# 02A

Letting March 7, 2025

# Notice to Bidders, Specifications and Proposal



Springfield, Illinois 62764

Contract No. UN065 University of Illinois-Willard Airport Savoy, Illinois Champaign County Illinois Project No. CMI-5043 SBG Project No. N/A

# Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. on March 7, 2025, at which time the bids will be publicly opened from the iCX SecureVault.
- 2. **DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. UN065 University of Illinois-Willard Airport Savoy, Illinois Champaign County Illinois Project No. CMI-5043 SBG Project No. N/A

#### **Rehabilitate General Aviation Aprons**

For engineering information, please contact Christopher Groth, P.E. of Crawford, Murphy, & Tilly, Inc. at 217.572.1101.

#### 3. INSTRUCTIONS TO BIDDERS.

- (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 10-18 of the Illinois Standard Specifications for Construction of Airports (Adopted April 1, 2012), become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
- (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded within 90 calendar days to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.
- 5. PRE-BID CONFERENCE. N/A
- **6. DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is <u>3.0</u>%.
- 7. **SPECIFICATIONS AND DRAWINGS.** The work shall be done in accordance with the Illinois Standard Specifications for Construction of Airports (Adopted April 1, 2012), the Special Provisions dated <u>January 10, 2025</u>, and the Construction Plans dated <u>January 10, 2025</u> as approved by the Illinois Department of Transportation, Division of Aeronautics.

- 8. **BIDDING REQUIREMENTS AND BASIS OF AWARD.** When alternates are included in the proposal, the following shall apply:
  - a. Additive Alternates
    - (1) Bidders must submit a bid for the Base Bid and for all Additive Alternates.
    - (2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

The lowest aggregate amount of (i) the Base Bid plus (ii) any Additive Alternate(s) which the Department elects to award.

The Department may elect not to award any Additive Alternates. In that case, award will be to the lowest responsible qualified bidder of the Base Bid.

- b. Optional Alternates
  - (1) Bidders must submit a bid for the Base Bid and for either Alternate A or Alternate B or for both Alternate A and Alternate B.
  - (2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

The lower of the aggregate of either (i) the Base Bid plus Alternate A or (ii) the Base Bid plus Alternate B.

**9. CONTRACT TIME.** The Contractor shall complete all work within the specified contract time. Any calendar day extension beyond the specified contract time must be fully justified, requested by the Contractor in writing, and approved by the Engineer, or be subject to liquidated damages.

The contract time for this contract is <u>Base Bid: 54 calendar days; Additive Alternate #1: 6 additional calendar days;</u> Additive Alternate #2: 6 additional calendar days; Additive Alternate #3: 18 additional calendar days.

- 10. INDEPENDENT WEIGHT CHECKS. The Department reserves the right to conduct random unannounced independent weight checks on any delivery for bituminous, aggregate or other pay item for which the method of measurement for payment is based on weight. The weight checks will be accomplished by selecting, at random, a loaded truck and obtaining a loaded and empty weight on an independent scale. In addition, the department may perform random weight checks by obtaining loaded and empty truck weights on portable scales operated by department personnel.
- **11. MATERIAL COST ADJUSTMENTS.** The Illinois Department of Transportation, Division of Aeronautics does not offer any material cost adjustment provisions.
- 12. GOOD FAITH COMPLIANCE. The Illinois Department of Transportation has made a good faith effort to include all statements, requirements, and other language required by federal and state law and by various offices within federal and state governments whether that language is required by law or not. If anything of this nature has been left out or if additional language etc. is later required, the bidder/contractor shall cooperate fully with the Department to modify the contract or bid documents to correct the deficiency. If the change results in increased operational costs, the Department shall reimburse the contractor for such costs as it may find to be reasonable.

By Order of the Illinois Department of Transportation

Gia Biagi, Acting Secretary

# State of Illinois Department of Transportation

SPECIAL PROVISION FOR EEO

Effective: July 21, 1978 Revised: November 18, 1980

The requirements of the following provisions written for federally-assisted construction contracts, including all goals and timetables and affirmative action steps, shall also apply to all State-funded construction contracts awarded by the Illinois Department of Transportation.

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

- 1. The offeror's or bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 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:

#### APPENDIX A

The following goal for female utilization in each construction craft and trade shall apply to all Contractors holding Federal and federally assisted construction contracts and subcontracts in excess of \$10,000. The goal is applicable to the Contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a federal, federally assisted or nonfederally related construction contact or subcontract.

Area Covered (Statewide)

Goals for Women apply nationwide.

GOAL Goal (percent)

Female Utilization 6.9

#### APPENDIX B

Until further notice, the following goals for minority utilization in each construction craft and trade shall apply to all Contractors holding federal and federally-assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographical areas. The goals are applicable to the Contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a federal, federally-assisted or nonfederally related construction contract or subcontract.

Economic Area	Goal (percent)
056 Paducah, KY: Non-SMSA Counties - IL - Hardin, Massac, Pope KY - Ballard, Caldwell, Calloway, Carlisle, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, McCracken, Marshall	5.2
080 Evansville, IN: Non-SMSA Counties - IL - Edwards, Gallatin, Hamilton, Lawrence, Saline, Wabash, White IN - Dubois, Knox, Perry, Pike, Spencer KY - Hancock, Hopkins, McLean, Mublenberg, Ohio, Union, Webster	3.5
081 Terre Haute, IN: Non-SMSA Counties - IL - Clark, Crawford IN - Parke	2.5

083	Chicago, IL:	
	SMSA Counties:	10.0
	1600 Chicago, IL -	19.6
	IL - Cook, DuPage, Kane, Lake, McHenry, Will	
	3740 Kankakee, IL -	9.1
	IL - Kankakee	0.1
	Non-SMSA Counties	18.4
	IL - Bureau, DeKalb, Grundy, Iroquois,	
	Kendall, LaSalle, Livingston, Putnam	
	IN - Jasper, Laporte, Newton,	
	Pulaski, Starke	
084	Champaign - Urbana, IL:	
	SMSA Counties:	
	1400 Champaign - Urbana - Rantoul, IL -	7.8
	IL - Champaign	
	Non-SMSA Counties -	4.8
	IL - Coles, Cumberland, Douglas,	
	Edgar, Ford, Piatt, Vermilion	
085	Springfield - Decatur, IL:	
	SMSA Counties:	
	2040 Decatur, IL -	7.6
	IL - Macon	
	7880 Springfield, IL -	4.5
	IL - Menard, Sangamon	4.0
	Non-SMSA Counties IL - Cass, Christian, Dewitt, Logan,	4.0
	Morgan, Moultrie, Scott, Shelby	
	Morgan, Mounto, Cook, Cholby	
086	Quincy, IL:	
	Non-SMSA Counties	3.1
	IL - Adams, Brown, Pike	
	MO - Lewis, Marion, Pike, Ralls	
087	Peoria, IL:	
001	SMSA Counties:	
	1040 Bloomington - Normal, IL -	2.5
	IL - McLean	
	6120 Peoria, IL -	4.4
	IL - Peoria, Tazewell, Woodford	
	Non-SMSA Counties -	3.3
	IL - Fulton, Knox, McDonough, Marshall,	
	Mason, Schuyler, Stark, Warren	
880	Rockford, IL:	
	SMSA Counties:	
	6880 Rockford, IL -	6.3
	IL - Boone, Winnebago	
	Non-SMSA Counties -	4.6
	IL - Lee, Ogle, Stephenson	
098	Dubuque, IA:	
	Non-SMSA Counties -	0.5
	IL - JoDaviess	
	IA - Atlamakee, Clayton, Delaware,	
	Jackson, Winnesheik	
	WI - Crawford, Grant, Lafayette	
099	Davenport, Rock Island, Moline, IA - IL:	
	SMSA Counties:	
	1960 Davenport, Rock Island, Moline, IA - IL -	4.6
	IL - Henry, Rock Island	
	IA - Scott	
	Non-SMSA Counties -	3.4
	IL - Carroll, Hancock, Henderson, Mercer, Whiteside IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine	
	MO - Clark	

St. Louis, MO: SMSA Counties: 7040 St. Louis. MO - IL -14.7 IL - Clinton, Madison, Monroe, St. Clair MO - Franklin, Jefferson, St. Charles, St. Louis, St. Louis City Non-SMSA Counties -11.4 IL - Alexander, Bond, Calhoun, Clav. Effingham, Fayette, Franklin, Greene, Jackson, Jasper, Jefferson, Jersey, Johnson, Macoupin, Marion, Montgomery, Perry, Pulaski, Randolph, Richland, Union, Washington, Wayne, Williamson MO - Bollinger, Butler, Cape Girardeau, Carter, Crawford, Dent, Gasconade, Iron, Lincoln, Madison, Maries, Mississippi, Montgomery, Perry, Phelps, Reynolds, Ripley, St. Francois, St. Genevieve, Scott, Stoddard, Warren, Washington, Wayne

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 nonfederally involved construction.

The Contractor's compliance with Executive Order 11246 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 provisions and specifications set forth in its federally assisted contracts, and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must 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 11246 and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 3. The Illinois Department of Transportation will provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten working days of award of any construction contract and/or subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. This notification will list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- 4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the entire State of Illinois for the goal set forth in APPENDIX A and the county or counties in which the work is located for the goals set forth in APPENDIX B.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:

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- (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, United States 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:
  - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race):
  - (iii) 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
  - (iv) 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 must 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 p 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 geographical areas 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 toward 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 nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must 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 on-site 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 as 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 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 therefor, along with whatever additional actions the Contractors 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 woman 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 agreements; 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 Foreman, 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 of 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.
  - (I) 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 nonsegregated 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 supervisors' 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 p). The efforts of a Contractor association, joint Contractor-union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p 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, the Contractor may be in violation of the Executive Order if a 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 specified 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.
- 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 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal 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 numbers, 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 his 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).

### State of Illinois Department of Transportation

# SPECIAL PROVISION FOR SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES NONFEDERAL-AID CONTRACTS

Effective: March 20, 1969 Revised: January 1, 1994

#### 1. General

- a. The requirements set forth herein shall constitute the specific affirmative action requirements under this contract and supplement the non- discrimination requirements contained elsewhere in this proposal.
- b. The Contractor shall work with the Illinois Department of Transportation (IDOT) in carrying out Equal Employment Opportunity (EEO) obligations and in reviews of activities under the contract.
- c. The Contractor, and all subcontractors holding subcontracts (not including material suppliers) of \$10,000 or more, shall comply with the following minimum specific requirement activities of EEO. The Contractor shall include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

#### 2. Equal Employment Opportunity Policy

The Contractor shall accept as operating policy the following statement which is designed to further the provision of EEO to all persons, and to promote the full realization of equal employment opportunity through a positive continuing program: "It is the policy of this Company to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age, or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

#### 3. Equal Employment Opportunity Officer

The Contractor shall designate and make known to IDOT contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active Contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

#### Dissemination of Policy

- a. All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
  - (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the Contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
  - (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the Contractor's EEO obligations within thirty days following their reporting for duty with the Contractor.
  - (3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the Contractor's procedures for locating and hiring minority and female employees.
- b. In order to make the Contractor's EEO policy known to all employees, prospective employees, and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the Contractor shall take the following actions:
  - (1) Notices and posters setting forth the Contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
  - (2) The Contractor's EEO policy and the procedures to implement such policy shall be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

#### 5. Recruitment

- a. When advertising for employees, the Contractor shall include in all advertisements for employees the notation: "An Equal Opportunity Employer". All such advertisements shall be published in newspapers, or other publications, having a large circulation among minority groups in the area from which the project work force would normally be derived.
- b. The Contractor shall, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority and female applicants, including, but not limited to, State employment

agencies, schools, colleges and minority and female organizations. To meet this requirement, the Contractor shall, identify sources of potential minority and female employees, and establish with such identified sources procedures whereby minority and female applicants may be referred to the Contractor for employment consideration. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he/she is expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with EEO contract provisions.

c. The Contractor shall encourage present employees to refer minority and female applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority and female applicants shall be discussed with employees.

#### 6. Personnel Actions

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, will be taken without regard to race, color, religion, sex, national origin, age, or disability. The following procedures shall be followed:

- a. The Contractor shall conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The Contractor shall periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The Contractor shall periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor shall promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The Contractor shall promptly investigate all complaints of alleged discrimination made to the Contractor in connection with the obligations under this contract, shall attempt to resolve such complaints, and shall take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor shall inform every complainant of all of the avenues of appeal.

#### 7. Training and Promotion

- The Contractor shall assist in locating, qualifying and increasing the skills of minority and female employees and applicants for employment.
- b. Consistent with the Contractor's work force requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance.
- c. The Contractor shall advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The Contractor shall periodically review the training and promotion potential of minority and female employees and shall encourage eligible employees to apply for such training and promotion.

#### 8. Unions

If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor shall use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minorities and females within the unions, and to effect referrals by such unions of minority and female employees. Actions by the Contractor, either directly or through a Contractor's association acting as agent, shall include the procedures set forth below:

- a. The Contractor shall use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority and female employees for membership in the unions and increasing the skills of minority and female and employees so that they may qualify for higher paying employment.
- b. The Contractor shall use best efforts to incorporate an EEO clause into each union agreement to the end that such union shall be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age, or disability.
- c. The Contractor is to obtain information as to the referral practices and policies of the labor union, except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the Contractor, the Contractor shall so certify to IDOT and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the Contractor with a reasonable flow of minority and female referrals within the time limit set forth in the collective bargaining agreement, the Contractor shall, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and females. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minorities or female employees). In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to these Special Provisions, such Contractor shall immediately notify IDOT.

#### 9. Selection of Subcontractors, Procurement of Materials, and Leasing of Equipment

The Contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

- a. The Contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
- b. Disadvantaged business enterprises (DBE), as defined in 49 CFR Part 23, shall have equal opportunity to compete for and perform subcontracts which the Contractor enters into pursuant to this contract. The Contractor shall use best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority and female representation among their employees. Contractors shall obtain lists of DBE construction firms from IDOT personnel.
- c. The Contractor shall use his/her best efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Records and Reports

The Contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of IDOT.

- a. The records kept by the Contractor shall document the following:
  - (1) the number of minorities, non-minorities and females employed in each work classification on the project;
  - (2) the progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and females;
  - (3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
  - (4) the progress and efforts being made in securing the services of DBE subcontractors, or subcontractors with meaningful minority and female representation among their employees.
- b. The Contractor shall submit to IDOT a monthly report every month for the duration of the project, indicating the number of minority, non-minority and female employees currently engaged in each work classification required by contract work and the number of hours worked. This information is to be reported on Form SBE-956. If on-the-job training is being required by special provision, the Contractor will be required to collect and report training data.

## State of Illinois Department of Transportation

# SPECIAL PROVISION FOR REQUIRED PROVISIONS – STATE CONTRACTS

Effective: April 1 1965 Revised: January 1, 2017

#### I. SELECTION OF LABOR

The Contractor shall comply with all Illinois statutes pertaining to the selection of labor.

# EMPLOYMENT OF ILLINOIS WORKERS DURING PERIODS OF EXCESSIVE UNEMPLOYMENT

Whenever there is a period of excessive unemployment in Illinois, which is defined herein as any month immediately following two consecutive calendar months during which the level of unemployment in the State of Illinois has exceeded five percent as measured by the United States Bureau of Labor Statistics in its monthly publication of employment and unemployment figures, the Contractor shall employ at least 90 percent Illinois laborers. "Illinois laborer" means any person who has resided in Illinois for at least 30 days and intends to become or remain an Illinois resident.

Other laborers may be used when Illinois laborers as defined herein are not available, or are incapable of performing the particular type of work involved, if so certified by the Contractor and approved by the Engineer. The Contractor may place no more than three of his/her regularly employed non-resident executive and technical experts, who do not qualify as Illinois laborers, to do work encompassed by this Contract during period of excessive unemployment.

This provision applies to all labor, whether skilled, semi-skilled, or unskilled, whether manual or non-manual.

#### II. EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

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

- 1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- 2. That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (in accordance with the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- 3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.
- 4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 5. That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- 6. That it will permit access to all relevant books, records, accounts and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- 7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

#### III. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The Contractor shall perform with his/her own organization contract work amounting to not less than 51 percent of the original total contract price, except that any items designated by the State as "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the original total contract price before computing the amount of work required to be performed by the Contractor with his/her own organization.
  - a. "His/her own organization" shall be construed to include only worker employed and paid directly by the Contractor and equipment owned or rented by him/her, with or without operators.
  - b. "Specialty Items" shall be construed to be limited to work that requires specialized knowledge, craftsmanship or equipment not ordinarily available in contracting organizations qualified to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. In addition to the 51 percent requirement set forth in paragraph 1 above, the Contractor shall furnish (a) a competent superintendent or foreman who is employed by him/her, who has full authority to direct performance of the work in accordance with the contract requirements, and who is in charge of all construction operations (regardless of who performs the work), and (b) such other of his/her own organizational capability and responsibility (supervision, management, and engineering services) as the State highway department contracting officer determines is necessary to assure the performance of the contract.
- 3. The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of the contract or contracts or any portion thereof, or of his/her right, title or interest therein, without written consent of the Engineer. In case such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with the Contractor's own organization, work amounting to not less than 51 percent of the total contract cost, except that any items designated in the contract as "specialty items" may be performed by subcontract and the cost of any such specialty items so performed by subcontract may be deducted from the total cost before computing the amount of work required to be performed by the Contractor with his/her own organization. Materials purchased or produced by the Contractor must be incorporated into the project by the Contractor's own organization if their cost is to be applied to the 50 percent requirement.

No subcontracts, or transfer of contract, shall in any case release the Contractor of his/her liability under the contract and bonds. All transactions of the Engineer shall be with the Contractor. The Contractor shall have representative on the job at all times when either contract or subcontract work is being performed.

All requests to subcontract shall contain a certification that the subcontract agreement exists in writing and physically contains the required Federal and State Equal Employment Opportunity provisions and Labor compliance provisions, including the contract minimum wage requirements. The Contractor shall permit Department or Federal representatives to examine the subcontract agreements upon notice.

- 4. Any items that have been selected as "Specialty Items" for the contract are listed as such in the Special Provisions, bid schedule, or elsewhere in the contract documents.
- 5. No portion of the contract shall be sublet, assigned or otherwise disposed of, except with the written consent of the State highway department contracting officer, or his/her authorized representative, and such consent when given shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract. Request for permission to sublet, assign or otherwise dispose of any portion of the contract shall be in writing and accompanied by (a) a showing that the organization which will perform the work is particularly experienced and equipped for such work, and (b) an assurance by the Contractor that the labor standards provisions set forth in this contract shall apply to labor performed on all work encompassed by the request.

#### IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

- 1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions. Current wage rate information shall be obtained by visiting the Department of Labor website at <a href="http://www.illinois.gov/idol/Pages/default.aspx">http://www.illinois.gov/idol/Pages/default.aspx</a>. It is the responsibility of the Contractor to review the rates applicable to the work of this contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the Contractor by means of the Department of Labor website satisfies the notification of revisions by the Department to the Contractor pursuant to the Act, and the Contractor agrees that no additional notice is required.
- 2. Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of three years from the later of the date of final payment under the contract or completion of the contract, records of the wages paid to his/her workers. The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid. Upon seven business days' notice, these records shall be available at a location within the State, during reasonable hours, for inspection by the Department or the Department of Labor; and Federal, State, or local law enforcement agencies and prosecutors.

#### 3. SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021 Revised: November 2, 2023

Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <a href="https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx">https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx</a>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's

social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <a href="https://lcptracker.com/">https://lcptracker.com/</a>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.

#### V. NONSEGREGATED FACILITIES

(Applicable to State Financed Construction Contracts and related subcontracts exceeding \$10,000 which are not exempt from the Equal Opportunity clause).

By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement, as appropriate, the bidder, construction Contractor, subcontractor, or material supplier, as appropriate, certifies that (s)he does not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that (s)he does not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. (S)He certifies further that (s)he will not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that (s)he will not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. (S)He 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, time clocks, 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 directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. (S)He agrees that (except where he/she has obtained identical certifications from proposed subcontractors and material suppliers for specific time periods), he/she will obtain identical certifications from proposed subcontractors or material suppliers prior to the award of subcontracts or the consummation of material supply agreements, exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that (s)he will retain such certifications in his/her files.

# State of Illinois Department of Transportation

#### SPECIAL PROVISION FOR SECTION 80 PROSECUTION AND PROGRESS

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports, adopted April 1, 2012 and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

#### 80-09 FAILURE TO COMPLETE ON TIME.

DELETE: "See contract documents for current schedule of deductions."

#### ADD:

Schedule of Deductions for Each Day of Overrun in Contract Time			
Original Con	ract Amount	Daily Ch	arges
From More Than	To and Including	Calendar Day	Work Day
\$ 0	\$ 100,000	\$ 475	\$ 675
100,000	500,000	750	1,050
500,000	1,000,000	1,025	1,425
1,000,000	3,000,000	1,275	1,725
3,000,000	6,000,000	1,425	2,000
6,000,000	12,000,000	2,300	3,450
12,000,000	And over	6,775	9,525

## State of Illinois Department of Transportation

#### SPECIAL PROVISION FOR SECTION 90 MEASUREMENT AND PAYMENT

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports, adopted April 1, 2012 and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

#### 90-07 PARTIAL PAYMENTS.

DELETE: The entire section.

ADD: Partial payments will be made to the Contractor at least once each month as the work progresses. The payments will be based upon estimates, prepared by the Resident Engineer, of the value of the work performed and materials complete and 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 Section 90-08 PAYMENT FOR MATERIALS ON HAND. From the amount of partial payment so determined on Federal-Aid projects, there shall be deducted an amount up to ten percent of the cost of the completed work which shall be retained until all conditions necessary for financial closeout of the project are satisfied. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1,000.00 will be approved for payment other than the final payment. A final voucher for under \$5.00 shall not be paid except through electronic funds transfer. (15 ILCS 405/9(b-1))

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, 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 Department 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 Section 90-09 ACCEPTANCE AND FINAL PAYMENT.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610) progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

In accordance with 49 USC § 47111, the Department will not make payments totaling more than 90 percent of the contract until all conditions necessary for financial closeout of the project are satisfied.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved.

#### 90-10 TRUST AGREEMENT OPTION.

DELETE: The entire section.

Contract No. UN065 University of Illinois-Willard Airport Savoy, Illinois Champaign County Illinois Project No. CMI-5043 SBG Project No. N/A

#### STATE OF ILLINOIS

#### **SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Construction of Airports," adopted April 1, 2012, and the Special Provisions included herein which apply to and govern the airport improvement of: Rehabilitate General Aviation Aprons at University of Illinois-Willard, Contract UN065, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### SPECIAL PROVISION FOR COMPLETION TIME VIA CALENDAR DAYS

It being understood and agreed that the completion within the time limit is an essential part of the contract, the bidder agrees to complete the work within Base Bid: 54 calendar days; Additive Alternate #1: 6 additional calendar days; Additive Alternate #2: 6 additional calendar days; Additive Alternate #3: 18 additional calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

#### CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009 Revised: January 2, 2012

<u>Diesel Vehicle Emissions Control</u>. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall certify that only ULSD will be used in all jobsite equipment. The certification shall be presented to the Department prior to the commencement of the work.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

#### CONSTRUCTION AIR QUALITY - IDLING RESTRICTION (BDE)

Effective: April 1, 2009

Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas

or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

#### SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

Effective: September 1, 2000 Revised: January 2, 2025

- 1. <u>OVERVIEW AND GENERAL OBLIGATION</u>. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory. Award of the contract is conditioned on meeting the requirements of 49 CFR Part 26, and failure by the Contractor to carry out the requirements of Part 26 is a material breach of the contract and may result in the termination of the contract or such other remedies as the Department deems appropriate.
- 2. <u>CONTRACTOR ASSURANCE</u>. All assurances set forth in FHWA 1273 are hereby incorporated by reference and will be physically attached to the final contract and all subcontracts.
- 3. CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. The Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies and that, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 3.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work in accordance with the requirements of 49 CFR 26.53 and SBE Memorandum No. 24-02.
- 4. <u>IDENTIFICATION OF CERTIFIED DBE</u>. Information about certified DBE Contractors can be found in the Illinois UCP Directory. Bidders can obtain additional information and assistance with identifying DBE-certified companies at the Department's website or by contacting the Department's Bureau of Small Business Enterprises at (217) 785-4611.
- 5. <u>BIDDING PROCEDURES</u>. Compliance with this Special Provision and SBE Policy Memorandum 24-02 is a material bidding requirement. The following shall be included with the bid.
  - (a) DBE Utilization Plan (form SBE 2026) documenting enough DBE participation has been obtained to meet the goal, or a good faith effort has been made to meet the goal even though the efforts did not succeed in obtaining enough DBE participation to meet the goal.
  - (b) Applicable DBE Participation Statement (form SBE 2023, 2024, and/or 2025) for each DBE firm the bidder has committed to perform the work to achieve the contract goal.

The required forms and documentation shall be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a bid if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. A bidder declared non-responsive for failure to meet the bidding procedures will not give rise to an administrative reconsideration. In the event the bid is

declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

6. <u>UTILZATION PLAN EVALUATION</u>. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate, and adequately document the bidder has committed to DBE participation sufficient to meet the goal, or that the bidder has made good faith efforts to do so, in the event the bidder cannot meet the goal, in order for the Department to commit to the performance of the contract by the bidder.

The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the Department determines, based upon the documentation submitted, that the bidder has made a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A and the requirements of SBE 2026.

If the Department determines that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan of that determination in accordance with SBE Policy Memorandum 24-02.

- 7. CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work the bidder commits to have performed by the specified DBEs and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE firms. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific guidelines for counting goal credit are provided in 49 CFR Part 26.55. In evaluating Utilization Plans for award the Department will count goal credit as set forth in Part 26 and in accordance with SBE Policy Memorandum 24-02.
- 8. CONTRACT COMPLIANCE. The Contractor must utilize the specific DBEs listed to perform the work and supply the materials for which each DBE is listed in the Contractor's approved Utilization Plan, unless the Contractor obtains the Department's written consent to terminate the DBE or any portion of its work. The DBE Utilization Plan approved by SBE is a condition-of-award, and any deviation to that Utilization Plan, the work set forth therein to be performed by DBE firms, or the DBE firms specified to perform that work, must be approved, in writing, by the Department in accordance with federal regulatory requirements. Deviation from the DBE Utilization Plan condition-of-award without such written approval is a violation of the contract and may result in termination of the contract or such other remedy the Department deems appropriate. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan.
  - (a) NOTICE OF DBE PERFORMANCE. The Contractor shall provide the Engineer with at least three days advance notice of when all DBE firms are expected to perform the work committed under the Contractor's Utilization Plan.
  - (b) SUBCONTRACT. If awarded the contract, the Contractor is required to enter into written subcontracts with all DBE firms indicated in the approved Utilization Plan and must provide copies of fully executed DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
  - (c) PAYMENT TO DBE FIRMS. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goal has been paid to the DBE. The Contractor shall document and report all payments for work performed by DBE certified firms in accordance with Article 109.11 of the Standard Specifications. All records of payment for work performed by DBE certified firms shall be made available to the Department upon request.
  - (d) FINAL PAYMENT. After the performance of the final item of work or trucking, or delivery of material by a DBE and final payment to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement (form SBE 2115) to the Engineer. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
  - (g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

#### SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) to the Resident Engineer on Division of Aeronautics Form "AER 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

#### SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS

Effective: November 2, 2017 Revised: April 1, 2019 To account for the preparatory work and the operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting according to Section 80-01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form AER 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form AER 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%

The mobilization payment to the subcontractor is an advance payment of the reported amount of the subcontract and is not a payment in addition to the amount of the subcontract; therefore, the amount of the advance payment will be deducted from future progress payments.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

#### SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS

Effective: November 2, 2017

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 90-07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause. If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontractor and/or material supplier so that payment can be made.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

#### SPECIAL PROVISION FOR SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Subcontractor and Disadvantaged Business Enterprise Payment Reporting

The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;

(c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

The report shall be made through the Department's on-line subcontractor payment reporting system within 21 days of making the payment.

#### SPECIAL PROVISION FOR NPDES CERTIFICATION

In accordance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder, this certification is required for all construction contracts that will result in the disturbance of one or more acres total land area.

The bidder certifies under penalty of law that he/she understands the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR100000) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

The Airport Owner or its Agent will:

- 1) prepare, sign and submit the Notice of Intent (NOI)
- 2) conduct site inspections and complete and file the inspection reports
- 3) submit Incidence of Non-Compliance (ION) forms
- 4) submit Notice of Termination (NOT) form

Prior to the issuance of the Notice-to-Proceed, for <u>each</u> erosion control measure identified in the Storm Water Pollution Prevention Plan, the contractor or subcontractor responsible for the control measure(s) must sign the above certification (forms to be provided by the Department).

#### ILLINOIS WORKS APPRENTICESHIP INITIATIVE - STATE FUNDED CONTRACTS (BDE)

Effective: June 2, 2021 Revised: April 2, 2024

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. Of this goal, at least 50% of the labor hours of each prevailing wage classification performed by apprentices shall be performed by graduates of the Illinois Works Pre-Apprenticeship Program, or the Highway Construction Careers Training Program.

The Contractor may seek from the Department of Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

#### SPECIAL PROVISION FOR SUBMISSION OF BIDDERS LIST INFORMATION (BDE)

Effective: January 2, 2025 Revised: March 2, 2025

In accordance with 49 CFR 26.11(c) all DBE and non-DBEs who bid as prime contractors and subcontractors shall provide bidders list information, including all DBE and non-DBE firms from whom the bidder has received a quote or bid to work as a subcontractor, whether or not the bidder has relied upon that bid in placing its bid as the prime contractor.

The bidders list information shall be submitted with the bid using the link provided within the "Integrated Contractor Exchange (iCX)" application of the Department's "EBids System".

#### REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES

The Prevailing rates of wages are included in this Contract proposal. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and this Proposal, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <a href="https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx">https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx</a> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.

ITEM 02A UN065

## **SECTION III**

# Special Provisions For

### **REHABILITATE GENERAL AVIATION APRONS**

IL. PROJ. CMI-5043

AT

# UNIVERSITY OF ILLINOIS – WILLARD AIRPORT SAVOY, ILLINOIS

March 07, 2025



Prepared By:



CRAWFORD, MURPHY & TILLY, INC.
Consulting Engineers
2750 West Washington Street
Springfield, IL 62702

ITEM

**DESCRIPTION** 

PAGE NUMBER

#### **GENERAL**

These Special Provisions, together with the Standard Specifications for Construction of Airports, Contract Requirements for Airport Improvement Projects, Rules and Regulations, Payroll Requirements and Minimum Wage Rates which are hereto attached or which by reference are herein incorporated, cover the requirements of the State of Illinois, Division of Aeronautics, and the representatives of the University of Illinois – Willard Airport for the construction of *Rehabilitate General Aviation Aprons* at the University of Illinois – Willard Airport in Savoy, Illinois.

#### **GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS**

The "Standard Specifications for Construction of Airports (Consolidated Reprint)", State of Illinois, Department of Transportation, Division of Aeronautics, dated April 1, 2012 shall govern. In the case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

Where noted within the Special Provisions, the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction" dated January 1, 2022 shall apply.

The Standard Specifications can be obtained from the Illinois Department of Transportation, Division of Aeronautics website at:

https://public.powerdms.com/IDOT/documents/2083173/Standard%20Specifications%20for%20Construction%20of%20Airports%202012 or from the Division of Aeronautics.

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#### **DIVISION I - GENERAL PROVISIONS**

#### SECTION 40. SCOPE OF WORK

#### 40-05 MAINTENANCE OF TRAFFIC

ADD: The Contractor's activity on the airfield shall be limited to the limits of construction as identified on the construction activity plan drawings. Beyond the limits of construction, the Contractor shall not have access to any part of the active airfield pavement with any equipment or personnel without the approval of Airport Management.

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The Contractor shall consult with the Airport Manager in arranging his construction operations. The Airport Manager will at all times have jurisdiction over the safety of air traffic during construction. Wherever the safety of air traffic during construction is affected, his decisions as to methods, procedures and measures used shall be final, and any and all Contractors performing work must be governed by said decisions.

The Contractor shall keep all haul roads utilized by his operations clean. All haul roads shall remain clear and unobstructed for use by Airport vehicles. The Contractor shall maintain these areas as required or as directed by the Airport Manager. Should the Contractor fail to respond to the Airport Manager's notification, the Division may suspend work until such time as the unsatisfactory condition is corrected.

The Airport Manager shall retain the authority to change the phasing of the work and/or the sequence of construction.

The Contractor shall not have access to any part of the active airfield (runway, taxiway or apron) for all equipment or personnel without the approval of the Resident Engineer.

The Contractor will erect signs stating "Authorized Personnel & Construction Access Only "at all gates or areas where they are gaining access to the airfield. These signs will be provided to help keep the public off the airfield. The Contractor shall provide and maintain construction entrance signage on all public use roads intended to be used by his operations as required by the City of Savoy, Champaign County Highway Department and/or Illinois Department of Transportation. The Contractor shall be responsible for coordinating all hauling and access on City, Township, or county roads with the agency responsible for the roadway.

To maintain airport operations and to facilitate the construction of the proposed work, the project has been divided into separate phases in accordance with Advisory Circular 150/5370-2G Operational Safety on Airports During Construction. References to Construction Safety and Phasing Plans (CSPP) in that document shall be interpreted to mean the phase limits, barricade locations, access points and notes shown on the construction activity plan sheets included in the as-bid contract documents. When "safety" is used or referred to in the contract documents and in the advisory circular(s) it shall be redefined by this contract as meaning "operational safety". The Construction Operational Safety and Phasing Plan (CSPP) establishes the airport and project specific requirements, supplementing the requirements in the AC, that are to be included in the Contractor's bid for maintaining operational safety during construction.

The Construction Operational Safety and Phasing Plan (CSPP) contained herein has been approved by both the Airport and the FAA. The Contractor shall be required to divide the overall work into separate phases in substantial conformance with the CSPP shown in the plans, except as allowed by the contract documents and approved by the Division on behalf of the FAA.

Ten (10) days prior to the Notice-To-Proceed, the Contractor shall submit a Safety Plan

Compliance Document (SPCD) to the airport describing how he will comply with the requirements of the advisory circular plus the CSPP and supplying any details that could not be determined before contract award. The SPCD must include a certification statement by the Contractor that indicates he understands the operational safety requirements of the CSPP, that the Contractor has incorporated these requirements into their overall work plan and that the Contractor will maintain the right of control for all means, methods and details of the work performed by the Contractor and any of his subcontractors within the framework of the operational safety plan.

The Contractor shall be fully aware and continuously monitor all requirements and activities for compliance with the contract documents and Advisory Circular 150/5370-2G.

Ten (10) days prior to the commencement of each phase the Contractor shall submit an updated Safety Plan Compliance Document for that phase that meets the requirement of Advisory Circular 150/5370-2G. The updated Safety Plan Compliance Document(s) shall detail implementation of the construction haul routes, procedures utilized by the Contractor to eliminate conflicts between construction operations and aircraft traffic shall be included.

Significant Changes to the Construction Operational Safety and Phasing Plan (CSPP) may require aeronautical review by the Division through the FAA's OEAAA System. Modification of the Construction Operational Safety and Phasing Plan (CSPP) and/ or the critical points shown in the contract documents will require airspace approval from Division/ FAA and may require the Contractor to submit FAA Form 7460 for Approval.

#### **SECTION 50. CONTROL OF WORK**

#### 50-01 AUTHORITY OF THE ENGINEER

ADD: The RPR shall not be allowed to modify the contract documents without the approval of the Division.

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Rehabilitate General Aviation Aprons

#### 50-04 COOPERATION OF CONTRACTOR

ADD: A weekly progress meeting shall be scheduled during construction to discuss work areas, scheduling, etc. The superintendent for the project, the subcontractor's foreman, and the Resident Engineer are required to attend this meeting. The Airport Management and the Division may attend the meeting.

The completion of the individual phases/ pavement closures within the times specified or discussed at the weekly meetings is of extreme importance to the Airport. The Contractor shall update his progress schedule as required for the scheduled progress meetings. No additional compensation will be made for accelerated work to meet schedule and/or contract time. If the Contractor falls behind schedule for any reason, including weather delays, s/he shall work extra hours or add extra crews to attempt to complete the project within the original schedule milestones.

Escorts or flag persons in direct control of personnel, vehicles and equipment shall be required for all operations inside the AOA.

#### 50-05 COOPERATION BETWEEN CONTRACTORS

ADD: Other contracts may be under construction concurrently resulting in more than one Contractor working on the Airport at the same time.

The Contractor shall plan and conduct his work so as not to interfere or hinder the progress or work being performed by the other Contractor. The timely prosecution of the overall project is dependent upon the proper coordination between Contractors.

It is to be fully understood by the Contractor that the prosecution of the overall projects and the safety and convenience of the aviation travelling public are the governing criteria for resolving conflicts which may arise between his schedule and the schedule of other Contractors. When conflicts arise, resolution of such conflicts will be made by the Airport through the Resident Engineer in the best interest of the Airport. Delays, changes in scheduling, or expedition of work under this contract to coordinate the timely prosecution of work will be considered incidental to the contract and no additional compensation will be allowed.

The Contractor shall acquaint himself with all ongoing contracts prior to bidding and shall cooperate with the Owner and any other Contractors who may be working on other contracts.

#### 50-06 CONSTRUCTION LAYOUT STAKES

DELETE: The first paragraph.

ADD: As the first paragraph:

The Contractor will be required to furnish and place construction layout stakes for the project.

The Resident Engineer will locate and reference three (3) control points and will establish

benchmarks along the line of the improvement outside the construction limits. The Contractor shall locate and reference the centerline of survey, which shall also consist of locating and referencing control points such as point of curvature, points of tangent, and sufficient points on tangent to provide a line of sight. Control points set by the Resident Engineer shall be identified in the field to the Contractor, and the field notes shall be kept in the office of the Resident Engineer.

#### RESPONSIBILITY OF THE RESIDENT ENGINEER

DELETE: Lines A & B.

ADD:

- A. The Resident Engineer will locate and reference three (3) control points within the limits of the project.
- B. Benchmarks will be established along the project outside of construction lines.

DELETE: Line D.

REVISE: Line E to read:

"The Resident Engineer may make random checks..."

DELETE: Line F.

DELETE: Line L.

ADD: As paragraph M:

M. It is not the responsibility of the Resident Engineer to check the correctness of the Contractor's stakes or forms, except as provided herein; however, any errors that are apparent shall be immediately called to the Contractor's attention, and he shall be required to make the necessary correction before the stakes are used for construction purposes.

#### RESPONSIBILITY OF THE CONTRACTOR

#### ADD:

- H. The Contractor shall immediately notify the Resident Engineer of conflicts or discrepancies with the established control points.
- I. Construction layout shall not be paid for separately but shall be considered incidental to the pay item for which the layout is required.

#### 50-12 LOAD RESTRICTIONS

#### ADD:

Access to the construction work area is limited to the haul routes as shown on the site plan and construction activity plan drawings. The use of existing airfield pavements by the Contractor construction traffic, including all haul traffic, is limited to the hauling routes as shown on the site plan and construction activity plan drawings. Use of existing airfield pavement other than as shown on the site plan and construction activity plan drawings is prohibited. Any damage to existing airfield pavement due to construction traffic operating beyond the approved work limits, hauling outside of the approved haul/access routes and

construction traffic operating in prohibited areas shall be repaired by the Contractor at his own expense to the satisfaction of the Owner.

If it is found the fully loaded delivery trucks are excessively damaging the Airport or local roadway pavement, the Contractor shall limit the weight of the material being hauled onto the site. The Resident Engineer shall determine what is considered excessive damage. No payments will be made for additional hauling that may be required due to load restrictions.

The Contractor shall coordinate construction hauling, construction access and load restrictions with the local jurisdiction responsible for that roadway i.e. County Superintendent of Highways and/or the Township Road Commissioner and the Village of Savoy as required. The Contractor shall be responsible for damage to any airfield pavement or public road caused by his construction operations. Any damage to existing airfield pavements or public roads shall be replaced by the Contractor at his own expense to the satisfaction of the Owner.

#### 50-13 MAINTENANCE DURING CONSTRUCTION

ADD:

Material tracked onto public use roads shall be removed continuously during the work.

The Contractor shall make provisions in the work to maintain positive drainage from the work areas and to minimize the ponding of water. In areas where the Contractor is required to core out or remove pavements the Contractor shall cut temporary ditches or swales to maintain positive drainage. At locations where temporary ditches are not feasible, the Contractor shall excavate stormwater storage areas adjacent to but at a lower elevation than the bottom of the work and utilize mechanical pumps to promptly remove stormwater from the excavations.

All existing pavement areas that are to remain open to aircraft traffic shall be kept clean to the satisfaction of Airport Operations and the Resident Engineer. At the request of the Resident Engineer or of the Airport, the Contractor shall provide a self-propelled, vacuum or regenerative (recirculating) air pavement sweeper, a pavement blower or tractor mounted "sweeper box". At a minimum, a pavement blower shall be kept on site at all times.

No material capable of being blown onto airfield pavement will be allowed to be stored uncovered anywhere within the fence line, at any time during construction.

#### 50-16 FINAL INSPECTION

DELETE: The first sentence of the first paragraph.

ADD: As the first sentence of the first paragraph.

Upon due notice to the Resident Engineer from the Contractor of presumptive completion of the entire project, the charging of Contract Time shall be suspended, and the Engineer will make an inspection.

ADD: After the first sentence of the second paragraph:

The charging of Contract Time shall resume on the day following the inspection and shall continue until the remaining work, including the applicable requirements of Section 40-08, Final Clean-up, is completed to the Engineer's satisfaction.

#### 50-18 PLANS AND WORK DRAWINGS

ADD: After the third paragraph:

Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Prior to submission, the Contractor shall review all shop drawing submittals for accuracy, completeness, and compliance with the contract requirements. The Contractor shall stamp, sign and date each submittal indicating Contractor approval of the submittal.

When submittals require close coordination of a number of products, the Contractor shall coordinate a concurrent submittal of all such products. The Project Engineer may withhold action on a submittal requiring coordination with other submittals until all related submittals are received.

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Any deviation from contract requirements shall be clearly identified on the shop drawing submittal and supporting documentation for such deviation shall be attached. The Project Engineer reserves the right to rescind inadvertent acceptance of submittals containing unidentified deviations.

REVISE: The second sentence of the seventh paragraph to read as follows:

Such review will not relieve the Contractor of the responsibility for complying with the contract document requirements or for any error that may exist in the submittal. The Contractor is responsible for the dimensions and designs of adequate connections, detail and satisfactory construction of all work.

EDIT: Information to be included on shop drawing submittals shall conform to the following:

PROJECT LOCATION: University of Illinois – Willard Airport

PROJECT TITLE: Rehabilitate General Aviation Aprons

PROJECT NUMBERS: Illinois Project: CMI-5043

CONTRACT ITEM: (Pay Item Name & Number)

i.e.: AR401610 - Bituminous Surface Course

SUBMITTED BY: (Contractor/Subcontractor Name)

DATE: (Date of Submittal)

This information shall be included on each page of each submittal.

ADD: The Project Engineer shall return incomplete or vague material shop drawing submittals for completion prior to review.

Shop drawing submittals shall contain a letter of certification from the **producer** stating that all materials furnished for the project conform to the requirements of the plans and specifications. Letters of certification from the producer shall be dated no more than six (6) months prior to the date it is submitted to the Project Engineer. Letters of certification from producers to verify submitted material conforms to the requirements of the contract shall be submitted on company letterhead and include the project name, location and project numbers. Submittals not including this information shall not be reviewed and returned as

incomplete. Incomplete shop drawing submittals causing re-submittal(s) shall not be allowed as justification for additional contract time.

The Project Engineer will review each submittal; mark corrections or modifications required and return it to the Contractor. The Project Engineer will stamp each submittal with an action stamp and will mark the stamp appropriately to indicate action taken as follows. Submittals marked "Resubmit with Corrections" or "Rejected" shall not be used at the project site. All submittals must ultimately receive "No Exceptions Taken" stamp from the Project Engineer to be eligible for payment. Submittals stamped "Exceptions Taken as Noted" are not considered approved shop drawings.

- 1. "No Exceptions Taken": Means fabrication/installation may be undertaken. Submittals stamped as such do not authorize changes to the contract price or time.
- 2. "Exceptions Taken as Noted": Same as "No Exceptions Taken" provided the Contractor complies with the corrections noted on the submittal by the Project Engineer. The Contractor is still obligated to resubmit the submittal including the corrections made by the Project Engineer so ultimately a shop drawing stamped "No Exceptions Taken" may be forwarded to the Division. Submittals not stamped Approved are not considered approved shop drawings.
- 3. "Resubmit with Corrections": Fabrication and/or installation MAY NOT be undertaken. Make appropriate revisions and resubmit limiting corrections to items marked.

#### **SECTION 60. CONTROL OF MATERIALS**

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#### 60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

REVISE: The first sentence of the third paragraph as follows:

"... shall provide, prior to delivery, ..."

ADD: NEW SECTION

#### 60-11 CERTIFICATION OF MATERIALS

The Contractor shall provide certification for all materials contained in the contract. Certification and documentation shall be submitted to the Resident Engineer. It shall be the sole responsibility of the Contractor to ensure the delivery of adequate and accurate documentation prior to the delivery of materials. Materials incorporated into this project without approved certification and documentation will not be recommended for payment by the Resident Engineer. It shall be the sole responsibility of the Contractor to provide certification that ALL materials to be used on the project meet the "Buy American" requirements.

The certification shall be submitted as part of the shop drawing submittal.

As a guide to the certification process and requirements, the Contractor shall use the Illinois Department of Transportation/Division of Aeronautics MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS (latest edition). Copies of this manual are available from the Illinois Division of Aeronautics. The MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS defines the Resident Engineer's/Contractor's responsibilities (Sections 300/400). The Contractor shall have the sole responsibility to provide the Resident Engineer with appropriate documentation to satisfy the contract certification requirements prior to the delivery of materials.

The cost of providing the required material documentation and certifications shall not be paid for separately but shall be considered incidental to the associated item.

All submittals shall contain the following information:

PROJECT LOCATION: University of Illinois – Willard Airport PROJECT TITLE: Rehabilitate General Aviation Aprons

PROJECT NUMBERS: Illinois Project: CMI-5043

CONTRACT ITEM: (Pay Item Number & Pay Item Description)

SUBMITTED BY: (Contractor/Subcontractor Name)

DATE: (Date of Submittal)

If the Division of Aeronautics requires additional documentation, they shall request it through the Resident Engineer.

#### SECTION 70. LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

#### 70-10 BARRICADES, WARNING SIGNS & HAZARD MARKERS

ADD: After the second paragraph:

The Contractor shall provide and install any warning signs (trucks entering highway, etc.) and provide flagman as required by the agency responsible for public roadway jurisdiction i.e. City of Savoy, Champaign County Highway Department and/or Illinois Department of Transportation. Any cost for signage or traffic control shall be borne by the Contractor.

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Low profile beam barricades as approved by the FAA shall be provided per the details in the plan sheets. The barricades shall be lighted with steady burn omni-directional red lights. The barricades shall be sufficiently weighted with sandbags or other appropriate method to withstand high winds or jet blast without dislocation. The barricades must be of low mass and easily collapsible upon contact with an aircraft.

The Contractor shall be responsible for supplying, maintaining and any moving of all barricades. Lights shall be maintained in proper working order. No separate payment will be made for supplying, maintaining, and moving barricades but shall be considered incidental to the contract.

The Contractor shall be required to provide a 24-hour phone number for emergency barricade and barricade lighting maintenance.

Contractor identification shall be displayed on both sides of all Contractor vehicles by labeling painted on the vehicles or by magnetically attached signs.

#### 70-13 RESPONSIBILITY FOR DAMAGE CLAIMS

REVISE: In the second sentence of the first paragraph, change the word "inspection" to "observation".

REVISE: In the last sentence of the fourth paragraph, change the word "inspection" to "observation".

# 70-17 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS

REVISE: The second paragraph as follows:

"..., the approximate locations and owners have been indicated on the plans."

DELETE: "Person to Contact" table after the second paragraph.

ADD: After the third paragraph:

The Contractor shall be responsible for locating Airport owned utilities.

ADD: After the fifth paragraph:

The Contractor shall be responsible for locating Airport owned utilities. The following table includes contact numbers that may provide assistance for locating cable. The personnel listed in the table are in no way responsible for damage to existing utilities.

If, in the Contractor's opinion, additional assistance is needed to locate the utility service or facility, the contractor shall enlist the assistance of a qualified technician or professional utility location firm to accurately locate underground utilities or facilities prior to excavation. Prior to commencing this detailed location 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 and request the presence of a representative of the owner to observe the work. 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.

Only after the investigation has been made should the contractor begin excavation operations. Upon beginning these operations, the contractor shall use extreme caution in the methods utilized. The contractor shall utilize exploratory trenching or small tool excavation practices when beginning operations in critical areas to verify that the utilities are clear of the area of interest or to verify the location and depth of these facilities.

Utility Service or Facility	Person to Contact	Contact Phone
FAA Control & Communications Cable	Rob Carter	217-355-4052
Airfield Lighting Cables	U of I Tim Bannon	217-369-0099
Sanitary Sewer	J.U.L.I.E.	800-892-0123
Electric Cables	J.U.L.I.E.	800-892-0123
Water	J.U.L.I.E.	800-892-0123
Telephone Cables	J.U.L.I.E.	800-892-0123
Gas Lines	J.U.L.I.E.	800-892-0123
All Utilities	U of I Operations and Maintenance	217-333-0340

Any utility damaged by the Contractor shall be repaired by the Contractor to the satisfaction of the Owner and shall be at the cost of the Contractor. In the event that an existing utility is damaged during construction, all other work on the project shall be suspended until the utility is repaired. No additional time will be awarded to the Contractor for delays in the project due to damaged utilities. It is a high priority to the airport that all existing Airport utilities, unless otherwise noted in the plans, remain in good working condition throughout the duration of the project.

Special care shall be taken on all operations and particularly near pavement edges to avoid damage to edge lights and all underground electrical cable on the airport. The approximate location of existing underground cable is shown on drawings. Any airfield lights or cable that are broken and require replacement because of the Contractor's operations will be replaced by the Contractor at his/her own expense.

Any airfield cable repairs or replacement to any part of the electrical system made necessary by the Contractor's operations will be made by him/her in the manner specified in Sections 108 and 125 at no cost to the Airport. Cost of replacement to be borne by the Contractor shall include any expense incurred in locating as well as repairing or replacing damaged parts of the system by the owning agency.

#### 70-26 CONTRACTOR'S RESPONSIBILITY FOR SAFETY DURING CONSTRUCTION

ADD: At the end of this section:

- E. Provide a safety officer/construction inspector(s) trained in airport safety to monitor construction activities and provide radio control.
- F. Restrict movement of construction vehicles to construction areas with flagging and

barricading, erecting temporary fencing, or providing escorts, as appropriate or as shown in plans.

- G. Ensure that no construction employees, employees of subcontractors or suppliers, or other persons enter any part of the aircraft operations area from construction site unless authorized.
- H. Review the requirements in AC 150/5370-2 (current edition) and comply with items listed as Contractor's responsibility.
- I. Implement a SPCD as required in AC 150/5370-2 (current edition) and ensure that construction personnel are familiar with operational safety procedures and regulations on the Airport.
- J. Provide a 24 hour point of contact that will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the Airport.
- K. Provide a safety officer/construction inspector(s) trained in airport safety to maintain the SPCD and to monitor all construction activities.
- L. Restrict movement of construction vehicles to construction areas as flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate.
- M. Ensure that no construction employees, employees of subcontractors or suppliers, or other persons enter any part of the aircraft operations area from construction site unless authorized.

#### **SECTION 80. PROSECUTION AND PROGRESS**

#### 80-05 LIMITATION OF OPERATIONS

ADD: A minimum distance of <u>85.5'</u> shall be maintained between construction operations and the centerline of all active taxiways and taxilanes and <u>250'</u> from centerline of active runways. It is intended to plan, conduct, and complete the work in these critical traffic areas in such a manner that the length and amount of interruption to aircraft traffic at the Airport is minimized.

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The Contractor shall comply with Federal Aviation Regulations Part 107 (Airport Security), Federal Air Regulation 139 (Airport Certification), and with all rules and regulations of the Airport, including, but not limited to, control and access to the airfield by Contractor's, employees and agents. In the event the Authority is assessed a fine by the Federal Aviation Administration for breach of security resulting from actions of Contractor's employees and agents, the Contractor shall fully reimburse the Authority for the amount of such fine in the form of additional rents.

#### 80-08 DETERMINATION AND EXTENSION OF CONTRACT TIME

ADD: After the fourth paragraph:

The Engineer will make charges against Contract Time after the presumptive completion of the entire project as provided for in Section 50-16, Final Inspection.

ADD: After the last paragraph of this section:

For this project, the following number of calendar days available for work per month has been assumed to be:

<u>Month</u>	Workable Calendar Days
January	0
February	0
March	0
April	0
May	15
June	17
July	17
August	17
September	16
October	16
November	14
December	0

For an extension of contract time due to inclement weather to be considered, the actual total number of calendar days available for work on controlling items must be less than the total number of workable calendar days assumed for the duration of the contract.

Requests for extension of contract time on calendar day projects caused by inclement weather, shall, as a minimum, be supported with National Weather Bureau data and project diaries. Requests for extension of contract time due to inclement weather will not be considered until after final acceptance.

As part of the request for contract time extension review, consideration may be given to how timely the Contractor prosecuted the work up to the point of the delays and the efforts by the Contractor to get back on schedule including the addition of labor or equipment and the extension of work hours and work days.

No allowance will be made for anticipated profits.

During the weekly progress meetings, the production rates of the Contractor will be analyzed. If it is determined by those in attendance that generally and reasonably the work has fallen behind schedule or will not be completed under normal circumstances in the specified time frames, the Contractor will be required to increase his forces and/or extend working hours per day.

#### 80-13 CONTRACTOR'S ACCESS TO AIRFIELD

ADD: After the third paragraph:

The location of an area for parking by the Contractor's employees shall be as shown on the plans or as agreed to by the Airport.

Use of personal vehicles beyond the staging area will not be allowed.

DELETE: The last paragraph:

ADD:

The Contractor shall submit a 10-year background and employment check on the superintendent and supervising foremen and complete a security form for all other personnel he proposes to use on the Airport. These forms shall be completed prior to that person being issued an identification badge and allowed on the airfield. A list of personnel authorized to work on the airfield shall be provided to the Resident Engineer by the Contractor. The Superintendent and foreman that are issued badges shall be directly responsible for the identity and location of those they are supervising while on the airfield. Badges shall be returned to the Airport once the project is complete or the person is no longer employed by the Contractor.

#### ADD: NEW SECTION

#### 80-14 SECURITY DURING CONSTRUCTION

The Contractor shall maintain security on the Airport as specified or as directed by Airport Management including adhering to all provisions of federal security regulations and all security requirements in the Airport Security Program and airport policies.

The project area lies entirely within the airport's security fence. Access to this area is only by airport issued access cards. No access point may be left unsecured and unattended at any time. During hauling operations and those requiring the access gate to remain open a security guard must be posted to maintain the security of the airport perimeter. The security guard must obtain an airport issued ID as specified below. The security guard must verify each vehicle and persons in the vehicle are authorized entry to the airport by use of authorized access lists and stop lists provided by the contractor and the airport. The security guard shall be required to carry a cell phone at all time while guarding an opening. The Contractor's Superintendent, Foremen, Security Guards, Flagmen, and any other employee directed by Airport Management, must display a current photo I.D. badge, issued by the Airport. To obtain the photo I.D. badge for any of the Contractor's employees, the following is required:

- a. The Contractor will be responsible for certifying that all employees needing access and requesting an access ID are currently employed and require access by providing authorized signature forms and authorized subcontractor and employee lists directly to the Airport Security Coordinator.
- b. Each ID applicant must submit to a fingerprint based FBI Criminal History Records Check (CHRC) and successfully pass with no disqualifying crimes or the applicant will be prohibited from working in the secured area of the airport. A fingerprint fee will

apply for each applicant

- c. The employee must complete an Airport Safety and Security Training Session before issue of their ID.
- d. The contractor will be responsible for all fees and costs associated with fingerprinting, issue of cards, and required security training for each applicant.

All ID applicants must complete their fingerprint checks and training before reporting for work. Due to the nature of the CHRC process and training requirements the contractor is urged to have employees report to the Operations Office as soon as practical.

The Contractor shall submit a list of subcontractors a minimum of 10 days prior to the preconstruction meeting. Subcontractor shall have the same badging requirements as the prime contractor.

In addition, the Airport Security Coordinator will require that all Gate Guards undergo additional training necessary to meet the Airport's security needs.

The Contractor is responsible for payment of Transportation Security Administration fines and penalties resulting from security infractions perpetrated by, caused by, or permitted by his personnel or work forces of his subcontractors or suppliers.

All costs relating to the Contractor's security shall be the responsibility of the Contractor.

#### **ITEM 150520 MOBILIZATION**

#### DESCRIPTION

#### 105-1.1 DELETE: THIS SECTION

ADD: This item of work shall consist of mobilization required by the contract at the time of notice to proceed, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items; establishment of offices, buildings, and other necessary general facilities for the contractor's operations at the site; premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable.

If additional mobilization activities and costs are required during the performance of the contract as a result of added items of work, such costs shall be included in the unit price for the item or items of work added. This does not apply to any approved "time and materials work."

This item also includes all efforts related to restoration of the project site, staging area and haul road as directed in the bidding documents at the conclusion of the job. This activity includes, but is not limited to, incidental grading, seeding and clean-up, as required to restore the project site to original condition.

#### ADD: NEW SECTIONS

#### 105-1.2 MOBILIZATION LIMIT

Mobilization shall be limited to 10% of the Base Bid amount. Should the Base Bid amount exceed 10%, the amount over 10% will not be paid until final acceptance of the project by the Engineer.

#### 105-1.3 POSTED NOTICES

Prior to commencement of construction activities, the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor: Equal Employment Opportunity (EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) – DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination. These notices must remain posted until final acceptance of the work by the Department.

#### BASIS OF PAYMENT

#### 150-3.1 ADD:

Payment will be made under:

Item AR150520 - Mobilization - per lump sum.

Item AS150520 – Mobilization – per lump sum.

Item AT150520 - Mobilization - per lump sum.

#### ITEM 209 CRUSHED AGGREGATE BASE COURSE

#### **MATERIALS**

209-2.1 ADD: Table 1, Gradation B or C shall be used.

#### **CONSTRUCTION METHODS**

#### 209-3.3 PLACING AND SPREADING

DELETE: The second sentence of the first paragraph.

#### <u>209-3.4</u> <u>FINISHING AND COMPACTING</u>

REVISE: The first paragraph as follows:

"... has been compacted to the satisfaction of the RPR, ..."

#### 209-3.7 SURFACE GRADE ACCURACY

REVISE: To read as follows:

".....shall not vary by more than 3/8 inch from the surface elevations....."

#### METHOD OF MEASUREMENT

209-4.1 DELETE: This section.

209-4.3 DELETE: This section.

#### BASIS OF PAYMENT

<u>209-5.1</u> DELETE: This paragraph.

ADD:

Payment will be made under:

Incidental to Item 501900, 501916 - Remove PCC Pavement

#### ITEM 401 BITUMINOUS SURFACE COURSE - SUPERPAVE

(Central Plant Hot Mix)

#### **DESCRIPTION**

401-1.1 ADD (To end of last paragraph): Method 1 shall apply. This item shall consist of providing bituminous surface course at the pavement transition locations as shown on the plans.

#### COMPOSITION

#### 401-3.2 JOB MIX FORMULA

ADD: At the end of the third paragraph.

Table 1 – Superpave Design Criteria for Aircraft under 60,000 lbs. shall apply.

ADD: Mix design shall meet the properties in the table below:

LOCATION	LOADING	MIX	PG GRADE	MAX RAP	ACCEPTANCE	DENSITY
APRON	UNDER 60K LBS	AERO 401 N30 @ 3.0%	SBS70-22	0%	METHOD I	NUCLEAR GAUGE

#### **CONSTRUCTION METHODS**

#### 401-4.3 HAULING EQUIPMENT

ADD:

If it is found the fully loaded delivery trucks are excessively damaging the Airport or local roadway pavement, the Contractor shall limit the weight of the material being hauled onto the site. The Resident Engineer shall determine what is considered excessive damage. No payments will be made for additional hauling that may be required due to load restrictions.

#### 401-4.12 JOINTS

ADD: After the first paragraph of this section.

At any time during the bituminous surface course paving operation, it becomes necessary to end a paving lane at a location other than the proposed finished pavement edge because of ending a day's paving, machinery breakdown, etc., the lane end will be sawed back a sufficient distance to provide a smooth, neat appearing joint from which to resume paving. The sawed face will be painted with a liquid asphalt and this work shall be considered incidental to Item 401, Bituminous Surface Course, and no additional compensation will be allowed.

REVISE: The sixth sentence of the fourth paragraph as follows:

"...at a random location as determined by the Resident Engineer..."

#### 401-4.15 ACCEPTANCE TESTING OF HMA MIXES FOR DENSITY

DELETE: All references to Method II for quantities over 2,500 tons.

#### **BASIS OF PAYMENT**

<u>401-6.1</u> DELETE: The third and fourth paragraph.

Payment will be made under:

Item AR401610 – Bituminous Surface Course – per ton.

#### ITEM 401650 BITUMINOUS PAVEMENT MILLING

#### DESCRIPTION

401-1.1 DELETE: First paragraph.

ADD:

This work shall consist of removing a nominal depth of existing bituminous pavement surface, as shown in the plans and as directed by the Engineer.

#### **CONSTRUCTION METHODS**

401-3.1 REVISE: The second sentence in the first paragraph:

"The material removed shall be disposed of on Airport Property at a location designated by the Airport or the Resident Engineer."

ADD: After the second paragraph:

The Contractor shall use caution when performing milling operations in close proximity to an existing structure. Any pavement structure, building foundation, or any other object said to be damaged by the Contractor's milling operations shall be repaired by the Contractor at his/her own expense and to the satisfaction of the Resident Engineer. The Contractor shall be responsible for satisfactorily removing all existing bituminous pavement to the limits shown in the plans. No additional cost shall be added to the contract for additional efforts required to sufficiently remove all pavement immediately adjacent to an existing structure, including sawcuts.

#### BASIS OF PAYMENT

401-5.1 Payment will be made under:

Item AR401650 – Bituminous Pavement Milling – per square yard.

#### **ITEM 401655 BUTT JOINT CONSTRUCTION**

#### BASIS OF PAYMENT

401-5.1 Payment will be made under:

Item AR401655 – Butt Joint Construction – per square yard.

#### **ITEM 501 PORTLAND CEMENT CONCRETE PAVEMENT**

(PLAIN AND REINFORCED)

#### **DESCRIPTION**

<u>501-1.1</u> ADD: This item shall also consist of the repair of spalled edges of existing concrete surfaces in the areas identified in the plans or as directed by the Resident Engineer.

ADD: (To end of last paragraph): Method 1 shall apply.

#### **MATERIALS**

#### 501-2.3 Paragraph A

DELETE: Paragraph A

ADD:

A. Cement shall conform to the requirements of ASTM C150 Type 1 or ASTM C595 Type IL.

#### ADD: NEW SECTION

#### 501-2.12 EXPOXY-RESIN

The chemical adhesive resin system shall consist of a two (2) part, fast-setting resin and filler/hardener. The system shall meet the requirements of the ITP for Chemical Adhesives and be listed on the current Illinois Department of Transportation's published Qualified Producer List of *Finely Divided Materials*.

All epoxy-resin mortar used for spall repairs shall be a two-component material conforming to the requirements of ASTM C881, Type III. Class as appropriate for each application temperature to be encountered.

#### **CONSTRUCTION METHODS**

#### 501-3.6 (A) PROPORTIONS

Modify the first paragraph to read: Proportioning requirements for the concrete shall be designed for a field compressive strength of 4400 PSI at 28 days for pavements designed for aircraft weighing more than 60,000 pounds.

#### 501-3.6 (B) PROPORTIONS

**DELETE: This section** 

ADD: NEW SECTION

#### 501-3.24 SPALLS ALONG JOINTS

- 1. Spalls less than one inch wide and less than the depth of the joint sealant reservoir shall be filled with joint sealant material.
- 2. Spalls larger than one inch and/or deeper than the joint reservoir and, but less than half the slab depth shall be a partial depth repair. Partial depth repair shall be as detailed in the plans and as follows:
  - a. Saw cut around spalled or damaged areas as detailed on the plans.
  - b. Remove unsound concrete and at least ½ inch of visually sound concrete between the saw cut and the joint or crack with a light chipping hammer.
  - c. Clean cavity with high pressure water jets supplemented with compressed air as needed to remove loose material.
  - d. Apply a prime coat of epoxy resin, Type III, Grade I, to the dry, cleaned surface of all sides and bottom of the cavity, except any joint face.
  - e. Fill cavity with epoxy resin concrete or mortar. Epoxy resin concrete shall be grade
  - f. An insert or other bond breaking medium shall be used to prevent bond at all joint faces.
  - g. A reservoir for the joint sealant shall be sawed to the dimensions required. The reservoir shall be thoroughly cleaned and sealed with the specified joint sealer.
  - h. The epoxy resin materials shall be placed in the cavity in layers not over 2 inches thick. The time interval between placement of additional layers shall be such that the temperature of the epoxy resin material does not exceed 140 F (60C) at any time during hardening. Any repair material on the surrounding surfaces of the existing concrete shall be removed before it hardens. If any spall penetrates half the depth of the slab or more, the entire slab shall be removed and replaced as previously specified.
- 3. Spalls deeper than half the slab depth shall require partial panel replacement as detailed in the plans.

#### METHOD OF MEASUREMENT

ADD: The quantity of PCC spall repair shall be the number of square feet of spall repair performed as specified, in place, completed and accepted by the Resident Engineer. Only existing spalls designated by the engineer for repair shall be measured. Any edge spall that has been caused by the contractor's operation and subsequently repaired shall not be measured for payment. Sealing joints along spalls shall not be measured for payment but shall be considered incidental to the spall.

#### BASIS OF PAYMENT

ADD: NEW SECTION

501-5.4 Payment will be made under:

Item AR501509 9" PCC Pavement – per square yard

Item AR501510 10" PCC Pavement – per square yard

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Item AR501530	PCC Test Batch – per lump sum
Item AR501922	PCC Spall Repair – per square Feet
Item AS501510	10" PCC Pavement – per square yard
Item AT501510	10" PCC Pavement – per square yard
Item AU501922	PCC Spall Repair – per square feet

#### **ITEM 501900 REMOVE PCC PAVEMENT**

#### METHOD OF MEASUREMENT

501-4.1 ADD: No separate payment shall be made for tie downs or ground rods in panels to be removed.

#### **BASIS OF PAYMENT**

501-5.1 Payment will be made under:

Item AR501900 - Remove PCC Pavement - per square yard.

Item AS501900 - Remove PCC Pavement - per square yard.

Item AT501900 – Remove PCC Pavement – per square yard.

#### ITEM 510500 TIE-DOWN/GROUND ROD

#### **BASIS OF PAYMENT**

#### 510-5.1 Payment will be made under:

Item AR510901 – Remove Tie Down – Type A – per each.

Item AU510511 – Tie Down – Type A – per each.

#### **ITEM 603 BITUMINOUS TACK COAT**

#### **DESCRIPTION**

603-1.1 ADD: This item shall consist of the application of a tack coat for the following items:

1. Between the milled/grooved Bituminous Surface and the proposed Bituminous Surface Course.

#### **MATERIALS**

ADD: Non-Tracking Emulsified Asphalt (SS-1vh) may be used in lieu of the materials specified in Table 1. The NTEA material shall be according to Article 1032.06, Section F, of the Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022.

DELETE: Second sentence of first paragraph.

ADD: The emulsified asphalt shall not be diluted.

#### **CONSTRUCTION METHODS**

#### 603-3.3 APPLICATION OF BITUMINOUS MATERIAL

ADD: The minimum application rate for the bituminous materials shall be 0.15 gallons/s.y.

#### **BASIS OF PAYMENT**

#### 603-5.1 ADD:

Payment will be made under:

Item AR603510 - Bituminous Tack Coat - per gallon.

#### **ITEM 605 JOINT SEALING FILLER**

#### **DESCRIPTION**

605-1.1 ADD: This item shall consist of the preparation and application of joint sealant to existing and proposed PCC panels.

#### **MATERIALS**

605-2.1(A) ADD: Material A shall be used.

#### METHOD OF MEASUREMENT

605-5.2 REVISE: "silicone" to non - silicone

#### **BASIS OF PAYMENT**

605-5.1 ADD:

Payment will be made under:

Item AU605510 - Joint Sealing Filler - per foot.

#### ITEM 610 STRUCTURAL PORTLAND CEMENT CONCRETE

#### **DESCRIPTION**

610-1.1 ADD: This item shall include concrete used for the purpose of tie downs, ground rods, and other miscellaneous concrete.

The cost of furnishing and install structural concrete shall be considered incidental to the contract unit price for the item utilizing Item 610 Structural Portland Cement Concrete. The prices shall be full compensation for furnishing all materials and or preparation, delivering and installation of these materials, and for all labor, equipment, tools and incidentals necessary to complete the item.

If, upon delivery and incorporation of any materials, the Contractor has failed to provide the necessary submittals as required by Sections 50-18, 60-01, 60-03 and 60-11 of the Standard Specifications, the pay item shall not be included on the Construction Progress Payment report until such submittals have been furnished.

#### **ITEM 620 PAVEMENT MARKING**

#### **MATERIALS**

#### 620-2.2 PAINT

ADD: Paint type shall be waterborne.

#### **CONSTRUCTION METHODS**

#### 620-3.3 PREPARATION OF SURFACE

ADD: Shot blasting will not be allowed.

ADD: Existing marking that is to be re-painted shall be cleaned using sand blasting or high-pressure water to remove dirt, grease, laitance, and loose or flaking paint.

ADD: Water blasting equipment shall be adjustable to prevent damage to the pavement.

#### 620-3.5 APPLICATION

DELETE:

Table 1 reference to Epoxy paint type.

ADD: Tie down markings shall not require the application of glass beads.

#### 620-3.7 PAVEMENT MARKING REMOVAL

DELETE: In the first sentence "shot blasting,".

ADD: Shot blasting will not be allowed.

#### METHOD OF MEASUREMENT

#### 620-4.1 ADD: No distinction will be made between colors of paint for payment purposes.

The quantity of pavement marking to be paid for shall be the number of square feet of surface covered with paint and beads, completed and accepted by the Engineer. Measurement shall not be made separately for each paint application.

Mobilization will not be measured for payment. Several mobilizations may be required for the payement marking.

Surface preparation will not be measured for payment. This shall be considered incidental to the pavement marking pay items.

#### **BASIS OF PAYMENT**

<u>620-5.1</u>

ADD: If, upon delivery and incorporation of any materials the Contractor has failed to provide the necessary submittals as required by Sections 30-18, 40-01, 40-03 and 40-10 of the Standard and Special Provisions, the pay item shall not be included on the CPP until such submittals have been furnished.

Payment will be made under:

Item AR620520 - Pavement Marking - Waterborne - per square foot

SPECIAL PROVISIONS University of Illinois – Willard Airport Savoy, IL

IL Project: CMI-5043 Rehabilitate General Aviation Aprons

#### **APPENDIX 1**

Policy Memorandum 96-3 Requirements for Quality Assurance on Projects with Bituminous Paving 2 Pages

# State of Illinois Department of Transportation Division of Aeronautics

#### **POLICY MEMORANDUM**

February 20, 2014 Springfield, Illinois Number 96-3

TO: CONSULTING ENGINEERS

SUBJECT: REQUIREMENTS FOR QUALITY ASSURANCE ON PROJECTS WITH

**BITUMINOUS CONCRETE PAVING** 

#### I. SCOPE

The purpose of this policy memorandum is to define to the Consulting Engineer the requirements concerning Quality Assurance on bituminous concrete paving projects. Specifically, this memo applies whenever the Contractor is required to comply with the requirements set forth in Policy Memorandum 2003-1, "Requirements for Laboratory, Testing, Quality Control, and Paving of Bituminous Concrete Mixtures".

#### II. LABORATORY APPROVAL

The Resident Engineer shall review and approve the Contractor's plant laboratory to assure that it meets the requirements set forth in the contract specifications and Policy Memorandum 2003-1. This review and approval shall be completed prior to utilization of the plant for the production of any mix.

#### III. QUALITY ASSURANCE DURING PRODUCTION PAVING

- A. At the option of the Engineer, independent assurance tests may be performed on split samples taken by the Contractor for Quality Control testing. In addition, the Resident Engineer shall witness the sampling and splitting of these samples at the start of production and as needed throughout mix production. The Engineer may select any or all split samples for assurance testing. These tests may be performed at any time after sampling. The test results will be made available to the Contractor as soon as they become available.
- B. The Resident Engineer may witness the sampling and testing being performed by the Contractor. If the Resident Engineer determines that the sampling and Quality Control tests are not being performed according to the applicable test procedures, the Engineer may stop production until corrective action is taken. The Resident Engineer will promptly notify the Contractor, both verbally and in writing, of observed deficiencies. The Resident Engineer will document all witnessed samples and tests. The Resident Engineer may elect to obtain samples for testing, separate from the Contractor's Quality Control process, to verify specification compliance.

1. Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits:

Test Parameter	Acceptable Limits	of Precision
% Passing		
1/2 in.		5.0 %
No. 4		5.0 %
No. 8		3.0 %
No. 30		2.0 %
No. 200		2.2 %
Asphalt Content		0.3 %
Maximum Specific Gravity	$V(G_{mm})$ of Mixture	0.026
Bulk Specific Gravity (G <sub>mb</sub>	) of Gyratory Brix	0.045

- 2. In the event a comparison of the required plant test results is outside the above acceptable limits of precision, split or independent samples fail the control limits, an extraction indicates non-specification mix, or a continual trend of difference between Contractor and Engineer test results is identified, the Engineer will immediately investigate. The Engineer may suspend production while the investigation is in progress. The investigation may include testing by the Engineer of any remaining split samples or a comparison of split sample test results on the mix currently being produced. The investigation may also include review and observation of the Contractor's technician performance, testing procedure, and equipment. If a problem is identified with the mix, the Contractor shall take immediate corrective action. After corrective action, both the Contractor and the Engineer shall immediately resample and retest.
- C. The Contractor shall be responsible for documenting all observations, records of inspection, adjustments to the mixture, test results, retest results, and corrective actions in a bound hardback field book or bound diary which will become the property of IDA upon completion and acceptance of the project. The Contractor shall be responsible for the maintenance of all permanent records whether obtained by the Contractor, the Contractor's Consultants, or the producer of bituminous mix material. The Contractor shall provide the Engineer full access to all documentation throughout the progress of the work.

Results of adjustments to mixture production and tests shall be recorded in duplicate and sent to the Engineer.

#### IV. ACCEPTANCE BY ENGINEER

Density acceptance shall be performed according to Policy Memorandum 87-2, or according to the acceptance procedure outlined in the Special Provisions.

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 96-3, dated January 1, 2004

SPECIAL PROVISIONS University of Illinois – Willard Airport Savoy, IL

IL Project: CMI-5043 Rehabilitate General Aviation Aprons

#### **APPENDIX 2**

Pavement Marking Paint Acceptance Policy Memorandum 97-2 2 Pages

#### State of Illinois Department of Transportation Division of Aeronautics

#### **POLICY MEMORANDUM**

June 22, 2018

Springfield, Illinois

Number 97-2

TO: CONSULTING ENGINEERS

SUBJECT: PAVEMENT MARKING PAINT ACCEPTANCE

I. SCOPE

The purpose of this policy memorandum is to define the procedure for acceptance of pavement marking paint.

II. RESIDENT ENGINEER'S DUTIES

The Resident Engineer shall follow the acceptance procedure outlined as follows:

- A. Require the contractor to furnish the name of the paint manufacturer, IDOT Test I.D. number and the Batch/Lot number proposed for use prior to beginning work. Notify the I.D.A. Materials Certification Engineer when this information is available.
- B. Require the manufacturer's certification before painting begins. Check the certification for compliance to the contract specifications.
  - 1. The certification shall be issued from the manufacturer and shall include the specification and the batch number.
  - 2. The paint containers shall have the manufacturer's name, the specification and the batch number matching the certification.
- C. If no batch number is indicated on the certification or containers, sample the paint according to the procedure for the corresponding paint type.
- D. If the I.D.A. Engineer of Materials indicates that batch number has not been previously sampled and tested, sample the paint according to the procedure for the corresponding paint type. The Division of Aeronautics will provide paint cans upon request by the Resident Engineer. Samples will only be taken in new epoxy lined cans and lids so that the paint will not be contaminated. It is important to seal the sample container immediately with the paint can lid to prevent the loss of volatile solvents.

Mark the sample cans with the paint color, manufacturer's name, and batch number. The paint samples and manufacturer's certification shall be placed in the mail or delivered within 24 hours after sampling. Address or deliver the samples to the Material's Certification Engineer at:

Illinois Department of Transportation Division of Aeronautics One Langhorne Bond Drive Springfield, Illinois 62707

#### Sampling Procedures for Each Paint Type:

- 1. Waterborne or Solvent Base Paints
  - a. A sample consists of one one-pint cans taken per batch number. Before drawing samples, the contents of the component's container must be <u>thoroughly</u> mixed to make certain that any settled portion is fully dispersed.
  - b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.

#### 2. Epoxy Paint

- a. Take separate one-pint samples of each paint component prior to marking. Before drawing samples, the contents of each component's container must be thoroughly mixed to make certain that any settled portion is fully dispersed. Do not combine the two components or sample from the spray nozzle.
- b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.

#### III. TESTING

The paint will be tested for acceptance by the IDOT Bureau of Materials and Physical Research for conformance to the contract specifications.

Alan D. Mlacnik, P.E. Chief Engineer

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Supersedes policy memorandum 97-2 dated January 1, 2004

SPECIAL PROVISIONS University of Illinois – Willard Airport Savoy, IL

IL Project: CMI-5043 Rehabilitate General Aviation Aprons

#### **APPENDIX 3**

Requirements for Lab, Testing, QC, & Paving of Superpave HMA Mixtures
Policy Memorandum 2003-11
11 Page

## State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

December 3, 2020 Springfield, Illinois Number 2003-1

TO: CONSULTANTS & CONTRACTORS

SUBJECT: REQUIREMENTS FOR LABORATORY, TESTING, QUALITY CONTROL, AND

PAVING OF SUPERPAVE HMA CONCRETE MIXTURES FOR AIRPORTS

#### I. SCOPE

The purpose of this policy memorandum is to define to the Contractor the requirements concerning the laboratory, testing, Quality Control, and paving of HMA mixtures utilizing Superpave technology. References are made to the most recent issue of the Standard Specifications for Construction of Airports (Standard Specifications) and to American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO) and IDOT Bureau of Materials Illinois Lab Procedure (ITP) testing methods. The Quality Assurance and acceptance responsibilities of the Resident Engineer are described in Policy Memorandum 96-3.

#### II. LABORATORY

The Contractor shall provide a laboratory located, at the plant, according to the current Illinois Department of Transportation, Bureau of Materials Policy Memorandum (PM) 6-08, *Minimum Private Laboratory Requirements for Construction Materials Testing or Mix Design*. The laboratory shall be of sufficient size and be furnished with the necessary equipment and supplies for adequately and safely performing the Contractor's Hot Mix Asphalt (HMA) Job Mix Formula (JMF), Quality Control (QC) testing and Quality Assurance (QA) testing. The laboratory and equipment furnished by the Contractor shall be properly calibrated and maintained. The Contractor shall maintain a record of calibration results at the laboratory. The Engineer may inspect measuring and testing devices at any time to confirm both calibration and condition. If the Engineer determines that the equipment is not within the limits of dimensions or calibration described in the appropriate test method, he may stop production until corrective action is taken. If laboratory equipment becomes inoperable or insufficient to keep up with mix production testing, the Contractor shall cease mix production until adequate and/or sufficient equipment is provided.

#### III. MIX DESIGN SUBMITTAL

Based upon data and test results submitted by the Contractor, the Illinois Division of Aeronautics (IDA) Engineer of Construction & Materials shall issue the final Job Mix Formula (JMF) approval letter that concurs or rejects the Contractor's proposed JMF. The Contractor will be required to perform the sampling and laboratory testing and develop a complete mix design, according to the following guidelines: Mix design submittals should be submitted to IDA, Construction/Material Section.

Attn: Certification and Mixtures Engineer. Note: Quality Control (QC) Managers shall

be Level III QC/QA qualified and will be responsible for all mix designs. All Technicians obtaining samples and performing gradations shall have successfully completed the IDOT Mixture Aggregate Technician Course and Technicians performing mix design testing and plant sampling/testing shall have successfully completed the IDOT Bituminous Concrete Level 1 Technician Course under the Illinois Department of Transportation, Bureau of Materials & Physical Research QC/QA Training Program.

#### A. Initial Mix Design Submittal

- 1. Use the first tab/page of the IDOT, QC/QA Package, Mix Design Software spreadsheet workbook. Provide the Producer name, Producer # and Producer location of each aggregate and asphalt binder (AB). Producers are assigned Producer numbers by IDOT Central Bureau of Materials.
- 2. Material code for each aggregate.
- 3. Aggregate Gradations per ASTM C-136 (The Contractor shall obtain representative samples of each aggregate).
- 4. Material code for each aggregate (i.e. 022CM11, etc.).
- 5. Material code for the grade of AB.
- 6. Proposed Aggregate Blend (% for each aggregate) Note: Based on the gradation results, the Contractor shall select the blend percentages that comply with the Standard Specifications, Section 401/403 3.3 (Table: Aggregate Asphalt Pavements)
- 7. Producer name, Producer #, and specific gravity of the proposed asphalt cement.
- 8. IDOT approved Performance Grade (PG) Binder shall be used unless otherwise specified by the IDA Engineer of Construction & Materials.

After verification and approval by IDA of the proposed design information from this Section A, Initial Mix Design Submittal, the Contractor shall proceed to Section B, Mixture Design and Testing, and perform mixture tests on 4 gyratory brix sample (4 point mix design) to determine the optimum AB content for the target Air Voids.

Note: If Section A, Initial Mix Design Submittal, is not performed first, and the complete mix design (gyratory testing) is submitted with an unapproved material source or an incorrect aggregate blend, then the gyratory laboratory testing would have to be redone.

#### B. Preliminary Mixture Design & Testing

#### **Design Parameters**

Gyrations ( $N_{des}$ ) – per Standard Specifications for Construction of Airports (Standard Specifications), Section 401/403 – 3.3 (JMF), Table (Asphalt Design Criteria)

Asphalt Content – AC% per Standard Specifications, Section 401/403 – 3.3 (JMF), Table (Aggregate – Asphalt Pavements)

Maximum Specific Gravity – G<sub>mm</sub> (AAHSTO T 209)

Bulk Specific Gravity – G<sub>mb</sub> (AAHTO T 166)

% air voids –  $V_a$  (ASTM D3203) per Standard Specifications, Section 401/403 – 3.3 Table (Asphalt Design Criteria)

VFA % – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table (Asphalt Design Criteria)

#### C. Preliminary Mix Design Submittal

The Preliminary JMF including all test results shall be submitted to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer with the following data:

- a) Aggregate & asphalt cement material codes
- b) Aggregate & asphalt cement producer numbers, names, and locations
- c) Percentage of each individual aggregate
- d) Aggregate blend % for each sieve
- e) AC Specific Gravity
- f) Bulk Specific Gravity and Absorption for each aggregate
- g) Summary of Superpave Design Data: AC % Mix, G<sub>mb</sub>, G<sub>mm</sub>, VMA, Voids (Total Mix), Voids Filled, V<sub>be</sub>, P<sub>be</sub>, P<sub>ba</sub>, G<sub>se</sub>
- h) Optimum design data listing: AC % Mix,  $G_{mb}$ ,  $G_{mm}$ , VMA, Voids (Total Mix), Voids Filled,  $G_{se}$ ,  $G_{sb}$
- i) Percent of asphalt that any RAP will add to the mix
- j) Graphs for the following: Gradation on 0.45 Power Curve, AC vs. Voids (Total Mix), AC vs. Specific Gravities, AC vs. Voids Filled, AC vs. VMA
- k) Tensile Strength Ratio (TSR)
- I) Type and amount of anti-strip agent when used
- m) Date the JMF was developed

#### D. Mix Approval

Once the preliminary JMF is reviewed and approved by IDA, a JMF approval letter will be issued to the consultant and contractor. Production of HMA is not authorized until a JMF letter has been issued.

#### E. Change in Material Sources

The above procedure, III. MIX DESIGN SUBMITTAL, shall be repeated for each change in material source or gradation of aggregate materials.

#### IV. MIX PRODUCTION TESTING

The Quality Control (QC) of the manufacture and placement of HMA mixtures is the responsibility of the Contractor and will be according to the Standard Specifications, Section 401/403-5.1 - 5.6. In addition, the Contractor shall develop a Contractor Quality Control Program (CQCP) in accordance with Item 100 in the Standard Specifications. The (CQCP) shall be submitted on the Form AER 27. Hot Mix Asphalt (HMA) Quality Control Plan. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Quality Control includes the recognition of defects and their immediate correction. This may require increased testing, communication of test results to the plant or the job site, modification of operations, suspension of HMA production, rejection of material, or other actions as appropriate. The Resident Engineer shall be immediately notified of any failing tests and subsequent remedial action. Form AER-14 shall be reported to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer and the Resident Engineer no later than the start of the next workday. The Contractor shall provide a Quality Control (QC) Manager who will have overall responsibility and authority for Quality Control. This individual shall have successfully completed the IDOT Division of Highways HMA Concrete Level II Technician Course "HMA Proportioning and Mixture Evaluation." In addition to the QC Manager, the Contractor shall provide sufficient and qualified personnel to perform the required visual inspections, sampling, testing, and documentation in a timely manner.

#### V. TEST SECTION (Note: Applies for Method II only (≥ 2,000 tons/pay item))

The purpose of the test section is to determine if the mix is acceptable and can be compacted to a consistent passing density. The test strip construction and acceptance will be according to the Standard Specifications, Section 401/403-3.5.

#### VI. MATERIAL ACCEPTANCE

Material acceptance and acceptance sampling to determine conformance to the contract specifications will be performed by the Resident Engineer in accordance with the Standard Specifications, Section 401/403-6.1. In addition to the requirements set forth in Section 401/403-6.1 the R.E. shall perform sample tests at a rate of 1/5000 tons randomly selected by the R.E. and shall be sent with an identification sheet (Form AER 24, Sample Identification) to an ASTM certified independent laboratory. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 2003-1 dated June 12, 2004

SPECIAL PROVISIONS University of Illinois – Willard Airport Savoy, IL

IL Project: CMI-5043 Rehabilitate General Aviation Aprons

#### **APPENDIX 4**

Accepted Cement Types Policy Memorandum 22-1 1 Pages

### State of Illinois Department of Transportation Office of Intermodal Project Implementation Aeronautics

### POLICY MEMORANDUM

February 10, 2022 Springfield, Illinois Number 22-1

TO: CONSULTING ENGINEERS / CONTRACTORS

SUBJECT: ACCEPTED CEMENT TYPES

- I. This policy memorandum addresses the accepted cement types for use in Items 501 and 610 Concrete mixtures. Type IL cement has been added to the approved list and may be used on all IDOT-Let Aeronautics projects.
- II. The following cement types are approved.
  - a. Type I cement conforming to the requirements of ASTM C 150.
  - b. Type IL cement conforming to the requirements of ASTM C 595.
  - c. All other types are not allowed unless specified by Special Provisions.

William C. Eves, P.E. Acting Chief Engineer

SPECIAL PROVISIONS University of Illinois – Willard Airport Savoy, IL

IL Project: CMI-5043 Rehabilitate General Aviation Aprons

#### **APPENDIX 5**

Item 610, Structural Portland Cement Concrete:
Job Mix Formula Approval & Production Testing
Policy Memorandum 96-1
2 Pages

## State of Illinois Department of Transportation Division of Aeronautics

#### **POLICY MEMORANDUM**

April 1, 2010 Springfield Number 96-1

TO: CONSULTING ENGINEERS

SUBJECT: ITEM 610, STRUCTURAL PORTLAND CEMENT CONCRETE: JOB MIX FORMULA APPROVAL & PRODUCTION TESTING.

I. This policy memorandum addresses the Job Mix Formula (JMF) approval process and production testing requirements when Item 610 is specified for an airport construction contract.

#### II. PROCESS

- a. The contractor may submit a mix design with recent substantiating test data or he may submit a mix design generated by the Illinois Division of Highways with recent substantiating test data for approval consideration. The mix design should be submitted to the Resident Engineer.
- b. The Resident Engineer should verify that each component of the proposed mix meets the requirements set forth under Item 610 of the *Standard Specifications for Construction of Airports* and/or the contract special provisions.
- c. The mix design should also indicate the following information:
  - 1. The name, address, and producer/supplier number for the concrete.
  - 2. The source, producer/supplier number, gradation, quality, and SSD weight for the proposed coarse and fine aggregates.
  - 3. The source, producer/supplier number, type, and weight of the proposed flyash and/or cement.
  - 4. The source, producer/supplier number, dosage rate or dosage of all admixtures.
- d. After completion of Items b and c above, the mix with substantiating test data shall be forwarded to the Division of Aeronautics for approval. Once the mix has been approved, the production testing shall be at the rate in Section III as specified herein.

#### III. PRODUCTION TESTING

- a. One set of cylinders or beams, depending on the strength specified, shall be cast for acceptance testing for each day the mix is used. In addition, at least one slump and one air test shall be conducted for each day the mix is used. If more than 100 c.y. of the mix is placed in a given day, additional tests at a frequently of 1 per 100 c.y. shall be taken for strength, slump, and air. The concrete shall have a maximum slump of three inches (3") and minimum slump of one inches (1") when tested in accordance with ASTM C-143. The air content of the concrete shall be between 5% and 8% by volume. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.
- b. If the total proposed amount of Item 610 Structural Portland Cement Concrete as calculated by the Resident Engineer is less than 50 c.y. for the entire project, the following shall apply:
  - The Resident Engineer shall provide calculations of the quantity of Item 610 to the Division of Aeronautics.
  - One set of cylinders or beams, depending the strength specified, shall be cast for acceptance testing.
  - One air content and one slump test shall be taken for acceptance testing.
  - The concrete shall have a maximum slump of three inches (3") and minimum of one inch (1") when tested in accordance with ASTM C-143. The air content of the concrete shall be between 5% and 8% by volume. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.
- c. The Resident Engineer shall collect actual batch weight tickets for every batch of Item 610 concrete used for the project. The actual batch weight tickets shall be kept with the project records and shall be available upon request of the Department of Transportation.

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 96-1 dated January 1, 2004

SPECIAL PROVISIONS University of Illinois – Willard Airport Savoy, IL

IL Project: CMI-5043 Rehabilitate General Aviation Aprons

#### **APPENDIX 6**

Requirements for Cold Weather Concreting Policy Memorandum 2001-1 8 Pages

## State of Illinois Department of Transportation Division of Aeronautics

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#### **POLICY MEMORANDUM**

December 3, 2020 Springfield, Illinois Number: 2001-1

TO: CONTRACTORS

#### SUBJECT: REQUIREMENTS FOR COLD WEATHER CONCRETING

#### I. PURPOSE

A. This policy memorandum outlines the minimum requirements for cold weather concreting. Cold weather is defined as whenever the average ambient air temperature during day or night drops below 40 F.

#### II. COLD WEATHER CONCRETING PLAN

- A. The contractor shall submit a cold weather concreting plan to the Engineer for approval. Cold weather concreting operations are not allowed to proceed until the contractor's cold weather concreting plan has been approved by the Engineer.
- B. The contractor's plan shall comply with this memorandum and shall address, as a minimum, the following:
  - 1. Concrete Mix Manufacturing
  - 2. Concrete Mix Temperature Monitoring
  - 3. Base Preparation
  - 4. Concrete Curing and Protection
  - 5. In Place Concrete Temperature Monitoring
  - 6. Strength Test Specimens

#### III. MINIMUM REQUIREMENTS

#### A. Concrete Mix Manufacturing

- The contractor must make the necessary adjustments so that the concrete temperature is maintained from 50 F to 90 F for placement. Acceptable methods include:
  - a) Heating the mixing water Note: If the mixing water is to be heated to a temperature above 100 F, the contractor must include a mixing sequence plan to indicate the order that each component of the mix is to be charged into the mixer.

b) Heating the aggregates Note: The exact method of heating the aggregates shall be included as part of the cold weather concreting plan. Aggregates must be free of ice and frozen lumps. To avoid the possibility of a quick or flash set of the concrete, when either the water or aggregates are heated to above 100 F, they should be combined in the mixer first before the cement is added.

#### B. Concrete Mix Temperature

 The contractor shall monitor the mix temperature at the plant and prior to placement in the forms. Mix that does not meet the temperature requirement of 50 F to 90 F shall be rejected for use on the project.

#### C. Base Preparation

- 1. Paving or placing concrete on a frozen base, subbase, or subgrade is prohibited.
- 2. The base, subbase, or subgrade on which the concrete is to be placed shall be thawed and heated to at least 40 F. The method by which the base subbase or subgrade is to be heated shall be indicated in the contractor's cold weather concreting plan. Insulating blankets or heated enclosures may be required.

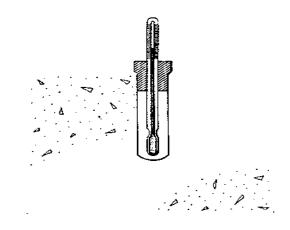
#### D. Concrete Protection and Curing

- In addition to the curing options available in article 501-4.13

   (a) (b), (c), (d), and (e) of the Standard Specifications for Construction of Airports, the contractor shall protect the concrete in such a manner as to maintain a concrete temperature of at least 50 F for 7 days.
- 2. The method of concrete protection shall be by use of insulating layer or heated enclosure around the concrete. The method of protection shall be indicated in the contractor's cold weather concreting plan. When insulating layers are to be used, the thermal resistance to heat transfer (R Value in F\*hr\*ft²/BTU) of the insulation material selected, shall be appropriate for the slab thickness being constructed and shall be indicated in the cold weather concreting plan.
- 3. Appendix A shows a chart and table taken from the American Concrete Institute specification, ACI 306 R Cold Weather Concreting, which may be used by the contractor in selecting the proper insulation (R Value) and insulating material which may be used.

#### E. In-Place Concrete Temperature Monitoring

- Once the concrete is in place, the protection method used, must ensure that the concrete temperature does not fall below 50 F for the time period specified in Section (D. 1.) of this Policy Memorandum (7 days).
- 2. The concrete temperature on the surface and below the surface must be monitored and recorded by the contractor for the duration of the protection period in Section (D. 1.).
- 3. After the concrete has hardened, surface temperature can be checked with special surface thermometers or with an ordinary thermometer that is kept covered with insulating blankets. The high and low values for each 24-hour period of protection must be measured and recorded.
- 4. One acceptable method of checking temperature below the concrete surface is given in the Portland Cement Association (PCA) book entitled "Design and Control of Concrete Mixtures" latest edition. The method is indicated below and it should be noted that the thermometer should be capable of recording high and low values for a given 24-hour period.



5. The exact method for <u>surface</u> and <u>sub-surface</u> concrete temperature monitoring shall be indicated in the contractor's cold weather concreting plan. The maximum permissible difference between the interior and surface temperature is 35 F. Adjustments in protection method shall be implemented if the maximum permissible difference is exceeded.

#### F. Strength specimen handling

- 1. The Contractor is responsible for making, transporting, and curing all samples (beams or cylinders)
- 2. The Contractor is required to load the testing machine and dispose of the broken pieces.
- 3. Onsite, indoor curing facilities, meeting the requirements of ASTM C-31, shall be required for cold weather concreting operations.

- Sampling for strength specimens shall be according to the Contract Special Provisions. Sampled concrete shall be transported to the indoor curing facilities for the casting of strength specimens.
- 5. The exact location and description of the curing facilities shall be indicated in the contractor's cold weather concreting plan.
- 6. The method of transporting concrete sampled from the grade to the curing facilities for casting shall be indicated in the contractor's cold weather concreting plan.

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 2001-1 dated January 1, 2004

## **APPENDIX A**

Minimum exposure temperatures for concrete flatwork placed on the ground for concrete placed & surface temperature maintained at 50 F (10 C) for 3 days on ground at 35 F (2 C)

	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance <b>R</b> , hr-ft²-F/Btu (m²-K/W), is used					
Slab thickness, in. (m)	$\mathbf{R} = 2 (0.35)$	$\mathbf{R} = 4 (0.70)$	<b>R</b> = 6 (1.06)	<b>R</b> = 8 (1.41)		
	Cement content = 300 lb/yd2 (178 kg/m2)					
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	*	*	*	*		
18 (0.46)	42 (6)	38 (3)	32 (0)	26 (-3)		
24 (0.61)	37 (3)	25 (-4)	11 (-12)	-3 (-19)		
30 (0.76)	31 (-1)	15 (-9)	-1 (-18)	-17 (-27)		
36 (0.91)	31 (-1)	12 (-11)	-5 (-21)	-22 (-30)		
	Cement content	= 400 lb/yd2 (237 kg	ı/m2)			
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	46 (8)	44 (7)	42 (6)	40 (4)		
18 (0.46)	36 (2)	22 (-6)	8 (-13)	-6 (-21)		
24 (0.61)	28 (-2)	9 (-13)	-10 (-23)	-29 (-34)		
30 (0.76)	21 (-6)	0 (-18)	-21 (-29)	-42 (-41)		
36 (0.91)	21 (-6)	-4 (-20)	-29 (-34)	-50 (-46)		
	Cement content	= 500 lb/yd2 (296 kg	ı/m2)			
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	42 (6)	36 (2)	30 (-1)	24 (-4)		
18 (0.46)	30 (-1)	12 (-11)	-6 (-21)	-22 (-30)		
24 (0.61)	21 (-6)	-5 (-21)	-31 (-35)	-50 (-46)		
30 (0.76)	16 (-9)	-10 (-23)	-42 (-41)	-74 (-59)		
36 (0.91)	16 (-9)	-18 (-28)	-50 (-46)	#		
Cement content = 600 lb/yd2 (356 kg/m2)						
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	38 (3)	26 (-3)	14 (-10)	2 (-17)		
18 (0.46)	24 (-4)	0 (-18 )	-24 (-31)	-48 (-44)		
24 (0.61)	14 (-10)	-16 (-27)	-46 (-43)	-82 (-63)		
30 (0.76)	10 (-12)	-20 (-29)	-62 (-52)	#		
36 (0.91)	7 (-14)	-30 (-34)	#	#		

<sup>\* &</sup>gt; 50 F (10 C): additional heat required

<sup># &</sup>lt;< -60 F (-51 C)

Minimum exposure temperatures for concrete flatwork placed on the ground for concrete placed & surface temperature maintained at 50 F (10 C) for 7 days on ground at 35 F (2 C)

	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance <b>R</b> , hr-ft²-F/Btu (m²-K/W), is used					
Slab thickness, in. (m)	<b>R</b> = 2 (0.35)	$\mathbf{R} = 4 (0.70)$	<b>R</b> = 6 (1.06)	<b>R</b> = 8 (1.41)		
	Cement content = 300 lb/yd2 (178 kg/m2)					
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	*	*	*	*		
18 (0.46)	46 (8)	42 (6)	36 (2)	30 (-1)		
24 (0.61)	40 (4)	31 (-1)	22 (-6)	11 (-12)		
30 (0.76)	35 (2)	22 (-6)	7 (-14)	-8 (-22)		
36 (0.91)	31 (-1)	13 (-11)	-5 (-21)	-23 (-31)		
	Cement content	= 400 lb/yd2 (237 kg	/m2)			
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	*	*	*	*		
18 (0.46)	41 (5)	32 (0)	22 (-6)	12 (-11)		
24 (0.61)	35 (2)	19 (-7)	-1 (-17)	-15 (-26)		
30 (0.76)	28 (-2)	8 (-13)	-14 (-26)	-36 (-38)		
36 (0.91)	23 (-5)	-4 (-20)	-29 (-34)	-54 (-48)		
	Cement content	= 500 lb/yd2 (296 kg	/m2)			
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	48 (9)	44 (7)	40 (4)	36 (2)		
18 (0.46)	36 (2)	22 (-6)	8 (-13)	-6 (-21)		
24 (0.61)	28 (-2)	6 (-14)	-16 (-27)	-38 (-39)		
30 (0.76)	22 (-6)	-7 (-22)	-36 (-38)	-64 (-53)		
36 (0.91)	16 (-9)	-18 (-28)	-50 (-46)	#		
	Cement content = 600 lb/yd2 (356 kg/m2)					
4 (0.10)	*	*	*	*		
8 (0.20)	*	*	*	*		
12 (0.31)	44 (7)	38 (3)	32 (0)	26 (-3)		
18 (0.46)	31 (-1)	14 (-10)	-5 (-21)	-24 (-31)		
24 (0.61)	22 (-6)	-5 (-21)	-32 (-36)	-61 (-52)		
30 (0.76)	14 (-10)	-19 (-28)	-67 (-55)	#		
36 (0.91)	7 (-14)	-30 (-34)	#	#		

<sup>\* &</sup>gt; 50 F (10 C): additional heat required # < -60 F (-51 C)

## Thermal Resistance of Various Insulating Materials

IVIALEI IAIS						
	Thermal resistance					
	"R" for these					
	thicknesses of					
	material*					
	1 in.,	10 mm, m3⋅K /				
	hr-ft3-F /	W				
Insulating Material	Btu	VV				
Boards and slabs						
Expanded polyurethane (R-11 exp.)	6.25	0.438				
Expanded polystyrene extruded						
(R-11 exp.)	5	0.347				
Expanded polystyrene extruded,						
plain	4	0.277				
Glass fiber, organic bonded	4	0.277				
Expanded polystyrene, molded beads	3.57	0.247				
Mineral fiber with resin binder	3.45	0.239				
Mineral fiber board, wet felted	2.94	0.204				
Sheathing, regular density	2.63	0.182				
Cellular glass	2.63	0.182				
Laminated paperboard	2	0.139				
Particle board (low density)	1.85	0.128				
Plywood	1.25	0.087				
Blanket						
Mineral fiber, fibrous form processed						
from rock, slag, or glass	3.23	0.224				
Loose fill						
Wood fiber, soft woods	3.33	0.231				
Mineral fiber (rock, slag, or glass)	2.5	0.173				
Perlite (expanded)	2.7	0.187				
Vermiculite (exfoliated)	2.2	0.152				
Sawdust or shavings	2.22	0.154				

<sup>\*</sup>Values from ASHRAE Handbook of Fundamentals, 1977, American Society of Heating, Refrigerating, and Air-Conditioning Engineers, New York.