

Mayfield-Graves County Airport (M25)

Project Specifications:

*Runway Markings, Sign
Panel Replacement and
Apron Crack Repair and Seal
Coat*

Mayfield-Graves County Airport Board
Mayfield, KY



Stantec



DATE OF ISSUE: 5/14/2013

MAYFIELD-GRAVES COUNTY AIRPORT BOARD

Todd McBee, Chairman

Rupert H. Holmes III, Treasurer

Brian Burnett, Member

Romey Holmes, Member

Joe Kendall, Member

Johnny Jackson, Member

Eddie Robertson, Airport Manager

STATE OF TEXAS, COUNTY OF DALLAS

BEFORE ME, the undersigned authority, on this day personally appeared _____

known to me to be the person whose name is subscribed to the foregoing instrument,

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and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 20____.

Notary Public in and for the State of Texas

My commission expires this _____ day of _____, 20____.

Notary Public in and for the State of Texas

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REQUEST FOR BIDS

Advertisement

Mayfield-Graves County Airport Board
Mayfield-Graves County Airport

Sealed proposals for furnishing all labor, materials and equipment and performing all work necessary to complete a Runway marking, sign panel replacement and apron seal coat and crack repair project will be received by Chairman, Todd McBee at the Mayfield-Graves County Airport Terminal, 227 Airport Rd. Mayfield, KY 42066 until 1:00 p.m. CDT on June 18th, 2013. At that time and location, all proposals will be publicly opened and read aloud. Proposals may be hand delivered immediately prior to the Bid Opening. Proposals may also be delivered before the Bid Opening in sealed envelopes addressed to:

Todd McBee, Chairman
Mayfield-Graves County Airport Board
227 Airport Road
Mayfield, KY 42066

The upper left hand corner of the sealed envelope must identify the following information:

CONFIDENTIAL (DO NOT OPEN)
CONTRACT PROPOSAL
Bid of [Name of Contractor]
for marking and seal coat project
at Mayfield-Graves County Airport
To be opened at 1:00 p.m. CDT on June 18th, 2013

Plans may be obtained from Lynn Imaging (www.lynnimaging.com) upon payment of \$75, a non-refundable deposit. Direct telephone line: (502-499-8400) – Attn: Tonya Thomason. All contractors and subcontractors bidding on this project must be prequalified through the Kentucky Transportation Cabinet.

Project Description: This project consists of the removal and marking of the runway numbers, apron crack repair and seal coat, sign panel replacement and apron markings.

Each sealed proposal shall be accompanied by a certified check, cashier's check, or satisfactory bid bond, in a sum that is not less than five (5) percent of the aggregate amount of bid, payable to the Mayfield-Graves County Airport Board.

The successful bidder will be required to execute Contract and to provide Contract Surety in an amount equal to one hundred (100) percent of the bid amount for performance, and a bond in the amount equal to one hundred (100) percent of the bid amount guaranteeing the payment of all labor, materials, and etc.

Rights to waive any formality in any proposed guarantee, to reject any and all bids, and to negotiate with the apparent low bidder to such extent as may be necessary, are reserved.

No bidder may withdraw his bid for a period of sixty (60) calendar days after the scheduled closing time for the receipt of bids. Bids may be held by the Mayfield-Graves County Airport Board for a

Request For Bids

period not to exceed sixty (60) calendar days from the date of the bid opening for the purpose of evaluating bids prior to award of contract.

The following provisions apply to this contract:

TITLE 49 United States Code, CHAPTER 501 – Buy American Preferences

DOT Regulation 49 CFR PART 30 - Denial of Public Works Contracts to Suppliers of Goods and Services of Countries that Deny Contracts to Suppliers of Goods and Services of Countries that Deny Procurement Market Access to U.S. Contractors (Foreign Trade Restriction).

DOL Regulation 29 CFR Part 5 – Davis Bacon Act

Executive Order 11246 and DOL Regulation 41 CFR PART 60 - Affirmative Action to Ensure Equal Employment Opportunity

DOT Regulation 49 CFR PART 29 - Governmentwide Debarment and Suspension and Governmentwide Requirements for Drug-free Workplace

Questions may be directed to Chad Smith, STANTEC, 601 Grassmere Park, Suite 22, Nashville, TN 37211, Telephone: (615) 885-1144.

NOTICE TO BIDDERS

Mayfield-Graves County Airport Board
Mayfield-Graves County Airport

Contract Work Items

The Bid Schedule containing work items and estimated quantities for this project can be found in the Proposal Forms section of this document. Prospective bidders are hereby advised that the quantities indicated herein are approximate and are subject to change per the Section 40 of the General Provisions.

Contract Time

The owner has established a contract performance time of 3 calendar days to complete Phase 1 and 3 additional calendar days to complete Phase 2. One additional calendar day will be allowed for pavement markings. All project work shall be substantially completed within the stated timeframe. This project is subject to liquidated damages as prescribed within the project specifications.

Bonding Requirements

- 1) *Bid Guarantee*: A bid guarantee from each bidder equivalent to five (5) percent of the bid price. The "bid guarantee" shall consist of a firm commitment such as a bid bond or certified check made payable to the Mayfield-Graves County Airport Board accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.
- 2) *Performance Bond*: A performance bond on the part of the contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.
- 3) *Payment Bond*: A payment bond on the part of the contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

Award of Contract

All proposals submitted in accordance with the instructions presented herein will be subject to evaluation. Bids may be held by the Mayfield-Graves County Airport Board for a period not to exceed 60 calendar days from the date of the bid opening for the purpose of conducting the bid evaluation.

Award of contract will be based on the lowest aggregate sum proposal submitted from those bidders that are confirmed as being responsive and responsible. The right is reserved, as the Mayfield-Graves County Airport Board may require, to reject any and all bids and to waive any informality in the bids received.

Prospective Bidders are hereby advised that award of contract is contingent upon the owner receiving funding assistance from the KDA.

All contractors and subcontractors shall be prequalified with the KYTC.

Federal Provisions

This project is subject to the following Federal provisions, statutes and regulations:

Buy American Certificate – Aviation Safety and Capacity Act of 1990:

Notice to Bidders

This contract is subject to the "Buy American Preferences" of the Aviation Safety and Capacity Act of 1990. Per Title 49 U.S.C. Section 50101, all steel and manufactured products installed under an AIP assisted project must be produced in the United States unless the Federal Aviation Administration has granted a formal waiver. As a condition of bid responsiveness, Bidders must submit the appropriate Buy American certification with their proposal.

Foreign Trade Restriction – 49 CFR Part 30:

The Bidder and Bidder's subcontractors, by submission of an offer and/or execution of a contract, is required to certify that it:

- a. Is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
- b. Has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
- c. Has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Equal Employment Opportunity - Executive Order 11246 and 41 CFR Part 60: The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth within the supplementary provisions. The successful Bidder shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin.

Goals for Minority and Female Participation – Executive Order 11246 and 41 CFR Part 60:

1. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth within the supplementary provisions.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables:

Goals for minority participation for each trade:	5.2%
Goals for female participation in each trade:	6.9%

These goals are applicable to all of the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its Federally involved and non-federally involved construction.

Certification of Nonsegregated Facilities – 41 CFR Part 60: A certification of Nonsegregated Facilities must be submitted prior to the award of a federally-assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

Contractors receiving federally assisted construction contract awards exceeding \$10,000, which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the notice to prospective subcontractors for supplies and construction contracts

where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Debarment, Suspension, Ineligibility and Voluntary Exclusion – 49 CFR Part 29: The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

Additional Provisions

Modification to the project documents may only be made by written addendum by the Owner or Owner's authorized Representative.

The proposal must be made on the forms provided within the bound project specifications. Bidders must supply all required information prior to the time of bid opening.

Submittal of Proposals

Additional information and instruction for submittal of a proposal are provided within the Instructions-to-Bidders. Envelopes containing bids must be sealed and addressed to:

Todd McBee, Chairman
Mayfield-Graves County Airport Board
227 Airport Road
Mayfield, KY 42066

The upper left hand corner of the sealed envelope must identify the following information:

CONFIDENTIAL (DO NOT OPEN)
CONTRACT PROPOSAL
Bid of [Name of Contractor]
for marking and seal coat project
at Mayfield-Graves County Airport
To be opened at 1:00 p.m. CDT on June 18th, 2013

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INSTRUCTIONS TO BIDDERS

Proposal Requirements and Conditions

SECTION 20

20-01 ADVERTISEMENT (Notice to Bidders).

20-02 PREQUALIFICATION OF BIDDERS. Each bidder shall furnish the owner satisfactory evidence of his/her competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available. In addition, each bidder shall furnish the owner satisfactory evidence of his/her financial responsibility. Such evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the Contractor's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether his/her financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect his/her (bidder's) true financial condition at the time such qualified statement or report is submitted to the Owner.

Unless otherwise specified, a bidder may submit evidence that he is prequalified with the State Highway Division and is on the current "bidder's list" of the state in which the proposed work is located. Such evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports hereinbefore specified.

Each bidder shall submit "evidence of competency" and "evidence of financial responsibility" to the Owner at the time of bid opening.

20-03 CONTENTS OF PROPOSAL FORMS. The Owner shall furnish bidders with proposal forms. All papers bound with or attached to the proposal forms are necessary parts and must not be detached.

The plans specifications, and other documents designated in the proposal form shall be considered a part of the proposal whether attached or not.

20-04 ISSUANCE OF PROPOSAL FORMS. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder should such bidder be in default for any of the following reasons:

- a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force (with the Owner) at the time the Owner issues the proposal to a prospective bidder.
- c. Contractor default under previous contracts with the Owner.
- d. Unsatisfactory work on previous contracts with the Owner.

20-05 INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is

Instructions to Bidders

the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly or by implication agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as hereinafter provided in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 without in any way invalidating the unit bid prices.

20-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

20-07 PREPARATION OF PROPOSAL. The bidder shall submit his/her proposal on the forms furnished by the Owner. All blank spaces in the proposal forms must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals for which he proposes to do each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall sign his/her proposal correctly and in ink. If the proposal is made by an individual, his/her name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state under the laws of which the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of his/her authority to do so and that the signature is binding upon the firm or corporation.

20-08 IRREGULAR PROPOSALS. Proposals shall be considered irregular for the following reasons:

- a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.
- b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.
- c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- d. If the proposal contains unit prices that are obviously unbalanced.
- e. If the proposal is not accompanied by the proposal guarantee specified by the Owner.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-09 BID GUARANTEE. Each separate proposal shall be accompanied by a certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such check, or collateral, shall be made payable to the Owner.

20-10 DELIVERY OF PROPOSAL. Each proposal submitted shall be placed in a sealed envelope plainly marked with **CONFIDENTIAL (DO NOT OPEN) CONTRACT PROPOSAL**, name and address of the airport board chairman as indicated in the request for bids, name of the bidder, project description, airport location, and bid opening date and time on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.

20-11 WITHDRAWAL OR REVISION OF PROPOSALS. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by telegram before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-12 PUBLIC OPENING OF PROPOSALS. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-13 DISQUALIFICATION OF BIDDERS. A bidder shall be considered disqualified for any of the following reasons:

- a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.
- b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.
- c. If the bidder is considered to be in "default" for any reason specified in the subsection titled **ISSUANCE OF PROPOSAL FORMS** of this section.

END OF SECTION 20

Award and Execution of Contract

SECTION 30

30-01 CONSIDERATION OF PROPOSALS. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

- a. If the proposal is irregular as specified in the subsection titled **IRREGULAR PROPOSALS** of Section 20.
- b. If the bidder is disqualified for any of the reasons specified in the subsection titled **DISQUALIFICATION OF BIDDERS** of Section 20.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-02 AWARD OF CONTRACT. The award of a contract, if it is to be awarded, shall be made within sixty (60) calendar days of the date specified for publicly opening proposals, unless otherwise specified herein.

Award of the contract shall be made by the Owner to the lowest, qualified bidder whose proposal conforms to the cited requirements of the Owner.

30-03 CANCELLATION OF AWARD. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guarantee, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with the subsection titled **APPROVAL OF CONTRACT** of this section.

30-04 RETURN OF PROPOSAL GUARANTEE. All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as hereinbefore specified in the subsection titled **CONSIDERATION OF PROPOSALS** of this section. Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guarantee will be returned. The successful bidder's proposal guarantee will be returned as soon as the Owner receives the contracts bonds as specified in the subsection titled **REQUIREMENTS OF CONTRACT BONDS** of this section.

30-05 REQUIREMENTS OF CONTRACT BONDS. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

30-06 EXECUTION OF CONTRACT. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return such signed contract to the owner, along with the fully executed surety bond or bonds specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder. If the contract is mailed, special handling is recommended.

30-07 APPROVAL OF CONTRACT. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

30-08 FAILURE TO EXECUTE CONTRACT. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the 15 calendar day period specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section shall be just cause for cancellation of the award and forfeiture of the proposal guarantee, not as a penalty, but as liquidation of damages to the Owner.

2018.07.17, 10:00 AM - 10:00 AM

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SUPPLEMENTARY PROVISIONS

These Supplementary Conditions amend and/or supplement the General Provisions of the Contract and other provisions of the Contract Documents as indicated herein. All contract provisions that are not so amended or supplemented remain in full force and effect.

Federal Provisions

Lobbying and Influencing Federal Employees: (49 CFR Part 20)

- 1) No Federal appropriated funds shall be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the Contractor shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

Trade Restriction Clause: (49 CFR Part 30)

The Contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- a) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
- b) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
- c) has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the Contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

Further, the Contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The Contractor shall provide immediate written notice to the sponsor if the Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

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This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

Access to Records and Reports: (49 CFR Part 18.36(i))

The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

Rights to Inventions: (49 CFR Part 18.36(i)(8))

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

Buy American Preferences: (Title 49 U.S.C. Chapter 501)

- a) The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:
 1. Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs b. (1) or (2) shall be treated as domestic.
 2. Components. As used in this clause, components means those articles, materials, and supplies incorporated directly into steel and manufactured products.
 3. Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.
- b) The successful bidder will be required to assure that only domestic steel and manufactured products will be used by the Contractor, subcontractors, materialmen and suppliers in the performance of this contract, except those:
 1. that the US Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality;
 2. that the US Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest; or

3. that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

Energy Conservation Requirements: (49 CFR Part 18.36)

The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163)

Civil Rights Act of 1964, Title VI – Contractor Contractual Requirements: (49 CFR Part 21)

During the performance of this contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

1.1 Compliance with Regulations. The Contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

1.2 Nondiscrimination. The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

1.3 Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

1.4 Information and Reports. The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

1.5 Sanctions for Noncompliance. In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

- a. Withholding of payments to the Contractor under the contract until the Contractor complies, and/or
- b. Cancellation, termination, or suspension of the contract, in whole or in part.

1.6 Incorporation of Provisions. The Contractor shall include the provisions of paragraphs 1.1 through 1.5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The

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Contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Airport and Airway Improvement Act of 1982: (Section 520 - General Civil Rights Provisions)

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. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

Veterans Preference: (Title 49 U.S.C. 47112(c))

In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Veterans of the Vietnam era and disabled veterans as defined in Section 515(c)(1) and (2) of the Airport and Airway Improvement Act of 1982. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

Equal Employment Opportunity: (41 CFR PART 60-1.4(b))

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The Contractor will send to each labor union or representative of workers with which s/he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section,

and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedure authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provision, including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Certification of Nonsegregated Facilities: (41 CFR Part 60-1.8)

Notice to Prospective Federally Assisted Construction Contractors

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a federally-assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.
2. Contractors receiving federally-assisted construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Notice to Prospective Subcontractors of Requirements for Certification of Non-Segregated Facilities

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a subcontract exceeding \$10,000, which is not exempt from the provisions of the Equal Opportunity Clause.
2. Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

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CERTIFICATION OF NONSEGREGATED FACILITIES

The federally-assisted construction contractor certifies that she or he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that she or he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally-assisted construction contractor certifies that she or he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that she or he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The federally-assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directives or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally-assisted construction contractor agrees that (except where she or he has obtained identical certifications from proposed subcontractors for specific time periods) she or he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that she or he will retain such certifications in his files.

Standard Federal Equal Employment Opportunity Construction Contract Specifications: (41 CFR Part 60.4.3)

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:
 - 1) Black (all) persons having origins in any of the Black African racial groups not of Hispanic origin);
 - 2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - 3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - 4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246 or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community

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organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally,) the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

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12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 18.7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws, which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

EEO Compliance: (41 CFR Part 60-1.7)

a) Requirements for prime contractors and subcontractors.

- 1) Each prime contractor and subcontractor shall file annually, on or before the September 30, complete and accurate reports on Standard Form 100 (EEO-1) promulgated jointly by the Office of Federal Contract Compliance Programs, the Equal Employment Opportunity Commission and Plans for Progress or such form as may hereafter be promulgated in its place if such prime contractor or subcontractor (i) is not exempt from the provisions of these regulations in accordance with Sec. 60-1.5; (ii) has 50 or more employees; (iii) is a prime contractor or first tier subcontractor; and (iv) has a contract, subcontract or purchase order amounting to \$50,000 or more or serves as a depository of Government funds in any amount, or is a financial institution which is an issuing and paying agent for U.S. savings bonds and savings notes: Provided, That any subcontractor below the first tier which performs construction work at the site of construction shall be required to file such a report if it meets requirements of paragraphs (a)(1) (i), (ii), and (iv) of this section.
- 2) Each person required by Sec. 60-1.7(a)(1) to submit reports shall file such a report with the contracting or administering agency within 30 days after the award to him of a contract or subcontract, unless such person has submitted such a report within 12 months preceding the date of the award. Subsequent reports shall be submitted annually in accordance with Sec. 60-1.7(a)(1), or at such other intervals as the Deputy Assistant Secretary may require. The Deputy Assistant Secretary may extend the time for filing any report.
- 3) The Deputy Assistant Secretary or the applicant, on their own motions, may require a contractor to keep employment or other records and to furnish, in the form requested,

within reasonable limits, such information as the Deputy Assistant Secretary or the applicant deems necessary for the administration of the order.

4) Failure to file timely, complete and accurate reports as required constitutes noncompliance with the prime contractor's or subcontractor's obligations under the equal opportunity clause and is ground for the imposition by the Deputy Assistant Secretary, an applicant, prime contractor or subcontractor, of any sanctions as authorized by the order and the regulations in this part.

b) Requirements for bidders or prospective contractors

1) Certification of compliance with Part 60-2: Affirmative Action Programs. Each agency shall require each bidder or prospective prime contractor and proposed subcontractor, where appropriate, to state in the bid or in writing at the outset of negotiations for the contract: (i) Whether it has developed and has on file at each establishment affirmative action programs pursuant to Part 60-2 of this chapter; (ii) whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; (iii) whether it has filed with the Joint Reporting Committee, the Deputy Assistant Secretary or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements.

2) Additional information. A bidder or prospective prime contractor or proposed subcontractor shall be required to submit such information as the Deputy Assistant Secretary requests prior to the award of the contract or subcontract. When a determination has been made to award the contract or subcontract to a specific contractor, such contractor shall be required, prior to award, or after the award, or both, to furnish such other information as the applicant or the Deputy Assistant Secretary requests.

c) Use of reports. Reports filed pursuant to this section shall be used only in connection with the administration of the order, the Civil Rights Act of 1964, or in furtherance of the purposes of the order and said Act.

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Requirement for Affirmative Action to Ensure Equal Employment Opportunity - 41 CFR Part 60-4.2

1. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are identified in the Notice-to-Bidders

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its Federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project, for the sole purpose of meeting the Contractor's goals, shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

2. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP), within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of subcontract; and the geographical area in which the subcontract is to be performed.

3. As used in this notice and in the Contract resulting from this solicitation, the "covered area" means the geographical area described in the solicitation from which the Contract results.

Termination of Contract: (49 CFR Part 18.36(i)(2))

- a. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.
- b. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.
- c. If the termination is due to failure to fulfill the Contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the Contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.
- d. If, after notice of termination for failure to fulfill contract obligations, it is determined that the Contractor had not so failed, the termination shall be deemed to have been

effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph (b) of this clause.

- e. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

Breach of Contract Terms: (49 CFR Part 18.36)

Any violation or breach of terms of this contract on the part of the Contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

Contract Work Hours and Safety Standards Act Requirements: (29 CFR Part 5)

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any work week in which he or she is employed on such work to work in excess of forty hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such work week.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) above, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 above, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 above.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 above.

4. Subcontractors.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 and also a clause requiring the subcontractor to include these clauses in any lower tier

Supplementary Provisions

subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section.

Clean Air and Water Pollution Control: (49 CFR Part 18.36(i)(12))

Contractors and subcontractors agree:

- a. That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;
- b. To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued thereunder;
- c. That, as a condition for the award of this contract, the Contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;
- d. To include or cause to be included in any construction contract or subcontract which exceeds \$ 100,000 the aforementioned criteria and requirements.

GENERAL PROVISIONS

Definition of Terms

SECTION 10

Whenever the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be interpreted as follows:

10-01 AASHTO. The American Association of State Highway and Transportation Officials, the successor association to AASHO.

10-02 ACCESS ROAD. The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.

10-03 ADVERTISEMENT. A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.

10-04 AIP. The Airport Improvement Program, a grant-in-aid program, administered by the Federal Aviation Administration.

10-05 AIR OPERATIONS AREA. For the purpose of these specifications, the term air operations area shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.

10-06 AIRPORT. Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; and airport buildings and facilities located in any of these areas, and includes a heliport.

10-07 ASTM. The American Society for Testing and Materials.

10-08 AWARD. The acceptance, by the Owner, of the successful bidder's proposal.

10-09 BIDDER. Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.

10-10 BUILDING AREA. An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.

10-11 CALENDAR DAY. Every day shown on the calendar.

10-12 CHANGE ORDER. A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes. The work, covered by a change order, shall be within the scope of the contract.

General Provisions

10-13 **CONTRACT.** The written agreement covering the work to be performed. The awarded contract shall include, but is not limited to: The Advertisement; The Contract Form; The Proposal; The Performance Bond; The Payment Bond; any required insurance certificates; The Specifications; The Plans, and any addenda issued to bidders.

10-14 **CONTRACT ITEM (PAY ITEM).** A specific unit of work for which a price is provided in the contract.

10-15 **CONTRACT TIME.** The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.

10-16 **CONTRACTOR.** The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.

10-17 **DRAINAGE SYSTEM.** The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.

10-18 **ENGINEER.** The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering inspection of the contract work and acting directly or through an authorized representative.

10-19 **EQUIPMENT.** All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.

10-20 **EXTRA WORK.** An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Engineer to be necessary to complete the work within the intended scope of the contract as previously modified.

10-21 **FAA.** The Federal Aviation Administration of the U.S. Department of Transportation. When used to designate a person, FAA shall mean the Administrator or his/her duly authorized representative.

10-22 **FEDERAL SPECIFICATIONS.** The Federal Specifications and Standards, Commercial Item Descriptions, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government.

10-23 **FORCE ACCOUNT.** Force account construction work is construction that is accomplished through the use of material, equipment, labor, and supervision provided by the Owner or by another public agency pursuant to an agreement with the Owner.

10-24 **INSPECTOR.** An authorized representative of the Engineer assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.

10-25 **INTENTION OF TERMS.** Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer is intended; and similarly, the words "approved," "acceptable,"

“satisfactory,” or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer, subject in each case to the final determination of the Owner.

Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.

10-26 LABORATORY. The official testing laboratories of the Owner or such other laboratories as may be designated by the Engineer.

10-27 LIGHTING. A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.

10-28 MAJOR AND MINOR CONTRACT ITEMS. A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20 percent of the total amount of the award contract. All other items shall be considered minor contract items.

10-29 MATERIALS. Any substance specified for use in the construction of the contract work.

10-30 NOTICE TO PROCEED. A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.

10-31 OWNER. The term “Owner” shall mean the party of the first part or the contracting agency signatory to the contract. For AIP contracts, the term “sponsor” shall have the same meaning as the term “Owner.” Where the term “Owner” is capitalized in this document, it shall mean airport owner or sponsor only.

10-32 PAVEMENT. The combined surface course, base course, and subbase course, if any, considered as a single unit.

10-33 PAYMENT BOND. The approved form of security furnished by the Contractor and his/her surety as a guarantee that he will pay in full all bills and accounts for materials and labor used in the construction of the work.

10-34 PERFORMANCE BOND. The approved form of security furnished by the Contractor and his/her surety as a guarantee that the Contractor will complete the work in accordance with the terms of the contract.

10-35 PLANS. The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications.

10-36 PROJECT. The agreed scope of work for accomplishing specific airport development with respect to a particular airport.

10-37 PROPOSAL. The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.

General Provisions

10-38 PROPOSAL GUARANTEE. The security furnished with a proposal to guarantee that the bidder will enter into a contract if his/her proposal is accepted by the Owner.

10-39 RUNWAY. The area on the airport prepared for the landing and takeoff of aircraft.

10-40 SPECIFICATIONS. A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.

10-41 SPONSOR. See definition above of "Owner."

10-42 STRUCTURES. Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; flexible and rigid pavements; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.

10-43 SUBGRADE. The soil that forms the pavement foundation.

10-44 SUPERINTENDENT. The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the Engineer, and who shall supervise and direct the construction.

10-45 SUPPLEMENTAL AGREEMENT. A written agreement between the Contractor and the Owner covering (1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25 percent, such increased or decreased work being within the scope of the originally awarded contract; or (2) work that is not within the scope of the originally awarded contract.

10-46 SURETY. The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.

10-47 TAXIWAY. For the purpose of this document, the term taxiway means the portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways or aircraft parking areas.

10-48 WORK. The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.

10-49 WORKING DAY. A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least 6 hours toward completion of the contract when work is suspended for causes beyond the Contractor's control, Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work, requiring the presence of an inspector, will be considered as working days.

END OF SECTION 10

Scope of Work

SECTION 40

40-01 INTENT OF CONTRACT. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 ALTERATION OF WORK AND QUANTITIES. The owner reserves and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work originally intended in an acceptable manner. Unless otherwise specified herein, the Engineer shall be and is hereby authorized to make such alterations in the work as may increase or decrease the originally awarded contract quantities, provided that the aggregate of such alterations does not change the total contract cost or the total cost of any major contract item by more than 25 percent (total cost being based on the unit prices and estimated quantities in the awarded contract). Alterations that do not exceed the 25 percent limitation shall not invalidate the contract nor release the surety, and the Contractor agrees to accept payment for such alterations as if the altered work had been a part of the original contract. These alterations that are for work within the general scope of the contract shall be covered by "Change Orders" issued by the Engineer. Change orders for altered work shall include extensions of contract time where, in the Engineer's opinion, such extensions are commensurate with the amount and difficulty of added work.

Should the aggregate amount of altered work exceed the 25 percent limitation hereinbefore specified, such excess altered work shall be covered by supplemental agreement. If the owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

All supplemental agreements shall require consent of the Contractor's surety and separate performance and payment bonds.

40-03 OMITTED ITEMS. The Engineer may, in the Owner's best interest, omit from the work any contract item, except major contract items. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be nonperformed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with the subsection titled **PAYMENT FOR OMITTED ITEMS** of Section 90.

40-04 EXTRA WORK. Should acceptable completion of the contract require the Contractor to perform an item of work for which no basis of payment has been provided in the original contract or previously issued change orders or supplemental agreements, the same shall be called "Extra Work." Extra Work that is within the general scope of the contract shall be covered by written change order. Change orders for such Extra Work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the Engineer's opinion, is necessary for completion of such Extra Work.

When determined by the Engineer to be in the Owner's best interest, he may order the Contractor to proceed with Extra Work by force account as provided in the subsection titled **PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK** of Section 90.

General Provisions

Extra Work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a Supplemental Agreement as hereinbefore defined in the subsection titled SUPPLEMENTAL AGREEMENT of Section 10.

Any claim for payment of Extra Work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

40-05 MAINTENANCE OF TRAFFIC. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas of the airport with respect to his/her own operations and the operations of all his/her subcontractors as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in the subsection titled CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS in Section 70.

With respect to his/her own operations and the operations of all his/her subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying: personnel; equipment; vehicles; storage areas; and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport.

When the contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall furnish erect, and maintain barricades, warning signs, flagperson, and other traffic control devices in reasonable conformity with the manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office), unless otherwise specified herein. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. Unless otherwise specified herein, the Contractor will not be required to furnish snow removal for such existing road, street, or highway.

The Contractor shall make his/her own estimate of all labor, materials, equipment, and incidentals necessary for providing the maintenance of aircraft and vehicular traffic as specified in this subsection.

The cost of maintaining the aircraft and vehicular traffic specified in this subsection shall not be measured or paid for directly, but shall be included in the various contract items.

40-06 REMOVAL OF EXISTING STRUCTURES. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Engineer shall be notified prior to disturbing such

structure. The disposition of existing structures so encountered shall be immediately determined by the Engineer in accordance with the provisions of the contract.

Except as provided in the subsection titled RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK of this section, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be utilized in the work as otherwise provided for in the contract and shall remain the property of the Owner when so utilized in the work.

40-07 RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be either embankment or waste, he may at his/her option either:

- a. Use such material in another contract item, providing such use is approved by the Engineer and is in conformance with the contract specifications applicable to such use; or,
- b. Remove such material from the site, upon written approval of the Engineer; or
- c. Use such material for his/her own temporary construction on site; or,
- d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., he shall request the Engineer's approval in advance of such use.

Should the Engineer approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at his/her own expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for his/her use of such material so used in the work or removed from the site.

Should the Engineer approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of his/her exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

40-08 FINAL CLEANING UP. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. He shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of such property owner.

General Provisions

END OF SECTION 40

Control of Work

SECTION 50

50-01 AUTHORITY OF THE ENGINEER. The Engineer shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work. The Engineer shall decide all questions that may arise as to the interpretation of the specifications or plans relating to the work. The Engineer shall determine the amount and quality of the several kinds of work performed and materials furnished which are to be paid for the under contract.

The Engineer does not have the authority to accept pavements that do not conform to FAA specification requirements.

50-02 CONFORMITY WITH PLANS AND SPECIFICATIONS. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans or specifications.

If the Engineer finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications but that the portion of the work affected will, in his/her opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, he will advise the Owner of his/her determination that the affected work be accepted and remain in place. In this event, the Engineer will document his/her determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. The Engineer's determination and recommended contract price adjustments will be based on good engineering judgment and such tests or retests of the affected work as are, in his/her opinion, needed. Changes in the contract price shall be covered by contract modifications (change order or supplemental agreement) as applicable.

If the Engineer finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the Engineer's written orders.

For the purpose of this subsection, the term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the Engineer's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's prosecution of the work, when, in the Engineer's opinion, such compliance is essential to provide an acceptable finished portion of the work.

For the purpose of this subsection, the term "reasonably close conformity" is also intended to provide the Engineer with the authority, after consultation with the FAA, to use good engineering judgment in his/her determinations as to acceptance of work that is not in strict conformity but will provide a finished product equal to or better than that intended by the requirements of the contract, plans and specifications.

The Engineer will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

General Provisions

50-03 COORDINATION OF CONTRACT, PLANS, AND SPECIFICATIONS. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited FAA advisory circulars; contract general provisions shall govern over plans, cited standards for materials or testing, and cited FAA advisory circulars; plans shall govern over cited standards for materials or testing and cited FAA advisory circulars. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited standards for testing occur due to the timing of changing, editing, and replacing of standards. In the event the Contractor discovers any apparent discrepancy within standard test methods, he shall immediately call upon the Engineer for his/her interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, he shall immediately call upon the Engineer for his/her interpretation and decision, and such decision shall be final.

50-04 COOPERATION OF CONTRACTOR. The Contractor will be supplied with five copies each of the plans and specifications. He shall have available on the work at all times one copy each of the plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and he shall cooperate with the Engineer and his/her inspectors and with other contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as his/her agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Engineer or his/her authorized representative.

50-05 COOPERATION BETWEEN CONTRACTORS. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct his/her work so as not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with his/her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced by him because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange his/her work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractors within the limits of the same project. He shall join his/her work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

50-06 CONSTRUCTION LAYOUT AND STAKES. The Engineer shall establish horizontal and vertical control only. The Contractor must establish all layout required for the construction of the work. Such stakes and markings as the Engineer may set for either his/her own or the Contractor's guidance shall be preserved by the Contractor. In case of negligence on the part of the Contractor, or his/her employees, resulting in the destruction of such stakes or markings, an amount equal to the cost of replacing the same may be deducted from subsequent estimates due the Contractor at the discretion of the Engineer.

The Contractor will be required to furnish all lines, grades and measurements from the control points necessary for the proper prosecution and control of the work contracted for under these specifications.

The Contractor must give weekly copies of the survey notes to the Engineer so that the Engineer may check them as to accuracy and method of staking. All areas that are staked by the Contractor must be checked by the Engineer prior to beginning any work in the area. The Engineer will make periodic checks of the grades and alignment set by the Contractor. In case of error on the part of the Contractor, or his/her employees, resulting in establishing grades and/or alignment that are not in accordance with the plans or established by the Engineer, all construction not in accordance with the established grades and/or alignment shall be replaced without additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses therewith. The cost thereof shall be included in the price of the bid for the various items of the Contract.

Construction Staking and Layout includes but is not limited to:

Clearing and Grubbing perimeter staking.

Rough Grade slope stakes at 100-foot stations.

Drainage Swales slope stakes and flow line blue tops at 50-foot stations.

Subgrade blue tops at 25 foot stations and 25 foot offset distance (max.) for the following section locations:

- a. Runway – minimum 5 per station
- b. Taxiways – minimum 3 per station
- c. Holding apron areas – minimum 3 per station
- d. Roadways – minimum 3 per station

Base Course blue tops at 25 foot stations and 25 foot offset distance (max.) for the following section locations:

- a. Runway – minimum 5 per station
- b. Taxiways – minimum 3 per station
- c. Holding apron areas – minimum 3 per station

Pavement areas:

- a. Edge of Pavement hubs and tacks (for stringline by Contractor) at 100 foot stations.
- b. Between Lifts at 25 foot stations for the following section locations:
 - 1) Runways – each paving lane width
 - 2) Taxiways – each paving lane width
 - 3) Holding areas – each paving lane width
- c. After finish paving operations at 50 foot stations
 - 1) All paved areas – Edge of each paving lane prior to next paving lot
- d. Shoulder and safety area blue tops at 50 foot stations and at all break points with maximum of 50 foot offsets

Fence lines at 100 foot stations

General Provisions

Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, VASI's, PAPI's, REIL's, Wind Cones, Distance Markers (signs), pull boxes and manholes.

Drain lines, cut stakes and alignment on 25-foot stations, inlet and manholes.

Painting and Striping layout (pinned with 1.5 inch PK nails) marked for paint Contractor. (All nails shall be removed after painting)

Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet per pass (i.e. paving lane).

NOTE: Controls and stakes disturbed or suspect of having been disturbed shall be checked and/or reset as directed by the Engineer without additional cost to the Owner.

50-07 AUTOMATICALLY CONTROLLED EQUIPMENT. Whenever batching or mixing plant equipment is required to be operated automatically under the contract and a breakdown or malfunction of the automatic controls occurs, the equipment may be operated manually or by other methods for a period 48 hours following the breakdown or malfunction, provided this method of operations will produce results which conform to all other requirements of the contract.

50-08 AUTHORITY AND DUTIES OF INSPECTORS. Inspectors employed by the Owner shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter, or waive any provision of the contract. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

Inspectors employed by the Owner are authorized to notify the Contractor or his/her representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the Engineer for his/her decision.

50-09 INSPECTION OF THE WORK. All materials and each part or detail of the work shall be subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Any work done or materials used without supervision or inspection by an authorized representative of the Owner may be ordered removed and replaced at the Contractor's expense unless the Owner's representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the Engineer as provided in the subsection titled CONFORMITY WITH PLANS AND SPECIFICATIONS of this section.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of the subsection titled CONTRACTOR'S RESPONSIBILITY FOR WORK of Section 70.

No removal work made under provision of this subsection shall be done without lines and grades having been given by the Engineer. Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans or as given, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs (incurred by the Owner) from any monies due or to become due the Contractor.

50-11 LOAD RESTRICTIONS. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor shall be responsible for all damage done by his/her hauling equipment and shall correct such damage at his/her own expense.

50-12 MAINTENANCE DURING CONSTRUCTION. The Contractor shall maintain the work during construction and until the work is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 FAILURE TO MAINTAIN THE WORK. Should the Contractor at any time fail to maintain the work as provided in the subsection titled MAINTENANCE DURING CONSTRUCTION of this section, the Engineer shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

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Should the Contractor fail to respond to the Engineer's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be deducted from monies due or to become due the Contractor.

50-14 PARTIAL ACCEPTANCE. If at any time during the prosecution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, he may request the Engineer to make final inspection of that unit. If the Engineer finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, he may accept it as being completed, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 FINAL ACCEPTANCE. Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be completed in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The Engineer shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of same and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50 16 CLAIMS FOR ADJUSTMENT AND DISPUTES. If for any reason the Contractor deems that additional compensation is due him for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, he shall notify the Engineer in writing of his/her intention to claim such additional compensation before he begins the work on which he bases the claim. If such notification is not given or the Engineer is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit his/her written claim to the Engineer who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

50 17 COST REDUCTION INCENTIVE. The provisions of this subsection will apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.

On projects with original contract amounts in excess of \$100,000, the Contractor may submit to the Engineer, in writing, proposals for modifying the plans, specifications or other requirements of the contract for the sole purpose of reducing the cost of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, design and

safety standards. This provision shall not apply unless the proposal submitted is specifically identified by the Contractor as being presented for consideration as a value engineering proposal.

Not eligible for cost reduction proposals are changes in the basic design of a pavement type, runway and taxiway lighting, visual aids, hydraulic capacity of drainage facilities, or changes in grade or alignment that reduce the geometric standards of the project.

As a minimum, the following information shall be submitted by the Contractor with each proposal:

- a. A description of both existing contract requirements for performing the work and the proposed changes, with a discussion of the comparative advantages and disadvantages of each;
- b. An itemization of the contract requirements that must be changed if the proposal is adopted;
- c. A detailed estimate of the cost of performing the work under the existing contract and under the proposed changes;
- d. A statement of the time by which a change order adopting the proposal must be issued;
- e. A statement of the effect adoption of the proposal will have on the time for completion of the contract; and
- f. The contract items of work affected by the proposed changes, including any quantity variation attributable to them.

The Contractor may withdraw, in whole or in part, any cost reduction proposal not accepted by the Engineer, within the period specified in the proposal. The provisions of this subsection shall not be construed to require the Engineer to consider any cost reduction proposal that may be submitted.

The Contractor shall continue to perform the work in accordance with the requirements of the contract until a change order incorporating the cost reduction proposal has been issued. If a change order has not been issued by the date upon which the Contractor's cost reduction proposal specifies that a decision should be made, or such other date as the Contractor may subsequently have requested in writing, such cost reduction proposal shall be deemed rejected.

The Engineer shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings from the adoption of all or any part of such proposal. In determining the estimated net savings, the Engineer may disregard the contract bid prices if, in the Engineer's judgment such prices do not represent a fair measure of the value of the work to be performed or deleted.

The Owner may require the Contractor to share in the Owner's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall acknowledge acceptance of it in writing. Such acceptance shall constitute full authority for the Owner to deduct the cost of investigating a cost reduction proposal from amounts payable to the Contractor under the contract.

If the Contractor's cost reduction proposal is accepted in whole or in part, such acceptance will be by a contract change order that shall specifically state that it is executed pursuant to this subsection.

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Such change order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or such part of it as has been accepted and shall include any conditions upon which the Engineer's approval is based. The change order shall also set forth the estimated net savings attributable to the cost reduction proposal. The net savings shall be determined as the difference in costs between the original contract costs for the involved work items and the costs occurring as a result of the proposed change. The change order shall also establish the net savings agreed upon and shall provide for adjustment in the contract price that will divide the net savings equally between the Contractor and the Owner.

The Contractor's 50 percent share of the net savings shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work.

Acceptance of the cost reduction proposal and performance of the cost reduction work shall not extend the time of completion of the contract unless specifically provided for in the contract change order.

END OF SECTION 50

Control of Materials

SECTION 60

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. The materials used on the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish complete statements to the Engineer as to the origin, composition, and manufacture of all materials to be used in the work. Such statements shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the Engineer's option, materials may be approved at the source of supply before delivery is stated. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

The Contractor shall furnish airport lighting equipment that conforms to the requirements of cited materials specifications. In addition, where an FAA specification for airport lighting equipment is cited in the plans or specifications, the Contractor shall furnish such equipment that is:

- a. Listed in FAA Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program, and Addendum that is in effect on the date of advertisement; and,
- b. Produced by the manufacturer as listed in the Addendum cited above for the certified equipment part number.

The following airport lighting equipment is required for this contract and is to be furnished by the Contractor in accordance with the requirements of this subsection:

There is no lighting required on this project

60-02 SAMPLES, TESTS, AND CITED SPECIFICATIONS. Unless otherwise designated, all materials used in the work shall be inspected, tested, and approved by the Engineer before incorporation in the work. Any work in which untested materials are used without approval or written permission of the Engineer shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the Engineer, shall be removed at the Contractor's expense. Unless otherwise designated, tests in accordance with the cited standard methods of ASTM, AASHTO, Federal Specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids, will be made by and at the expense of the Engineer. The testing organizations performing on site field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel, including the Contractor's representative at his/her request. Unless otherwise designated, samples will be taken by a qualified representative of the Engineer. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at his/her request.

The Contractor shall employ a testing organization to perform all Contractor required tests. The Contractor shall submit to the Engineer resumes on all testing organizations and individual persons who will be performing the tests. The Engineer will determine if such persons are qualified. All the

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test data shall be reported to the Engineer after the results are known. A legible, handwritten copy of all test data shall be given to the Engineer daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the Engineer showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

60-03 CERTIFICATION OF COMPLIANCE. The Engineer may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the Engineer.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "brand name," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

- a. Conformance to the specified performance, testing, quality or dimensional requirements; and,
- b. Suitability of the material or assembly for the use intended in the contract work.

Should the Contractor propose to furnish an "or equal" material or assembly, he shall furnish the manufacturer's certificates of compliance as hereinbefore described for the specified brand name material or assembly. However, the Engineer shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The Engineer reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

60-04 PLANT INSPECTION. The Engineer or his/her authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for his/her acceptance of the material or assembly.

Should the Engineer conduct plant inspections, the following conditions shall exist:

- a. The Engineer shall have the cooperation and assistance of the Contractor and the producer with whom he has contracted for materials.
- b. The Engineer shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.

- c. If required by the Engineer, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The Engineer shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

60-05 ENGINEER'S FIELD OFFICE. NA

60-06 STORAGE OF MATERIALS. Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the Engineer. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the Engineer. Private property shall not be used for storage purposes without written permission of the owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the Engineer a copy of the property owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at his/her entire expense, except as otherwise agreed to (in writing) by the owner or lessee of the property.

60-07 UNACCEPTABLE MATERIALS. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the Engineer.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the Engineer has approved its use in the work.

60-08 OWNER FURNISHED MATERIALS. The Contractor shall furnish all materials required to complete the work, except those specified herein (if any) to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified herein.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

END OF SECTION 60

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Legal Regulations and Responsibility to Public

SECTION 70

70-01 LAWS TO BE OBSERVED. The Contractor shall keep fully informed of all Federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all his/her officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by himself or his/her employees.

70-02 PERMITS, LICENSES, AND TAXES. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the work.

70-03 PATENTED DEVICES, MATERIALS, AND PROCESSES. If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, he shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the surety shall indemnify and save harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the prosecution or after the completion of the work.

70-04 RESTORATION OF SURFACES DISTURBED BY OTHERS. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. To the extent that such construction, reconstruction, or maintenance has been coordinated with the Owner, such authorized work (by others) is indicated as follows:

No work is planned for others.

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the Engineer.

Should the owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such owners by arranging and performing the work in this contract so as to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the Engineer, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

70-05 FEDERAL AID PARTICIPATION. For AIP contracts, the United States Government has agreed to reimburse the Owner for some portion of the contract costs. Such reimbursement is made

from time to time upon the Owner's request to the FAA. In consideration of the United States Government's (FAA's) agreement with the Owner, the Owner has included provisions in this contract pursuant to the requirements of Title 49 of the United States Code (USC) and the Rules and Regulations of the FAA that pertain to the work.

As required by the USC, the contract work is subject to the inspection and approval of duly authorized representatives of the Administrator, FAA, and is further subject to those provisions of the rules and regulations that are cited in the contract, plans, or specifications.

No requirement of the USC, the rules and regulations implementing the USC, or this contract shall be construed as making the Federal Government a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

70-06 SANITARY, HEALTH, AND SAFETY PROVISIONS. The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his/her employees as may be necessary to comply with the requirements of the state and local Board of Health, or of other bodies or tribunals having jurisdiction.

Attention is directed to Federal, state, and local laws, rules and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to his/her health or safety.

70-07 PUBLIC CONVENIENCE AND SAFETY. The Contractor shall control his/her operations and those of his/her subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to his/her own operations and those of his/her subcontractors and all suppliers in accordance with the subsection titled MAINTENANCE OF TRAFFIC of Section 40 hereinbefore specified and shall limit such operations for the convenience and safety of the traveling public as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80 hereinafter.

70-08 BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS. The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs, and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area shall be a maximum of 18 inches high. Unless otherwise specified, barricades shall be spaced not more than 25 feet apart. Barricades, warning signs, and markings shall be paid for under Section 40-05.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office).

When the work requires closing an air operations area of the airport or portion of such area, the Contractor shall furnish, erect, and maintain temporary markings and associated lighting conforming to the requirements of AC 150/5340-1, Standards for Airport Markings.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stock piles, and his/her parked construction equipment that may be

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hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to AC 150/5370-2, Operational Safety on Airports During Construction.

The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to AC 150/5370-2.

The Contractor shall furnish and erect all barricades, warning signs, and markings for hazards prior to commencing work that requires such erection and shall maintain the barricades, warning signs, and markings for hazards until their dismantling is directed by the Engineer.

Open-flame type lights shall not be permitted within the air operations areas of the airport.

70-09 USE OF EXPLOSIVES. When the use of explosives is necessary for the prosecution of the work, the Contractor shall exercise the utmost care not to endanger life or property, including new work. The Contractor shall be responsible for all damage resulting from the use of explosives.

All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the Engineer and, in general, not closer than 1,000 feet (300 m) from the work or from any building, road, or other place of human occupancy.

The Contractor shall notify each property owner and public utility company having structures or facilities in proximity to the site of the work of his/her intention to use explosives. Such notice shall be given sufficiently in advance to enable them to take such steps as they may deem necessary to protect their property from injury.

The use of electrical blasting caps shall not be permitted on or within 1,000 feet (300 m) of the airport property.

70-10 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his/her manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the nonexecution thereof by the Contractor, he shall restore, at his/her own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or he shall make good such damage or injury in an acceptable manner.

70-11 RESPONSIBILITY FOR DAMAGE CLAIMS. The Contractor shall indemnify and save harmless the Engineer and the Owner and their officers, and employees from all suits actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or

because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of his/her contract as may be considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, his/her surety may be held until such suit(s), action(s), or claim(s) for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he is adequately protected by public liability and property damage insurance.

70-12 THIRD PARTY BENEFICIARY CLAUSE. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create the public or any member thereof a third party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 OPENING SECTIONS OF THE WORK TO TRAFFIC. Should it be necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work shall be specified herein and indicated on the plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified. The Contractor shall make his/her own estimate of the difficulties involved in arranging his/her work to permit such beneficial occupancy by the Owner as described below:

Runway Closure for Base Bid and Additive Alternates

All work on the Runway and parallel taxiway shall be completed in the 5 calendar days allowed for runway closure under the base bid or in seven calendar days if the additive alternates are constructed.

This Work includes crack repair and seal coat (if additive alternates are constructed) of the Runway and parallel taxiway and taxiway connectors.

Upon completion of any portion of the work listed above, such portion shall be accepted by the Owner in accordance with the subsection titled PARTIAL ACCEPTANCE of Section 50.

No portion of the work may be opened by the Contractor for public use until ordered by the Engineer in writing. Should it become necessary to open a portion of the work to public traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the Engineer, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at his/her expense.

The Contractor shall make his/her own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

Contractor shall be required to conform to safety standards contained AC 150/5370-2, Operational Safety on Airports During Construction (See Special Provisions.)

Contractor shall refer to the approved safety plan to identify barricade requirements and other safety requirements prior to opening up sections of work to traffic.

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70-14 CONTRACTOR'S RESPONSIBILITY FOR WORK. Until the Engineer's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with the subsection titled **PARTIAL ACCEPTANCE** of Section 50, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at his/her expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seedings, and soddings furnished under his/her contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

70-15 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS. As provided in the subsection titled **RESTORATION OF SURFACES DISTURBED BY OTHERS** of this section, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control his/her operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and the owners are indicated as follows:

Western KY Rural Electric

270-247-1321

Water & Sewer

Mayfield Electric & Water Systems

270-247-4661

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of his/her responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the owners of all utility services or other facilities of his/her plan of operations. Such notification shall be in writing addressed to **THE PERSON TO CONTACT** as provided hereinbefore in this subsection and the subsection titled **RESTORATION OF SURFACES DISTURBED BY OTHERS** of this section. A copy of each notification shall be given to the Engineer.

In addition to the general written notification hereinbefore provided, it shall be the responsibility of the Contractor to keep such individual owners advised of changes in his/her plan of operations that would affect such owners.

Prior to commencing the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such owner of his/her plan of operation. If, in the Contractor's opinion, the owner's assistance is needed to locate the utility service or facility or the presence of a representative of the owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Engineer.

The Contractor's failure to give the two days' notice hereinabove provided shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use excavation methods acceptable to the Engineer within 3 feet (90 cm) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, he shall immediately notify the proper authority and the Engineer and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the Engineer continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to his/her operations whether or not due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or his/her surety.

70-15.1 FAA FACILITIES AND CABLE RUNS. The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the prosecution of the project work, shall comply with the following:

- a. The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.
- b. The Contractor shall notify the above named FAA Airway Facilities Point-of-Contact seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facility outages.
- c. If prosecution of the project work requires a facility outage, the Contractor shall contact the above named FAA Point-of-Contact a minimum of 48 hours prior to the time of the required outage.

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- d. If prosecution of the project work results in damages to existing FAA equipment or cables, the Contractor shall repair the damaged item in conformance with FAA Airway Facilities' standards to the satisfaction of the above named FAA Point-of-Contact.
- e. If the project work requires the cutting or splicing of FAA owned cables, the above named FAA Point-of-Contact shall be contacted a minimum of 48 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA Airway Facilities representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA Airway Facilities' specifications and require approval by the above named FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA Airway Facilities restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA Airway Facilities, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.

70-16 FURNISHING RIGHTS-OF-WAY. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

70-17 PERSONAL LIABILITY OF PUBLIC OFFICIALS. In carrying out any of the contract provisions or in exercising any power or authority granted to him by this contract, there shall be no liability upon the Engineer, his/her authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 NO WAIVER OF LEGAL RIGHTS. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or his/her surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill his/her obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the owner's rights under any warranty or guarantee.

70-19 ENVIRONMENTAL PROTECTION. The Contractor shall comply with all Federal, state, and local laws and regulations controlling pollution of the environment. He shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

70-20 ARCHAEOLOGICAL AND HISTORICAL FINDINGS. Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during his/her operations, any building, part of a building, structure, or object that is incongruous with its surroundings, he shall immediately cease operations in that location and notify the Engineer. The Engineer will immediately investigate the Contractor's finding

and the Owner will direct the Contractor to either resume his/her operations or to suspend operations as directed.

Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract modification (change order or supplemental agreement) as provided in the subsection titled EXTRA WORK of Section 40 and the subsection titled PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT WORK of Section 90. If appropriate, the contract modification shall include an extension of contract time in accordance with the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of Section 80.

END OF SECTION 70

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Prosecution and Progress

SECTION 80

80-01 SUBLETTING OF CONTRACT. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Engineer.

Should the Contractor elect to assign his/her contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner. In case of approval, the Contractor shall file copies of all subcontracts with the Engineer.

The Contractor shall perform, with his organization, an amount of work equal to at least 25 percent of the total contract cost.

80-02 NOTICE TO PROCEED. The notice to proceed shall state the date on which it is expected the Contractor will begin the construction and from which date contract time will be charged. The Contractor shall begin the work to be performed under the contract within 10 days of the date set by the Engineer in the written notice to proceed, but in any event, the Contractor shall notify the Engineer at least 48 hours in advance of the time actual construction operations will begin.

80-03 PROSECUTION AND PROGRESS. Unless otherwise specified, the Contractor shall submit his/her progress schedule for the Engineer's approval within 10 days after the effective date of the notice to proceed. The Contractor's progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Engineer's request, submit a revised schedule for completion of the work within the contract time and modify his/her operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the prosecution of the work be discontinued for any reason, the Contractor shall notify the Engineer at least 48 hours in advance of resuming operations.

For AIP contracts, the Contractor shall not commence any actual construction prior to the date on which the notice to proceed is issued by the Owner.

80-04 LIMITATION OF OPERATIONS. The Contractor shall control his/her operations and the operations of his/her subcontractors and all suppliers so as to provide for the free and unobstructed movement of aircraft in the AIR OPERATIONS AREAS of the airport.

When the work requires the Contractor to conduct his/her operations within an AIR OPERATIONS AREA of the airport, the work shall be coordinated with airport operations (through the Engineer) at least 48 hours prior to commencement of such work. The Contractor shall not close an AIR OPERATIONS AREA until so authorized by the Engineer and until the necessary temporary marking and associated lighting is in place as provided in the subsection titled BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS of Section 70.

When the contract work requires the Contractor to work within an AIR OPERATIONS AREA (AOA) of the airport on an intermittent basis (intermittent opening and closing of the AIR OPERATIONS AREA),

the Contractor shall maintain constant communications as hereinafter specified; immediately obey all instructions to vacate the AIR OPERATIONS AREA; immediately obey all instructions to resume work in such AIR OPERATIONS AREA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AIR OPERATIONS AREA until the satisfactory conditions are provided. The following AIR OPERATIONS AREA cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently as follows:

Runway and associated Taxiways

Seven Calendar Days allowed for Runway Closure

Contractor must maintain communications with aircraft via the Unicom Frequency 122.8.

Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction (See Special Provisions).

80-04.1 OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION. All Contractors' operations shall be conducted in accordance with the project safety plan and the provisions set forth within the current version of Advisory Circular 150/5370-2. The safety plan included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a plan that details how it proposes to comply with the requirements presented within the safety plan.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks of the safety plan measures to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the safety plan and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved safety plan unless approved in writing by the Owner or Engineer.

80-05 CHARACTER OF WORKERS, METHODS, AND EQUIPMENT. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations and, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the Engineer.

Should the Contractor fail to remove such persons or person, or fail to furnish suitable and sufficient personnel for the proper prosecution of the work, the Engineer may suspend the work by written notice until compliance with such orders.

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All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall be such that no injury to previously completed work, adjacent property, or existing airport facilities will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than specified in the contract, he may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this subsection.

80-06 TEMPORARY SUSPENSION OF THE WORK. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for the prosecution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the Engineer's order to suspend work to the effective date of the Engineer's order to resume the work. Claims for such compensation shall be filed with the Engineer within the time period stated in the Engineer's order to resume work. The Contractor shall submit with his/her claim information substantiating the amount shown on the claim. The Engineer will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather, for suspensions made at the request of the Owner, or for any other delay provided for in the contract, plans, or specifications.

If it should become necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. He shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME. The number of calendar or working days allowed for completion of the work shall be stated in the proposal and contract and shall be known as the CONTRACT TIME.

Should the contract time require extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

- a) CONTRACT TIME based on WORKING DAYS shall be calculated weekly by the Engineer. The Engineer will furnish the Contractor a copy of his/her weekly statement of the number of working days charged against the contract time during the week and the number of working days currently specified for completion of the contract (the original contract time plus the number of working days, if any, that have been included in approved CHANGE ORDERS or SUPPLEMENTAL AGREEMENTS covering EXTRA WORK).

The Engineer shall base his/her weekly statement of contract time charged on the following considerations:

- 1) No time shall be charged for days on which the Contractor is unable to proceed with the principal item of work under construction at the time for at least 6 hours with the normal work force employed on such principal item. Should the normal work force be on a double-shift, 12 hours shall be used. Should the normal work force be on a triple-shift, 18 hours shall apply. Conditions beyond the Contractor's control such as strikes, lockouts, unusual delays in transportation, temporary suspension of the principal item of work under construction or temporary suspension of the entire work which have been ordered by the Owner for reasons not the fault of the Contractor, shall not be charged against the contract time.
- 2) The Engineer will not make charges against the contract time prior to the effective date of the notice to proceed.
- 3) The Engineer will begin charges against the contract time on the first working day after the effective date of the notice to proceed.
- 4) The Engineer will not make charges against the contract time after the date of final acceptance as defined in the subsection titled FINAL ACCEPTANCE of Section 50.
- 5) The Contractor will be allowed 1 week in which to file a written protest setting forth his/her objections to the Engineer's weekly statement. If no objection is filed within such specified time, the weekly statement shall be considered as acceptable to the Contractor.

The contract time (stated in the proposal) is based on the originally estimated quantities as described in the subsection titled INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES of Section 20. Should the satisfactory completion of the contract require performance of work in greater quantities than those estimated in the proposal, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in contract time shall not consider either the cost of work or the extension of contract time that has been covered by change order or supplemental agreement and shall be made at the time of final payment.

- b) CONTRACT TIME based on CALENDAR DAYS shall consist of the number of calendar days stated in the contract counting from the effective date of the notice to proceed and including all Saturdays, Sundays, holidays, and nonwork days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

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At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

- c) When the contract time is a specified completion date, it shall be the date on which all contract work shall be substantially completed.

If the Contractor finds it impossible for reasons beyond his/her control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this subsection, he may, at any time prior to the expiration of the contract time as extended, make a written request to the Engineer for an extension of time setting forth the reasons which he believes will justify the granting of his/her request. Requests for extension of time on calendar day projects, caused by inclement weather, shall be supported with National Weather Bureau data showing the actual amount of inclement weather exceeded which could normally be expected during the contract period. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, he may extend the time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

80-08 FAILURE TO COMPLETE ON TIME. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of this Section) the sum specified in the contract and proposal as liquidated damages will be deducted from any money due or to become due the Contractor or his/her surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in his/her contract.

The maximum construction time allowed for this project is three (3) calendar days for the base bid. No additional time will be allowed for additive alternate 1. Liquidated damages of \$500 per calendar day will be assessed for any construction times exceeding any of these limitations. The runway will remain closed for not more than 3 calendar days for the project. Liquidated damages of \$500 per calendar day will be assessed for construction times exceeding the permitted runway closure days.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

80-09 DEFAULT AND TERMINATION OF CONTRACT. The Contractor shall be considered in default of his/her contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons if the Contractor:

- a. Fails to begin the work under the contract within the time specified in the "Notice to Proceed," or
- b. Fails to perform the work or fails to provide sufficient workers, equipment or materials to assure completion of work in accordance with the terms of the contract, or

- c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- d. Discontinues the prosecution of the work, or
- e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- g. Allows any final judgment to stand against him unsatisfied for a period of 10 days, or
- h. Makes an assignment for the benefit of creditors, or
- i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Engineer consider the Contractor in default of the contract for any reason hereinbefore, he shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the Engineer of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the prosecution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the Engineer will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 TERMINATION FOR NATIONAL EMERGENCIES. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the prosecution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as

General Provisions

shown by receipted bills and actual cost records at such points of delivery as may be designated by the Engineer.

Termination of the contract or a portion thereof shall neither relieve the Contractor of his/her responsibilities for the completed work nor shall it relieve his/her surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 WORK AREA, STORAGE AREA AND SEQUENCE OF OPERATIONS. The Contractor shall obtain approval from the Engineer prior to beginning any work in all areas of the airport. No operating runway, taxiway, or Air Operations Area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate his/her work in such a manner as to insure safety and a minimum of hindrance to flight operations. All Contractor equipment and material stockpiles shall be stored a minimum of 250 feet from the centerline of an active runway. No equipment will be allowed to park within the approach area of an active runway at any time. No equipment shall be within 250 feet of an active runway at any time.

END OF SECTION 80

Measurement and Payment

SECTION 90

90-01 MEASUREMENT OF QUANTITIES. All work completed under the contract will be measured by the Engineer, or his/her authorized representatives, using United States Customary Units of Measurement or the International System of Units.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meter) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

In computing volumes of excavation the average end area method or other acceptable methods will be used.

The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inches.

The term "ton" will mean the short ton consisting of 2,000 pounds (907 kilograms) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designed by the Engineer. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

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Bituminous materials will be measured by the gallon (liter) or ton (kilogram). When measured by volume, such volumes will be measured at 60 F (15 C) or will be corrected to the volume at 60 F (15 C) using ASTM D 1250 for asphalts or ASTM D 633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when bituminous material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work.

When bituminous materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, may be used for computing quantities.

Cement will be measured by the ton (kilogram) or hundredweight (kilogram).

Timber will be measured by the thousand feet board measure (M.F.B.M.) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered by the Engineer in connection with force account work will be measured as agreed in the change order or supplemental agreement authorizing such force account work as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of this section.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gage, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales.

Scales shall be accurate within one-half percent of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the inspector before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed one-tenth of 1 percent of the nominal rated capacity of the scale, but not less than 1 pound (454 grams). The use of spring balances will not be permitted.

Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the inspector can safely and conveniently view them.

Scale installations shall have available ten standard 50-pound (2.3 kilogram) weights for testing the weighing equipment or suitable weights and devices for other approved equipment.

Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales "overweighing" (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of one-half of 1 percent.

In the event inspection reveals the scales have been "underweighing" (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.

All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.

When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the Engineer. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

90-02 SCOPE OF PAYMENT. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the prosecution thereof, subject to the provisions of the subsection titled **NO WAIVER OF LEGAL RIGHTS** of Section 70.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 COMPENSATION FOR ALTERED QUANTITIES. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in the subsection titled **ALTERATION OF WORK AND QUANTITIES** of Section 40 will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from his/her unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-04 PAYMENT FOR OMITTED ITEMS. As specified in the subsection titled **OMITTED ITEMS** of Section 40, the Engineer shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the Engineer omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the Engineer's order to omit or nonperform such contract item.

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Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Engineer's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the Engineer's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature and the amount of such costs.

90-05 PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK. Extra work, performed in accordance with the subsection titled EXTRA WORK of Section 40, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work. When the change order or supplemental agreement authorizing the extra work requires that it be done by force account, such force account shall be measured and paid for based on expended labor, equipment, and materials plus a negotiated and agreed upon allowance for overhead and profit.

a. **Miscellaneous.** No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

b. **Comparison of Record.** The Contractor and the Engineer shall compare records of the cost of force account work at the end of each day. Agreement shall be indicated by signature of the Contractor and the Engineer or their duly authorized representatives.

c. **Statement.** No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with duplicate itemized statements of the cost of such force account work detailed as follows:

1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.

2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

3) Quantities of materials, prices, and extensions.

4) Transportation of materials.

5) Cost of property damage, liability and workman's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by a receipted invoice for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

90-06 PARTIAL PAYMENTS. Partial payments will be made at least once each month as the work progresses. Said payments will be based upon estimates prepared by the Engineer of the value of the work performed and materials complete in place in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials

stockpiled and stored in accordance with the subsection titled PAYMENT FOR MATERIALS ON HAND of this section.

No partial payment will be made when the amount due the Contractor since the last estimate amounts to less than five hundred dollars.

The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. The Owner must ensure prompt and full payment of retainage from the prime contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

From the total of the amount determined to be payable on a partial payment, 10 percent of such total amount will be deducted and retained by the Owner until the final payment is made, except as may be provided (at the Contractor's option) in the subsection titled PAYMENT OF WITHHELD FUNDS of this section. The balance (90 percent) of the amount payable, less all previous payments, shall be certified for payment. Should the Contractor exercise his/her option, as provided in the subsection titled PAYMENT OF WITHHELD FUNDS of this section, no such 10 percent retainage shall be deducted.

When at least 95 percent of the work has been completed, the Engineer shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done.

The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the Engineer to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection titled ACCEPTANCE AND FINAL PAYMENT of this section.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final retained percentage or final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-07 PAYMENT FOR MATERIALS ON HAND. Partial payments may be made to the extent of the delivered cost of 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:

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- a. The material has been stored or stockpiled in a manner acceptable to the Engineer at or on an approved site.
- b. The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- c. The Contractor has furnished the Engineer with satisfactory evidence that the material and transportation costs have been paid.
- d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled.
- e. The Contractor has furnished the Owner evidence that the material so stored or stockpiled is insured against loss by damage to or disappearance of such materials at anytime prior to use in the work.

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/her responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

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.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

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

90-08 PAYMENT OF WITHHELD FUNDS. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in subsection 90-06 PARTIAL PAYMENTS, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

- a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.
- b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the 10 percent retainage that would otherwise be withheld from partial payment.
- c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.
- d. The Contractor shall obtain the written consent of the surety to such agreement.

90-09 ACCEPTANCE AND FINAL PAYMENT. When the contract work has been accepted in accordance with the requirements of the subsection titled FINAL ACCEPTANCE of Section 50, the Engineer will prepare the final estimate of the items of work actually performed. The Contractor shall approve the Engineer's final estimate or advise the Engineer of his/her objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the Engineer shall resolve all disputes (if any) in the measurement and computation of final quantities to

be paid within 30 calendar days of the Contractor's receipt of the Engineer's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the Engineer's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with the subsection titled CLAIMS FOR ADJUSTMENT AND DISPUTES of Section 50.

After the Contractor has approved, or approved under protest, the Engineer's final estimate, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of the subsection titled CLAIMS FOR ADJUSTMENTS AND DISPUTES of Section 50 or under the provisions of this subsection, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

END OF SECTION 90

General Provisions

Contractor Quality Control Program

SECTION 100

100 01 GENERAL. When the specification requires a Contractor Quality Control Program, the Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The intent of this section is to enable the Contractor to establish a necessary level of control that will:

- a. Adequately provide for the production of acceptable quality materials.
- b. Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.
- c. Allow the Contractor as much latitude as possible to develop his or her own standard of control.

The Contractor shall be prepared to discuss and present, at the preconstruction conference, his/her understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Engineer.

100 02 DESCRIPTION OF PROGRAM.

- a. General Description. The Contractor shall establish a Quality Control Program to perform inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.
- b. Quality Control Program. The Contractor shall describe the Quality Control Program in a written document that shall be reviewed by the Engineer prior to the start of any production, construction, or off site fabrication. The written Quality Control Program shall be submitted to the Engineer for review at least 7 calendar days before the preconstruction conference.

The Quality Control Program shall be organized to address, as a minimum, the following items:

- a. Quality control organization;
- b. Project progress schedule;
- c. Submittals schedule;
- d. Inspection requirements;
- e. Quality control testing plan;
- f. Documentation of quality control activities; and
- g. Requirements for corrective action when quality control and/or acceptance criteria are not met.

The Contractor is encouraged to add any additional elements to the Quality Control Program that he/she deems necessary to adequately control all production and/or construction processes required by this contract.

100 03 QUALITY CONTROL ORGANIZATION. The Contractor Quality Control Program shall be implemented by the establishment of a separate quality control organization. An organizational chart shall be developed to show all quality control personnel and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. If necessary, different technicians can be utilized for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the Quality Control Program, the personnel assigned shall be subject to the qualification requirements of paragraph 100 03a and 100 03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The quality control organization shall consist of the following minimum personnel:

- a. **Program Administrator.** The Program Administrator shall be a full time employee of the Contractor, or a consultant engaged by the Contractor. The Program Administrator shall have a minimum of 5 years of experience in airport and/or highway construction and shall have had prior quality control experience on a project of comparable size and scope as the contract.

Additional qualifications for the Program Administrator shall include at least 1 of the following requirements:

- 1) Professional engineer with 1 year of airport paving experience acceptable to the Engineer.
- 2) Engineer in training with 2 years of airport paving experience acceptable to the Engineer.

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- 3) An individual with 3 years of highway and/or airport paving experience acceptable to the Engineer, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.
- 4) Construction materials technician certified at Level III by the National Institute for Certification in Engineering Technologies (NICET).
- 5) Highway materials technician certified at Level III by NICET.
- 6) Highway construction technician certified at Level III by NICET.
- 7) A NICET certified engineering technician in Civil Engineering Technology with 5 years of highway and/or airport paving experience acceptable to the Engineer.

The Program Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract plans and technical specifications. The Program Administrator shall report directly to a responsible officer of the construction firm. The Program Administrator may supervise the Quality Control Program on more than one project provided that person can be at the job site within 2 hours after being notified of a problem.

- b. **Quality Control Technicians.** A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be either engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II or higher construction materials technician or highway construction technician and shall have a minimum of 2 years of experience in their area of expertise.

The quality control technicians shall report directly to the Program Administrator and shall perform the following functions:

- 1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by Section 100 06.
- 2) Performance of all quality control tests as required by the technical specifications and Section 100 07.

Certification at an equivalent level, by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

- c. **Staffing Levels.** The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The Quality Control Program shall state where different technicians will be required for different work elements.

100 04 PROJECT PROGRESS SCHEDULE. The Contractor shall submit a coordinated construction schedule for all work activities. The schedule shall be prepared as a network diagram in Critical Path Method (CPM), PERT, or other format, or as otherwise specified in the contract. As a minimum, it shall provide information on the sequence of work activities, milestone dates, and activity duration.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

100 05 SUBMITTALS SCHEDULE. The Contractor shall submit a detailed listing of all submittals (e.g., mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include:

- a. Specification item number;
- b. Item description;
- c. Description of submittal;
- d. Specification paragraph requiring submittal; and
- e. Scheduled date of submittal.

100 06 INSPECTION REQUIREMENTS. Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by Section 100 07.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

- a. During plant operation for material production, quality control test results and periodic inspections shall be utilized to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment utilized in proportioning and mixing shall be inspected to ensure its proper operating condition. The Quality Control Program shall detail how these and other quality control functions will be accomplished and utilized.
- b. During field operations, quality control test results and periodic inspections shall be utilized to ensure the quality of all materials and workmanship. All equipment utilized in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The Program shall document how these and other quality control functions will be accomplished and utilized.

100 07 QUALITY CONTROL TESTING PLAN. As a part of the overall Quality Control Program, the Contractor shall implement a quality control testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.

The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

- a. Specification item number (e.g., P 401);
- b. Item description (e.g., Plant Mix Bituminous Pavements);
- c. Test type (e.g., gradation, grade, asphalt content);
- d. Test standard (e.g., ASTM or AASHTO test number, as applicable);
- e. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated);
- f. Responsibility (e.g., plant technician); and

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- g. Control requirements (e.g., target, permissible deviations).

The testing plan shall contain a statistically based procedure of random sampling for acquiring test samples in accordance with ASTM D 3665. The Engineer shall be provided the opportunity to witness quality control sampling and testing.

All quality control test results shall be documented by the Contractor as required by Section 100 08.

100 08 DOCUMENTATION. The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests that have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:

- a. **Daily Inspection Reports.** Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations on a form acceptable to the Engineer. These technician's daily reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following:

- 1) Technical specification item number and description;
- 2) Compliance with approved submittals;
- 3) Proper storage of materials and equipment;
- 4) Proper operation of all equipment;
- 5) Adherence to plans and technical specifications;
- 6) Review of quality control tests; and
- 7) Safety inspection.

The daily inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible quality control technician and the Program Administrator. The Engineer shall be provided at least one copy of each daily inspection report on the work day following the day of record.

- b. **Daily Test Reports.** The Contractor shall be responsible for establishing a system that will record all quality control test results. Daily test reports shall document the following information:

- 1) Technical specification item number and description;
- 2) Test designation;
- 3) Location;
- 4) Date of test;

- 5) Control requirements;
- 6) Test results;
- 7) Causes for rejection;
- 8) Recommended remedial actions; and
- 9) Retests.

Test results from each day's work period shall be submitted to the Engineer prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the Program Administrator.

100 09 CORRECTIVE ACTION REQUIREMENTS. The Quality Control Program shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the Quality Control Program as a whole, and for individual items of work contained in the technical specifications.

The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and utilize statistical quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

100 10 SURVEILLANCE BY THE ENGINEER. All items of material and equipment shall be subject to surveillance by the Engineer at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in conformance with the requirements detailed herein and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to surveillance by the Engineer at the site for the same purpose.

Surveillance by the Engineer does not relieve the Contractor of performing quality control inspections of either on site or off site Contractor's or subcontractor's work.

100 11 NONCOMPLIANCE.

- a. The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his/her authorized representative to the Contractor or his/her authorized representative at the site of the work, shall be considered sufficient notice.
- b. In cases where quality control activities do not comply with either the Contractor Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Engineer, the Engineer may:
 - 1) Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.

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- 2) Order the Contractor to stop operations until appropriate corrective actions are taken.

END OF SECTION 100

GENERAL SPECIFICATIONS

Existing Utilities

Attempts have been made to locate all underground utilities. Existing plans have been researched and field explorations have been made. It is believed that all underground utilities that may be affected by construction have been shown. It is the responsibility of the Contractor to check all elevations of existing utilities that may be affected before any construction is begun near them. The Contractor shall be responsible for any damage to existing utilities whether shown on the plans or not. Any utilities found that show different locations or elevations than shown on the plans shall be reported immediately to the Engineer.

Staking for Construction

The Contractor shall be responsible for laying out the work from baselines and benchmarks established by the Engineer and the Contractor shall be responsible for all measurements in connection therewith. The Contractor shall furnish, at his own expense, all stakes, templates, platforms, equipment, ranges and labor that may be required in setting and cutting or laying out any part of the work. The Contractor will be held responsible for the proper execution of the work to such lines and grades as may be established or indicated by the Engineer. Final decisions on any variation will be determined by the Engineer. Any other staking referenced in these specifications to be staked by the Engineer shall mean the Contractor's Engineer.

Testing

The Contractor shall furnish Vendor's certified test reports on all materials furnished on the project. He shall also furnish the Engineer samples of all materials used for further testing by the Engineer. Should any samples submitted to the Engineer fail to meet the specifications, the Contractor shall bear the expense of any further testing for that particular item until the material is furnished that meets the specifications.

Air and Water Pollution Control

Description

This supplemental item shall consist of the Contractor acquiring all permits and providing all materials, equipment, devices, and work required to comply with air and water standards and to accomplish construction of the project in a manner that will protect, enhance, and retrieve a favorable environment. The Contractor, at all times, shall observe and comply with all Federal, State, Possession, and local laws, codes, ordinances, and regulations governing air and water pollution control and the Contractor and his surety shall indemnify and save harmless the Owner and all his officers, agents, and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decrees, whether by himself or his employees.

The pollution control conditions and items of work outlined in this supplement to the GENERAL CONDITIONS is provided to indicate that type of materials, equipment, devices, and work of a nature considered incidental to the project construction, and for which no specific unit price has been established under other items of work within the specifications. The Contractor shall bear all expense of meeting and maintaining air and water standards, and any accessory features incidental to compliance without additional or direct compensations, except as otherwise specified. When unit prices are included in the proposal for permanent or temporary air and water pollution control items, such unit prices shall be considered full compensation for these items, and no additional, extra or incidental compensation will be made.

Pollution Control Agencies

General Specifications

The pollution control agencies governing air and water standards are, but not necessarily limited to, the following:

AIR POLLUTION

Kentucky Air Pollution Control Commission
National Air Pollution Control Administration
Environmental Protection Agency

WATER POLLUTION

Division of Water
Water Pollution Control Commission
Federal Water Quality Administration
Environmental Protection Agency

In the event of conflict between pollution control laws, rules or regulations of the governing agencies, or the pollution controls outlined in these specifications, the more restrictive laws, rules, regulations, or specifications shall apply.

Unanticipated Control Work

When unanticipated control work is necessary to the proper control of air and water standards, which in the opinion of the Engineer is non-incidental in nature, and for which no quantities or prices were given in the proposal or contract, the same shall be called extra work and shall be performed by the Contractor when so directed in writing by the Engineer. Extra Work shall be performed in accordance with applicable sections of these specifications.

Preconstruction Conference

At the preconstruction conference, or prior to the start of the applicable construction, the Contractor shall submit, for acceptance, his schedules for accomplishment of temporary erosion and pollution control work. He shall also submit, for acceptance, his proposed method of erosion control on haul roads and borrow pits and his plan for disposal of waste materials, or erosion control details for other potential sources of pollution.

Permanent Erosion Control

The Contractor shall complete all permanent erosion control features, both incidental and unit price type, at the earliest practicable time. Temporary pollution control measures shall be used to correct unforeseen conditions that occur during construction or those that are needed prior to completion of permanent measures. Temporary measures shall consist of the construction of berms, dikes, dams, drains, and sediment basins, or use of fiber mats, gravel, mulches, and other control devices or methods acceptable to the Engineer. Any temporary measure provided prior to the construction of a particular permanent control feature for which a unit price is included within the proposal, shall be considered incidental to the unit price work, except as otherwise specified.

Failure to Provide Pollution Controls

In the event that temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls in a timely manner, the Contractor shall provide such temporary erosion and pollution control measures at his own expense.

In the case of repeated failure on the part of the Contractor to control erosion and pollution, the Owner reserves the right to employ outside assistance to provide the necessary corrective measures. Such incurred costs, plus related engineering costs, shall be charged to the Contractor and appropriate deductions made from the Contractor's progress payment.

All erosion and pollution control features installed by the Contractor shall be acceptably maintained by the Contractor during the life of the Contract. Upon completion and acceptance of this project, the Owner shall accept responsibility for maintenance of permanent control measures.

Open Burning of Combustible Wastes

State and local air pollution controls are hereby augmented with the following requirements for the open burning of combustible waste; and such requirements are hereby made a part of the construction contract for the purpose of minimizing air pollution or danger from open burning during the construction of this project.

1. No tires, oils, asphalt, paint, or coated metals are permitted in combustible waste piles.
2. Burning will not be permitted within 1,000 feet of a residential or built-up area nor within 100 feet of any standing timber or flammable growth.
3. Burning shall not be permitted unless the prevailing wind is away from any nearby town or built-up area.
4. Burning shall not be permitted during a local air inversion or other climatic condition as would result in a pall of smoke over a nearby town or built-up area.
5. Burning shall not be permitted when the danger of brush or forest fires is made known by State, local, or federal officials.
6. The size and number of fires shall be restricted to avoid the danger of brush or forest fires. Burning shall be done under surveillance of a watchman, who shall have fire-fighting equipment and tools readily available.

Alternatives to Open Burning

When so specified in the particular items of work within these specifications, or when approved by the Engineer, the Contractor may use the following alternatives to open burning:

1. Sound trees, stumps, and brush may be cut off within six inches above the ground and allowed to remain in areas outside of areas to be paved providing the depth of embankment will exceed three and one-half feet. Taproots and other projections over one and one-half inches in diameter shall be grubbed out to a depth of at least 18 inches below the finished subgrade or slope elevation. Spoil materials removed by clearing and grubbing may be buried outside the airport construction graded areas, paved or to be paved areas, existing or future runway sites, and taxiway safety or apron areas.
2. Wood may be salvaged for firewood or commercial use, or it may be chipped and disposed of for use as mulch.
3. Logs, brush, etc., may be removed to an authorized disposal area or disposed of to the general public without charge.

Air Pollution Controls

The Contractor shall take all precautions necessary to prevent air pollution and shall provide all equipment and accessory features required, such equipment and accessory features to be considered incidental to the applicable unit price item. The following list of potential air

General Specifications

pollution work is given to assist the Contractor in planning necessary air pollution controls; however, it is not intended as a complete list and all other potential sources of air pollution shall be included:

1. Common construction operations that may cause excessive dust include:

- a. Quarry drilling and rock crushing
- b. Clearing, grubbing and stripping
- c. Excavation and placement of embankment
- d. Cement and aggregate handling
- e. Cement or lime stabilization
- f. Blasting
- g. Use of haul roads
- h. Sandblasting or grading

2. Other construction items that may cause air pollution are:

- a. Volatiles escaping from asphalt and cutback materials
- b. Use of herbicides or fertilizers
- c. Smoke from asphalt plants or from heater/planners

3. The Contractor shall provide one or more of the control measures listed below, as required to control air pollution to the satisfaction of the governing agencies and the Engineer:

- a. Drilling apparatus shall be equipped with water or chemical dust controlling systems
 - b. Exposing the minimum area of land
 - c. Applying temporary mulch with or without seeding
 - d. Use of water sprinkler trucks
 - e. Use of covered haul trucks
 - f. Use of stabilizing agent in solution
 - g. Use of dust palliatives and penetration asphalt on temporary roads
 - h. Use of wood chips in traffic and work areas
 - i. Use of vacuum-equipped sandblasting systems
 - j. Use of plastic sheet coverings
 - k. Restricting the application rate of herbicides to recommended dosage. Materials should be covered and protected from the elements. Application equipment and empty containers shall not be rinsed and discharged so as to pollute a stream, etc. or the ground water
 - l. Bituminous mixing plants shall be equipped with a dust collector, to waste or return uniformly to the hot elevator all or any part of the material collected, as stated in specifications P 201 and P 401 in Advisory Circular 150/5370
- 1A

Airport Safety Requirements

Scheduling Work

Prior to commencement of any work, the appropriate FAA representative and the airport owner or operator must confer with the Contractor to assure that the scheduling of construction activities in conjunction with aircraft operations is fully understood. Construction work shall be

phased so that it will result in minimum delays to aircraft movements. In moving from one area of construction activity to another area, the airport owner or operator (through the Engineer) will require appropriate advance notice from the Contractor. The airport owner or operator (through the Engineer) shall coordinate the Contractor's proposed schedule of operations with the Kentucky Department of Aviation and the Federal Aviation Administration.

Limitation of Operations

The Contractor shall not perform work in the RESTRICTED AREA shown on the safety plan until the following requirements are met:

- a. All work shall be coordinated in writing with the airport owner or operator (through the Engineer) at least forty-eight (48) hours prior to commencing work in the referenced restricted area.

Debris

Waste and loose material capable of causing damage to aircraft landing gears, propellers or being ingested in jet engines should not be placed on active aircraft movement area. Material tracked on these areas should be removed continuously during the work project.

Inspection

Frequent inspection will be made by the airport owner or operator in the presence of the Engineer to determine that work done by the Contractor is in compliance with the recommended safety procedures.

Contractor's Storage and Employee Parking Area

The Contractor shall construct the storage and parking area to handle all the airport construction equipment and vehicular traffic during the life of the Contract. When the airport construction is complete, the Contractor shall remove the storage and parking area and reseed or repave the area to match the surrounding area as directed by the Engineer. The cost for the storage and parking area construction and removal shall be born by the Contractor. The Contractor shall store all materials and equipment (when not in use) in the area designated on the plans.

Scheduling of Operation Plan

The Contractor shall submit in writing to the Engineer his plan for scheduling of operations and the period of time the airport will be closed. This plan must be approved by the Engineer before any paving operations are begun.

NOTAM Issuance

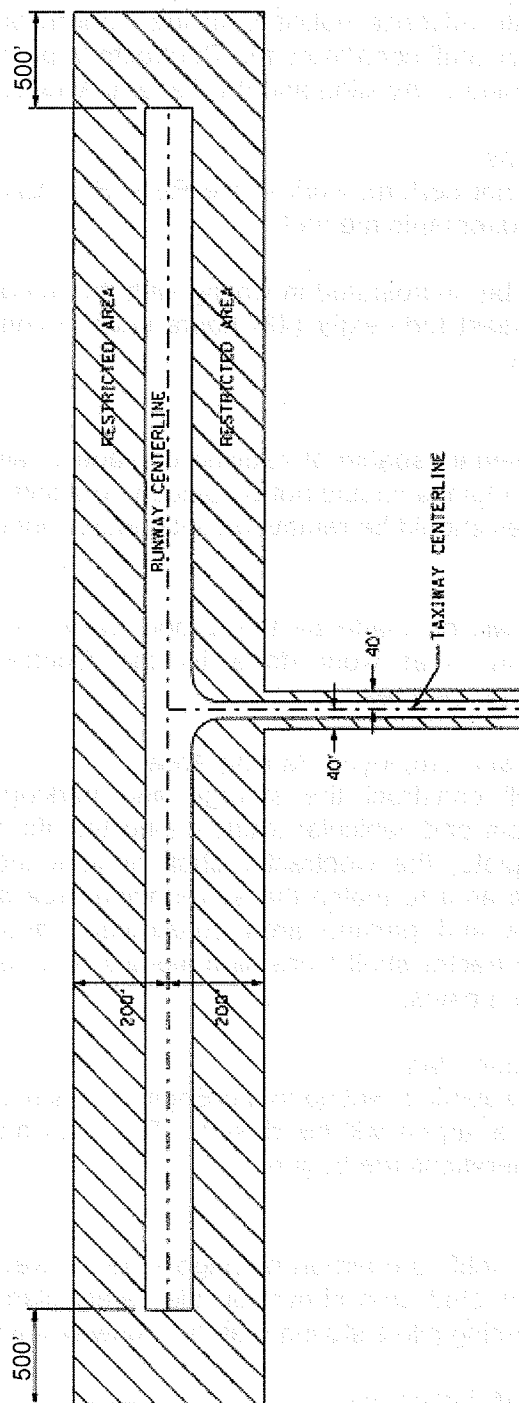
The Contractor shall notify the airport manager one (1) week prior to performing construction operations in the restricted area shown on the safety plan. The airport manager shall then issue a NOTAM informing pilots stating that the Runway will be closed.

24 Hour Emergency Maintenance

The Contractor is required to have a man on call 24 hours per day for emergency maintenance of airport hazard lighting and barricades. The name and phone number will be given to the airport owner or operator and the Engineer.

General Specifications

CONSTRUCTION RESTRICTED AREA MAP



NOTE: SEE AIRPORT SAFETY REQUIREMENTS BEFORE COMMENCING WORK IN THIS AREA

Special Conditions

- a. All items in the specifications must be completed in the allotted time for this Contract.
- b. The Contractor shall construct his own haul roads on airport property at locations approved by the Engineer. These roads shall be obliterated and reseeded to the satisfaction of the Engineer at the close of the Project. Any damage to existing entrances, apron, or other existing pavement shall be repaired by the Contractor at his expense.
- c. The Contractor is responsible for maintenance on all items constructed by him, until they are accepted by the Owner and the Contract completed. The only exception to this is written notice from the Owner, that he accepts maintenance on any specific items that are put into use before the Contract is complete.
- d. The minimum standards for all electrical work shall be the most recent revision of the NEC. Whenever and wherever OSHA and/or Federal, state and/or local laws or regulations and/or design require higher standards than the NEC, then these laws and/or regulations and/or design shall be followed.
- e. The existing airport pavements are designed for aircraft on single and dual gear configurations. The Contractor shall preserve and/or protect existing and new pavements from damage due to construction operations. Pavements that are damaged shall be replaced or repaved at the Contractor's expense. The Contractor shall take immediate action to alleviate the problem.
- f. The Contractor shall keep the Engineer apprised of his scheduled construction activities in order to allow proper notification of the airport manager and airport operators. As a minimum, weekly meetings to discuss construction progress and location should be anticipated by the Contractor.
- g. It is the intent of the Owner to minimize interference with aircraft operations. The Contractor shall coordinate his activities while working near the aircraft operational area, so as to create minimal interference with aircraft operations. Before starting his operations at any location on the airport, the Contractor shall assure proper safety precautions and separations in accordance with the plans and referenced FAA Advisory Circulars.
- h. The Contractor shall maintain during the work and shall provide the Engineer with one set of marked prints showing any modifications between the original plans and final "as-constructed" conditions. The Contractor shall provide the marked set of drawings to the Engineer at the final inspection.
- i. The Contractor is responsible for notifying the Engineer a minimum of 48 hours prior to requiring the Engineer to be on-site to test or check the following work, as a minimum:
 1. Proof-roll of prepared areas of embankment
 2. Compaction tests for embankment
 3. Blue tops or other grade control methods for subgrade
 4. Subgrade acceptance
 5. Concrete pour
 6. Asphalt Placement

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TECHNICAL SPECIFICATIONS

ITEM PAVEMENT MARKING REMOVAL

DESCRIPTION

190-1.1 This item shall consist of removing existing pavement markings from paved areas designated on the drawings or required by the Engineer. The Contractor shall schedule and coordinate the removal operations with the Engineer prior to the start of any work. The Engineer will determine the limits and degrees of pavement marking removal. **This item does not include the removal of loose, flaking or poorly bonded paint which is covered under Item P-620.**

MATERIALS

190-2.1 Water to be used by high-pressure water equipment or for other purposes shall be provided by the Contractor.

190-2.2 The use of chemicals for removing pavement markings will not be permitted.

EQUIPMENT

190-3.1 Equipment, tools and machinery to be used in the work shall be in safe and satisfactory operational condition at all times.

CONSTRUCTION

190-4.1 Except as approved by the Engineer, do not perform work when the atmospheric temperature is below 40 degrees F or when the pavement is covered with snow or ice.

190-4.2 Existing paint markings shall be removed to the degree specified by the Engineer. The degree of removal will be determined by the following criteria:

- a. 95-100% paint removal of existing obsolete markings

190-4.3 Pavement markings shall be removed from indicated areas by methods acceptable to the Engineer that cause negligible damage to existing pavements, surface texture, or other airfield appurtenances as determined by the Engineer. The Contractor and the Engineer should evaluate the surfaces prior to commencing paint removal operations so that all parties can acknowledge and record existing pavement and/or joint deterioration. It is understood that the paint removal process will leave some scarring. It will be incumbent upon the contractor to mitigate the degree of damage and scarring to the pavement. If excessive damage results from the paint removal operation, the Contractor shall repair, at his expense, said damage to the pavement, surface texture, sealant or appurtenances caused by the removal work by methods acceptable to the Engineer. Excessive damage can be defined as any result whereby PCC pavement is removed more than 1/8-inch in depth or ACC pavement, after adequate clean-up, has exposed aggregate, a majority of which can be loosened by light brushing or abrasion. Grooved runway surfaces shall maintain their functionality, i.e., water shall be able to run off the surface without puddling.

190-4.4 Sand, water, residue and other waste material that may be deposited on the pavement as a result of removal operations shall be removed as the work progresses. Obtain the approval of residue

Technical Specifications

removal and disposal method from the Engineer prior to beginning work. Accumulations of residue or other waste materials that might interfere with drainage or might constitute a hazard to aircraft or aircraft operations will not be permitted.

190-4.5 Prior to the start of work, remove pavement markings on designated test areas not less than 50 square yards in size. Use approved procedures and equipment needed to achieve the required degree of marking removal. The test section will be inspected and approved by the Engineer before any further removal work will be allowed. If more than one degree of paint removal is required during the course of the work, a test section for each area shall be designated, conducted and approved.

METHOD OF MEASUREMENT

190-5.1 The quantity of pavement marking removal to be paid for shall be the number of square feet of designated pavement markings removed in accordance with the specifications, complete, and accepted by the Engineer.

BASIS OF PAYMENT

190-6.1 The contract unit prices shall be full compensation for all disposal work and for furnishing all material, labor, equipment, tools and incidentals necessary to complete the item to the degree specified and to the satisfaction of the Engineer.

Payment will be made under:

Pavement Marking Removal: Per square foot

END ITEM PAVEMENT MARKING REMOVAL

ITEM P-620 RUNWAY ,TAXIWAY & APRON PAINTING

DESCRIPTION

620-1.1 This item shall consist of the painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Engineer.

MATERIALS

620-2.1 MATERIALS ACCEPTANCE. The Contractor shall furnish manufacturer's certified test reports for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. The reports can be used for material acceptance or the Engineer may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the Engineer upon arrival of a shipment of materials to the site.

620-2.2 PAINT. Paint shall be waterborne in accordance with the requirements of paragraph 620-2.2a. Paint shall be furnished in white (37925) and yellow (33538 or 33655) in accordance with Federal Standard No. 595.

a. Waterborne. Paint shall meet the requirements of Federal Specification TT-P-1952E, Type II.

620-2.3 REFLECTIVE MEDIA. Glass beads shall meet the requirements for Federal Specification TT-B-1325D, Type I, gradation A. Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

Paint Color	Glass Beads, Type I, Gradation A	Glass Beads, Type III	Glass Beads, Type IV
White	See Table 1.	See Table 1.	See Table 1.
Yellow	See Table 1.	See Table 1.	See Table 1.
Red	See Table 1 and Note.	Not used.	See Table 1 and Note.
Pink	See Table 1 and Note.	Not used.	See Table 1 and Note.
Black	Not used.	Not used.	See Table 1 and Note.

CONSTRUCTION METHODS

620-3.1 WEATHER LIMITATIONS. The painting shall be performed only when the surface is dry and when the surface temperature is at least 45 °F (7 °C) and rising and the pavement surface temperature is at least 5 °F (2.7 °C) above the dew point. Painting operations shall be discontinued when the surface temperature exceeds manufacturer's recommendation. Markings shall not be applied when the pavement temperature is greater than 120 °F (49 °C).

620-3.2 EQUIPMENT. Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type or airless-type marking machine suitable for application of traffic paint. It shall produce an even and uniform film thickness at the required

Technical Specifications

coverage and shall apply markings of uniform cross-sections and clear-cut edges without running or spattering and without over spray.

620-3.3 PREPARATION OF SURFACE. Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other foreign material that would reduce the bond between the paint and the pavement. The area to be painted shall be cleaned by sweeping and blowing or by other methods as required to remove all dirt, laitance, and loose materials without damage to the pavement surface. Use of any chemicals or impact abrasives during surface preparation shall be approved in advance by the Engineer.

620-3.4 LAYOUT OF MARKINGS. The proposed markings shall be laid out in advance of the paint application. All markings shall receive glass beads.

620-3.5 APPLICATION. Paint shall be applied at the locations and to the dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the surface has been approved by the Engineer. The edges of the markings shall not vary from a straight line more than 1/2 in (12 mm) in 50 ft (15 m) and marking dimensions and spacings shall be within the following tolerances:

Dimension and Spacing	Tolerance
36 in (910 mm) or less	±1/2 in (12 mm)
greater than 36 in to 6 ft (910 mm to 1.85 m)	± 1 in (25 mm)
greater than 6 ft to 60 ft (1.85 m to 18.3 m)	± 2 in (51 mm)
greater than 60 ft (18.3 m)	± 3 in (76 mm)

The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate shown in Table 1. The addition of thinner will not be permitted. A period of 14 days shall elapse between placement of a bituminous surface course or seal coat and application of the paint.

Table 1 Application Rates For Paint And Glass Beads
(See Note regarding Red and Pink Paint)

Paint Type	Paint Square feet per gallon, ft ² /gal. (Sq ms per liter, m ² /l)	Glass Beads, Type I, Gradation A Pounds per gallon of paint-lb./gal. (Km per liter of paint-kg/l)	Glass Beads, Type III Pounds per gallon of paint-lb./gal. (Km per liter of paint-kg/l)	Glass Beads, Type IV Pounds per gallon of paint-lb./gal. (Km per liter of paint-kg/l)
Waterborne	115 ft ² /gal. max (2.8 m ² /l)	7 lb./gal. min (0.85 kg/l)	NA	NA

Glass beads shall be distributed upon the marked areas immediately after application of the paint. All markings shall receive glass beads. A dispenser shall be furnished that is properly designed for attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at the rate shown in Table 1. Glass beads shall not be applied to black paint. Glass beads shall adhere to the cured paint or all marking operations shall cease until corrections are made.

All emptied containers shall be returned to the paint storage area for checking by the Engineer. The containers shall not be removed from the airport or destroyed until authorized by the Engineer.

620-3.6 NOT USED

620-3.7 PROTECTION AND CLEANUP: After application of the markings, all markings shall be protected from damage until dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings. The Contractor shall remove from the work area all debris, waste, loose or unadhered reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the Engineer. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and Federal environmental statutes and regulations.

METHOD OF MEASUREMENT

620-4.1 The quantity of runway, taxiway and apron markings to be paid for shall be the number of square feet in accordance with the specifications and accepted by the Engineer.

BASIS OF PAYMENT

620-5.1 Payment shall be made at the respective contract price per square foot. Reflective media shall be applied to all pavement markings and shall be included in the unit cost for pavement marking. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Pavement Marking - White - per square foot

Pavement Marking - Yellow - per square foot

TESTING REQUIREMENTS

ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C 146	Chemical Analysis of Glass Sand
ASTM C 371	Wire-Cloth Sieve Analysis of Nonplastic Ceramic Powders
ASTM D 92	Test Method for Flash and Fire Points by Cleveland Open Cup
ASTM D 711	No-Pick-Up Time of Traffic Paint
ASTM D 968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D 1213-54 (1975)	Test Method for Crushing Resistance of Glass Spheres
ASTM D 1652	Test Method for Epoxy Content of Epoxy Resins
ASTM D 2074	Test Method for Total Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
ASTM D 2240	Test Method for Rubber Products-Durometer Hardness
ASTM G 15453	Operating Light and Water-Exposure Apparatus (Fluorescent Light Apparatus UV-Condensation Type) for Exposure of Nonmetallic Materials.

Technical Specifications

Federal Test Method Paint, Varnish, Lacquer and Related Materials; Methods of Inspection,
Standard No. 141D/GEN Sampling and Testing

MATERIAL REQUIREMENTS

ASTM D 476 Specifications for Dry Pigmentary Titanium Dioxide Pigments Products

Code of Federal Regulations 40 CFR Part 60, Appendix A – Definition of Traverse Point Number and Location

Code of Federal Regulations 29 CFR Part 1910.1200 – Hazard Communications

FED SPEC TT-B-1325D Beads (Glass Spheres) Retroreflective

AASHTO M 247 Glass Beads Used in Traffic Paints

FED SPEC TT-P-1952E Paint, Traffic and Airfield Marking, Waterborne

Commercial Item Description (CID) A-A-2886B Paint, Traffic, Solvent Based

FED STD 595 Colors used in Government Procurement

END OF ITEM P-620

RUNWAY/TAXIWAY CLOSURE MARKERS

Runway closure markers are required when working within 200' of the runway centerline. Taxiway closure markers are required when working within 39' of the taxiway centerline or as shown by phase on the drawings. This item shall consist of providing and installing runway/taxiway closure markings as detailed on the plans and in these specifications.

MATERIALS

Runway and taxiway closure markers shall be yellow snow fence and shall be weighted with sand bags. The runway closure marker should be a minimum of 60' long X 8' wide. The taxiway closure marker should be a minimum of 30' long X 4' wide.

CONSTRUCTION METHODS

The contractor shall install runway and taxiway closure markers as specified herein and as shown on the plans. Runway and taxiway closure markers shall be weighted in to prevent displacement and the method shall be approved by the engineer. The contractor shall install runway closure markers on the runway designation markings as shown on the plans. The contractor may temporarily locate the runway closure markers in the grass area off the end of the runway when work is being performed in the area of the runway designation numbers. The contractor shall remove, relocate, and reinstall runway and taxiway closure markers as directed by the Engineer based on the contractor's construction phasing. No additional payment will be made for removing, relocating, or reinstalling runway or taxiway closure markers.

The contractor should minimize the time that the runway closure markers are off the end of the runway. If runway closure markers kill existing vegetation, discing, seeding, and mulching will be required. No additional payment will be made for discing, seeding, or mulching.

METHOD OF MEASUREMENT

620-4.1 The quantity of runway and taxiway closure markers to be paid for shall be the number of each unit required for construction in accordance with the specifications and accepted by the Engineer.

BASIS OF PAYMENT

Payment will be made at the contract unit price bid per each runway and taxiway closure marker, respectively. This price shall constitute payment in full for all labor, materials and incidentals required to complete this item.

Payment will be made under:

Runway Closure Marker - per each

Taxiway Closure Marker - per each

END OF ITEM

Technical Specifications

LOW PROFILE BARRICADE

This item includes furnishing and placement of frangible low profile barricades. Barricades are to be used to close off existing taxiways and apron areas when work is being performed that would warrant its closure. Barricades shall be located 20' on center with a barricade on the centerline of the taxiway, or as directed by the engineer. Contractor shall weight barricade to prevent displacement and the method shall be approved by the engineer. Barricades shall be frangible and approved by the engineer.

Payment will be made at the contract unit price bid each. This price shall constitute payment in full for all labor, materials, and incidentals required to complete this item.

Payment will be made under:

Low Profile Barricades – per lump sum

END OF ITEM

REPLACE EXISTING SIGN PANEL

This item includes furnishing and replacing the existing sign panels called out on the plans for replacement with new sign panels of the same size. New panels shall have the new message as shown on the plans. All existing signs are size 2. All sign panels must be an FAA approved product.

Payment will be made at the contract unit price bid each. This price shall constitute payment in full for all labor, materials, and incidentals required to complete this item.

Payment will be made under:

Replace existing sign panel – per each

END OF ITEM

Technical Specifications

CRACK REPAIR

DESCRIPTION

This item consists of removing existing, loose, or damaged sealant material where applicable, preparation of the cracks, preparation of the sealant material, and the complete installation of the sealant repair system. This item includes providing and installing a resilient and adhesive crack sealant conforming to Item M-361 Hot-Applied Joint And Crack Sealants For Rigid (Portland Cement Concrete) And Flexible (Bituminous) Pavements, as specified herein, in cracks in flexible (hot-mix asphalt) pavements up to 3/4 inch in width. Locations of cracks to be repaired will be identified in the field by the Engineer or the Engineer's Representative.

CLASSIFICATION OF CRACK REPAIR

Routing - Cracks between 1/8" and 3/4" – Cracks that are between 1/8" and 3/4" shall require routing as shown on the plan details.

Sealing – Cracks between 1/8" and 3/4" - Cracks that are between 1/8" and 3/4" which have been routed shall require crack sealing per item M-361 after thorough cleaning, blowing out with compress air free of oil and water, and installation of backer material as needed. Backer rod and cleaning of crack shall be considered incidental to the sealant.

CONSTRUCTION METHODS

Routing – Shall be done to create a sealant reservoir with a 3/4-inch minimum width and 1:1 depth to width ratio. Any remaining sealant/debris will be removed by use of a hot lance and compressed air free of oil and water. The joint will be allowed sufficient time to dry prior to sealing.

Cleaning – All cracks will be cleaned of any debris or laitance by use of a hot lance and compressed air free of oil and water. Only air compressors with operable oil and water traps will be used to prepare the joints for sealing. All loose material and other material will be removed from the cracks and from the pavement surfaces. The cracks will be sterilized by use of propane torch to eliminate all vegetation, moisture and dirt.

Sealing – Sealing should be done as soon as feasible after completion of the pavement preparation. The joint faces will be allowed to cool to the ambient temperature and will be surface dry when the seal is applied. No crack sealing material will be applied in wet cracks. Joint sealing material and construction methods shall conform to Item M-361 Hot-Applied Joint And Crack Sealants For Rigid (Portland Cement Concrete) And Flexible (Bituminous) Pavements as described in these specifications. Sealer shall be well bonded to the pavement. A well bonded sealant cannot be readily pulled from the pavement by hand. The surface of the installed sealant material will be 1/8-inch below the existing pavement surface. More than one application of crack sealer may be necessary to fill cracks to required level. Excess or spilled sealer shall be removed from the pavement and discarded. Sealer will be delivered to the pavement surface through a pressure hose line and appropriately sized applicator shoe.

Backer Material – Backer material may be used as needed to control the depth of the sealant, to achieve the desired shape factor, reservoir width to depth ratio, and to support the sealant against indentation and sag. Backer rod materials and bond breakers should be compatible with the sealant, should not adhere to the sealant, should be compressible without extruding the sealant, and should recover to maintain contact with the crack faces when the crack is open. The backer rod will be

nonreactive and non-adhesive with the pavement or the sealant. The backer rod will be 25 percent larger in diameter than the width of the reservoir.

If backer material is not used, additional applications of crack sealer/filler will be required after previous application has been given 12 hours to settle into the crack. The number of additional applications will be as needed to bring the sealant to a depth of 1/8-inch below the existing pavement surface.

MATERIALS

M-361 Hot-Applied Joint And Crack Sealants For Rigid (Portland Cement Concrete) And Flexible (Bituminous) Pavements – See Section in Specifications

CERTIFICATION - Manufacturer's certificates of all materials used will be required for the following materials:

- a. M-361

CONSTRUCTION REQUIREMENTS

Weather Limitations – No crack repair material will be applied in wet cracks, or where frost, snow, or ice is present, or when the ambient temperature is below 40°F.

Time Limitations - The Contractor will schedule his operations so that all crack filling and pavement repair will be performed within the schedules identified by the engineer.

Equipment - Equipment used in the performance of the work will be subject to the approval of the Engineer and maintained in satisfactory working condition at all times.

Air compressor will be portable and capable of furnishing not less than 100 cubic feet of air per minute at not less than 90 pounds per square inch pressure at the nozzle. The compressors will be equipped with traps that will maintain the compressed air free of oil and water.

Manually operated, gas powered air-broom or self-propelled vacuum sweeper designed especially for use in cleaning pavements will be used to remove debris, dirt and dust from routed cracks. Hand sweeping and cleanup of debris, dirt, and dust may be used on small areas.

Hand tools consist of brooms, shovels, metal bars with chisel-shaped ends, and any other tools that may be satisfactorily used to accomplish work.

The melting kettle used to melt the crack sealing compound will be a double boiler, indirect fired type. The space between inner and outer shells will be filled with a suitable heat transfer oil or substitute having a flash point of not less than 600°F. The kettle will be equipped with a satisfactory means of agitating the crack sealer at all times. This may be accomplished by continuous stirring with mechanically operating paddles and/or by a continuous circulating gear pump attached to the heating unit. The kettle will be equipped with thermostatic control calibrated between 200 and 500°F.

Equipment for blowing clean, drying and rejuvenating sidewall of cracks will be a propane torch unit which operates at 3,000°F and gas velocity of 3000 feet per second.

Technical Specifications

METHOD OF MEASUREMENT

Routing cracks between 1/8" and 3/4" will be measured in place by linear feet completed and accepted by the Engineer.

Sealing cracks between 1/8" and 3/4" will be measured by the linear foot of sealant in place, completed, and accepted by the Engineer. Cleaning of the crack and backer rod shall be considered incidental to this item.

BASIS OF PAYMENT

Payment for Routing - cracks between 1/8" and 3/4" will be made at the contract unit price bid per linear foot. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment, tools and incidentals necessary to complete the item including any items that may not be listed in this specification.

Payment for Sealing - cracks between 1/8" and 3/4" will be made at the contract unit price bid per linear foot. This price will be full compensation for furnishing all materials, for all preparation, delivering, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Routing cracks between 1/8" and 3/4" – per linear foot
Sealing cracks between 1/8" and 3/4" – per linear foot

TESTING REQUIREMENTS

ASTM D 2950	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D 244	Standard Test Methods and Practices for Emulsified Asphalts
ASTM D 2939	Standard Test Methods for Emulsified Bitumens Used as Protective Coatings
ASTM D 7226	Standard Test Method for Determining the Viscosity of Emulsified Asphalts Using a Rotational Paddle Viscometer

MATERIAL REQUIREMENTS

ASTM D 977	Standard Specification for Emulsified Asphalt
ASTM D 5249	Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland Cement Concrete and Asphalt Joints
ASTM D 6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

END OF ITEM

ITEM M-361 HOT-APPLIED JOINT AND CRACK SEALANTS FOR RIGID (PORTLAND CEMENT CONCRETE) AND FLEXIBLE (BITUMINOUS) PAVEMENTS

DESCRIPTION

361-1.1 This item consists of providing and installing a resilient and adhesive crack sealant, hot-applied, capable of effectively sealing cracks in rigid (PCC) or flexible (bituminous) pavements. This item includes the removal of existing, loose, or damaged sealant material where applicable, preparation of the cracks, preparation of the sealant material, and the complete installation of the sealant repair system. The selection of sealant material products will be based on climate conditions, past performance of products, and at the discretion of the engineer.

MATERIALS

361-2.1 The repair material will be a hot-applied sealant conforming to the requirements of ASTM D 6690, as listed in Table 1, for the classification type specified below. The engineer will evaluate performance based on local conditions.

Type II – A joint and crack sealant capable of maintaining an effective seal in most climates. The material is tested for low temperature performance at -29°C (-84.2°F) using 50% extension.

Table 1. Sealant Requirements per Classification Type

	Type II
Cone Penetration at 25°C (77°F), per ASTM D 5329	90 max
Softening Point, °C (°F), per ASTM D 36 minimum	80 (176)
Bond, non-immersed, per ASTM D 5329	Three 12.7 mm specimens pass A 3 cycles at 50% ext at -29°C (-84.2°F)
Bond, water immersed, per ASTM D 5329	--
Resilience, %, per ASTM D 5329	60 min
Oven Aged Resilience, %, per ASTM D 5329	--
Asphalt Compatibility, per ASTM D 5329	Pass ^B

^A The development of at any time during the test procedure of a crack, separation, or other opening over 6mm (0.24 in) deep, in the sealant or between the sealant and the concrete block will constitute failure of the test specimen. The depth of crack, separation or other opening will be measured perpendicular to the side of the sealant showing the defect.

^B There will be no failure in adhesion, formation of an oily exudate at the interface between the sealant and asphaltic concrete or other deleterious effects on the asphaltic concrete or sealant when tested at 60°C (140°F).

361-2.2 Heating of Materials. The hot-applied sealant will be heated in conformance with ASTM D 5167, Standard Practice for Melting of Hot-Applied Joint and Crack Sealant and Filler for Evaluation.

CONSTRUCTION METHODS

361-3.1 Time of Application. Cracks will be sealed as soon after completion of the pavement preparation as feasible and preferably before the pavement is opened to traffic, including construction equipment. The pavement temperature must be above 50°F (10°C) at the time of installation of the hot-applied crack sealing material.

Technical Specifications

361-3.5 Preparation of Cracks in Flexible Pavements

a. Sawing / Routing. All cracks will be cleaned of any debris or laitance by use of a hot lance and compressed air free of oil and water. In some instances, sawing or routing the cracks may be required. If sawing/routing the cracks is required, immediately after sawing/routing, the resulting debris will be completely removed from the crack and adjacent area by a hot lance and compressed air free of oil and water, and by use of other tools as necessary. The crack will be allowed sufficient time to dry prior to sealing. When sawing/routing cracks, the reservoir ratio should be 1:1 with a 3/8-inch minimum width recommended.

b. Sealing. Immediately before sealing, the cracks will be thoroughly cleaned of all remaining laitance and other foreign material. Cleaning will be accomplished by use of a hot lance. Upon completion of cleaning, the cracks will be blown out with compressed air free of oil and water. Only air compressors with operable oil and water traps will be used to prepare the cracks for sealing. The crack faces will be surface dry when the seal is applied. The surface of the installed sealant material will be 1/4-inch to 3/8-inch below the existing pavement surface.

361-3.6 INSTALLATION OF SEALANTS. Cracks will be inspected for proper width, depth, alignment, and preparation, and will be approved by the Engineer before sealing is allowed. Sealants will be installed in accordance with the following requirements:

a. Hot Poured Sealants. The crack sealant will be applied uniformly solid from bottom to top and will be filled without formation of entrapped air or voids. The sealant surface when complete will be 1/4-inch and 3/8-inch below existing pavement surface. A backing material will be placed to obtain the desired width to depth ratio and will be both non-reactive and non-adhesive to the pavement or the sealant material. The heating kettle will be an indirect heating type, constructed as a double boiler. A positive temperature control and mechanical agitation will be provided. The sealant will not be heated to more than 20°F (-11°C) below the safe heating temperature. The safe heating temperature can be obtained from the manufacturer's shipping container. A direct connecting pressure type extruding device with nozzles shaped for insertion into the joint will be provided. Any sealant spilled on the surface of the pavement, structures and/or lighting fixtures will be removed immediately.

b. Backer Rod Material. The use of a backer rod material or bond breaker in the bottom of the crack to be filled is recommended to control the depth of the sealant, to achieve the desired shape factor, reservoir width to depth ration, and to support the sealant against indentation and sag. Backer rod materials and bond breakers should be compatible with the sealant, should not adhere to the sealant, should be compressible without extruding the sealant, and should recover to maintain contact with the crack faces when the crack is open. The backer rod will be 25 percent larger in diameter than the width of the reservoir.

METHOD OF MEASUREMENT

605-4.1 No separate measurement will be made for sealant under this section.

BASIS OF PAYMENT

605-5.1 No separate payment will be made for sealant under this section.

TESTING REQUIREMENTS

ASTM D 36 Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)
ASTM D 5167 Standard Practice for Melting of Hot-Applied Joint and Crack Sealant and Filler for
Evaluation

MATERIAL REQUIREMENTS

ASTM D 6690 Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete
and Asphalt Pavements

END ITEM M-361

Technical Specifications

DEMOBILIZATION

Demobilization shall consist of all work and operations necessary to perform final cleanup; move personnel, equipment, supplies and incidentals from the project site; remove all offices, buildings and other facilities that were necessary for work on the project; and for other work that must be performed or costs incurred after acceptable completion of construction operations on the project.

Demobilization shall conform to Section 110 of the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction; however, contrary to that specification, the amount bid for Demobilization can be less than 1-1/2% of the sum of the total bid for all other items, excluding Demobilization.

Payment will be made under:

Demobilization – per lump sum

END OF ITEM

RUBBERIZED COAL-TAR EMULSION SEAL COAT**DESCRIPTION**

628-1.1 This item shall consist of an application of a coal-tar emulsion seal coat, with water and with or without mineral aggregate applied on an existing, previously prepared bituminous surface, in accordance with these specifications for the area shown on the plans or as designated by the Engineer. The material is intended for use to rehabilitate and restore existing asphalt pavement surfaces and protect them from weathering. The material is capable of filling all voids and cracks, to prevent the loss of fines through oxidation, and is fuel-resistant. The material is used to even out small irregularities on the pavement surface (truing and leveling).

MATERIALS

628-2.1 AGGREGATE. The Mineral aggregate shall be a manufactured product of ground slag material, such as "black beauty" or equal and shall be composed of clean, hard, durable, uncoated particles, free from lumps of clay and all organic material. The aggregate shall meet the gradation in Table 1, when tested in accordance with ASTM C 136.

TABLE 1. GRADATION OF AGGREGATES

<u>Sieve Size</u>	<u>Percentage By Weight Passing Sieves</u>
No. 8 (2.36 mm)	100
No. 16 (1.18 mm)	97-100
No. 20 (0.85 mm)	85-100
No. 30 (0.60 mm)	15-85
No. 40 (0.40 mm)	2-15
No. 100 (0.15 mm)	0-2

628-2.2 BITUMINOUS MATERIALS. The bituminous material shall be a coal-tar emulsion prepared from a high temperature coal-tar conforming to the requirements of ASTM D 490, grade 11/12. The coal-tar emulsion shall conform to all the requirements of Federal Specification R-P-355e except the water content shall not exceed 50 percent.

628-2.3 WATER. The water used in mixing shall be potable and free from harmful soluble salts. The temperature of the water added during mixing shall be at least 50 degrees F (10 degrees C). The pH of the water to be added during mixing shall conform to the requirements of the coal tar emulsion manufacturer by certification.

COMPOSITION AND APPLICATION

628-3.1 COMPOSITION. The seal coat shall consist of a mixture of coal-tar emulsion, water and aggregate in the proportions that fall within the ranges shown in Table 2.

628-3.2 JOB MIX FORMULA.**TABLE 2. COMPOSITION OF MIXTURE**

Seal Coat Mixture Quantities

Technical Specifications

Water gal./gal. of emul.	Aggregate lbs/gal. of emul.	Application Rate gal./sq.yd. (per application)
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0.30-0.35	3	0.10
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TABLE 3. DESIGN CRITERIA

<u>Steps/Test Property</u>	<u>Purpose</u>	<u>Criterion</u>
1 Brookfield Viscosity poises @ 77 degrees F	Incompatibility between latex and coal tar	10-90
2. Brookfield Viscosity	Workability of composite mix	10-90
3. Scuff Resistance	Rate of set	>100 in-lbs
	Final Scuff Resistance	>8-hour torque
4. Freeze-Thaw 5 cycles 10 cycles	Cracking	< 1 < 3
5. Adhesion	Loss of adhesion	Rating = 5A
6. Fuel Resistance (One composite coat)	Fuel penetration Loss of adhesion	No penetration or loss of adhesion

628-3.3 APPLICATION RATE. The coal-tar emulsion seal coat shall be applied in two coats. The predetermined formulation and application rate shall be verified during placement of the test section and shall be within the limits shown in Table 2 and shall be within 10% of the application rates as prescribed in Table 2.

CONSTRUCTION METHODS

628-4.1 WEATHER LIMITATIONS. The seal coat shall not be applied when the surface is wet or when the humidity or impending weather conditions will not allow proper curing nor when the atmospheric or pavement temperature is 50 degrees F (10 degrees C), unless otherwise directed by the Engineer.

628-4.2 EQUIPMENT AND TOOLS. The Contractor shall furnish all equipment, tools, and machinery necessary for the performance of the work. All methods employed in performing the work and all the equipment, tools and machinery used for handling materials and executing any part of the work shall be subject to the approval of the Engineer before the work is started.

a. Distributors. Distributors or spray units used for the spray application of the seal coat shall be self-

propelled and capable of uniformly applying (0.05 to 0.55) gallons per square yard (0.23 to 2.5 liters per square meter) of material over the required width of application. Distributors shall be equipped with removable manhole covers, tachometers, pressure gauges, and volume-measuring devices.

The mix tank shall have a mechanically powered mixer with sufficient power to move and homogeneously mix the entire contents of the tank.

The distributor shall be equipped with a positive displacement pump or pressurized so that a constant pressure can be maintained on the mixture to the spray nozzles.

b. Mixing Equipment. The mixing machine shall have a continuous flow mixing unit capable of accurately delivering a predetermined proportion of emulsion, water and aggregate and of discharging the thoroughly mixed product on a continuous basis. The mixing unit shall be capable of thoroughly blending all ingredients together and discharging the material to the spreading/application equipment.

c. Spreading Equipment. Attached to the spreading/application machine shall be a mechanical-type squeegee distributor, equipped with flexible material in contact with the surface to prevent loss of seal coat from the spreader box. It shall be maintained to prevent loss of seal coating on varying grades and adjusted to assure uniform spread. There shall be a lateral control device and a flexible strike-off capable of being adjusted to lay the seal coating at the specified rate of application. The spreader box shall be kept clean; coal-tar emulsion and aggregate build-up on the box shall not be permitted.

d. Calibration. The Contractor shall furnish all equipment and materials and labor necessary to calibrate the mixing equipment. It shall be calibrated with water to assure that it will produce a mix that conforms to the job mix design. A copy of the calibration test results shall be furnished to the Engineer.

628-4.4 CLEANING EXISTING SURFACE. Prior to placing the seal coat, the surface of the pavement shall be clean and free from dust, dirt, or other loose foreign matter, grease, oil, or any type of objectionable surface film. The existing surface and/or cracks shall be cleaned with wire brushes and a power blower. Where vegetation exists in cracks, the vegetation shall be removed and the cracks cleaned to a depth of at least two inches where practical. Cracks shall then be airblown vertically. Those cracks shall be treated with a concentrated solution of a herbicide approved by the Engineer. Pavement areas that have been subjected to fuel or oil spillage shall be wire brushed and blown clean to remove any dirt accumulations. The areas shall then be primed with a synthetic resin to prevent the seal coat from debonding. If crack seal is present in the cracks, it is not necessary to remove or rout out the cracks before sealing.

628-4.5 NOT USED

628-4.6 APPLICATION OF SEAL COATING. The seal coat shall be applied at a uniform rate with a distributor spray unit or squeegee applicator at the rate determined in Table 2. The mixing sequence of the various components shall be coal tar emulsion, water and aggregate. After all constituents are in the mixer, the mixing shall continue until it produces a smooth, free-flowing homogeneous mixture of uniform consistency. Slow mixing shall be continuous from the time the emulsion is placed into the mixer until the seal coating is applied by distributor truck or application equipment. During the entire mixing process, no breaking, segregating, or hardening of the emulsion, nor balling, lumping, or swelling of the aggregate shall be permitted.

When a spreader box is used, a sufficient amount of seal coat shall be fed in the spreader box to keep a full supply against the full width of the squeegee, so that complete coverage of all surface voids and cracks is obtained.

Technical Specifications

In areas inaccessible to equipment, the seal coating may be applied by means of a hand squeegee. Upon completion of the work, the seal coat shall have no pin holes, bare spots or cracks through which liquids or foreign matter could penetrate to the underlying pavement. The finished surface shall present a uniform texture, void of ridges or excessive seal coating buildup. Each application shall be allowed to dry thoroughly before the next coat is applied.

628-4.7 CURING. The mixture shall be permitted to dry for a minimum of eight (8) hours after the final application before opening to traffic and shall be sufficiently cured to drive over without damage to the seal coat. Any damage to the uncured mixture will be the responsibility of the Contractor.

628-4.8 HANDLING. The mixture shall be continuously agitated from the initial mixing until its application on the pavement surface. The distributor or applicator, pumps and all tools shall be maintained in satisfactory working condition.

QUALITY CONTROL

628-5.1 CONTRACTOR'S CERTIFICATION. The Contractor shall furnish the coal tar emulsion manufacturer's certification that each consignment of coal tar emulsion shipped to the project meets the requirements of Federal specification R-P-355e, except the water content shall not exceed 50 percent. The certification shall also indicate the solids and ash content of the emulsion, and the date the tests were conducted. The manufacturer's certification for the emulsion shall not be interpreted as a basis for final acceptance. Any certification received may be subject to verification by testing samples received for project use, at the Contractor's expense.

628-5.2 QUALITY ASSURANCE. This project shall be subject to a Pre-Construction meeting according to KYTC Specifications. The Contractor is responsible for quality control.

628-5.3 Warranty: Contractor shall furnish a one-year warranty on materials and labor, to cover any failure of the coal-tar system due to materials or workmanship, excluding any normal wear and tear or misuse, and excluding mechanical, base failure, reflective cracking and areas over fresh resilient joint and crack seal materials.

METHOD OF MEASUREMENT

4.1 The quantity of Seal Coat to be paid for will be determined by measurement of the square yards actually constructed and accepted by the Engineer as complying with the plans and specifications.

BASIS OF PAYMENT

628-6.1 Payment shall be made at the contract unit price per square yard for the two coats of the coal tar emulsion mixture. These prices shall fully compensate the Contractor for furnishing all materials, and for all labor, equipment, tools, and incidentals necessary to complete the items.

Payment will be made under:

Item Coal-Tar Sealer – per Square Yard

END OF ITEM

PROPOSAL FORMS

Bid Requirements Form

The following is a list of Bid Information requirements that make a complete bid package. All pages and fields must be filled out correctly before submitting the bid. If any page or field is not filled out properly, the bid can be voided by the Owner.

<u>Item</u>	<u>Description</u>
1.	Bid Requirements Form
2.	Proposal Form
3.	Buy American Certificate
4.	Legal Status of Bidder
5.	Affidavit
6.	Bid Schedule
7.	Prequalification of Bidders
8.	Bid Guarantee

By signing this form, I agree that the above mentioned items are complete and included with this bid package. I understand that by not including part of the package this bid can be voided.

Signature of Bidder

Dated and signed this _____ day of _____ 20_____.

Name of Business, Partnership, Corporation, or Joint Venture

Name and Title of Authorized Signee

(Attach Evidence of Authority to sign if Partnership, Corporation, or Joint Venture)

(Authorized Signature)

Business Address:

Telephone Number:

(If a Joint Venture, attach copy of Joint Venture Agreement and provide above information for each party)

Proposal Forms

Proposal Forms

The undersigned, as bidder, hereby proposes to furnish all materials and perform all construction for the Runway Marking and Apron Sealcoat project at the Mayfield-Graves County Airport in strict accordance with the provisions of the bid documents noted herein for the consideration of the prices quoted in the "Bid Schedule", attached hereto and incorporated herein by reference. It is understood that all items of work are guaranteed for one year from the date of final acceptance, unless otherwise specified.

The undersigned affirms that in making such proposal, neither he nor any company that he may represent, nor anyone on behalf of him or 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 proposal is made without regard or reference to any other bidder or proposal and without any agreements 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. The undersigned further certifies that no member, officer or agent of OWNER'S has direct or indirect financial interest in this proposal.

The bidder shall complete the following statement by checking appropriate boxes:

The bidder has () has not () participated in a previous contract subject to the Non-discrimination clause by Executive Order 11246 September 24, 1965.

If the bidder has participated in a previous Contract subject to the Non-discrimination Clause and has not submitted compliance reports as required by applicable instruction, the bidder shall submit Standard Form 41 (for Federal Construction Contracts) with the bid or proposal indicating current compliance.

Acknowledgements by Bidder

- a. Estimated Quantities: By submittal of a proposal, the BIDDER acknowledges and accepts that the quantities established by the OWNER are an approximate estimate of the quantities required to fully complete the Project and that the estimated quantities are principally intended to serve as a basis for evaluation of bids. The BIDDER further acknowledges and accepts that payment under this contract will be made only for actual quantities and that quantities will vary in accordance with the General Provisions subsection entitled "Alteration of Work and Quantities".
- b. Bid Documents: The BIDDER acknowledges and accepts that the Bid Documents are comprised of the documents identified within the Instructions to Bidders. The BIDDER further acknowledges that each of the individual documents that comprise the Bid Documents are complementary to one another and together establishes the complete terms, conditions and obligations of the successful BIDDER.
- c. Bid Guarantee: As evidence of good faith in submitting this proposal, the undersigned encloses a bid guarantee in the form of a certified check or bid bond in the amount of _____ Dollars (\$ _____)
(5% of the bid price) payable to the Mayfield-Graves County Airport Board, as required in the Advertisement for Bids. The BIDDER acknowledges and accepts that refusal or failure to accept award and execute a contract within the terms and conditions established herein will result in forfeiture of the bid guarantee to the owner as a liquidated damage. Otherwise the check or Bid Bond shall be returned to the undersigned upon the execution of the Contract and the acceptance of his bonds and insurance, or upon the rejection of his proposal.

- d. Owner's Right to Reject Bids: The BIDDER acknowledges and accepts the OWNER'S right to reject any or all bids and to waive any minor informality in any Bid or solicitation procedure and to negotiate with the apparent qualified low bidder if necessary.
- e. Owner's Right to Hold Bids: The BIDDER acknowledges and accepts the OWNER'S right to hold all Proposals for purposes of review and evaluation and not issue a notice-of-award for a period not to exceed sixty (60) calendar days from the stated date for receipt of bids. It is agreed that this proposal may not be withdrawn for a period of sixty (60) days after the opening thereof.
- f. Failure to Execute: The undersigned agrees that upon written notice-of-award of contract, he or she will execute the Construction Contract Documents, in accordance with the proposal as accepted, and give Performance Bond and Payment Bond, with good and sufficient sureties, within fifteen (15) days. The undersigned accepts that failure to execute the contract and provide the required bonds within the stated timeframe shall result in forfeiture of the bid guarantee to the owner as a liquidated damage.
- g. Time of Performance: By submittal of this proposal, the undersigned acknowledges and agrees to commence work within ten (10) calendar days of the date specified in the written "Notice-to-Proceed" as issued by the OWNER. The undersigned further agrees to complete the project within 6 calendar days for all work except the pavement markings and one additional calendar day a minimum of 14 days after the seal coat has been placed from the commencement date specified in the Notice-to-Proceed.
- h. Liquidated Damages: The undersigned acknowledges and accepts that for each and every Calendar/Working day the project remains incomplete beyond the contract time of performance, the Contractor shall pay the non-penal amount of \$500 per day for each calendar day required in excess of the authorized Contract Time and \$500 per day for each calendar day required in excess of the authorized Runway Closure Time as a liquidated damage to the OWNER.
- i. EEO Compliance Reports (41 CFR Part 60-1.7): Within 30 days after award of this contract, the Contractor/Subcontractor shall file a compliance report (Standard Form 100) if s/he has not submitted a complete compliance report within 12 months proceeding the date of award. This report is required if the Contractor/Subcontractor meets all of the following conditions:
 1. Contractors/Subcontractors are not exempt based on 41 CFR 60 1.5.
 2. Has 50 or more employees.
 3. Is a prime contractor or first tier subcontractor.
 4. There is a contract, subcontract, or purchase order amounting to \$50,000 or more
- j. Receipt of Addendums: The undersigned acknowledges receipt of the following addenda:
 Addendum Number dated / / Received
 Addendum Number dated / / Received

Representations by Bidder

By submittal of a proposal (bid), the BIDDER represents the following:

- a. The BIDDER has read and thoroughly examined the bid documents including Advertisement for Bids; Instructions to Bidders; Special Provisions; Proposal; Contract Documents; Including construction Contract Form; Construction Contract Bond Form; Plans; Specifications; and Addenda (if any) on file in the office of Lynn Imaging, 2300 Plantside Drive, Louisville, KY 40299.
- b. The BIDDER has a complete understanding of the terms and conditions required for the satisfactory performance of project work.
- c. The BIDDER has fully informed themselves of the project site, the project site conditions and the surrounding area.

Proposal Forms

- d. The BIDDER has familiarized themselves of the requirements of working on an operating airport and understands the conditions that may in any manner affect cost, progress or performance of the work
- e. The BIDDER has correlated their observations with that of the project documents.
- f. The BIDDER has found no errors, conflicts, ambiguities or omissions in the project documents, except as previously submitted in writing to the owner that would affect cost, progress or performance of the work.
- g. The BIDDER is familiar with all applicable Federal, State and local laws, rules and regulations pertaining to execution of the contract and the project work.
- h. The BIDDER has complied with all requirements of these instructions and the associated project documents.

Insurance

Workmen's Compensation

The Contractor shall take out and maintain during the life of this contract Workmen's Compensation Insurance for all his employees employed at the site of the project and in case any work is sublet, shall require the subcontractor to provide his men Workmen's Compensation Insurance for all employees unless such employees are covered by the protection afforded by the Contractor.

Public Liability Insurance

The Contractor shall take out and maintain during the life of this contract Public Liability (Bodily Injury & Property Damage) Insurance as shall protect him and any subcontractor performing work covered.

Bodily Injury Insurance shall be in an amount not less than \$250,000 for injuries including accidental death, to any one person and subject to the same limit for each person in an aggregate amount of not less than \$1,000,000 due to any one accident. Property Damage Insurance shall be in the amount of not less than \$250,000. Both types of insurance shall include a provision automatically reinstating the aforesaid limits after each accident or claim for damages, except that the property damage shall be limited to an aggregate of \$1,000,000.

The aforesaid requirements shall be construed to include both General (Comprehensive) and Automotive Liability. The General Contractor shall be covered by Contractor's Contingent Public Liability Insurance in the above amounts if any subcontracts are let. Certificates of Insurance will be issued to the Mayfield-Graves County Airport Board. Three (3) copies of the certificates will be forwarded to the Owner and two (2) copies to the Engineer.

Certifications by Bidder

Trade Restriction Certification: (49 CFR Part 30)

The Bidder, by submission of an offer certifies that it:

- 1. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
- 2. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

3. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Buy American Certification: (Title 49 U.S.C. Chapter 501)

As a condition of bid responsiveness, the bidder must certify its compliance with the Buy American preferences established under Title 49 U.S.C. Section 50101. Bidders must complete the Buy American certification that is attached to this proposal form.

Certification of Non-Segregated Facilities: (41 CFR Part 60-1.8)

The BIDDER, as a potential federally-assisted construction contractor, certifies that it does not maintain or provide, for its employees, any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The BIDDER certifies that it will not maintain or provide, for its employees, segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause, which is to be incorporated in the contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The Bidder agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that it will retain such certifications in its files.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion: (49 CFR Part 29)

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

Signature of Bidder

Dated and signed this _____ day of _____ 20_____.

Name of Business, Partnership, Corporation, or Joint Venture

Name and Title of Authorized Signee
(Attach Evidence of Authority to sign if Partnership, Corporation, or Joint Venture)

Proposal Forms

(Authorized Signature)

Business Address: _____

Telephone Number: _____

(If a Joint Venture, attach copy of Joint Venture Agreement and provide above information for each party)

Buy American Certificate

By submitting a bid/proposal under this solicitation, except for those items listed by the offeror below or on a separate and clearly identified attachment to this bid/proposal, the offeror certifies that steel and each manufactured product, are produced in the United States, as defined in the clause Buy American - Steel and Manufactured Products for Construction Contracts) and that components of unknown origin are considered to have been produced or manufactured outside the United States.

Offerors may obtain from the Owner a listing of articles, materials and supplies excepted from this provision.

PRODUCT	COUNTRY OF ORIGIN

Proposal Forms

Legal Status of Bidder

Bidder _____

Date _____ 20_____

CHECK ONE AND FILL IN APPROPRIATE AREAS

☐ 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 Proposal is duly authorized to execute contracts.

☐ A Partnership, all of the members of which with addresses are: (Designate general partners as such)

_____	_____
_____	_____
_____	_____

☐ An individual whose signature is fixed to this Proposal. (The Bidder shall fill out the appropriate form and strike out the other two).

Affidavit

State of _____

County of _____

_____, Being first duly sworn, deposes and says that he is

(Sole Owner, Partner, or Officer of Corporation)

The party making the foregoing Proposal of Bid swears that such Bid is genuine and not collusive or sham; that said Bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any Bidder or person, to put in sham bid or to refrain Bidding, and has not, in any manner directly or indirectly, sought by agreement or collusion, or communication or conference with any person, to fix the bid price of the affiant or any other bidder, or to fix any overhead, profit, or cost of said bid price or of that of any other bidder, or to obtain any advantage against the Mayfield-Graves County Airport Board, Mayfield, Kentucky, or any person interested in proposed Contract, and that all statements contained in said proposal or bid are true.

SIGNED _____
(Name of Bidder)

TITLE _____

Subscribed and sworn to before me this _____ day of _____, 20_____.

SEAL

Notary Public

Proposal Forms

Bidder's Plan, Equipment and Experience Questionnaire

1. Have you authorized banks and furnishers of materials to furnish the State of Kentucky, Department of Purchasing, any information which may be requested in the investigation of questionnaire? If not, you are requested to do this immediately.

2. Explain in detail the manner in which you have inspected the project on which you are bidding.

3. State the sources of materials for the project on which you are bidding.

4. The project awarded, or to be awarded, will have the personal supervision of whom?

5. State the work which will be performed on the project with your organization.

6. List the equipment which you own and which will be available for the project on which you are bidding.

7. List names of firms from whom you have purchased equipment during the last three (3) years.

8. Outline your general plan for constructing the project on which you are bidding.

9. Are you familiar with these Specifications and Plans which form the basis of proposals which are submitted?

10. List clients for whom work has been completed during the last three years.

11. What types of work have you completed during the last three (3) years?

Proposal Forms

12. How many years have you been doing construction work of the same character as the work on which you are bidding?

13. State below the status of all uncompleted projects which you are now having under contract, including all sub-contracts.

Proj. No.	County	State	Date of Contract	Amount of Contract	Percent Completed	Percent of Time Consumed	Description Of Work

REMARKS:

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Bid Schedule

Date _____

DESCRIPTION OF WORK

RUNWAY MARKING, SIGN PANEL REPLACEMENT APRON SEAL COAT AND CRACK
REPAIR

ESTIMATE OF QUANTITIES AND SCHEDULE OF PRICES

CONTRACT TIME
7 CALENDAR DAYS

ITEM NO.	QUANTITY AND UNIT OF MEASURE		ITEMS AND UNIT PRICES	UNIT PRICE	AMOUNT
1.	2,650	SF	Pavement Marking Removal Dollars cents per SF	_____	_____
2.	1,486	SF	Pavement Marking - White Dollars cents per SF	_____	_____
3.	1,028	SF	Pavement Marking - Yellow Dollars cents per SF	_____	_____
4.	2	EA	Runway Closure Marker Dollars cents per each	_____	_____
5.	1	EA	Taxiway Closure Marker Dollars cents per each	_____	_____
6.	11	EA	Low Profile Barricade Dollars cents per each	_____	_____
7.	7	EA	Replace existing sign panel Dollars cents per each	_____	_____
8.	11,000	LF	Routing- Crack repair between 1/8" and 3/4" Dollars cents per LF	_____	_____

Proposal Forms

9.	11,000	LF	Sealing- Crack repair between 1/8" and 3/4"		
			<u>Dollars</u>		
			<u>cents per LF</u>		
10.	21,559	SY	Coal-Tar Sealer		
			<u>Dollars</u>		
			<u>cents per SY</u>		
11.	1	LS	KYTC-110 Demobilization		
			<u>Dollars</u>		
			<u>cents per LS</u>		

Total amount of bids: _____ - dollars
and _____ cents. \$ _____

Time of completion: 7 calendar days

CONTRACT AGREEMENT

Mayfield-Graves County Airport Board
Mayfield-Graves County Airport

THIS AGREEMENT, made as of _____ is
BY AND BETWEEN the OWNER: **Mayfield-Graves County Airport Board**
And the CONTRACTOR: _____

WITNESSETH:

WHEREAS it is the intent of the Owner to make improvements at Mayfield-Graves County Airport generally described as follows; hereinafter referred to as the Project.

Runway Marking & Apron Seal Coat and Crack Repair project.

NOW THEREFORE in consideration of the mutual covenants hereinafter set forth, OWNER and CONTRACTOR agree as follows:

Article 1 – Scope of Work

It is hereby mutually agreed that for and in consideration of the payments as provided for herein to the CONTRACTOR by the OWNER, CONTRACTOR shall faithfully furnish all necessary labor, equipment, and material and shall fully perform all necessary work to complete the Project in strict accordance with this Contract Agreement and the Contract Documents.

Article 2 – Contract Documents

CONTRACTOR agrees that the Contract Documents consist of the following: this Agreement, General Provisions, Supplementary Provisions, Specifications, Drawings, all issued addenda, Notice-to-Bidders, Instructions-to-Bidders, Proposal and associated attachments, Performance Bond, Payment Bond, Insurance certificates, documents incorporated by reference, documents incorporated by attachment, and all OWNER authorized change orders issued subsequent to the date of this agreement. All documents comprising the Contract Documents are complementary to one another and together establish the complete terms, conditions and obligations of the CONTRACTOR. All said Contract Documents are incorporated by reference into the Contract Agreement as if fully rewritten herein or attached thereto.

Article 3 – Contract Price

In consideration of the faithful performance and completion of the Work by the CONTRACTOR in accordance with the Contract Documents, OWNER shall pay the CONTRACTOR an amount equal to:

\$ _____ (\$ _____)
(Amount in Written Words) (Amount in Numerals)

subject to the following:

- a. Said amount is based on the schedule of prices and estimated quantities stated in CONTRACTOR'S Bid Proposal, which is attached to and made a part of this Agreement;
- b. Said amount is the aggregate sum of the result of the CONTRACTOR'S stated unit prices multiplied by the associated estimated quantities;
- c. CONTRACTOR and OWNER agree that said estimated quantities are not guaranteed and that the determination of actual quantities is to be made by the OWNER'S ENGINEER;

Contract Agreement

- d. Said amount is subject to modification for additions and deductions as provided for within the Contract General Provisions.

Article 4 – Payment

a) Progress Payments

The Owner shall process Contractor's Invoice on or about the tenth day of each month for ninety (90%) percent of the value, based on the Contract prices of labor and materials incorporated in the work and ninety (90%) percent of materials suitably stored at the site thereof or at some other location agreed upon in writing by the parties up to the first day of each month, as estimated by the Engineer, less the aggregate of previous payments; and upon completion of the entire work, a sum sufficient to increase the total payments to one hundred percent (100%) of the Contract price.

Payment for that month's invoice shall be made within sixty days after submittal of that invoice to the funding agencies.

b) Acceptance of Final Payment

Final payment shall be due sixty days after completion of the work provided the work be then fully completed and the Contract fully performed.

Upon receipt of written notice that the work is ready for inspection and acceptance, the Engineer shall promptly move such inspection, and when he finds the work acceptable under the Contract and the Contract fully performed, he shall promptly issue a final certificate, over his own signature, stating that the work provided for in this Contract has been completed and is accepted by him under the terms and conditions thereof, and that the entire balance found to be due the Contractor, and noted in said final certificate, is due and payable.

Before issuance of final payment the Contractor shall submit evidence satisfactory to the Engineer that all payrolls, material bills, and other indebtedness connected with the work have been paid or otherwise satisfied.

If after the work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor, and the Engineer so certifies, the Owner shall, upon certificate of the Engineer, and without terminating the Contract, make payments of the balance due for the portion of the work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Article 5 – Contract Time

The CONTRACTOR agrees to commence work within ten (10) calendar days of the date specified in the OWNER'S Notice-to-Proceed. CONTRACTOR further agrees to complete said work within 6 calendar days for all work except the pavement markings which shall be completed within 1 calendar day after the seal coat has had a minimum of 14 days to cure. It is expressly understood and agreed that the stated Contract Time is reasonable for the completion of the Work, taking all factors into consideration. Furthermore, extensions of the Contract Time may only be permitted by execution of a formal modification to this Contract Agreement in accordance with the General Provisions and as approved by the OWNER.

Article 6 – Liquidated Damages

The CONTRACTOR and OWNER understand and agree that time is of essence for completion of the Work and that the OWNER will suffer additional expense and financial loss if said Work is not completed within the authorized Contract Time. Furthermore, the CONTRACTOR and OWNER recognize and understand the difficulty, delay, and expense in establishing the exact amount of actual financial loss and additional expense. Accordingly, in place of requiring such proof, the CONTRACTOR expressly agrees to pay the OWNER as liquidated damages the non-penal sum of

\$500 per day for each calendar day required in excess of the authorized Contract Time and \$500 per day for each calendar day required in excess of the authorized Runway Closure Time.

Furthermore, the CONTRACTOR understands and agrees that;

- a. the OWNER has the right to deduct from any moneys due the CONTRACTOR, the amount of said liquidated damages;
- b. the OWNER has the right to recover the amount of said liquidated damages from the CONTRACTOR, SURETY or both.

Article 7 – CONTRACTOR’S Representations

The CONTRACTOR understands and agrees that all representations made by the CONTRACTOR within the Proposal shall apply under this Agreement as if fully rewritten herein.

Article 8 – CONTRACTOR’S Certifications

The CONTRACTOR understands and agrees that all certifications made by the CONTRACTOR within the Proposal shall apply under this Agreement as if fully rewritten herein. The CONTRACTOR further certifies the following;

- a. Certification of Eligibility (29 CFR Part 5.5)
 - i. By Entering into this contract, the CONTRACTOR certifies that neither he or she nor any person or firm who has an interest in the CONTRACTOR’S firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1);
 - ii. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1);
 - iii. The penalty for making false statements is prescribed in the U.S. Criminal Code 18 U.S.C.
- b. Certification of Non-Segregated Facilities (41 CFR Part 60-1.8)

The federally-assisted construction CONTRACTOR, certifies that it does not maintain or provide, for its employees, any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The BIDDER certifies that it will not maintain or provide, for its employees, segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause, which is to be incorporated in the contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The Bidder agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that it will retain such certifications in its files.

Article 9 – Miscellaneous

Contract Agreement

- a. CONTRACTOR understands that it shall be solely responsible for the means, methods, techniques, sequences and procedures of construction in connection with completion of the Work;
- b. CONTRACTOR understands and agrees that it shall not accomplish any work or furnish any materials that are not covered or authorized by the Contract Documents unless authorized in writing by the OWNER or ENGINEER;
- c. The rights of each party under this Agreement shall not be assigned or transferred to any other person, entity, firm or corporation without prior written consent of both parties;
- d. OWNER and CONTRACTOR each bind itself, their partners, successors, assigns and legal representatives to the other party in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- e. CONTRACTOR understands that all equipment and materials furnished and installed under this contract shall be guaranteed against defects in materials and workmanship for a period of at least twelve (12) months from final acceptance by the Owner.

Article 10 – OWNER’S Representative

The OWNER’S Representative, herein referred to as ENGINEER, is defined as follows:

Stantec
601 Grassmere Park, Suite 22
Nashville, TN 37211

Said ENGINEER will act as the OWNER’S representative and shall assume all rights and authority assigned to the ENGINEER as stated within the Contract Documents in connection with the completion of the Project Work.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have executed five (5) copies of this Agreement on the day and year first noted herein.

OWNER

Name: _____

Address: _____

By: _____

Signature

Title of Representative

ATTEST

By: _____

Signature

Title

CONTRACTOR

Name: _____

Address: _____

By: _____

Signature

Title of Representative

ATTEST

By: _____

Signature

Title