construction contract? If so, state name of individual, name of other organization, and the reason therefor.

---

---

6. Has any officer or partner of your organization ever failed to complete a construction contract handled in his own name? If so, state name of individual, name of owner and reason therefor.

---

---

---

7. Give below any information which would indicate the size and capacity of your organization, including number of employees, equipment owned by your organization, etc., which are available for utilization of this Contract.

---

---

---

---

8. List below the names and addresses of the subcontractors you may expect to employ on this Contract and a description of the work each subcontractor will perform.

Name and Address of Subcontractor	Description of Work

9. List below the sources of supply of the various materials you intend to incorporate in this Contract.

Source of Supply	Material

Name of Bidder: \_\_\_\_\_

Address of Bidder: \_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

Title

Date: \_\_\_\_\_

Georgia Tax Registration No.: \_\_\_\_\_

Witness or Attest:

\_\_\_\_\_  
(Corporate Seal)

Sworn to and subscribed before me this  
\_\_\_\_\_ day of \_\_\_\_\_, 2017.

My commission expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public

**SAVANNAH AIRPORT COMMISSION**

**BID BOND**

(NOT TO BE FILLED OUT IF A CERTIFIED CHECK IS SUBMITTED)

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned \_\_\_\_\_, as Principal, and \_\_\_\_\_, a Corporate Surety authorized under the laws of the State of \_\_\_\_\_ to do business in the State of \_\_\_\_\_, as surety, are held and firmly bound unto the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission in the sum of \_\_\_\_\_ (\$ \_\_\_\_\_) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves and our heirs, executors, administrator, successors and assigns.

The condition of the above obligation is such that if the attached proposal of \_\_\_\_\_ (\$ \_\_\_\_\_) for the improvement of airport facilities, **THRIFTY CAR WASH INSTALLATION**, stipulated in said proposal in accordance with the plans and specifications provided therefor, is accepted and the contract awarded to the above named Bidder, and the said Bidder shall within ten (10) days after notice of said award enter into a contract in writing and furnish the required Payment and Performance Bond with surety, or sureties, to be approved by the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission this obligation shall be void. Otherwise, the same shall be in full force and virtue of law, and the full amount of this Bid Bond will be paid to the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission as stipulated for liquidated damages.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

(Principal must indicate whether corporation, partnership, company or individual)

This person signing shall in his handwriting sign the principal's name, his own name, and his title. Where the person signing for a corporation is other than the President or Vice President, he must, by affidavit as contained herein, show his authority to bind the corporation.

\_\_\_\_\_  
Principal

BY: \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Surety (Company Name)

\_\_\_\_\_  
Surety (Signature)

**Countersigned:**

\_\_\_\_\_  
Georgia Resident Agent

\_\_\_\_\_  
Georgia License Number

## **BID SCHEDULE**

In accordance with all bid documents, addenda, plans, and specifications, the undersigned proposes to furnish all services, material, labor, tools, equipment, and other means of construction required for **THRIFTY CAR WASH INSTALLATION**.

**Base Bid Written In Words:** \_\_\_\_\_

\_\_\_\_\_ (Dollars) (\$\_\_\_\_\_.)

NAME OF BIDDER: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

BUSINESS \_\_\_\_\_

ADDRESS: \_\_\_\_\_

WITNESS: \_\_\_\_\_

WITNESS: \_\_\_\_\_



## SAVANNAH AIRPORT COMMISSION

### CONTRACT

This AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, hereinafter designated the Owner, party of the first part, and \_\_\_\_\_ of the City of \_\_\_\_\_ and State of \_\_\_\_\_, hereinafter designated the Contractor, party of the second part,

#### W I T N E S S E T H:

That the parties to these presents, each in consideration of the undertakings, promises and agreements on the part of the other herein contained, have undertaken, promised and agreed, and do hereby undertake, promise, and agree, the party of the first part for itself, its successors, and assigns, and the part(y) (ies) of the second part for (its) (itself) and (its) (their) heirs, executors, administrators, successors, and assigns, as follows:

That the part(y) (ies) of the second part in consideration of the sums of money herein specified to be paid by said party of the first part to said part(y) (ies) of the second part, shall and will at (its) (their) own cost and expense furnish all labor, materials, tools, and equipment for the improvement of **Thrifty Car Wash Installation**, Savannah /Hilton Head International Airport, in accordance with the Notice to Bidders, Instructions to Bidders, Proposal, Bid Schedule, and Bonds hereto attached, and in accordance with Plans, Specifications, General Conditions, and Supplemental General Conditions therein referred to as the Contract Documents, are hereby made a part of this agreement, all of said work to be fully completed to the satisfaction of the Engineer and to the acceptance of and by the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission in the lump sum amount of

\_\_\_\_\_ dollars/cents (\$\_\_\_\_\_).

If the Contractor shall fail to comply with any of the terms, conditions, provisions, or stipulations of this Contract, according to the true intent and meaning thereof, then the party of the first part may avail itself of any or all remedies provided in that behalf in the Contract and shall have the right and power to proceed in accordance with the provisions thereof.

That the Contractor shall commence the Work within ten (10) days of the date set by the Owner in a written Notice-To-Proceed and shall substantially complete all work under this Contract within forty-five (45) consecutive calendar days after the date shown in the Notice-To-Proceed, and shall substantially complete the milestones in the CONSTRUCTION SCHEDULE below within the number of Calendar Days from the Notice-To-Proceed shown therein.

The Owner hereby agrees to pay to the Contractor for the said work the unit prices set forth in the BID SCHEDULE, at the times and manner set forth in the Contract Documents. Payment to the Contractor by the Owner shall be made upon presentation of the proper certificates to the Owner and upon terms set forth in the Contract Documents.

It is mutually agreed between the parties hereto that time is the essence of this Contract, and in the event the construction is not substantially complete by the Calendar Days specified below in COLUMN I of the CONSTRUCTION SCHEDULE, it is agreed that from any money due or to become due the Contractor or his Surety, the Owner may retain the dollar amount shown below in COLUMN II per Milestone per day for each calendar day thereafter, Sundays and Holidays included, that the work remains incomplete, not as a penalty but as liquidation of a reasonable portion of damages that will be incurred by the Owner by failure of the Contractor to complete the work within the times stipulated.

#### CONSTRUCTION SCHEDULE

	<u>Column I</u>	<u>Column II</u>
	Total Calendar Days After Notice-To-Proceed	Liquidated Damages per Calendar Day if Not Completed by Calendar Days Shown on Column I
Final Completion	45	\$500.00

IN WITNESS WHEREOF, the parties to the agreement have hereunto set their hands and seals and have executed this agreement the day and year first above written.

SAVANNAH AIRPORT COMMISSION

**OWNER**

(Party of the First Part)

BY: \_\_\_\_\_

Stephen S. Green, Chairman

ATTEST: \_\_\_\_\_

Gregory B. Kelly, Secretary  
(Seal)

**CONTRACTOR**

(Party of the Second Part)

\_\_\_\_\_  
Company

BY: \_\_\_\_\_

Name (Signature)

TITLE: \_\_\_\_\_

Title

\_\_\_\_\_  
Name (Print/Type)  
(Seal)

ATTEST: \_\_\_\_\_

Name (Signature)

TITLE: \_\_\_\_\_

Title

\_\_\_\_\_  
Name (Print/Type)  
(Seal)

Contractor must indicate whether Corporation, Partnership, Company or Individual

The person signing shall in his own handwriting sign the principal's name, his own name, and his title. Where the person signing for a corporation is other than the President or Vice President, he must, by affidavit, as contained herein, show his authority to bind the corporation.

Corporate seal is required for all companies that are incorporated.

ARCH

Revised June 2015

\_\_\_\_\_  
Out-of-state contractors must affix Georgia tax registration number.

## SAVANNAH AIRPORT COMMISSION

### PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that \_\_\_\_\_,  
as Principal, hereinafter called Contractor, and \_\_\_\_\_  
\_\_\_\_\_ as Surety, hereinafter  
called Surety, are held and firmly bound unto the Mayor and Aldermen of the City of  
Savannah, Georgia and the Savannah Airport Commission as Obligee, hereinafter  
called Owner, in the amount of \_\_\_\_\_  
\_\_\_\_\_ dollars (\$\_\_\_\_\_) for the payment whereof  
Contractor and Surety bind themselves, their heirs, executors, administrators,  
successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated \_\_\_\_\_,  
20\_\_\_\_, entered into a Contract with Owner for **Thrifty Car Wash Installation**, in  
accordance with all of the construction plans and contract documents listed in the  
specifications prepared by the Savannah Airport Commission., which Contract is by  
reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of the above obligation is such that if the said  
Contractor shall well and faithfully perform the things agreed by him to be done and  
performed according to the terms of said Contract, and shall promptly make payments  
to all persons supplying labor, material, and supplies used directly or indirectly by the  
said Contractor, or subcontractor(s), in the prosecution of the work provided for in said  
Contract, we agreeing and assenting that this undertaking shall be for the benefit of any  
subcontractor, material men, or laborer having a just claim, as well as for the Obligee  
herein, then this obligation shall be void, otherwise, the same shall remain in full force  
and effect, it being expressly understood and agreed that the liability of the Surety for  
any and all claims hereunder shall in no event exceed the amount of this obligation as  
herein stated.

The said Surety hereby stipulates and agrees that no modifications, omissions, or  
additions, in or to the terms of said Contract or on or to the plans and specifications  
therefor shall in any way affect the obligation of said Surety or its Bond.

The said Surety shall inform the Owner thirty (30) days prior to expiration of this  
bond, by giving notice by registered mail.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Principal must indicate whether  
corporation, partnership, company  
or individual.

\_\_\_\_\_  
Principal

The person signing shall,  
in his own handwriting, sign  
the principal's name, his own  
name and his title. Where a  
person signing for a corporation  
is other than the President or  
Vice President, he must, by  
affidavit as contained herein,  
show his authority to bind the  
corporation.

BY:

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Name (Print/Type)

TITLE:

(Affix Contractor's Corporate Seal)

ATTEST BY:

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Name (Print/Type)

TITLE:

(Affix Surety's Corporate Seal)

\_\_\_\_\_  
Surety

BY:

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Name (Print/Type)

**COUNTERSIGNED:**

\_\_\_\_\_  
Georgia Resident Agent

\_\_\_\_\_  
Georgia Resident Agent (Print/Type)

\_\_\_\_\_  
Georgia License Number



## SAVANNAH AIRPORT COMMISSION

### PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that \_\_\_\_\_,  
as Principal, hereinafter called Contractor, and \_\_\_\_\_,  
\_\_\_\_\_ as  
Surety, hereinafter called Surety, are held and firmly bound unto the Mayor and  
Aldermen of the City of Savannah, Georgia, and the Savannah Airport Commission as  
Obligee, hereinafter called Owner, in the amount of \_\_\_\_\_  
\_\_\_\_\_ dollars  
(\$ \_\_\_\_\_) for the payment whereof Contractor and Surety  
bind themselves, their heirs, executors, administrators, successors, and assigns, jointly  
and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated \_\_\_\_\_,  
20\_\_\_\_, entered into a Contract with Owner for **Thrifty Car Wash Installation**, in  
accordance with all of the construction plans and contract documents listed in the  
specifications prepared by the Savannah Airport Commission which Contract is by  
reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of the above obligation is such that if the said  
Contractor shall well and faithfully perform the things agreed by him to be done and  
performed according to the terms of said Contract, and shall promptly make payments  
to all persons supplying labor, material, and supplies used directly or indirectly by the  
said Contractor, or subcontractor(s), in the prosecution of the work provided for in said  
Contract, we agreeing and assenting that this undertaking shall be for the benefit of any  
subcontractor, material men, or laborer having a just claim, as well as for the Obligee  
herein, then this obligation shall be void, otherwise, the same shall remain in full force  
and effect, it being expressly understood and agreed that the liability of the Surety for  
any and all claims hereunder shall in no event exceed the amount of this obligation as  
herein stated.

The said Surety hereby stipulates and agrees that no modifications, omissions, or  
additions, in or to the terms of said Contract or on or to the plans and specifications  
therefor shall in any way affect the obligation of said Surety or its Bond.

The said Surety further stipulates and agrees that in the event of a default or  
deficiency on the part of the Contractor amounting to a breach of the Contract, the  
Owner may, by giving notice by registered mail to Contractor and Surety, require that  
such default or deficiencies be remedied within thirty (30) days from the date of such  
notice. Failure so to remedy or to take proper steps to remedy such defaults or  
deficiencies within said period shall be cause for the Owner to require that Surety take  
over and prosecute the work under the Contract and to take over all obligations  
pertaining thereto. In the event the work under the Contract is taken over by the Surety  
in a manner satisfactory to the Owner, the Owner will pay to the Surety henceforth all  
amounts due and to become due under the Contract, including amendments, less the  
balance of the Contract price previously paid to the Contractor and less liquidated



damages, if assessed. The Owners shall not be liable for any monies not due on the Contract and shall not be made a party to any dispute between Contractor and Surety.

If the Surety does not take over the work in a satisfactory manner within thirty (30) days after the notice of default or does not proceed with completing the work in accordance with the Contract, the Owner shall have full power and authority, without impairing the obligation of the Contract or the Contract Bond, to take over the completion of the work; to appropriate or use any or all material and equipment that may be suitable; to enter into agreements and provisions thereof; or to use such other methods as may be required for completion of the Contract. The Contractor and his Surety shall be liable for all costs incurred by the Owner in completing the work and for all liquidated damages in conformity with the terms of the Contract. If the sum of such liquidated damages and the expense so incurred by the Owner is less than the sum which would have been payable under this Contract if it had been completed by the Contractor or his Surety, the Contractor or his Surety shall be entitled to receive the difference; and if the sum of such expense and such liquidated damages exceeds the sum which would have been payable under the Contract, the Contractor and his Surety shall be liable and shall pay to the Owner the amount of such excess. Notice to the Contractor shall be deemed to have been served when delivered to the man in charge of any office used by the Contractor, his representative at or near the work, or by registered mail addressed to the Contractor at his last known place of business.

The said Surety further stipulates and agrees that this bond is also given and made as a guarantee insuring the Owner against loss resulting from costs of repairing, replacing, or reconstructing any portion of the work performed or equipment furnished under the Contract, because of failure to perform as specified or from being defective in any manner whatsoever. This bond shall remain in full force and effect for a period of one year after the date of written recommendation and of acceptance by the Engineer to the Owner.

The said Surety shall inform the Owner thirty (30) days prior to expiration of this bond, by giving notice by registered mail.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Principal must indicate whether corporation, partnership, company or individual.

\_\_\_\_\_  
Principal

The person signing shall, in his own handwriting, sign the principal's name, his own name and his title. Where a person signing for a corporation is other than the President or Vice President, he must, by affidavit as contained herein, show his authority to bind the corporation.

BY: \_\_\_\_\_

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Name (Print/Type)

TITLE: \_\_\_\_\_

(Affix Contractor's Corporate Seal)

ATTEST BY: \_\_\_\_\_

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Name (Print/Type)

TITLE: \_\_\_\_\_

(Affix Surety's Corporate Seal)

\_\_\_\_\_  
Surety

BY: \_\_\_\_\_

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Name (Print/Type)

**COUNTERSIGNED:**

\_\_\_\_\_  
Georgia Resident Agent

\_\_\_\_\_  
Georgia Resident Agent (Print/Type)

\_\_\_\_\_  
Georgia License Number

**SAVANNAH AIRPORT COMMISSION**

**BOND AFFIDAVIT**

State of \_\_\_\_\_

County of \_\_\_\_\_

Before me, the undersigned authority, personally appeared \_\_\_\_\_, who, being duly sworn, deposes and says that he is a duly authorized (resident) (nonresident) insurance agent, properly licensed under the laws of the State of \_\_\_\_\_ and the State of Georgia, to represent \_\_\_\_\_ of \_\_\_\_\_, a company authorized to make corporate surety bonds under the laws of the State of Georgia.

Said \_\_\_\_\_ further certifies that as Attorney-in-fact for the said \_\_\_\_\_ he has signed the attached bond in the sum of \_\_\_\_\_ (U. S. \$ \_\_\_\_\_) on behalf of \_\_\_\_\_ covering Savannah/Hilton Head International Airport, Savannah Airport Commission, Savannah, Georgia for the following project: **Thrifty Car Wash Installation**.

Said \_\_\_\_\_ further certifies that the premium on the said bond is \_\_\_\_\_ which will be paid in full direct to him as Attorney-in-fact, and included in his regular accounts to the said \_\_\_\_\_, and that he will receive his regular commission of \_\_\_\_\_ percent as Attorney-in-fact for the execution of said Bond and that his commission will not be divided with anyone except as follows: \_\_\_\_\_ percent to \_\_\_\_\_, who is duly authorized resident insurance agent and properly licensed under the laws of the State of Georgia.

\_\_\_\_\_  
Agent and Attorney-in-fact

**COUNTERSIGNED:**

\_\_\_\_\_  
Georgia Resident Agent

\_\_\_\_\_  
Georgia Resident Agent (Print/Type)

\_\_\_\_\_  
Georgia License Number

Acknowledgement for Attorney-in-fact

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, A. D. 20\_\_\_\_.

\_\_\_\_\_  
Notary Public,

State of \_\_\_\_\_

My Commission expires \_\_\_\_\_

## GENERAL CONDITIONS

### 1. SUMMARY OF WORK

- a. This project consists of providing all labor and materials to install a new car wash and liquid recovery system at Thrifty Car Rental's maintenance facility. The work includes, but is not limited to, a complete install of the system with electrical service, plumbing, metal panel installation, testing, and all other systems associated with the install.
- b. The location of the project is at the Savannah / Hilton Head International Airport, Savannah, Georgia.
- c. The Owner for whom this work shall be executed is the Savannah Airport Commission, 400 Airways Avenue, Savannah, Georgia 31408.

### 2. AIRPORT RULES AND REGULATIONS

Contractor(s) shall be responsible for informing all employees concerning pertinent airport and Federal Aviation Administration rules and regulations. Contractor(s) shall conform with all rules and regulations and directives issued either orally or in writing by the Owner or his representative. All pertinent local, state and federal safety requirements shall be observed by the Contractor(s) and Contractor(s)' personnel. Contractor(s) shall execute a Hold Harmless Agreement with the Savannah Airport Commission, which form shall be furnished by the Airport Commission.

### 3. BURNING

Burning is permitted on airport property by obtaining a permit from local government agencies.

### 4. ACCIDENTS

All accidents causing personal injury or property damage shall be reported to the Executive Director or his representative immediately. The contractor(s) shall provide, at the site, such equipment and medical facilities as are necessary to supply first aid service to anyone who may be injured in connection with the performance of the work, whether on or adjacent to the site, which causes death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone to the Executive Director or his representative and the Project Engineer.

### 5. SANITARY FACILITIES

The Contractor shall furnish temporary sanitary facilities for his employees.

## 6. NOTICE TO PROCEED

The Notice to Proceed shall state the date on which it is expected the Contractor will begin the work and from which date the contract time will be charged. The Contractor shall begin the work to be performed under the contract within ten (10) calendar days of the date written by the Owner in the Notice to Proceed, but in any event, he shall notify the Owner at least 24 hours in advance of the time actual construction operations will begin.

## 7. SEQUENCE OF WORK

All work in public areas shall be done between the hours of 8:00 PM and 4:00 AM. During this time, work areas shall be barricaded off, as necessary, and cleaned thoroughly when work has been completed for the day. A phasing plan shall be submitted to the Airport for approval which will depict work areas in each area of the Terminal Building.

## 8. CONTRACT TIME AND LIQUIDATED DAMAGES

- a. The number of calendar days for the completion of the project shall be forty-five (45) calendar days from the date of the Notice to Proceed.
- b. For each calendar day that any work remains uncompleted after the contract time (including all approved extensions in time and adjustments), the sum of \$500 per calendar day as liquidated damages shall be deducted from any money due or to become due to the Contractor for his surety.

## 9. EXTENSION OF CONTRACT TIME

If the Contractor finds it impossible for reasons beyond his control to complete the work within the contract time as specified, the Contractor may, at any time prior to the expiration of the contract time, make a written request to the Owner for an extension of time, setting forth the reasons which he believes will justify the granting of his request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Owner finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Owner may extend the time for completion in such amount as the conditions justify. The extended time of completion shall then be in full force and effect, the same as though it were the original time for completion.

## 10. PREVAILING WAGE RATES

The construction wage rates have been furnished and compiled by the City of Savannah and certified by the U. S. Department of Labor to be wages prevailing for construction of projects in the Chatham County area. In accordance with the terms of the Proposal, the Contractor agrees to pay to each employee of the corresponding craft at least the wage rate listed.



In addition to the basic hourly rates shown, certain crafts, trades or industries indicate health, welfare, pension, and other fringe benefits which are given employees pursuant to a bonafide Collective Bargaining Agreement for the respective craft, trade, or industry. In the absence of any such Agreement, the basic hourly rates plus the monetary equivalent for the fringe benefit payments indicated, less any legal deductions, shall be paid directly to the employees.

If the wage rate determination of the U. S. Department of Labor incorporated in the following page does not include rates for requested classifications, the Bidder is responsible for ascertaining the rates payable for such classifications and whether area practice requires their use in accomplishing the work. No inference concerning area practice is to be drawn from this omission. Further, the omission will not, per se, establish any liability for increased labor cost resulting from the use of such classifications.

The Contractor and Subcontractors at any tier shall make and submit a copy of, to the Savannah Airport Commission, within seven (7) days, a record of all payments for labor with an affidavit that the weekly wages paid are not less than the applicable wage rates contained in the wage determination incorporated into the contract and that the classifications set forth therein for each laborer and mechanic conforms with the work he/she performed. Such records shall contain the name of the individual, his/her classification, the hourly rate, the number of hours worked, and the total amount paid including any and all deductions/withholdings for all individuals who provided and were paid via any means for labor on this project. Records shall be made, and copies provided to the Owner with each pay request, of all payments of any kind (including cash, check, voucher, or any other type of remuneration) to any individual (including employees, subcontractors, independent contractors, day laborers, or anybody else) who performed labor on this project for any kind of compensation whatsoever. Every pay request shall also include a copy of a record of Workers' compensation paid for any and all persons paid in any manner for labor of any type on this project.

The Contractor shall post and maintain a copy of the wage determination at the Contractor's field office or any other location as directed by the Savannah Airport Commission.



General Decision Number: GA170129 09/08/2017 GA129

Superseded General Decision Number: GA20160129

State: Georgia

Construction Type: Building

County: Chatham County in Georgia.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/06/2017
1	04/28/2017
2	07/14/2017
3	09/08/2017

BOIL0026-001 01/01/2013

	Rates	Fringes
BOILERMAKER.....	\$ 24.91	19.69

---

ENG10474-002 07/01/2017

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Bobcat/Skid Steer/Skid Loader, Bulldozer, Forklift (under 15 tons), and Loader.....	\$ 25.02	13.83
Crane (over 10 tons) and Forklift (15 tons and over).....	\$ 26.85	13.83
Crane (over 120 tons).....	\$ 27.85	13.83
Crane (over 250 tons).....	\$ 28.85	13.83
Oiler.....	\$ 22.68	13.83

---

PLUM0188-001 08/01/2016

	Rates	Fringes
PIPEFITTER.....	\$ 26.40	14.05
PLUMBER (Including HVAC Pipe Installation).....	\$ 26.40	14.05

---

GC-3a

SFGA0669-001 04/01/2017

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 28.54	15.84

---

\* SHEE0085-002 07/01/2017

	Rates	Fringes
SHEET METAL WORKER (Excluding HVAC Duct and Metal Roof Installation).....	\$ 29.78	12.31

---

SUGA2012-036 08/11/2012

	Rates	Fringes
BRICKLAYER.....	\$ 16.00	0.00
CARPENTER.....	\$ 18.50	0.35
CEMENT MASON/CONCRETE FINISHER...	\$ 15.90	2.66
ELECTRICIAN (Low Voltage Wiring).....	\$ 18.00	1.67
ELECTRICIAN, Excludes Low Voltage Wiring.....	\$ 19.95	5.56
GLAZIER.....	\$ 16.42	2.00
IRONWORKER, REINFORCING.....	\$ 20.48	8.41
IRONWORKER, STRUCTURAL.....	\$ 21.00	0.00
LABORER: Common or General.....	\$ 11.81	1.15
LABORER: Mason Tender - Brick...	\$ 9.00	0.00
LABORER: Pipelayer.....	\$ 12.00	0.23
LABORER: Plaster Tender.....	\$ 11.00	0.00
OPERATOR: Backhoe/Excavator.....	\$ 12.00	0.46
OPERATOR: Grader/Blade.....	\$ 17.52	0.00
PAINTER: Brush, Roller and Spray.....	\$ 16.00	1.62
PLASTERER.....	\$ 16.00	0.00
ROOFER, Excludes Installation of Metal Roofs.....	\$ 11.38	0.00
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 16.88	2.53

SHEET METAL WORKER (Metal Roofs Installation).....	\$ 15.56	0.00
TILE FINISHER.....	\$ 10.31	0.00
TILE SETTER.....	\$ 14.00	0.54
TRUCK DRIVER: Dump Truck.....	\$ 13.61	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 17.41	0.00

---

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

---

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

---

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of

the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

---

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

\* an existing published wage determination

- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION



## 11. CONTRACTOR'S AND SUBCONTRACTOR'S RECORDS

- a. The Contractor and all Subcontractors, at any tier, shall maintain for a period of not less than three (3) years from the date of final payment all books, records, documents, and papers pertaining to the contract.
- b. The Contractor and all Subcontractors, at any tier, shall provide to the City of Savannah, the Savannah Airport Commission, the FAA, or any other Federal or State agency, the Comptroller General of the United States, or any of their duly authorized representatives access to all such books, documents, papers and records, pertaining to the contract for the purposes of examining, auditing and copying them.

## 12. INSURANCE REQUIREMENTS

The Contractor shall obtain and maintain with a company or companies authorized to do business in the State of Georgia, and approved by the Savannah Airport Commission, such insurance as will protect the Commission, and Contractor, from claims set forth below which may arise out of or result from Contractor's operations under the contract and for which the Contractor is legally liable, which includes operations by subcontractors, subcontractor's/subcontractors, or by any persons directly or indirectly employed by Contractor or Subcontractor.

a. Claims under workers' compensation, disability benefit, and other similar employee benefit acts. Further, Contractor shall relieve the Commission from any costs due to accidents or other liabilities mentioned in workers' compensation act. Contractor or subcontractors with either an insufficient number of employees or in certain excluded occupational classifications are required to maintain WORKERS' compensation coverage on a voluntary basis regardless of the statutory regulations. If the Contractor is from a state other than Georgia, before work begins he shall take whatever measures are necessary to eliminate conflicts regarding which state is responsible for WORKERS' compensation claims.

b. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees.

c. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees.

d. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by another person.

e. Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom.



f. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle.

The insurance required above, shall be written for not less than the following amounts, or greater if required by law:

a. Workers' Compensation:

Georgia Statutory

Employer's Liability, including all states

\$1,000,000 - each accident

\$1,000,000 - disease - policy limit

\$1,000,000 - disease - each employee

b. Comprehensive General Liability: shall include all major divisions of coverage and be on a comprehensive basis including, but not limited to:

Premises, operations, including explosion, collapse and underground; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage including completed operations; Contractual Liability; Personal Injury Liability with employment exclusion deleted. Must include projects at airports.

Bodily Injury and Property Damage Limits: \$1,000,000 combined single limit, each occurrence

Products and Completed Operations:

Insurance to be maintained for three (3) years after issuance of the final certificate for payment.

c. Mobile Equip/Comprehensive Vehicle Liability:

(Owned, non-owned, and hired.)

Bodily Injury/Property Damage Combined:

\$1,000,000 combined single limit, each occurrence

d. Umbrella/Excess Liability:

Umbrella/Excess Liability insurance covering all liability lines excess of the primary limits. The total limits of liability for each coverage including primary and umbrella coverages shall be no less than \$5,000,000 combined single limit – each occurrence.

e. Builders Risk (Property Insurance):  
**(IF APPLICABLE TO THE TYPE OF CONSTRUCTION)**

Shall be purchased and maintained by the Contractor covering the entire Work at the site to the full insurable value thereof, including stockpiled material at the construction site intended for incorporation into the project.

Also, such insurance shall be in a company or companies against which Commission has no reasonable objection, and shall include the interest of the Commission, the Contractor, and Subcontractors in the Work. Such insurance shall insure against the perils of Fire, Extended Coverage, Theft, Vandalism and Malicious Mischief, and all other risks. If the Commission is damaged by the failure of the Contractor to maintain such insurance and to so notify the Commission, then the Contractor shall bear all reasonable costs properly attributable thereto. If not covered under such insurance or otherwise provided in the contract documents applicable to constructions, the Contractor shall effect and maintain similar Property Insurance on the Work stored off the site or in transit when such portions of the work are to be included in an application for payment under the contract.

The insurance required above should include contractual liability insurance applicable to the Contractor's obligations.

Detailed Information Relating to Insurance:

a. The Savannah Airport Commission requires that ALL LIABILITY POLICIES must be **ENDORSED** to include **the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, its officers, directors, agents and employees as ADDITIONAL INSURED**. This must be reflected on the Certificate of Insurance which shall be furnished to the Commission. The Certificate of Insurance shall evidence proper limits of coverage as set forth herein and that the policy or policies will not be cancelled or modified without thirty (30) days prior written notice thereof is given to the Savannah Airport Commission. The Certificate shall also reflect that all policies have been endorsed to include waivers of any and all subrogation. The Contractor shall also require its subcontractors and subcontractors/subcontractors to endorse their policies to include **the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, its officers, directors, agents and employees as ADDITIONAL INSURED**.

b. The extent of coverage or limits of liability provided under the policies procured by the Contractor and/or Subcontractors shall not be construed to be a limitation on the nature or extent of the Contractor's obligations or to relieve the Contractor of any such obligations or representation by the Savannah Airport Commission as to the adequacy of the insurance to protect the Contractor against the obligations imposed on him by law or by this or any other contract. All policies shall be primary and non contributory.

c. Immediate notification must be given to the Savannah Airport Commission and/or its agent upon receiving any knowledge or notification of claim or litigation on which the Savannah Airport Commission may be named.

d. The Contractor shall indemnify, protect, defend, and hold completely harmless the Commission, and its officers, agents and employees from and against any and all liabilities, losses, suits, claims, judgments, fines, or demands arising by reason of injury or death of any person or damage to any property, including all reasonable costs for investigation and defense thereof (including but not limited to attorney fees, court costs, and expert fees), of any nature whatsoever arising out of or incident to this contract and/or the use of occupancy of the leased premises or the acts or omissions of Contractor's officers, agents, employees, contractors, subcontractors, licensees, or invitees, regardless of where the injury, death, or damage may occur, unless such injury, death or damage is caused by the sole negligence of the Commission. The Commission shall give to Contractor reasonable notice of any such claims or actions. The Contractor shall also use counsel reasonably acceptable to Commission in carrying out its obligations hereunder.

All policies shall be endorsed to include waivers of any and all subrogation.

### 13. SAFETY

a. Airport safety is an extremely important element of managing and operating today's airport. Specific rules, regulations, advisory circulars and guidelines are placed upon the airport owner/operator to improve safety on airports and to protect its users, tenants, and neighbors.

(1) Entry Into the Air Operations Area - Entry shall be by gate(s) designated by the Executive Director or his representative. The Contractor shall be responsible for gate security. No personal vehicles owned by Contractor's employees or subcontractors shall be allowed on the airfield at any time.

(2) Communications - Radio contact with the control tower must be maintained by all Contractor vehicles on the airfield. Vehicles must contact the control tower upon entering active runway, taxiway, or apron area where aircraft are moving or are subject to move; and if working within five hundred (500) feet of the centerline of any active runway or two hundred (200) feet of the centerline of any (active) taxiway, the Contractor shall maintain radio contact with the control tower at all times. If the Contractor has vehicles with no radio, then such vehicles shall form a convoy and follow a vehicle having two-way radio contact with the control tower. Contractors working in runway clear zones shall maintain constant radio contact with the control tower. The Contractor shall be responsible for supplying his own radios.

The Contractor shall reimburse the Airport Commission for the full amount of any fines placed on the Airport Commission due to an unauthorized crossing of an active runway or taxiway by the Contractor or any of his subcontractors.

- (3) Flags - All vehicles, upon entering the Air Operations Area shall display an orange and white-checkered flag, staff mounted, of not less than three (3) feet square displayed on the vehicle. Cranes, backhoes, and similar equipment working within five hundred (500) feet of the centerline or runways and two hundred (200) feet of taxiways and in clear zones, shall display the same size and type of flag specified for vehicles attached to the boom. Crane booms shall be lowered when not in use.

(4) Storage Area

- a. Material or personal vehicular storage area shall be assigned by the Executive Director or his representative.
- b. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free unobstructed movement of aircraft.
- c. Loose materials capable of causing damage to aircraft landing gears, propellers, or being ingested in jet engines, shall not be stored on or around active aircraft movement areas.
- d. Stockpiled material will be constrained in a manner to prevent movement resulting from aircraft blast or wind conditions in excess of 10 knots. Stockpiled material shall be prominently marked with orange flags and lighted with flashing yellow lights during hours of restricted visibility.
- e. The Contractor shall be responsible for the security of his material and equipment.

(5) Open Trenches

- a. All open trenches, excavations within the Air Operations Area, shall be marked by lighted and flagged barricades. Barricades shall be alternate orange and white markings with flashing yellow lights and a maximum of 18 inches in height. Barricades adjacent to runways or taxiway pavement areas shall be required to be secured in such manner to prevent tipping over. Flags shall be orange and white, staff mounted, and not less than 20" x 20". All barricades shall be subject to approval by the Executive Director. The Contractor shall provide the name and phone number of two individuals to be on call 24 hours per day for emergency maintenance of barricade lighting.



- b. All construction work closer than one hundred twenty-five (125) feet of the edge of a runway or eighty-five (85) feet from the edge of a taxiway will require temporary closing of the runway or taxiway. Temporarily closed taxiways shall be marked by lighted and weighted barricades as shown on the plans. Temporarily closed runways shall be marked with a cross placed on the runway numbers by the Savannah Airport Commission.
- c. Prior to beginning any excavation within two hundred (200) feet of the centerline of any runway or taxiway, the Contractor shall notify the Executive Director or his representative. All trench excavation within the Air Operations Area shall be backfilled and compacted at the end of each work day.
- d. Construction equipment or material shall not be stored within the Air Operations Area during hours of restricted visibility or darkness without the approval of the Executive Director or his representative.
- e. Open flame welding or torch cutting operations are prohibited unless fire and safety precautions are provided in accordance with NFPA codes and approved by the Owner. Open flame welding or torch cutting will be permitted on Airport property by obtaining a permit from the Airport Fire Department.

Any use of oxygen/acetylene welding equipment or open flame equipment shall require the Contractor to obtain a permit from the Airport Fire Chief.

(6) Motorized Vehicles

- a. Vehicular traffic crossing active aircraft movement areas (runways, taxiways or aircraft parking aprons) shall be controlled either by two-way radio contact with the control tower, by escort, flagman, signal lights, or other appropriate means as approved by the FAA Control Tower Chief. After receiving clearance from the Control Tower, the driver's personal observation that no aircraft is approaching his position will be made before he makes any crossing of active taxiway or runway. **THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING HIS OWN RADIOS.**
- b. Contractor(s) shall post two (2) crossing guards, one (1) on each side of all active aircraft movement areas (runways, taxiways and aircraft movement areas (runways, taxiways and aircraft parking aprons). Each crossing guard shall be equipped with a portable two-way radio (121.90 MHz) and

maintain constant radio contact with the control tower. All vehicular traffic shall come to a complete stop at all active aircraft movement areas and shall not proceed into active aircraft movement areas without authorization from the control tower. **THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING HIS OWN RADIOS.**

- c. If it is desirable to clearly identify the vehicles for control purposes by either assigned initials or numbers, then the identifying symbol shall be of eight (8) inch minimum, block-style character of a color easily read. Symbols may be applied by use of tape or water soluble paint.
- d. Motorized vehicles and equipment operating in the AOA shall not exceed fifteen (15) miles per hour.
- e. Aircraft shall have priority over all motorized vehicles and equipment.

(7) Disposal of Debris

All construction debris shall be disposed of off airport property in accordance with all federal, state and local laws. All clean fill material shall remain the property of the Savannah Airport Commission and be disposed of on airport property as directed by the Savannah Airport Commission.

- (8) NOTAMS - Construction NOTAMS shall be issued by the Executive Director or his representative. Construction causing runway or taxiway closures shall be kept to a minimum and scheduled closures shall be discussed with the Executive Director or his representative as far in advance as possible, but not less than forty-eight (48) hours in advance. Landing and taking off of scheduled airlines shall have priority.

- (9) Erosion - Contractor(s) shall consider permanent means of control or prevention of soil erosion not only to preserve and protect the slopes, pavement and other facilities, but also to reduce potential sources of water pollution.

- (10) All electrical and control cables shall be buried a minimum of thirty-six (36) inches below the surface of the ground.

14. SECURITY

Contractor shall be responsible for the security of his equipment and materials. He shall be responsible for the security of all perimeter security gates, terminal doors and hatches leading to secure areas utilized by him. As directed by the Executive



Director, locks shall be placed on each gate used by the Contractor. The locks must be marked in a manner showing company ownership and a key or combination provided to the Airport Public Safety Department. The gates shall be locked at all times or guards posted at the gates to control access through them. Gate guards shall have a radio or cellular phone which will enable them to call the Police to report security problems or the contractor to verify identities, etc. For joint use gates, if a lock is found unsecured, the company owning the lock is in violation of Airport Rules and Regulations. In addition, unauthorized entry to the Air Operations Area through the gates may result in the responsible party being cited for violating Airport Regulations.

15. AFFIDAVIT AND FINAL PAYMENT

Before any periodic pay estimate or the final payment under this contract is made, the Contractor shall submit to the Owner a Contractor's Affidavit of Payment of Debts and Claims and a Contractor's Affidavit of Release of Liens. (See Page GC-12 and GC-13.)

## AFFIDAVIT

### Contractor's Affidavit of Payment of Debts, Claims and Release of Liens.

Whereas a contract was entered into on \_\_\_\_\_, between the Savannah Airport Commission and \_\_\_\_\_ for construction of **Thrifty Car Wash Installation**.

The undersigned hereby certifies that all work under the above contract has been performed in accordance with the terms thereof, that all materialmen, subcontractors, mechanics, and laborers have been paid and satisfied in full, and that there are no outstanding claims of any character including disputed claims or any claims to which the contractor/party has or will assert any defense arising out of the performance of the contract which have not been paid and satisfied in full.

The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of the contract, or any suits or claims for any other damage of any kind, nature, or description which might constitute a lien upon the property of the Owner.

The undersigned makes this affidavit as provided by law for the purpose of receiving payment for work performed during this contract of all claims against the Owner arising under or by virtue of this contract. Acceptance of such payment is acknowledged as a release of the Owner from any and all claims arising under or by virtue of this contract.

This pay period from \_\_\_\_\_ to \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Personally appeared before me, the Undersigned Authority, \_\_\_\_\_ who is known to me to be an official of the firm of \_\_\_\_\_ who after being duly sworn, stated of his oath that he had read the above statement and that the same is true and correct.

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Notary Public, State of \_\_\_\_\_

My Commission expires \_\_\_\_\_

PERIODIC PAY REQUEST

## AFFIDAVIT

### Contractor's Affidavit of Payment of Debts, Claims and Release of Liens

Whereas a contract was entered into on \_\_\_\_\_, between the Savannah Airport Commission and \_\_\_\_\_  
for construction of **Thrifty Car Wash Installation**.

The undersigned hereby certifies that all work under the above contract has been performed in accordance with the terms thereof, that all materialmen, subcontractors, mechanics, and laborers have been paid and satisfied in full, and that there are no outstanding claims of any character including disputed claims or any claims to which the contractor/party has or will assert any defense arising out of the performance of the contract which have not been paid and satisfied in full.

The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of the contract, or any suits or claims for any other damage of any kind, nature, or description which might constitute a lien upon the property of the owner.

The undersigned makes this affidavit as provided by law for the purpose of receiving final payment in full settlement for work performed during this contract of all claims against the owner arising under or by virtue of this contract. Acceptance of such payment is acknowledged as a release of the owner from any and all claims arising under or by virtue of this contract.

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

Signature \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Personally appeared before me, the Undersigned Authority, \_\_\_\_\_  
who is known to me to be an official of the firm of \_\_\_\_\_  
who after being duly sworn, stated of his oath that he had read the above statement and that the same is true and correct.

This \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public, State of \_\_\_\_\_

\_\_\_\_\_  
My Commission expires \_\_\_\_\_.

FINAL PAY REQUEST

16. PAYMENT FOR MATERIALS ON HAND

- a. Partial payments may be made to the extent of the delivered cost of non-perishable materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:
  - 1. The materials have been stored or stockpiled in a manner acceptable to the Engineer at or an approved site.
  - 2. The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
  - 3. The Contractor has furnished the Engineer with satisfactory evidence that the material and transportation costs have been paid.
  - 4. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled, if requested.
  - 5. The Contractor has furnished the Owner evidence that the material so stored or stockpiled is insured against loss by damage or to disappearance of such materials at any time prior to use in the work.
  - 6. The value of the delivered material to be used in one item of work exceeds \$3,000 and is not scheduled to be incorporated into the work within 60 days after delivery.
- b. It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of his responsibility for furnishing and placing such materials in accordance with the requirements of the contracts, plans, and specifications.
- c. In no case will the amount of partial payments for materials on-hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.
- d. No partial payments will be made for stored or stockpiled living or perishable plant materials.

- e. The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this subsection.

## 17. WARRANTIES AND GUARANTEES

The Contractor shall furnish to the Owner written warranties on all equipment and material furnished on this contract. The Contractor will guarantee to the Owner that he will replace, repair, and make good any and all failures of his work, including all labor and material required to repair or replace all failed work for a period of 12 months beginning at the date of written acceptance of the project. If an item fails or has to be replaced within that 12 month period, he will, upon replacement or repair, guarantee that item for an amount of time that will equal 12 months from the date of repair or replacement.

## 18. AS BUILT PLANS

The Contractor shall note on a set of plans any and all changes made to the plans, to include dimensions and reference points of the changes made. Any authorized changes made to the plans will be noted on the plans. all uncharted utilities or structures encountered during construction will be noted and located on the plans. This set of marked up as built plans will be submitted to the Owner prior to final payment being made on the project.

## 19. PROTECTION OF AIRPORT, CABLES, CONTROLS, NAVAIDS, AND WEATHER BUREAU FACILITIES

- a. The Contractor is hereby informed that there are installed on the airport FAA Navaids, including, without limitation, ASR, UHF, and VHF receivers and transmitters; U.S. Weather Bureau facilities; airfield lighting systems; electric cables and controls relating to such Navaids and facilities. Such Navaids, Weather Bureau and other facilities, and electric cables must be fully protected during the entire construction time. Work under this contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time.

Approval is subject to withdrawal at any time because of changes in the weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason determined by the Engineer acting under the orders and instructions of the airport management and the designated FAA representative. Any instructions to this Contractor to clear any given area, at any time, by the Engineer, the Airport Management, or the FAA Control Tower (by radio or other means) shall be immediately executed. Construction work will be commenced in the cleared areas only when additional instructions are issued by the Engineer.



## 20. CHANGE ORDERS

Any change to the scope of work that affects the price of the Contract shall be submitted in writing and approved by the Executive Director, Savannah Airport Commission, or his representative. If the change is an emergency and critical to the project, a verbal approval by the Executive Director may be given provided an estimated cost of the change is given prior to approval. Any work performed without approval of the Executive Director will be done at the Contractor's own expense, and no compensation will be made by the Savannah Airport Commission for such work.

## 21. PERMITS

The Contractor shall be responsible for obtaining any and all licenses and permits to conduct the work as may be prescribed by the federal government, State of Georgia, Chatham County or the City of Savannah. Any fee or expenses associated in obtaining any license or permit shall be paid by the Contractor.

## 22. INDEMNIFICATION

### a. Governing Law

This Agreement shall be deemed to be made in and construed in accordance with the laws of the State of Georgia.

- b. The Contractor shall protect, defend, and indemnify Commission and its officers, agents and employees from an against any and all liabilities, losses, suits, claims, judgments, fines or demands arising by reason of injury or death of any person, or damage to any property, including all reasonable costs for investigation and defense thereof (including but not limited to attorney fees, court costs, and expert fees), of any nature whatsoever arising out of or incident to this Agreement and/or the use or occupancy of the Premises or the acts or omissions of contractor's officers, agents, employees, contractors, subcontractors, licensees, or invitees, regardless of where the injury, death or damage may occur, unless such injury, death, or damage is caused by the sole negligence of the Commission. The Commission shall give to contractor reasonable notice of any such claims or actions. The Contractor shall also use counsel reasonably acceptable to Commission in carrying out its obligations hereunder. The provisions of this section shall survive the expiration or early termination of this Agreement.

## 23. TERMINATION OF CONTRACT

The provisions of this contract may be terminated by either party without cause, in which event at least thirty (30) days prior written notice of such termination shall be given to the other. In the event the Savannah Airport Commission causes abandonment, termination, or suspension of this Contract, or parts thereof, the Contractor shall be compensated for services rendered up to the time of such



abandonment, termination or suspension. Compensation to the Contractor shall be for any reasonable costs incurred by the Contractor up to the time of abandonment, termination or suspension. The Contractor shall submit full documentation of costs incurred.

24. PERFORMANCE BOND, PAYMENT BOND, LABOR AND MATERIALS BOND

The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

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 permit a copy to be made.

The Contractor shall be required to furnish in duplicate a Performance Bond and a Labor and Material Payment bond, each in the amount of one hundred percent (100%) of the Contract Sum, written by a surety company licensed to do business in the State of Georgia and approved by the Owner.

25. GOVERNING LAW

This Agreement shall be deemed to be made in and construed in accordance with the laws of the State of Georgia.

26. NONDISCRIMINATION

(As required by Title VI of the Civil Rights Act of 1964; Department of Transportation 49 CFR Part 21; and Section 520 of the Airport and Airway Improvement Act of 1982).

Contractor shall comply with and shall ensure that the following Non-Discrimination clause is inserted in all subcontracts, subleases, and other agreements at all tiers:

"The Contractor assures that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance."

27. BASIS OF DESIGN

The basis of design for the Thrifty Car Wash and recovery System is the NS Wash Systems ECO 5-TB or approved equal. This system is currently installed in three

of the existing Rental Car Facilities and fits well within the wash bays. It is the intent of the Airport to install a wash system which will meet the criteria set forth in the plans and specifications. Therefore, if another system is proposed to be installed, the proposer shall submit that system as an approved equal prior to bid opening for review by the Airport.

## SECTION 09912 – INTERIOR PAINTING

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes surface preparation and the application of paint systems generally on the following interior substrates:

- 1. Concrete masonry units (CMU).

#### 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Product List: For each product indicated, include the following:
  - 1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
  - 2. Printout of current “MPI Approved Products List” for each product category specified in Part 2, with the proposed product highlighted.

#### 1.4 QUALITY ASSURANCE

- A. MPI Standards:
  - 1. Products: Complying with MPI standards indicated and listed in “MPI Approved Products List.”
  - 2. Preparation and Workmanship: Comply with requirements in “MPI Architectural Painting Specification Manual” for products and paint systems indicated.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).

1. Maintain containers in clean condition, free of foreign materials and residue.
2. Remove rags and waste from storage areas daily.

## 1.6 PROJECT CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

## PART 2 – PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
  1. Benjamin Moore & Co.
  2. Duron, Inc.
  3. ICI Paints.
  4. PPG Architectural Finishes, Inc.
  5. Sherwin-Williams Company (The).

### 2.2 PAINT, GENERAL

- A. Material Compatibility:
  1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- B. Colors: As selected by airport from manufacturer's full range, custom mixing may be required by some paint manufacturers.

## 2.3 BLOCK FILLERS

A. Interior/Exterior Latex Block Filler: MPI #4.

1. VOC Content: E Range of E2 or E3.

## 2.4 PRIMERS/SEALERS

A. Interior Latex Primer/Sealer: MPI #50.

1. VOC Content: E Range of E2 or E3.
2. Environmental Performance Rating: EPR 1 or EPR 2.

## 2.5 LATEX PAINTS

A. High-Performance Architectural Latex (Eggshell): MPI #139 (Gloss Level 3).

1. VOC Content: E Range of E2 or E3.
2. Environmental Performance Rating: EPR 5.

## 2.6 QUICK-DRYING ENAMELS

A. Quick-Drying Enamel (Semigloss): MPI #81 (Gloss Level 5).

1. VOC Content: E Range of E2 or E3.

# PART 3 – EXECUTION

## 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.
- B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- C. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
  1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
- B. Remove plates, machined surfaces, and similar items already in place that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
  - 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- C. Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.
- D. Concrete Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Gypsum Board substrates: Do not begin paint application until finishing compound is dry and sanded smooth.

### 3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
  - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.



- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

### 3.4 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.5 INTERIOR PAINTING SCHEDULE

- A. CMU Substrates:
  - 1. High-Performance Architectural Latex Systems: MPI INT 4.2D.
    - a. Prime Coat: Interior/exterior latex block filler.
    - b. Topcoat: High-performance architectural latex (low sheen).

END OF SECTION 09912

## SECTION 16010 - BASIC ELECTRICAL REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections apply to this Section.

#### 1.2 SUMMARY

- A. This division of the Specifications, Division 16 000, covers the complete interior and exterior electrical systems as indicated on the drawings or as specified herein. Provide all materials, labor, equipment and supervision to install electrical systems.

#### 1.3 QUALITY ASSURANCE

- A. All electrical work shall be in accordance with the following codes and agencies:
  - 1. The National Electrical Code (NFPA 70), 2011 edition with Georgia state amendments
  - 2. The International Building Code, 2006 edition with Georgia state amendments
  - 3. Occupation Safety and Health Administration (OSHA)
  - 4. Manufacturer's written requirements.
  - 5. Municipal ordinances governing electrical work.
- B. Material Standards: All material shall be new and shall conform to the standards where such have been established for the particular material in question.

#### 1.4 PERMITS

- A. Obtain all permits and inspections for the installation of this work and pay all charges incident thereto. Deliver to the Owner all certificates of said inspection issued by authorities having jurisdiction.

#### 1.5 WARRANTY

- A. The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3. Prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

#### 1.9 EQUIPMENT REQUIRING ELECTRICAL SERVICE

- A. Review all specification sections and drawings for equipment requiring electrical service. Provide service to and make connections to all such equipment requiring electrical service. Refer to ELECTRICAL CONNECTIONS FOR EQUIPMENT section for connection requirements.
- B. Drawings indicate design loads and voltages and corresponding control equipment, feeders, and overcurrent devices. If equipment actually furnished have loads other than those indicated on the drawings or specified herein, control equipment, feeders, and overcurrent devices shall be adjusted in size accordingly at no additional cost to the Owner. Such adjustment shall be subject to the review of the Architect.
- C. Incidental items not indicated on Drawings or mentioned in Specifications but that can legitimately and reasonably be inferred to belong to the Work or be necessary in good practice to provide a complete system, shall be furnished and installed as though itemized here in detail. This includes connection requirements for air conditioning and refrigeration equipment as outlined by NEC Article 440.

#### 1.10 MECHANICAL SYSTEMS INTERFACE

- A. All control wiring for plumbing and heating, ventilating and air conditioning systems shall be installed under Division 15. Review Division 15 specifications and shop drawings for control systems to assure compatibility between equipment furnished under Division 16 and wiring furnished under Division 15.
- B. Motor controllers (starters) shall be furnished and installed under Division 16, unless specified to be furnished as an integral component of the equipment. Provide the number and type of auxiliary contacts necessary to interlock the equipment and provide the specified control sequence.
- C. Power wiring to all motors and motor controllers and between motors and controllers shall be provided in Division 16.
- D. All electric heating equipment shall be provided and installed under Division 15 - HEATING, VENTILATING AND AIR CONDITIONING. Power wiring to all electric heating equipment shall be provided under Division 16 of these specifications.

#### 1.11 SCHEDULING OF OUTAGES

- A. Electrical work requiring interruption of electrical power which would adversely affect the normal operation of the other portions of the Owner's property, shall be done between 12:00am and 4:30am.

including conductors, shall be stored other than in an enclosed weathertight structure. Equipment stored other than as specified above shall be removed from the premises.

- C. Equipment and materials shall not be installed until such time as the environmental conditions of the job site are suitable to protect the equipment or materials. Conditions shall be those for which the equipment or materials are designed to be installed. Equipment and materials shall be protected from water, direct sunlight, cold or heat and high humidity at all times. Equipment or materials damaged or which are subjected to these elements are unacceptable and shall be removed from the premises and replaced.

### 3.2 CLEANING AND PAINTING

- A. Remove oil, dirt, grease and foreign materials from all raceways, fittings, boxes and cabinets to provide a clean surface for painting. Touchup scratched or marred surfaces of lighting fixtures, cabinet trims or equipment enclosures with paint furnished by the equipment manufacturers specifically for that purpose.
- B. Unless indicated on the drawings or specified herein to the contrary, all painting shall be done under the PAINTING Section of these Specifications.

### 3.3 EXCAVATION, TRENCHING AND BACKFILLING

- A. Perform all excavation to install conduits indicated on the drawings or specified herein. During excavation, pile material for backfilling back from the banks of the trench to avoid overloading and to prevent slides and cave-ins. Provide shoring as required by OSHA Standards. Remove and dispose of all excavated materials not to be used for backfill. Grade to prevent surface water from flowing into trenches and excavation. Remove any water accumulating therein by pumping. Do all excavation by open cut. No tunneling shall be done unless indicated on the drawings or unless written permission is received from the Architect.
- B. Grade the bottom of trenches to provide uniform bearing and support for conduits on undisturbed soil at every point along its entire length. Tamp overdepths with loose, granular, moist earth. Remove unstable soil that is not capable of supporting equipment or installation and replace with specified material for a minimum of 12" below invert of equipment or installation.
- C. Backfill the trenches with excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand and gravel or soft shale, free from large clods of earth and stones, deposited in 6" layers and rammed until the installation has a cover of not less than the adjacent ground but not greater than 2" above existing ground. Backfilling shall be carried on simultaneously on both sides of the trench so that injurious pressures do not occur. Compaction of the filled trench shall be at least equal to that of the surrounding undisturbed material. Do not settle backfill with water. Reopen any trenches not meeting compaction requirements or where settlement occurs, refill, compact, and restore surface to grade and compaction indicated on the drawings, mounded over and smoothed off.

## SECTION 16110 - RACEWAYS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This section covers the complete interior and exterior raceway system.
- B. Definition: The term conduit, as used in this Specification, shall mean any or all of the raceway types specified.

#### 1.3 QUALITY ASSURANCE

- A. Referenced Industry Standard: The following specifications and standards are incorporated into and become a part of this Specification by reference.
  - 1. Underwriters' Laboratories, Inc. (UL) Publications:
    - No. 1 Flexible Metal Electrical Conduit
    - No. 6 Rigid Galvanized Conduit
    - No. 467 Electrical Grounding and Bonding
    - No. 651 Rigid Nonmetallic Electrical Conduit
    - No. 797 Electrical Metallic Tubing
    - No. 1242 Intermediate Metal Conduit
  - 2. American National Standards Institute (ANSI):
    - C-80.1 Rigid Galvanized Conduit.
    - C-80.3 Electrical Metallic Tubing.
  - 3. National Fire Protection Association (NFPA):
    - No. 70 National Electrical Code (NEC).
- B. Acceptable Manufacturers: Products of the following manufacturers, which comply with these specifications, are acceptable.
  - 1. Metallic Conduit Fittings:
    - a. Appleton
    - b. Carlon
    - c. Crouse Hinds
    - d. Killark
    - e. O-Z/Gedney
    - f. RACO
    - g. Thomas and Betts
  - 2. Support Channel:
    - a. Kindorf
    - b. Powers

screw type with two (2) screws each or compression type. Couplings for conduits 2.5" and larger shall be set screw type with four (4) screws each or compression type. All connectors shall be insulated throat type. All set screw connectors encased in walls or floor shall be taped at all joints.

## 2.3 RIGID AND IMC CONDUIT FITTINGS

- A. Fittings for rigid steel and IMC shall be standard threaded couplings, locknuts, bushings and elbows. All materials shall be steel or malleable iron only. Set screw or non-thread fittings are not permitted. Bushings shall be metallic insulating type consisting of insulating insert molded or locked into the metallic body of the fittings. Erickson-type couplings may be used to complete a conduit run.

## 2.4 NON-METALLIC CONDUIT AND FITTINGS

- A. Non-metallic conduit shall be heavy wall, Schedule 40 PVC.
- B. Non-metallic conduit fittings shall be of the same material as the conduit furnished and be the product of the same manufacturer.
- C. Glue for all non-metallic conduit and fittings shall be provided as required by the manufacturer of the conduit being used.

## 2.5 CONDUIT SUPPORTS

- A. All parts and hardware shall be zinc-coated or have equivalent corrosion protection.
- B. Conduit straps shall be single hole cast metal type or two hole galvanized or stainless steel metal type.
- C. Conduit support channels shall be 1.5" x 1.5" x 14 gauge galvanized (or with equivalent treatment) channel. Channel suspension shall be 3/8" threaded steel rods. Use swivel type connector to attach suspension rods to structure. Spring steel clips are not acceptable. Wire or chain is not acceptable for conduit hangers.
- D. Individual conduit hangers shall be galvanized spring steel specifically designed for the purpose, sized appropriately for the conduit type and diameter, and have pre-assembled closure bolt and nut and provisions for receiving threaded hanger rod. Support with 1/4" threaded steel rod for individual conduits 1.5" and smaller and 3/8" rod for individual conduits 2.0" and larger.
- E. Support multiple conduits from metal studs using pre-assembled bar hanger assembly consisting of hanger bar, retaining clips and conduit straps.
- F. Refer to SUPPORTING DEVICES section of these specifications for additional material requirements.



6. Protect conduits against dirt, plaster, and foreign debris with conduit plugs. Plugs shall remain in place until all masonry is complete. Protect conduit stub-ups during construction from damage; any damaged conduits shall not be used.
7. Seal all conduits originating from outside building from below grade and all conduits entering exterior mounted electrical equipment with insulating electrical putty to prevent entrance of moisture. Spray foam is not acceptable.
8. Install conduit with wiring, including homeruns as indicated on the drawings. Any change resulting in a savings in labor or materials is to be made only in accordance with a contract change. Deviations shall be made only where necessary to avoid interferences and when approved by Architect by written authorization.
9. Conduits which penetrate roof membranes shall be installed in accordance with manufacturer's recommendations and architectural specifications.
10. Use flexible conduit for connection to vibrating equipment and rotating machinery and for connection from junction box to flush mounted lighting fixtures only.
11. Separate raceway systems are to be installed for power systems and for control, signal and communications systems. Do not install control, signal or communications cables in the same raceways as branch circuit or feeder cables, unless indicated otherwise on the drawings.
12. Provide expansion fitting in all conduits where length of run exceeds 200 feet or where conduits pass building expansion joints.

**B. Uses Permitted**

1. Conduits installed within concrete floor slabs which are in direct contact with grade or other material shall be galvanized rigid steel (GRS) or intermediate metal conduit (IMC). Conduits which penetrate the building roof shall be galvanized rigid steel (GRS) or intermediate metal conduit (IMC). Where transition is made from raceway in slab to any type of raceway out of slab, make transition with rigid galvanized elbow. For corrosion protection, where elbow penetrates surface, wrap with vinyl all-weather electrical tape or coat with bituminous asphaltic compound, for 6" above and below concrete surface.
2. Conduits installed in direct contact with earth shall be schedule 40, heavy wall PVC.
3. All other conduit, unless excluded herein, not permitted in accordance with the National Electrical Code, or otherwise indicated on the drawings, shall be electrical metallic tubing (EMT).
4. Conduit types shall not be mixed indiscriminately with other types in the same run, unless specified herein or required by the NEC.
5. Use flexible conduit for connections to motors, electrical duct heaters, unit heaters and flush mounted lighting fixtures.
  - a. Flexible conduit used for connection of motors, electric duct heaters and unit heaters shall not exceed 18" in length.
  - b. Flexible conduit from outlet box to flush mounted lighting fixture shall not exceed 6-ft. in length.
  - c. Maintain ground continuity through flexible conduit with green equipment grounding conductor; do not use flexible conduit for ground continuity.
  - d. Liquid tight conduit shall be used to connect equipment in mechanical equipment rooms and exterior installations.
6. No conduit requiring cutting of cross-webs of concrete masonry units is permitted. Conduit shall be threaded through cells or concrete masonry units lowered around conduit. Neither horizontal joint reinforcement nor bond beam reinforcement shall be cut for conduit installation. Conduits shall not be run horizontally in walls.

5. Install all conduits or sleeves penetrating rated fire walls to maintain fire rating of wall or floor.

### 3.2 ADJUSTMENT, CLEANING AND PROTECTION

- A. Clean: Upon completion, clean all installed materials of paint, dirt, and construction debris. All conduit systems shall be cleaned of water and debris prior to the installation of any conductors.

### 3.3 REUSE OF EXISTING CONDUITS

- A. Where existing conduits are specified to be re-used, each conduit shall be cleaned prior to the installation of conductors or cables. A standard flexible mandrel with a diameter approximately 1/4" less than the inside diameter of the conduit shall be pulled through and then a brush with soft bristles which has a diameter equal to the inside diameter of the conduit.
- B. All conduit fittings shall be checked for tightness and retightened, if necessary, and all supports verified and adjusted.

END OF SECTION 16110

## SECTION 16120 - WIRES AND CABLES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. The work required under this section of the specifications consists of furnishing, installation and connections of the building wiring system, 600 volts and below. Exterior branch circuit wiring and feeder conductors extended beyond the building are included. Wiring systems for communication and alarm systems are not included in this section unless specified to be included, by reference, in the respective specification sections for alarm and communication systems.

#### 1.3 QUALITY ASSURANCE

- A. Industry Referenced Standards. The following specifications and standards are incorporated into and become a part of this Specification by Reference.
  - 1. Underwriters' Laboratories, Inc. (UL) Publications:
    - a. No. 44: Rubber - Insulated Wire and Cables
    - b. No. 83: Thermoplastic - Insulated Wires
    - c. No. 493: Thermoplastic - Insulated Underground Feeder and Branch Circuit Cables
    - d. No. 486: Wire Connectors and Soldering Lugs
  - 2. Insulated Cable Engineers Association Standards (ICEA):
    - a. S-61-402: Thermoplastic Insulated Wire and Cable
  - 3. National Electrical Manufacturer's Standards (NEMA):
    - a. WC-5: Thermoplastic Insulated Wire and Cable
  - 4. National Fire Protection Association Publication (NFPA):
    - a. No. 70: National Electrical Code (NEC)
  - 5. Federal Specifications (Fed. Spec.):
    - a. J-C-30A(1) Cable and Wire Electrical (Power Fixed Installations)
    - b. HH-I-595C: Insulation Type, Electrical, Pressure-Sensitive Adhesive, Plastic
- B. Acceptable Manufacturers. Products produced by the following manufacturers which conform to this specification are acceptable.
  - 1. Hydraulically applied conductor terminations:
    - a. Square D
    - b. Burndy
    - c. IlSCO
    - d. Scotch (3M)
    - e. Thomas and Betts (T&B)
    - f. Anderson

- D. Conductor size shall be a minimum of No. 12 AWG. Conductor size shall not be less than indicated on the drawings.
- E. Insulation voltage level rating shall be 600 volts.

## 2.2 PRODUCT/MATERIALS DESCRIPTION

- A. All conductors shall be stranded copper, 75°C. type THW, THWN or XHHW unless otherwise indicated on the drawings, required by the National Electrical Code, or specified elsewhere in Division 16. Where fixtures are used as raceway use 90°C type THHN or XHHN conductors.
- B. Fixture wire shall be No. 16 AWG silicone rubber insulated, stranded fixture wire, type SFF-2 (150°C), or No. 16 AWG thermoplastic, nylon jacketed stranded fixture wire, type TFFN (90°C). Color code as specified herein shall not be required for fixture wire; however, neutral conductor shall be identified distinctly from phase conductors.
- C. Control conductors for use on 120 volt control wiring systems shall be No. 12 AWG stranded type THHN/THWN, unless indicated otherwise on the drawings.
- D. Splices and taps (No. 10 AWG and smaller) - Connectors for solid conductors shall be solderless, screw-on, spring pressure cable type, 600 volt, 105°C. with integral insulation and UL approved for aluminum and copper conductors. Connectors for stranded conductors shall be crimp-on type with integral insulating cover.
- E. Splices and taps (No. 8 and larger) - Hydraulically applied crimping sleeve or tap connector sized for the conductors. Insulate the hydraulically applied connector with 90°C., 600 volt insulating cover provided by the connector manufacturer. Insulator materials and installation shall be approved for the specific application, location, voltage and temperature and shall not have an insulation value less than the conductors being joined.
- F. Electrical insulating tape shall be 600 volt, flame retardant, cold and weather resistant, minimally .85 mil thick plastic vinyl material; Scotch No. 88, Tomic No. 85, Permacel No. 295.

## PART 3 - EXECUTION

### 3.1 EXECUTION

- A. Install all wiring in raceway system.
- B. Connect all conductors. Torque each terminal connection to the manufacturers recommended torque value. A calibrated torqueing tool shall be used to insure proper torque application. Any conductors nicked or ringed while removing insulation shall be replaced.
- C. Do not install more conductors in a raceway than indicated on the drawings. A maximum of three branch circuits are to be installed in any one conduit, on 3 phase 4 wire system, unless specifically indicated otherwise on the drawings. A maximum of two branch circuits are to be installed in any one conduit, on 1 phase 3 wire systems, unless specifically indicated otherwise

## SECTION 16130 - BOXES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. The work required under this section of the specifications consists of the installation of outlet boxes, pull boxes, and junction boxes throughout the wiring system including box supports.
- B. Definition: Box, as used in this specification, includes all outlet, device, junction, and pull boxes. Feeder shall mean all conductor circuits larger than #8 AWG.

#### 1.3 QUALITY ASSURANCE

- A. Referenced Industry Standards: The following specifications and standards are incorporated into and become a part of this specification by reference.
  - 1. Underwriters' Laboratories, Inc. (UL) Publications:
    - a. No. 50: Electrical Cabinets and Boxes
    - b. No. 467: Electrical Grounding and Bonding Equipment
    - c. No. 514: Electrical Outlet Boxes and Fittings
  - 2. National Fire Protection Association (NFPA):
    - a. No. 70: National Electrical Code (NEC)
- B. Coordination: Review architectural drawings for areas where outlets occur within specific architectural or structural features and install outlets as shown on architectural drawings; or if not shown, accurately center and align boxes within the architectural features or detail.
- C. Acceptable Manufacturers:
  - 1. Exterior junction or pull boxes:
    - a. Quaztite
    - b. CDR Systems

### PART 2 - PRODUCTS

#### 2.1 GENERAL MATERIALS REQUIREMENTS

- A. Furnish all materials specified herein.
- B. All boxes shall be UL listed and labeled.



## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. All boxes shall be completely accessible and as required by the NEC.
- B. Provide an outlet box for each lighting fixture and for each device. Boxes shall not be smaller than indicated in this section of the specifications and shall be larger if required by Article 370 of the National Electrical Code for the number and size of conductors installed.
- C. Support every box from structure:
  - 1. Secure to wood with wood screws.
  - 2. Secure to hollow masonry with toggle bolts.
  - 3. Secure to metal with sheet metal screws, machine bolts, or clamps.
  - 4. Anchors for solid masonry and concrete shall be self drilling expansion shields, insert expansion shields, or lead shields with machine bolts.
  - 5. Hub type cast boxes need not be directly attached to structure if rigid conduit is used and supported in conformance with the NEC.
- D. Remove only knockouts as required and plug all unused openings. Use threaded plugs for cast boxes and snap-in metal plugs for sheet metal boxes.
- E. Install pull boxes when any of the following conditions apply:
  - 1. Where indicated on the drawings.
  - 2. Where conduit run exceeds 200 ft. from box to box or box to terminal.
  - 3. Where conduit contains more than 4-90 degree bends or the equivalent offsets.
  - 4. To facilitate conductor installation or to insure that the manufacturer's maximum pulling tension is not exceeded.
  - 5. As described in the RACEWAYS section of the specifications for crossing expansion joints.
- F. Do not splice conductors in pull boxes. Splices are not permitted in pull boxes except when approved in writing by the Architect or where shown on the drawings. Where splices are permitted, make splices with splicing sleeves attached to conductors with hydraulic crimping tool. Split bolt connectors are not acceptable for splices within pull boxes.
- G. Where a pull box is required, one shall be installed for each individual branch circuit conduit or each feeder. It shall contain only the feeder conductors or those conductors in the conduit. A combined pull box for multiple branch conduits or feeders is not permitted, unless approved by the Architect or indicated on the drawings. Where permitted for multiple circuits within pull box:
  - 1. Circuit conductors and feeders shall be individually laced with nylon tie straps of the type with enlarged tab to permit identification of each circuit and feeder within pull box. Identify each with respect to load served.
  - 2. Feeder circuits shall be wrapped, in accordance with manufacturer's recommendations, with arc-proof and fire proof tape.
- H. Box covers shall be in place and secured to box.

## SECTION 16142 - ELECTRICAL CONNECTIONS FOR EQUIPMENT

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Extent of electrical connections for equipment is indicated by drawings and schedules. Electrical connections are hereby defined to include connections used for providing electrical power to equipment.
- B. Applications of electrical power connections specified in this section include the following:
  - 1. To resistive heaters.
  - 2. From electrical source to motor starters.
  - 3. From motor starters to motors.
  - 4. To lighting fixtures.
  - 5. To motor disconnects
  - 6. To units of communication, signal, alarm, sound, and video systems.
- C. Electrical connections for equipment, not furnished as integral part of equipment, are specified in Division - 15 and other Division - 16 sections, and are work of this section.
  - 1. Division 1 - GENERAL REQUIREMENTS
  - 2. Division 11 - EQUIPMENT
  - 3. Division 13 - SPECIAL CONSTRUCTION
  - 4. Division 15 - MECHANICAL
- D. Motor starters and controllers, not furnished as integral part of equipment, are specified in applicable Division - 16 sections, and are work of this section.
- E. Raceways and wires/cables required for connecting motors and other electrical units of equipment are specified in applicable Division 16 sections, and are work of this section.
- F. Electrical identification for wire/cable conductors is specified in Division - 16 section, ELECTRICAL IDENTIFICATION, and is work of this section.
- G. Refer to Division - 15 sections for control system wiring; work is not included in this section.

#### 1.3 QUALITY ASSURANCE

- A. NEC Compliance: Comply with applicable requirements of NEC as to type products used and installation of electrical power connections (terminals and splices), for junction boxes, motor starters, and disconnect switches. NEC Article 110-14, "ELECTRICAL CONNECTIONS" applies to above.

## 2.2 MATERIALS AND COMPONENTS

- A. General: For each electrical connection indicated, provide 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 items and accessories as needed to complete splices and terminations of types indicated.
- B. Metal Conduit, Tubing and Fittings:
  - 1. Provide metal conduit, tubing and fittings of types, grades, sizes and weights (wall thicknesses) indicated for each type service. Where types and grades are not indicated, provide proper selection as determined by Installer to fulfill wiring requirements and comply with NEC requirements for raceways. Provide products complying with Division - 16 BASIC ELECTRICAL MATERIALS and RACEWAYS section, and in accordance with the following listing of metal conduit, tubing and fittings:
    - a. Rigid steel conduit.
    - b. Rigid metal conduit fittings.
    - c. Electrical metallic tubing.
    - d. EMT fittings.
    - e. Flexible metal conduit.
    - f. Flexible metal conduit fittings.
    - g. Liquid-tight flexible metal conduit.
    - h. Liquid-tight flexible metal conduit fittings.
- C. Wires, Cables, and Connectors:
  - 1. Provide wires, cables, and connectors complying with Division - 16 basic electrical materials and methods section "WIRES AND CABLES".
  - 2. Wires/Cables: Unless otherwise indicated, provided wires/cables (conductors) for electrical connections which match, including sizes and ratings, of wires/cables which are supplying electrical power. Provide copper conductors with conductivity of not less than 98% at 20°C (68°F).
  - 3. Connectors and Terminals: Provide electrical connectors and terminals which mate and match, including sizes and ratings, with equipment terminals which are recommended by equipment manufacturer for intended applications.
  - 4. Electrical Connection Accessories: Provide electrical insulating tape, heat-shrinkable insulating tubing and boots, wirenuts and cable ties as recommended for use by accessories manufacturers for type services indicated.

## PART 3 - EXECUTION

### 3.1 INSTALLATION OF ELECTRICAL CONNECTIONS:

- A. Install electrical connections as indicated; in accordance with equipment manufacturer's written instructions and with recognized industry practices, and complying with applicable requirements of UL, NEC and NECA's "Standard of Installation" to ensure that products fulfill requirements.

### 3.2 FIELD QUALITY CONTROL

- A. Upon completion of installation of electrical connections, and after circuitry has been energized with rated power source, test connections to demonstrate capability and compliance with requirements. Ensure that direction of rotation of each motor fulfills requirement. Correct malfunctioning units at site, then retest to demonstrate compliance.

END OF SECTION 16142

## SECTION 16143 - WIRING DEVICES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. The work included under this section of the specifications consists of the installation of wiring devices, i.e. switches and receptacles and device plates. All materials shall be provided under this section of the specifications.
- B. Select devices from lists of acceptable devices contained in this section of the specifications.
- C. The catalog numbers listed herein for switches and receptacles are for items with brown finish. Notwithstanding catalog numbers, the switches and receptacles provided on this project shall have grey finish unless otherwise indicated. All special purpose receptacles shall be provided in black finish.

#### 1.3 QUALITY ASSURANCE

- A. NEMA WD-1 General Purpose Wiring
- B. NEMA WD-5 Specific Purpose Wiring Devices

### PART 2 - PRODUCTS

#### 2.1 SWITCHES

- A. Specification grade. Hubbell, Cooper or Leviton.

#### 2.2 RECEPTACLES

- A. Specification grade. Hubbell, Cooper or Leviton.

#### 2.3 SPECIAL PURPOSE RECEPTACLES

- A. Special purpose receptacles shall be of the type as indicated on the drawings.



## SECTION 16170 - CIRCUIT AND MOTOR DISCONNECTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This section covers disconnect switches for electrical equipment, 600V and below, and fuses mounted in the disconnect devices.
- B. Furnish and install disconnect switches for any of the following conditions:
  - 1. Where indicated on the drawings.
  - 2. For all motors located out-of-sight of its motor controller.
  - 3. For water heaters.
  - 4. For electrical duct heaters.
  - 5. Where required by the National Electrical Code.

#### 1.3 QUALITY ASSURANCE

- A. Referenced Industry Standard. The following specifications and standards are incorporated into and become a part of this Specification by reference.
  - 1. Underwriters' Laboratories, Inc. (UL) Publications:
    - a. No. 98: Enclosed Switches
    - b. No. 198.2: High-Interrupting Capacity Fuses, Current Limiting Type
    - c. No. 198.4: Class R fuses
  - 2. National Fire Protection Association (NFPA) Publications:
    - a. No. 70: National Electrical Code (NEC)
  - 3. National Electrical Manufacturers Association (NEMA) Publications:
    - a. No. KS 1: Enclosed Switches
- B. Acceptable Manufacturers: Products of the following manufacturers, which comply with these specifications, are acceptable:
  - 1. General Electric
  - 2. Cutler-Hammer
  - 3. Square D
  - 4. Siemens
- C. Coordination: Coordinate installations with architectural and structural features, equipment installed under other sections of the specifications and electrical equipment to insure disconnect switch access and insure that clearance minimums are provided.

- E. Fusible switches through 600 amp shall be provided with rejection clips to accept RK1 or RK5 class fuses only. Fusible switches larger than 600 amp shall be suitable for class L fuses. Furnish and install a complete set of fuses in each disconnect sized as indicated on the drawings. Fuses serving predominantly motor or transformer loads shall be dual-element, time delay type, otherwise non-time delay fast acting type is required. Fuses shall be current limiting with 200,000 AIC.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Locate disconnect switches to maintain line of sight and to provide working clearance and full accessibility as required by the National Electrical Code.
- B. Unless indicated otherwise on the drawings, locate disconnects adjacent to equipment served.
- C. Lace and group conductors installed in disconnect with nylon tie straps. Only one conductor shall be installed under terminals. Form and train conductors in enclosure neatly parallel and at right angles to sides of box. Uninsulated conductor shall not extend beyond 1/8" from terminal lug.
- D. Mounting and Support
  - 1. Enclosure shall be secured to structure by a minimum of four (4) fastening devices. A 1.5" minimum diameter round washer shall be used between head of screw or bolt and enclosure.
  - 2. Mounting
    - a. Enclosures shall be mounted where indicated on the drawings or specified herein. Support from the structure with fastening device specified.
    - b. Attach enclosure directly to masonry, concrete, or wood surfaces.
    - c. Mount enclosure on metal channel (strut), which is connected to structure with fastening device specified, for installations on steel structure, sheet metal equipment enclosure, or sheet rock walls.
    - d. Where enclosure is not indicated on a wall or structure, construct a metal channel (strut) free standing frame secured to floor, pad, or other appropriate building structure.
    - e. Mount switch with handle between 36" and 60" above floor or grade, unless otherwise indicated on the drawings.
- E. Do not splice conductors in enclosure. Where required, install junction box or wireway adjacent to disconnect and splice or tap conductors in box. Refer to number of conductors in a conduit limitation defined in the WIRES AND CABLES section of the specifications and do not exceed.
- F. Conductors not terminating in disconnect shall not extend through or enter disconnect enclosure.
- G. Install push-in knock-out closure plugs in any unused knock-out openings.

## SECTION 16190 - SUPPORTING DEVICES

### PART I - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Extent of supports, anchors, sleeves and seals is indicated by drawings and schedules and/or specified in other Division - 16 sections.
- B. Types of supports, anchors, sleeves and seals specified in this section include the following:
  - 1. C-clamps.
  - 2. I-beam clamps.
  - 3. One-hole conduit straps.
  - 4. Two-hole conduit straps.
  - 5. Round steel rods.
  - 6. Expansion anchors.
  - 7. Toggle bolts.
  - 8. Wall and floor seals.
- C. Supports, anchors, sleeves and seals furnished as part of factory-fabricated equipment are specified as part of that equipment assembly in other Division - 16 sections.

#### 1.3 QUALITY ASSURANCE

- A. NEC Compliance: Comply with NEC requirements as applicable to construction and installation of electrical supporting devices.
- B. NECA Compliance: Comply with National Electrical Contractors Association's "Standard of Installation" pertaining to anchors, fasteners, hangers, supports, and equipment mounting.
- C. UL Compliance: Provide electrical components which are UL-listed and labeled.
- D. FS Compliance: Comply with Federal Specification FF-S-760 pertaining to retaining straps for conduit, pipe and cable.

#### 1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's data on supporting devices including catalog cuts, specifications, and installation instructions, for each type of support, anchor, sleeve and seal.

body, neoprene sealing grommets and rings, metal pressure rings, pressure clamps, and cap screws.

E. U-Channel Strut Systems:

1. Provide U-channel strut system for supporting electrical equipment, 12-gage hot-dip galvanized steel, of types and sizes indicated; construct with 9/16" diameter holes, 8" o.c. on top surface, with standard green finish, and with the following fittings which mate and match with U-channel.
  - a. Fixture hangers.
  - b. Channel hangers.
  - c. End caps.
  - d. Beam clamps.
  - e. Wiring studs.
  - f. Thinwall conduit clamps.
  - g. Rigid conduit clamps.
  - h. Conduit hangers.
  - i. U-bolts.
2. Manufacturers: Subject to compliance with requirements, provide channel systems of one of the following:
  - a. Allied Tube and Conduit Corporation.
  - b. B-Line Systems, Inc.
  - c. Elcen Metal Products Company.
  - d. Greenfield Mfg Company, Inc.
  - e. Midland-Ross Corporation.
  - f. OZ/Gedney Div; General Signal Corporation.
  - g. Power-Strut Div; Van Huffer Tube Corporation.
  - h. Unistrut Div; GTE Products Corporation.

2.2 FABRICATED SUPPORTING DEVICES

- A. Pipe Sleeves: Provide pipe sleeves of one of the following:
1. Sheet Metal: Fabricate from galvanized sheet metal; round tube closed with snaplock joint, welded spiral seams, or welded longitudinal joint. Fabricate sleeves from the following gage metal: 3" and smaller, 20-gage; 4" to 6", 16-gage; over 6", 14" gage.
  2. Steel Pipe: Fabricate from Schedule 40 galvanized steel pipe.
  3. Iron Pipe: Fabricate from cast-iron or ductile-iron pipe.
  4. Plastic Pipe: Fabricate from Schedule 80 PVC plastic pipe.
- B. Sleeve Seals: Provide modular mechanical type seals, consisting of interlocking synthetic rubber links shaped to continuously fill annular space between pipe and sleeve, connected with bolts and pressure plates which cause rubber sealing elements to expand when tightened, providing watertight seal and electrical insulation.

## SECTION 16195 - ELECTRICAL IDENTIFICATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Extent of electrical identification work is as outlined by this specification.
- B. Types of electrical identification work specified in this section include the following:
  - 1. Buried cable warnings.
  - 2. Electrical power, control and communication conductors.
  - 3. Operational instructions and warnings.
  - 4. Danger signs.
  - 5. Equipment/system identification signs.
- C. Refer to Division 1 General Requirements section IDENTIFICATION SYSTEMS, for equipment and system nameplates, and performance data; not work of this section.

#### 1.3 QUALITY ASSURANCE

- A. NEC Compliance: Comply with NEC as applicable to installation of identifying labels and markers for wiring and equipment.
- B. UL Compliance: Comply with applicable requirements of UL Std 969, "Marking and Labeling Systems", pertaining to electrical identification systems.
- C. ANSI Compliance: Comply with applicable requirements of ANSI Std A13.1, "Scheme for the Identification of Piping Systems".
- D. NEMA Compliance: Comply with applicable requirements of NEMA Std No's WC-1 and WC-2 pertaining to identification of power and control conductors.

#### 1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's data on electrical identification materials and products.
- B. Samples: Submit samples of each color, lettering style and other graphic representation required for each identification material or system.

### PART 2 - PRODUCTS



1. Provide manufacturer's standard, self-adhesive or pressure-sensitive, pre-printed, flexible vinyl signs for operational instructions or warnings; of sizes suitable for application areas and adequate for visibility, with proper wording for each application, e.g., 208V, EXHAUST FAN, RECTIFIER.
  2. Colors: Unless otherwise indicated, or required by governing regulations, provide white signs with black lettering.
- G. Baked Enamel Danger Signs:
1. General: Provide manufacturer's standard "DANGER" signs of baked enamel finish on 20-gage steel; of standard red, black and white graphics; 14" x 10" size except where 10" x 7" is the largest size which can be applied where needed, and except where larger size is needed for adequate vision; with recognized standard explanation wording, e.g., HIGH VOLTAGE, KEEP AWAY, BURIED CABLE, DO NOT TOUCH SWITCH.
- H. Engraved Plastic-Laminate Signs:
1. Provide engraving stock melamine plastic laminate, complying with FS L-P-387, in sizes and thicknesses indicated, engraved with engraver's standard letter style of sizes and wording indicated, black face and white core plies (letter color) except as otherwise indicated, punched for mechanical fastening except where adhesive mounting is necessary because of substrate.
  2. Thickness: 1/8", except as otherwise indicated.
  3. Fasteners: Self-tapping stainless steel screws, except contact-type permanent adhesive where screws cannot or should not penetrate substrate.

## 2.3 LETTERING AND GRAPHICS

- A. General: Coordinate names, abbreviations and other designations used in electrical identification work, with corresponding designations shown, specified or scheduled. Provide numbers, lettering and wording as indicated or, if not otherwise indicated, as recommended by manufacturer or as required for proper identification and operation/maintenance of electrical systems and equipment. Comply with ANSI A13.1 pertaining to minimum sizes for letters and numbers.

## PART 3 - EXECUTION

### 3.1 APPLICATION AND INSTALLATION

- A. General Installation Requirements:
1. Install electrical identification products as indicated, in accordance with manufacturer's written instructions, and requirements of NEC and OSHA.
  2. Coordination: Where identification is to be applied to surfaces which require finish, install identification after completion of painting.
  3. Regulations: Comply with governing regulations and requests of governing authorities for identification of electrical work.
- B. Box Identification:

lettering in black field. Provide text matching terminology and numbering of the contract documents and shop drawings. Provide signs for each unit of the following categories of electrical work:

- a. Panelboards, electrical cabinets and enclosures.
2. Install signs at locations indicated or, where not otherwise indicated, at location for best convenience of viewing without interference with operation and maintenance of equipment. Secure to substrate with fasteners, except use adhesive where fasteners should not or cannot penetrate substrate. Identification of flush mounted cabinets and panelboards shall be on the inside of the device.
3. Panelboards, individually mounted circuit breakers, and each feeder breaker in the distribution panels shall be identified with an engraved plastic laminate sign. Plastic nameplates shall be multicolored laminated plastic with faceplate and core as scheduled. Lettering shall be engraved minimum 1/4" high letters.
  - a. 208/120 volt normal power equipment shall be identified with black faceplate with white core.
  - b. 115/230 volt normal power equipment shall be identified with orange faceplate with white core.
  - c. Equipment identification is to indicate the following:
    - 1) Equipment ID abbreviation.
    - 2) Voltage, phase, wires and frequency.
    - 3) Normal or other system.
    - 4) Power source origination. Example:
      - a) Panel HA
      - b) 208/120, 3 phase, 4 wire
      - c) Normal System
      - d) Fed by SWBD-7
  - d. Submit complete schedule with the shop drawings listing all nameplates and information contained thereon.

END OF SECTION 16195

## SECTION 16470 – PANELBOARDS - EXISTING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. The work required under this section of the specifications consists of the furnishing, installation and connection of new circuit breakers to existing panelboards. Modification to existing panelboards shall be as required to accommodate circuit breakers.

#### 1.3 QUALITY ASSURANCE

- A. Industry Referenced Standards. The following specifications and standards are incorporated into and become a part of this Specification by Reference.
  - 1. Underwriters' Laboratories, Inc. (UL) Publications:
    - a. No. 489: Molded Case Circuit Breakers and Circuit Breaker Enclosure
  - 2. Federal Specifications (Fed Spec):
    - a. WC-375: Circuit Breakers
  - 3. National Electrical Manufacturer's Association (NEMA) Publications:
    - a. No. AB-3: Molded Case Circuit Breakers
  - 4. National Fire Protection Association (NFPA):
    - a. No. 70: National Electrical Code (NEC)
- B. Acceptable Manufacturers: Products of the following manufacturers, which comply with these specifications, are acceptable.
  - 1. General Electric
  - 2. Square D
  - 3. Siemens
- C. Coordination: Coordinate installation with existing conditions.

#### 1.4 SUBMITTALS

- A. Refer to BASIC ELECTRICAL REQUIREMENTS for submittal requirements.
- B. Manufacturers Product Data:
  - 1. Submit material specifications and installation data for products specified under Part 2 - Products to include:
    - a. Circuit breakers

2. Provide handle lock-off device to prevent manually turning off device without removal. Install on all circuit breakers indicated.

#### 2.4 SEPARATELY ENCLOSED MOLDED CASE CIRCUIT BREAKERS

- A. Where separately enclosed molded case circuit breakers are shown on the drawings, provide circuit breakers in accordance with the applicable requirements of those specified for panelboards.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Lace and group conductors installed in panels with nylon tie straps. Only one conductor shall be installed under terminal of individual circuit breakers. Form and train conductors in panel enclosure neatly parallel and at right angles to sides of box. Uninsulated conductor shall not extend beyond one-eighths inch from terminal lug.
- B. Do not splice conductors in panels. Where required, install junction box adjacent to panel and splice or tap conductors in box. Refer to number of conductors in a conduit limitation defined in the conductors and cables section of the specifications and do not exceed.
- C. Conductors not terminating in panelboard shall not extend through or enter panel enclosure.
- D. Maintain conductor phase color code requirement described in the wires and cables section of the specifications.
- E. Provide in each panelboard a typewritten circuit directory mounted on interior of panel door. Directory shall reflect any field changes or additions.
- F. Install push-in knock-out closure plugs in any unused knock-out openings.

#### 3.2 CLEANING AND ADJUSTMENT

- A. After completion, clean the interior and exterior of dirt.

#### 3.3 FIELD QUALITY CONTROL

- A. Refer to the ELECTRICAL EQUIPMENT ACCEPTANCE TESTING section of this specification.
- B. Contractor shall verify in the field that all factory-made connections and terminations are torqued to manufacturer's recommended tolerances.

END OF SECTION 16470