04A

Letting March 8, 2024

Notice to Bidders, Specifications and Proposal

Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. BL072
Central Illinois Regional Airport
Bloomington, Illinois
McLean County
Illinois Project No. BMI-4776
AIP Project No. N/A

(Printed by authority of the State of Illinois)

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 8, 2024, 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. BL072
   Central Illinois Regional Airport
   Bloomington, Illinois
   McLean County
   Illinois Project No. BMI-4776
   AIP Project No. N/A

   Rehabilitate Airport Entrance Road and Associated Improvements

   For engineering information, please contact Dillon Ruholl, P.E. of Crawford, Murphy & Tilly, Inc. at 217.572.1069.

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 5.0%.

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 January 12, 2024, and the Construction Plans dated January 12, 2024 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 Base Bid: 97 calendar days; Additive Alternate #1: 0 additional calendar days; Additive Alternate #2: 0 additional calendar days; Additive Alternate #3: 0 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

Omer Osman,
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:
1600 Chicago, IL - 19.6
IL - Cook, DuPage, Kane,
Lake, McHenry, Will
3740 Kankakee, IL - 9.1
IL - Kankakee
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
Non-SMSA Counties 4.0
IL - Cass, Christian, Dewitt, Logan,
Morgan, Moultrie, Scott, Shelby

086 Quincy, IL:
Non-SMSA Counties 3.1
IL - Adams, Brown, Pike
MO - Lewis, Marion, Pike, Ralls

087 Peoria, IL:
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

088 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

107	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, Clay,	
	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:

   (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.

(l) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

(m) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

(n) Ensure that all facilities and company activities are 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.

4. 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

a. 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 http://www.illinois.gov/idol/Pages/default.aspx. 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 https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx. 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 https://lcptracker.com/. 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 Contract Amount		Daily Charges	
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.

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 Airport Entrance Road and Associated Improvements at Central Illinois Regional, Contract BL072, 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: 97 calendar days; Additive Alternate #1: 0 additional calendar days; Additive Alternate #2: 0 additional calendar days; Additive Alternate #3: 0 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

Diesel Vehicle Emissions Control. 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.

Environmental Deficiency Deduction. 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.

Environmental Deficiency Deduction. 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: March 2, 2019

FEDERAL OBLIGATION. 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 by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract the Contractor signs with a subcontractor.

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(a) Withholding progress payments;

(b) Assessing sanctions;

(c) Liquidated damages; and/or

(d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 5.0% 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. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

(a) The bidder documents enough DBE participation has been obtained to meet the goal or,

(b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at: http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must 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 Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not 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.

GOOD FAITH EFFORT PROCEDURES. 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 enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will 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 bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. This means the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts the bidder has made. Mere *pro forma* efforts, in other words efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.

(1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.

(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

(5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

(6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

(b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed 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 companies. 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 counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

(a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

(b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

(c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

(d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

(1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

(2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.

(e) DBE as a material supplier:

(1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.

(2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.

(3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. 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 goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

(a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at DOT.DBE.UP@illinois.gov.

(b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

(c) SUBCONTRACT. The Contractor must provide copies of 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.

(d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

(1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or

(2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or

(3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

(e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

(1) The listed DBE subcontractor fails or refuses to execute a written contract;

(2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;

(3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;

(4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;

(5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.

(6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;

(7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;

(8) The listed DBE is ineligible to receive DBE credit for the type of work required;

(9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;

(10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

(f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore 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 on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. 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. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

(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.

(h) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)
Effective: June 2, 2012
Revised: November 1, 2021

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted 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; and to all payments made to lower tier 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 subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of 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 each 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: September 2, 2021

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. 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.

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 https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx 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.

Central Illinois Regional Airport
at Bloomington-Normal

SECTION III

SPECIAL PROVISIONS

FOR

REHABILITATE AIRPORT ENTRANCE ROAD AND ASSOCIATED IMPROVEMENTS

IL PROJ: BMI-4776

AT

CENTRAL ILLINOIS REGIONAL AIRPORT

BLOOMINGTON, ILLINOIS

JANUARY 12, 2024

Prepared By:

CMT

CRAWFORD, MURPHY & TILLY
Engineers & Consultants
2750 West Washington Street
Springfield, Illinois 62702

01/30/2024
Exp. 11/30/2025

GENERAL

These Special Provisions, together with the Illinois 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 Bloomington-Normal Airport Authority for the construction of *Rehabilitate Airport Entrance Road and Associated Improvements* at the Central Illinois Regional Airport in Bloomington, Illinois.

GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS

The **"Illinois 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. Where conflicts arise regarding contract documents versus IDOT Highway Standards and Standard Drawings, the contract documents shall govern.

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.

Where referenced within the Special Provisions, the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction adopted January 1, 2022 shall apply only to those sections noted.

INDEX TO SPECIAL PROVISIONS

DIVISION I – GENERAL PROVISIONS

SECTION 40 – SCOPE OF WORK

40-05 MAINTENANCE OF TRAFFIC

ADD: The Contractor shall provide 10-days of notice to the Airport prior to the start of construction.

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 Airport, Township, County, and/or State. The Contractor shall be responsible for coordinating all hauling and access on city, township, county, or state roads with the agency responsible for the roadway.

SECTION 50 – CONTROL OF WORK

50-01 AUTHORITY OF THE ENGINEER

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

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.

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 airport pavements by the contractor's 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 is prohibited. Any damage to existing 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. The Contractor shall be responsible for damage to any road caused by his construction operations. Any damage to existing public roads shall be repaired 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.

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:	**Central Illinois Regional Airport**
PROJECT TITLE:	**Rehabilitate Airport Entrance Road and Associated Improvements**
PROJECT NUMBERS:	**Illinois Project: BMI-4776**
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 review 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

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

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

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

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 Bloomington, McLean County Highway Department, and/or Illinois Department of Transportation. Any and all costs for signage or traffic control shall be borne by the Contractor.

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

DELETE: “Person to Contact” table after the second paragraph.

ADD: After the second paragraph:

Maintenance of Airport Systems are critical to the operation of the Airport and the safety and/ or security of the traveling public. Prior to beginning work the Contractor shall investigate existing systems which may be located within the work area and locate all existing utilities. The Contractor may seek assistance from the JULIE, Engineer, Resident Engineer, Airport and FAA with locating utilities but the final responsibility for all utility locates lies solely with the Contractor. If the Contractor’s investigation reveals that a utility must be relocated to allow for the performance of the work in the plans, the Contractor shall immediately notify the Resident Engineer and remain clear of the utility until resolution has been determined by the Division and the Airport. Any system, including but not limited to systems associated with security, air navigation, weather, airfield lighting damaged by the Contractor’s operations shall be immediately repaired to the satisfaction of the owner. No delay shall be taken in the repair of the damaged facility. The Contractor shall not be allowed to finish work for the day until the utility has been repaired.

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.

Should any utilities or cables require location, the following people shall be contacted:

Central Illinois Regional Airport

Utility Service or Facility	Person to Contact	Contact Phone
Airfield and Roadway Lighting Cables	Mark Cohenouer	309-831-6189
FAA Control and Communications Cable	Joshua White – FAA SSC	309-697-1363 ext. 100
Sanitary Sewer	J.U.L.I.E.	800-892-0123
Electric Cables – Public	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
Airport Utilities	Mark Cohenouer	309-831-6189

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. 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.

F. Ensure that no construction employees, employees of subcontractors or suppliers, or other persons enter any part of the aircraft operations area from construction site.

G. Provide a 24-hour point of contact that will coordinate an immediate response to correct any construction-related activity that may adversely affect the operation of the Airport.

SECTION 80 – PROSECUTION AND PROGRESS

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:

Month	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.

DIVISION II – PAVING CONSTRUCTION DETAILS

ITEM 150510 – ENGINEER'S FIELD OFFICE

CONSTRUCTION METHODS

150-2.1(B) DELETE THIS PARAGRAPH

150-2.1(D) ADD: …and one adjustable office chair on rolling wheels.

150-2.1(H) DELETE THIS PARAGRAPH

ADD: The contractor shall provide a mobile wireless network with connection to the internet to be used in the engineer's field office and on the construction site for use at no cost by the resident engineer. Possible solutions include wireless network cards installed in the Engineer's field computer or wireless phones capable of supplying access to the internet via a connection to the Engineer's field computer. The Contractor shall determine the alternate most suitable to the needs of the Engineer and they shall agree to the final method. The internet access shall be made available for as long as the Engineer's Field Office is on site. No extra payment shall be made to the Contractor for this service.

150-2.1(I) ADD: The copier shall be capable of scanning documents into pdf format for direct download into the Engineer's computer. Ink replenishment and paper shall be supplied by the contractor. The scanning capabilities shall allow for creation of pdf documents for field books and plan sheets. A multiple sheet document feeder shall also be included for scanning multiple sheet documents such as field reports and catalog cuts. The printer shall be capable of printing and scanning documents (11"x17").

150-2.1(J) DELETE THIS PARAGRAPH

BASIS OF PAYMENT

150-3.1 ADD:

Payment will be made under:

Item AR150510 – Engineer's Field Office – per lump sum.

ITEM 150520 – MOBILIZATION

DESCRIPTION

150-1.1 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.

150-1.2 ADD NEW SECTION

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.

150-1.3 ADD NEW SECTION

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.

METHOD OF MEASUREMENT

150-2.1 REPLACE THIS SECTION WITH:

Based upon the contract lump sum price for “Mobilization” partial payments will be allowed as follows:

a. With first pay request, 25%.
b. When 25% or more of the original contract is earned, an additional 25%.
c. When 50% or more of the original contract is earned, an additional 40%.
d. The remaining 10% of the pay item will be paid along with any amount bid in excess of 10% of the original contract amount upon final acceptance of the project by the engineer.

BASIS OF PAYMENT

150-3.1 REMOVE AND REPLACE FIRST PARAPGRAPH WITH:

This item shall be paid for at the lump sum price for Mobilization. The amount which a Contractor will receive payment for, according to the following schedule, will be limited to ten percent of the original Base Bid contract amount. Should the bid for mobilization exceed ten percent, the amount over ten percent will not be paid until final acceptance of the project by the Engineer.

ADD:

Payment will be made under:

Item AR150520 – Mobilization – per lump sum.

ITEM 150530 – TRAFFIC MAINTENANCE

Traffic Maintenance shall be performed in accordance with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 700, Section 701 – WORK ZONE TRAFFIC CONTROL AND PROTECTION

METHOD OF MEASUREMENT

701.19(a) DELETE: THIS SECTION

701.19(b) DELETE: THIS SECTION

701.19(d) DELETE: THIS SECTION

701.19(e) DELETE: THIS SECTION

701.19(f) DELETE: THIS SECTION

BASIS OF PAYMENT

701.20 DELETE: THIS SECTION

ADD:

Payment shall be made at the contract unit price per lump sum for “Traffic Maintenance”. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item AR150530 – Traffic Maintenance – per lump sum.

ITEM 152 – EXCAVATION AND EMBANKMENT

DESCRIPTION

152-1.1 ADD:

Specifically, this item shall include:

- Shoulder Adjustment
- Shoulder Embankment

CONSTRUCTION METHODS

152-2.1 GENERAL

DELETE: fourth sentence of first paragraph

ADD: The Resident Engineer shall determine the suitability of material to be placed in embankments.

152-2.2 EXCAVATION

ADD: After the first paragraph:

ADD: 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.

152-2.15 ADD NEW SECTION

DUST CONTROL WATERING

This work shall consist exclusively of applying water to control dust resulting from construction operations and is not intended for use in compaction of earth embankment. The Contractor shall take measures to control dust.

Dust shall be controlled by a uniform application of sprinkled water and shall be applied as directed by the Resident Engineer or Airport, in a manner meeting their approval.

Dust control watering shall not be paid for separately but shall be considered incidental to the item requiring the dust control.

METHOD OF MEASUREMENT

152-3.1 ADD:

Dust control watering will not be measured for payment but shall be considered incidental to the contract items for which dust control is required.

152-3.2 DELETE: This entire section.

152-3.3 DELETE: This entire section.

ADD:

Shoulder Adjustment shall be measured per square yard for the quantity necessary to meet the shoulder grading requirements shown on the plans.

152-3.4 ADD:

Shoulder Embankment shall be measured per cubic yard for the quantity necessary to meet the requirements shown on the plans.

BASIS OF PAYMENT

152-4.1 DELETE

152-4.2 DELETE

152-4.3 DELETE

152-4.4 ADD:

Payment shall be made at the contract unit price per square yard for “Shoulder Embankment”. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item AR152480 – Shoulder Adjustment – per square yard.

Item AT152451 – Shoulder Embankment – per cubic yard.

ITEM 156000 – EROSION CONTROL

MATERIALS

156-2.7 DELETE: This entire section.

ADD:

The protection shall be constructed with silt fence and as detailed on the plans.

METHOD OF MEASUREMENT

156-4.3 DELETE: This entire section.

ADD:

Temporary seeding and temporary mulching shall not be measured for payment but shall be considered incidental to the contract.

BASIS OF PAYMENT

156-5.1 ADD:

Payment will be made under:

Item AR156520 – Inlet Protection – per each.

ITEM 209 – CRUSHED AGGREGATE BASE COURSE

DESCRIPTION

209-1.1 ADD: After the first paragraph.

Specifically, this item shall consist of the Crushed Aggregate Base Course to be constructed under the new pavement sections to widen roadways.

MATERIALS

209-2 DELETE: This entire section.

ADD:

Crushed aggregate base course materials shall conform with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, section 1004.04 – COARSE AGGREGATE FOR GRANULAR SUBBASE, Gradation CA 6 or CA 10.

CONSTRUCTION METHODS

209-3.3 DELETE: The second sentence of the first paragraph.

209-3.7 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 entire section.

209-4.3 DELETE: This entire section.

BASIS OF PAYMENT

209-5.1 REVISE: The first sentence to read as follows:

"Payment shall be made at the contract unit price per square yard as specified per the plans for crushed aggregate base course."

ADD:

Payment will be made under:

Item AR209612 – Crushed Agg. Base Course – 12" – per square yard.

ITEM 401 – BITUMINOUS SURFACE COURSE
(Central Plant Hot Mix)

This Special Provision references multiple sections of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1030 Hot-Mix Asphalt.

DESCRIPTION

401-1.1 ADD: This item shall consist of providing bituminous surface course overlay and for the new pavement sections.

MATERIALS

DELETE: SECTION 401-2.1 THROUGH SECTION 401-2.5

ADD: Materials used in the Bituminous Surface Course shall conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1030 – HOT-MIX ASPHALT, IL-9.5 surface.

The Job Mix Formula shall be an approved Illinois Department of Transportation mix that uses the IDOT approved aggregate and asphalt binder.

COMPOSITION

DELETE: THIS SECTION

ADD: Bituminous Surface Course Mix Composition shall be per the tables below and per the mixture composition table in section 1030.05 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022. Bituminous Surface Course shall be placed as shown on the plans.

BITUMINOUS SURFACE MIX 1

MIX COMPOSITION	IL 9.5, High ESAL Surface Course
AC/PG	PG-64-22
MAX RAP %	10%
Ndesign	50
Target % Voids	4.0%
FRICTION AGGREGATE	N/A

BITUMINOUS SURFACE MIX 2

MIX COMPOSITION	IL 9.5, High ESAL Surface Course
AC/PG	SBS PG-70-22
MAX RAP %	10%
Ndesign	50
Target % Voids	4.0%
FRICTION AGGREGATE	N/A

ADD BY REFERENCE: Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1030.02 – Materials.

ADD BY REFERENCE: Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1030.05 – Mixture Design.

401-4.10 TRANSPORTING, SPREADING, AND FINISHING

DELETE: The fifth paragraph and replace with:

The contractor shall place the bituminous material by controlling the thickness of the mixture. Stringline will not be required to construct the pavement.

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 I for quantities under 2,500 tons.

ADD TO THE FIRST PARAGRAPH: Acceptance testing shall be in accordance with the Illinois Department of Transportation, Division of Aeronautics, Illinois Standard Specifications for Construction of Airports Adopted April 1, 2012 and any other Policy Memorandums referenced in the Illinois Department of Transportation, Division of Aeronautics, Illinois Standard Specifications for Construction of Airports.

BASIS OF PAYMENT

401-6.1 ADD: To the end of the first paragraph.

Payment will not be made for any HMA surface course in excess of 103 percent of plan quantity as outlined in Section 401-5.1.

DELETE: The second paragraph.

ADD:

Payment will be made under:

Item AR800226 – Bituminous Surface – IDOT IL 9.5 – per ton.

Item AS800226 – Bituminous Surface – IDOT IL 9.5 – per ton.

Item AR801510 – Bituminous Surface – IDOT IL 9.5 Modified Binder – per ton.

Item AS801510 – Bituminous Surface – IDOT IL 9.5 Modified Binder – 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.

BASIS OF PAYMENT

401-5.1 ADD:

Payment will be made under:

Item AS401650 – Bituminous Pavement Milling – per square yard.

ITEM 401655 – BUTT JOINT CONSTRUCTION

DESCRIPTION

401-1.1 REVISE TO READ:

This work shall consist of removing existing PCC pavement surface to a variable depth to construct a butt joint for the transition of the proposed HMA overlay to the existing pavements to remain at the locations shown on the plans.

EQUIPMENT AND MATERIALS

401-2.1 REVISE TO READ:

The Contractor may use a mill machine for removal of existing PCC pavement at the locations and to the depths shown on the plans.

BASIS OF PAYMENT

401-5.1 ADD:

Payment will be made under:

Item AR401655 – Butt Joint Construction – per square yard.

ITEM 401663 – LONGITUDINAL JOINT SEALANT

Longitudinal Joint Sealant shall be performed in accordance with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 400, Section 406 – Hot-Mix Asphalt Binder and Surface Course.

HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)

Effective: November 1, 2022
Revised: August 1, 2023

Add the following after the second sentence in the eighth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"If rain is forecasted and traffic is to be on the LJS or if pickup/tracking of the LJS material is likely, the LJS shall be covered immediately following its application with FA 20 fine aggregate mechanically spread uniformly at a rate of 1.5 ± 0.5 lb/sq yd (0.75 ± 0.25 kg/sq m). Fine aggregate landing outside of the LJS shall be removed prior to application of tack coat."

Add the following after the first sentence in the ninth paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS half-width shall be applied at a width of 9 ± 1 in. (225 ± 25 mm) in the immediate lane to be placed with the outside edge flush with the joint of the next HMA lift. The vertical face of any longitudinal joint remaining in place shall also be coated."

Add the following after the eleventh paragraph of Article 406.06(h)(2) of the Standard Specifications:

"LJS Half-Width Application Rate, lb/ft (kg/m) 1/			
Lift Thickness, in. (mm)	Coarse Graded Mixture (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75)	Fine Graded Mixture (IL-9.5FG)	SMA Mixture (SMA-9.5, SMA-12.5)
¾ (19)	0.44 (0.66)		
1 (25)	0.58 (0.86)		
1 ¼ (32)	0.66 (0.98)	0.44 (0.66)	
1 ½ (38)	0.74 (1.10)	0.48 (0.71)	0.63 (0.94)
1 ¾ (44)	0.82 (1.22)	0.52 (0.77)	0.69 (1.03)
2 (50)	0.90 (1.34)	0.56 (0.83)	0.76 (1.13)
≥ 2 ¼ (60)	0.98 (1.46)		

1/ The application rate includes a surface demand for liquid. The thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application, provided the correct width and application rate are maintained."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

"Aggregate for covering tack, LJS, or FLS will not be measured for payment."

Add the following to the end of the second paragraph of Article 406.14 of the Standard Specifications:

"Longitudinal joint sealant (LJS) half-width will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT, HALF-WIDTH."

80446

Payment will be made under:

AR401663 – Longitudinal Joint Sealant – per foot.

ITEM 401900 – REMOVE BITUMINOUS PAVEMENT

DESCRIPTION

401-1.1 REMOVE AND REPLACE: This entire section.

This item of work shall consist of removing all bituminous pavement shoulders full depth. The pavement structures are nominal, and the record drawings may not accurately represent the thickness of the individual layers, the number of individual layers nor the total pavement thickness. The Contractor shall satisfy himself prior to bidding as to the actual thickness of the pavements to be removed. No additional compensation will be made for variability in the pavement structure or differences between the actual structure and that provided here in.

Typical construction details are shown in the plans. Exact locations of the pavement removal and replacement shall be as shown in the plans and as determined by the Resident Engineer.

CONSTRUCTION METHODS

401-2.1 ADD:

Existing subbase and subgrade shall be compacted to the satisfaction of the Resident Engineer.

BASIS OF PAYMENT

401-4.1 ADD:

Payment will be made under:

Item AT401900 – Remove Bituminous Pavement – per square yard.

ITEM 501115 – CRACK AND SEAT PAVEMENT

DESCRIPTION

501-1.1 ADD: To first paragraph.

The Contractor shall crack and seat the existing PCC pavement to the limits shown on the plans.

BASIS OF PAYMENT

501-5.1 ADD:

Payment will be made under:

Item AR501115 – Crack & Seat Pavement – per square yard.

ITEM 501540 PCC PAVEMENT GROOVING

DESCRIPTION

501-1.1 DELETE: This entire section.

ADD: This item shall consist of constructing a grooved surface by providing saw cut grooves in the PCC pavement surface.

EQUIPMENT

501-2.1 DELETE: This entire section.

ADD: The grooving equipment shall be equipped to meet the requirements of this item. The grooving equipment shall be equipped with diamond blades.

The Contractor shall submit a complete list of grooving equipment to be used on the job for approval by the Resident Engineer before the start of work.

CONSTRUCTION METHODS

501-3.1 DELETE: This entire section.

ADD: New PCC shall have reached the strength specified in Item 610 prior to initiation of grooving operations unless otherwise authorized by the Resident Engineer.

501-3.2 DELETE: This entire section.

ADD: Groove dimensions and tolerances shall be as indicated on the plans.

501-3.3 DELETE: This entire section.

501-3.4 DELETE: This entire section.

ADD: Clean-up is important and should be continuous throughout the grooving operation. All grooved areas shall be flushed with clear water as soon as possible to remove any slurry material. The pavement shall be cleaned to the satisfaction of the Resident Engineer.

The contractor shall provide adequate dust control during grooving operation. Dust control shall be incidental to this item of work.

BASIS OF PAYMENT

501-5.1 DELETE: This entire section.

ADD: Payment will be made at the contract unit price per square yard for grooving, which shall be full compensation for all materials, including water, labor, equipment, tools, and incidentals necessary to complete the work.

Payment will be made under:

Item AR501540 – PCC Pavement Grooving – per square yard.

ITEM 501550 – PCC PAVEMENT MILLING

DESCIPTION

501-1.1 DELTE: This entire section.

ADD: This item shall consist of variable depth milling of existing PCC surface for profile correction or faulting between joints.

CONSTRUCTION METHODS

501-2.1 ADD: Equipment shall also conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1100, Section 1101.04 – Pavement Surface Grinding Equipment.

ADD: The machine shall be capable of leaving a smooth finish that is not grooved. Finish surface shall be approved by the engineer and Airport, if required additional grinding shall be completed to provide a smooth surface. The equipment and method for additional griding shall be approved by the engineer.

BASIS OF PAYMENT

501-4.1 ADD:

Payment will be made under:

Item AR501550 – PCC Pavement Milling – per square yard.

ITEM 603 – BITUMINOUS TACK COAT

This section references the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1032 Bituminous Materials.

DESCRIPTION

603-1.1 DELETE: This entire Section

ADD:

This item shall consist of the application of a tack coat for the following items:

1. Between the Bituminous Surface Course lifts.
2. Between the Crack and Seat surface and the Bituminous Surface Course overlay.

MATERIALS

603-2.1 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.

CONSTRUCTION METHODS

603-3.1 REVISE: The first sentence of the first paragraph as follows:

…when the atmospheric temperature is above **50° F**.

603-3.3 ADD:

Non-Tracking Emulsified Asphalt (SS-1vh) shall be applied at the same rates as specified in Table 1.

BASIS OF PAYMENT

603-5.1 ADD:

Payment will be made under:

Item AR603510 – Bituminous Tack Coat – per gallon.

Item AS603510 – Bituminous Tack Coat – per gallon.

ITEM 605 – JOINT SEALING FILLER

DESCRIPTION

605-1.1 REVISE: The first paragraph.

This item shall consist of providing a resilient and adhesive joint sealing filler capable of effectively sealing joints and cracks in both new and existing Portland Cement Concrete pavements.

MATERIALS

605-2.1 DELETE: Section A, C, and E.

605-2.2 DELETE: This entire section.

605-2.3 DELETE: This entire section.

605-2.4 ADD: The backer rod shall be compatible with the sealant and no bond or reaction shall occur between the rod and sealant. The rod shall be installed in the joint to the depths and diameters as indicated in the plans.

CONSTRUCTION METHODS

605-3.2(B) DELETE: This entire section.

605-3.3(B) DELETE: This entire section.

605-3.4(B) DELETE: This entire section.

METHOD OF MEASUREMENT

605-4.1(B) DELETE: This entire section.

BASIS OF PAYMENT

605-5.1 ADD:

Payment will be made under:

Item AR605540 – Clean & Seal Joints – per foot.

Item AR605542 – Clean & Seal Expansion Joints - per foot.

ITEM 610 – STRUCTURAL PORTLAND CEMENT CONCRETE

This Special Provision references multiple sections of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1020 Portland cement Concrete.

DESCRIPTION

610-1.1 ADD: This item shall consist of providing all concrete required to complete pavement panel replacement and repair.

MATERIALS

610-2.1 DELETE: Section 610-2.1 Through Section 610-2.6 and Section 2.9 through section 2.11

ADD: Materials used in the Portland Cement Concrete shall conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1020 – Portland Cement Concrete, Class PV Concrete.

CONSTRUCTION METHODS

610-3.2 DELETE: The first three paragraphs and last paragraph.

ADD: Concrete proportions shall conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022, Division 1000, Section 1020 – Portland Cement Concrete, Class PV Concrete.

610-3.5 DELETE: This entire section.

610-3.20 ADD: New section.

Remove PCC Pavement. The Contractor shall saw cut the existing pavement structure full depth as shown in the plans at locations determined by the Resident Engineer. Saw cutting shall provide a vertical surface.

After completion of saw cutting, the Contractor shall remove the pavement structure using methods which will allow a vertical surface along all sides of the removal area.

Should the Contractor’s operations cause additional damage to the adjacent pavement that is to remain, the Contractor shall extend the repair or make additional repairs as directed by the Engineer and at the Contractor’s expense.

Material obtained from removal operations shall be hauled to a disposal site off of airport property by the Contractor. No additional compensation will be made for hauling and disposal of the removed material. Existing aggregate base shall be compacted in accordance with Item 209. Existing subgrade shall be compacted in accordance with Item 152.

610-3.21 ADD: New section.

Joint Spalls and Partial Depth Repair

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 low slump concrete or mortar or with epoxy resin concrete or mortar.

    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.

3. Spalls deeper than half the slab depth shall require partial panel replacement as detailed in the plans.

METHOD OF MEASUREMENT

610-4.1 ADD: The quantity to be paid for shall be the number of square yards of pavement as specified, in place, completed and accepted. Pavement removal shall be considered incidental, and no separate measurement will be made for PCC pavement removal.

BASIS OF PAYMENT

610-5.1 DELETE: This entire section.

ADD: The quantity of Portland Cement Concrete measured as outlined in Section 610-4.1. Final payment shall be full compensation for furnishing and placing all materials, including any dowels, steel reinforcement, joint materials, texturing, saw-cutting, and grooving. This also includes payment for all Quality Control Engineering.

Pavement removal shall be considered incidental to each pay item, and no separate payment will be made for PCC pavement removal.

Payment will be made under:

Item AR501910 – Remove and Replace PCC Pavement – per square yard.

Item AR801509 – Partial Depth PCC Panel Repair – per square yard.

ITEM 620 – PAVEMENT MARKING

DESCRIPTION

620-1.1 DELETE: This entire Section.

ADD: This work shall consist of furnishing and applying pavement marking.

MATERIALS

620-2.2 ADD: Paint type shall be Waterborne. The marking colors shall match IDOT standards.

CONSTRUCTION METHODS

620-3.3 ADD: Shot blasting will not be allowed.

Existing marking that is to be repainted shall be cleaned using sand blasting or high pressure water to remove dirt, grease, laitance, and loose or flaking paint. Water blasting equipment shall be adjustable to prevent damage to the pavement.

620-3.5 DELETE: Table 1 reference to Epoxy paint type.

620-3.7 DELETE: In the first sentence “shot blasting,”.

ADD: Shot blasting will not be allowed.

METHOD OF MEASUREMENT

620-4.1 DELETE: The first paragraph.

ADD:

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. No distinction will be made between colors of paint for payment purposes.

Mobilization of material, equipment, and labor will not be measured for payment. Several mobilizations may be required for the pavement marking.

BASIS OF PAYMENT

620-5.1 ADD:

Payment will be made under:

Item AR620520 – Pavement Marking – Waterborne – per square foot.

Item AR620900 – Pavement Marking Removal – per square foot.

DIVISION IV - DRAINAGE

ITEM 705 PIPE UNDERDRAIN FOR AIRPORTS

DESCRIPTION

705-1.1 DELETE: This entire section.

ADD: This item shall consist of adjusting the existing pipe underdrain cleanout to the elevation of the proposed grade as detailed on the plans.

MATERIALS

DELETE: Section 705-2.2 through 705-2.13

CONSTRUCTION METHODS

705-3.3 DELETE: This entire section.

705-3.6 DELETE: This entire section.

METHOD OF MEASUREMENT

705-4.1 DELETE: This entire section.

ADD: The number of cleanout adjustments for underdrains shall be measured by the unit. All fittings reinforcement, frame, and lid shall be considered incidental to adjustment underdrain cleanout.

BASIS OF PAYMENT

705-5.1 DELETE: This entire section.

ADD: The contract unit price for adjust underdrain cleanout shall be the full compensation for furnishing and installing all materials. Excavation, and for all labor, equipment and tools necessary to complete this item to the satisfaction of the Engineer.

Payment shall be made under:

Item AR705944 – Adjust underdrain cleanout – per each.

ITEM 754 – CONCRETE GUTTERS, DITCHES, AND FLUMES

METHOD OF MEASUREMENT

754-4.1 DELETE: This entire section.

ADD:

Concrete curb and gutter shall be measured by the number of linear feet measured along the centerline.

754-5.1 ADD:

Payment will be made under:

AR754410 – Comb Concrete Curb & Gutter – per linear foot.

AR754904 – Remove Comb Curb & Gutter – per linear foot.

DIVISION V - TURFING

ITEM 901 – SEEDING

DESCRIPTION

901-1.1 ADD:

Restoration, seeding and mulching beyond the limits of seeding and mulching shown in the plans (such as lighting, cabling, signage, access, staging, etc.) shall be incidental to the project.

MATERIALS

901-2.1 ADD:

Seed mixture for the public safety roadway work shall be an IDOT class 1 lawn mixture per the following:

SEED	LB/ACRE
Kentucky Blue Grass	100
Perennial Rye Grass	60
Creeping Red Fescue	40

901-2.2 ADD:

Lime will not be required unless considered necessary by the Contractor.

CONSTRUCTION METHODS

901-3.2 DELETE:

Paragraph (C.), Seeding.

ADD: Grass seed shall be sown at the rate shown in 901-2.1.

Grass seed shall be sown with a machine that is capable of cutting a slit in the soil free from leaves and debris, placing the seed in the slit and compacting the seed into the soil of the slit in one continuous operation.

901-3.3 DELETE: This section.

BASIS OF PAYMENT

901-5.1 ADD:

Payment will be made under:

Item AR901510 – Seeding – per acre.

ITEM 905 – TOPSOILING

DESCRIPTION

905-1.1 ADD:

Existing topsoil shall be stripped from excavation and embankment areas and from below proposed pavements and stockpiled outside of the grading limits. Upon completion of the work, the surface of all disturbed areas shall be covered with a layer of topsoil, as needed, to facilitate drainage and the growth of turf.

CONSTRUCTION METHODS

905-3.1 DELETE:

The first sentence.

ADD:

A 2-inch minimum layer of topsoil shall be spread evenly over the disturbed areas outside the proposed pavement to facilitate drainage and the growth of turf.

905-3.3 DELETE:

The third paragraph.

METHOD OF MEASUREMENT

905-4.1 DELETE: This section.

905-4.2 DELETE: This section.

BASIS OF PAYMENT

905-5.1 DELETE: This section.

ADD: Topsoiling shall be considered incidental to Item 152480 – Shoulder Adjustment.

ITEM 908 – MULCHING

DESCRIPTION

908-1.1 ADD:

Restoration, seeding and mulching beyond the limits of seeding and mulching shown in the plans (such as lighting, cabling, signage, access, staging, etc.) shall be incidental to the project.

MATERIALS

908-2.1 DELETE: The first and second paragraph.

DELETE: Paragraph A, B, and C.

ADD:

Manufactured Heavy-Duty hydraulic mulch shall be used as mulching material.

BASIS OF PAYMENT

908-5.2 ADD:

Payment will be made under:

Item AR908510 – Mulching – per acre.

DIVISION VI – LIGHTING INSTALLATION

ITEM 108 – INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

DISCRIPTION

108-1.1 REVISE: The second paragraph as follows:

This item of work shall consist of the underground installation of 600V power cables and controls / communication cables in new and existing unit duct at the locations shown on the plans and in accordance with these specifications. When crossing existing utilities or as required by the Engineer, the Contractor shall hand dig the trenches for the proposed cables.

REVISE: Replace instance of “vault” with “electrical room”

MATERIALS

108-2.1 DELETE:

Sections C and D.

108-2.2 ADD:

Parking and entrance roadway lighting cables under this item shall be:

-REMOVE CABLE
-3/C #2 600 V UG CABLE IN UD
-3/C #6 600 V UG CABLE IN UD
-1/C #8 600 V UG CABLE IN UD

The 1/C #8 600 V UG CABLE IN UD shall be installed in the same unit duct as the 3/C #2 600 V UG CABLE IN UD and the 3/C #6 600 V UG CABLE IN UD. The cable in unit duct shall be as follows:

-3/C #2 and 1/C #8 600 V UG CABLE in 1-1/2” inch unit duct
-3/C #6 and 1/C #8 600 V UG CABLE in 1-1/4” inch unit duct

108-2.3 DELETE: This entire Section

108-2.4 ADD: To end of section d:

To further reduce the possibility of water (moisture) entrance into the connector between the cable and the field attached connector, heat shrinkable tubing with interior adhesive shall be applied over all cable connections.

The heat shrinkable tubing shall cover the entire L-823 connector. all connections shall be at manholes or light bases. No direct burial splicing will be allowed.

No splices will be allowed in the new cable unless at the end of a spool of cable. Splices due to termination points shall be done in splice cans, manholes, handholes and light cans. Any repairs necessary to cable damaged during installation shall be done at the Contractor’s expense and shall consist of replacing the entire length of damaged cable between pull points.

In line connections for existing cables to be spliced or those which are cut during construction shall be repaired with the cast splice kit. The Contractor shall have a minimum of five (5) splice kits on the jobsite at all times for emergency repairs. Splice markers shall be installed over each splice in cables not to be abandoned. Cast splice

kits shall be as specified in paragraph (a). all field splices shall be covered with a flexible polyolefin heat-shrinkable sleeve.

CONSTRUCTION METHODS

108-3.1 ADD:

Any damages to existing utilities as a result of the Contractor's operations shall be repaired immediately at his/her expense.

108-3.2 ADD:

The Contractor shall install Unit Duct as shown on the plans in the case of damaged existing unit duct.

The Contractor shall coordinate the cable trenching, placement and backfilling operations so that the cable will not be damaged by (a) the use of mechanized road building equipment in the area where underground cable is or will be in existence, and (b) stone or other foreign materials falling into the trench or mixing into the trench backfill materials.

108-3.5 REVISE: Section d to read as follows:

Contractor shall use cast splicing kits as described in Article 108-2.4 for any splices made inside the electric handholes. The cast splicing kit shall be series 82-B1 Scotch cast or 90- B1 Scotch cast as manufactured by 3M or equal. Contractor shall provide shop drawing for splicing method and cast splicing kit. The contractor shall also leave minimum 30" of slack on each side of the cable being spliced.

Splicing of FAA cables shall be tested and approved by FAA.

108-3.10 ADD:

Locating of Existing Cables

Contractor Personnel are listed in Section 70-17 herein.

108-3.11 ADD:

Termination and Connections

If, due to length of spool ordered by the Contractor, it is necessary to install additional handholes, the Contractor shall supply same at no additional cost to the project. The handhole shall be the size as directed by the Engineer.

108-3.12 ADD:

Removal of Cable From Existing Conduit

The Contractor shall be responsible for the removal of all cabling that needs to be removed as specified in the plans. The contractor is responsible to field verify the locations of all cables that need to be removed. Any damage to the conduit or any other cables shall be repaired at the cost of the Contractor. All removed conduits shall be disposed of by the Contractor and shall be included in the removal pay item.

METHOD OF MEASUREMENT

108-4.2 ADD to end:

The length of all XLP-USE and Ground cable installed in the proposed conduit to be paid for shall be the number of lineal feet measured in place, completed and ready for operation, and accepted as satisfactory, and no extra quantity will be allotted for any vertical distances or the required cable slack, as stated under Item 108-3.3, in the Standard Specifications.

The cost of routing the cable through duct, splicing, marking, trenching, backfilling, and all connections shall be included in the unit price bid for the cable. The cost of removing cable as called out in the plans shall be measured separately for payment.

BASIS OF PAYMENT

108-5.1 DELETE:

Everything after first paragraph should be deleted.

ADD:

The cables measured under Item 108-4.2 shall be paid for under this item. These prices shall be full compensation for furnishing all materials and for all preparation and installation of these materials, trenching, backfilling and compacting trenches, all connections, line marking tape and installation, and for all labor, equipment, tool s and incidentals necessary to complete these items. The line marking tape installed shall be considered incidental to the work and shall not be paid for separately.

Payment will be made under:

Item AR108960 - REMOVE CABLE - per linear foot

Item AR108602 - 3/C #2 600 V UG CABLE - per linear foot

Item AR108606 - 3/C #6 600 V UG CABLE - per linear foot

Item AR108758 - 1/C #8 Ground - per linear foot

ITEM 110 – INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT

DESCRIPTION

110-1.1 ADD:

This item shall consist of the construction of new directionally bored PVC conduit, including installation of appropriate duct markers in pavement at the locations shown in the plans or as directed by the Resident Engineer in the case of unusable existing conditions. This item shall also consist of the removal of any conduits deemed as unusable along with any equipment and labor associated with the process.

This item shall consist of the removal of new conduit between the existing foundations to be removed and the installation of new conduit connecting existing conduit to new foundations. These items shall also consist of the removal of any conduit deemed as unusable along with any equipment and labor associated with the process.

MATERIALS

110-2.3 ADD: To section d:

Conduit used for directional boring shall be 3” Schedule 80 PVC of the length needed to replace existing conduit bore indicated in the plans.

Conduit to be used to connect from existing HDPE to new foundations shall be the same size as existing HDPE and appropriate length to connect existing duct to new foundation as shown in the plan set.

110-2.10 ADD:

Duct Marker

The Contractor shall provide duct markers for each new or existing duct being used as detailed in the plans. The cost of installation of the duct markers shall be paid for each duct marker installed.

Brass duct markers shall only be used at bituminous pavement locations as shown in the plans. At concrete pavement locations, the Contractor shall stamp the concrete as directed by the Engineer.

110-2.11 ADD:

Remove Duct

The Contractor shall remove designated existing foundations as detailed in Roadway Lighting section. After foundation is removed appropriate existing duct shall be removed form foundation location as shown in plan set.

METHOD OF MEASUREMENT

110-4.1 ADD:

The quantity of 3” directional bore conduit to be paid for shall be the number of lineal feet installed, measured in place, completed, and accepted. No separate measurement will be

made for individual ducts in a multi-way duct system. The cost of trench excavation and backfill shall not be measured separately for payment, but shall be considered incidental to the respective pay item associated with the work. The cost of connecting new conduit to existing manholes, splice cans, light and sign bases shall not be measured separately for payment but shall be considered incidental to the conduit installation.
The amount of new conduit to be paid for shall be the number of lineal feet installed, measured in place, completed, and accepted. The cost of trench excavation and backfill shall not be measured separately for payment but shall be considered incidental to the respective pay item associated with the work. The cost of connecting new conduit to existing conduit, foundations, splice cans, and lights shall not be measured separately for payment but shall be considered incidental to the conduit installation.

The amount of existing conduit to be removed shall be the number of lineal feet removed and accepted. The cost of trench excavation and back fill shall not be measured separately for payment but shall be considered incidental to the respective pay item associated with the work. The cost of removing conduit from foundations, splice cans, and lights shall not be measured separately for payment but shall be considered incidental to the conduit removal.

BASIS OF PAYMENT

110-5.1 Revise:

Payment will be made at the contract unit price per lineal foot for each size of directionally bored PVC conduit completed and accepted. These prices shall be full compensation for furnishing all materials and for all preparation, assembly, aggregate backfill, backfill, compaction, duct markers, pull rope/wire, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete these items as specified herein.

Payment will be made at the contract unit price per lineal foot for the removal of existing conduit, completed and accepted. These prices shall be full compensation for all preparation, backfill, compaction, equipment, labor, tools, and incidentals necessary to complete these items as specified herein.

Payment will be made at the contract unit price per lineal foot of conduit connected, completed, and accepted. These prices shall be full compensation for furnishing all materials and for all preparation, assembly, aggregate backfill, backfill, compaction, duct markers, pull rope/wire, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete these items as specified herein.

Payment will be made at the contract unit price per each for the installation of each duct marker in pavement. These prices shall be the full compensation for all preparation equipment, labor, tools, and incidental necessary to complete these items as specified herein.

Topsoiling and seeding of the conduit trench shall not be paid for separately but shall be considered incidental to the associated duct.

Payment will be made under:

Item AR110013 – 3" DIRECTIONAL BORE – per linear foot

Item AR110102 – DUCT MARKER IN PAVEMENT – per each

Item AR109520 – CONDUIT – per linear foot

Item AR110900 – REMOVE DUCT – per linear foot

ASPHALT REINFORCEMENT FIBERS

DESCRIPTION

SP-1-1.1 This item shall consist of the high tensile strength synthetic fiber blend formulated to reinforce asphalt mixes. This item shall include the incorporation of the synthetic fibers in the bituminous surface course mix.

MATERIALS

SP-1-2.1 Fiber reinforced asphalt concrete (FRAC) may be produced by one or a combination of several synthetic fiber types and dosage rates. Fibers need to be added at production temperatures as specified by the manufacturer, to the hot aggregates, allow manufacturer's minimum dry mixing time, just before introduction of the liquid asphalt.

	ARAMID FIBERS	POLYOLEFIN FIBERS
LENGTH	¾"	¾"
FORM	MONOFILAMENT	FILLIBRATED
ACID/ALKALI RESISTANCE	INERT	INERT
TENSILE STRENGTH	400,000 PSI	N/A*
SPECIFIC GRAVITY	1.44	0.91
OPERATING TEMP.	-300°F to 800°F	N/A*

* Fibers will partially melt or become plastically deformed during asphalt mix production.

CONSTRUCTION METHODS

SP-1-3.1 Mix Design. For fiber reinforced asphalt concrete produced at one (1) pound of fibers per one (1) ton of Asphalt mix the Job Mix Formula (JMF) will not require any modifications or design alterations. For higher dosages of fiber in the mix develop and submit a job mix formula for each mixture according to Section 401 Bituminous Surface Course. Each job mix formula must be capable of being produced, placed, and compacted as specified. Apply all mix design requirements for HMA to the development of the FRAC mix design.

A. Fiber Supply System. Add fiber through specialized equipment that can accurately proportion and/or meter, by weight (mass), the proper amount per batch for batch plants, or continuously and in a steady uniform manner for drum plants. If approved by the Manufacturer's Representative, pre-weighed dissolvable bags can add fiber manually for HMA mixes only.

Provide proportioning devices that are interlocked with the plant system and controlled to ±10% of the mass (weight) of the fibers required. Perform an equipment calibration to the satisfaction of the Representative to show that the fiber is being accurately metered and uniformly distributed into the mix, or use pre-weighed bags through a feeder system equipped with electronic counting devices capable of date and time stamp print outs.

Include the following on the fiber supply system:

- Low-level indicators (loose fiber feeders only).
- No-flow indicators (loose fiber feeders only).
- A printout of feed rate status in pounds (kg)/minute, or date and time stamp each bag by print out.
- A section of transparent pipe in the fiber supply line for observing consistency of the flow or feed (loose fiber feeder only).

Have a Manufacturer's representative approve all fiber addition systems.

When a batch plant is used, add the fiber to the aggregate in the weigh hopper and increase the dry batch, minimum of five seconds, and wet mixing time by a few seconds, to ensure that the fiber bags dissolve and are uniformly distributed. If clumping is present, increase wet mixing time.

When a drum plant is used, examine the system so the fibers do not become entangled in the exhaust system. If there is any evidence of fiber in the bag-house or wet washer fines, relocate the liquid asphalt binder line and/or the fiber line so that the fiber is captured by liquid asphalt spray and incorporated into the mix. If there is any evidence of clumps of fibers at the discharge chute, increase the dry mixing time and/or intensity. Store the fibers in a dry environment.

Submit a written job mix formula for review and approval and include the following additional information.

1. All information required in Section 401 Bituminous Surface Course
2. FRAC technology and/or additives information.
3. FRAC technology manufacturer's established recommendations for usage.
4. FRAC technology manufacturer's established target dosage rate, the acceptable for production, and documentation showing the impact of excessive production variation.
5. Fiber technology material safety data sheets (MSDS).
6. Temperature range for mixing.
7. Temperature range for compacting. Asphalt binder performance grade test data and asphalt binder viscosity-temperature relationships.
8. Fiber mixture performance test results.

Comply with the manufacturer's recommendations for incorporating the fiber technologies into the mix. Comply with manufacturer's recommendations regarding receiving, storage, and delivery of fibers (Keep fibers dry).

Maintain supplier recommendations on file at the asphalt mixing plant and make available for reference while producing FRAC.

METHOD OF MEASUREMENT

SP-1-4.1 Asphalt Reinforced Fibers will be measured by pound. The quantity used will be measured by one pound of fibers for each ton of HMA surface course accepted.

BASIS OF PAVEMENT

SP-1-5.1 For Asphalt Reinforcement Fibers, payment will be made at the contract unit price per pound. This price shall be for the full compensation for furnishing all materials and for all preparation, delivering, and application of the material and for all labor, equipment, tools, and incidentals necessary to complete the incorporation of fibers into the HMA Mix.

Payment will be mad under:

Item AU801506– Asphalt Reinforcement Fiber – per pound.

ROADWAY LIGHTING

DESCRIPTION

SP2-1.1 This item shall consist of furnishing and installing roadway lights, brackets, poles, internal wiring, fuses, vibration dampeners, foundation, wire mesh, ground rods and all accessories required, at the locations shown on the plans or as directed by the Engineer.

This item shall also consist of removing roadway lights and foundations at the location shown on the plans or as directed by the Engineer.

MATERIALS

SP2-2.1 New Luminaire shall be LED type and shall operate with 480V, three phase power supply. The housing shall be constructed of heavy-gauge aluminum with no seams, weld beads or any other visible disturbances on the surface of the housing. All the internal and external hardware shall be stainless steel.

The lens shall be thermal and shock resistant glass and shall be sealed to the frame and secured with four retainer clips. The lens frame shall be piano hinged to the housing.

Luminaries shall be Cat. No. GL18-3-180LA-6490-NW as manufactured by Signify or approved equal.

If Contractor elects to submit a light fixture other than the specified fixture, Contractor shall be required to provide a foot-candle plot to the Project Engineer for review.

The number of fixtures to be mounted shall be denoted by pay item.

SP2-2.2 New 30’ light pole shall be round tapered aluminum pole with base plate, mounted on a metal foundation with wire meshing and breakaway coupling.

New 25’ light pole shall be round straight aluminum pole with base plate, mounted on a metal foundation with wire meshing and breakaway coupling.

Mounting heights shall be as detailed in the plans. The finish and color of the poles shall be specified by the Owner. Contractor shall provide finish and color samples for final selection. Light poles shall be as manufactured by Gardco or equal.

Type A Area Light poles shall be 30’ feet round tapered aluminum pole and Type B Area Light Poles shall be 25’ feet round straight aluminum pole.

SP2-2.3 All fusing shall be accessible through the pole handhole for the light poles. Contractor shall provide the waterproof splices, breakaway fuse holders, fuses and other miscellaneous items necessary for a complete installation. The breakaway fuse holders and fuses shall be manufactured by Bussman or equal. All splicing of wiring from main power wiring to #10 wiring within pole shall be done at concrete handhole at each pole. All fuses and lightning arrestors shall be within the light pole handhole.

CONSTRUCTION METHODS

SP2-3.1 Prior to light pole removals and installations, the Contractor shall coordinate with resident engineer the shutdown of the power circuit with the Airport.

Contractor shall take care to disconnect the power circuit from the pole for later reconnection.

Contractor shall install light poles, foundations, and fixtures in conformance with project plans. Once the pole, foundation, and fixtures have been installed, Contractor shall coordinate with Resident Engineer energizing of the power circuit.

SP2-3.2 The Contractor shall be responsible for the necessary excavation and pole foundation removal as detailed on the plans. The removal shall include all foundations in with Type A light pole. The foundation shall be constructed as detailed on the construction plans, including grounding and conduits. The contractor shall verify with the manufacturer the required new anchor bolt diameter, length, and bolt pattern. Poles and luminaries shall be assembled and wired on the ground, then lifted, and bolted in place plumb. The pole shall be considered plumb when the center of the top is directly over the center of the base. Plumb is to be measured with a transit by the Resident Engineer.

Wiring run from luminaire to pole base shall have a strain relief clamp provided at the entry to the luminaire to prevent the wires from pulling loose from their terminals at the luminaire.

Internal wiring of poles and luminaries including fuses and waterproof splices shall be incidental to this item.

Poles and luminaries shall be set in the ground such that the luminaries aim in the direction indicated on the plans.

SP2-3.3 Existing light poles shall be disconnected and removed from the existing foundations. The removed light pole shall be disposed of off Airport property unless the Airport wishes to retain portions of the removed light pole in which the Contractor shall haul salvageable light pole pieces to the Airport maintenance yard.

Existing light pole foundations shall be completely removed in its entirety if it will be replaced with type A light pole. Contractor shall take caution when removing light pole foundations to not damage existing cables and conduit intended to be reused.

SP2-3.4 All areas disturbed by the light fixture installation and storing of dirt and other work shall be restored to its original condition. The restoration shall include any necessary topsoiling, fertilizing, seeding or sodding and shall be performed in accordance with the Standard Turfing Specifications. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance.

SP2-3.5 Granular backfill shall be constructed and compacted in accordance with the plans. The backfill material shall consist of crushed limestone meeting the material requirements set forth in Section 209. The material gradation shall be meet IDOT CA-6.

The backfill shall be watered and compacted to the satisfaction of the Engineer in lifts no greater four (4) inches.

METHOD OF MEASUREMENT

SP2-4.1 The quantity of new light poles to be paid for under this item shall be the number of units furnished and installed ready for operation. Each unit shall consist of the light pole,

luminaire, mast arm, metal foundation, breakaway couplings, wire meshing, fuses, internal wiring, and any miscellaneous items and fittings required to make the unit operational. Pay items shall be separated by fixture quantity and pole type.

The quantity of existing roadway light poles and foundations to be removed and paid for under this item shall be the number of units removed as shown in the plans. This price shall be full compensation for all labor, equipment, tools, and necessary to complete this item.

BASIS OF PAYMENT

SP2-5.1 Payment will be made at the contract unit price for each removed light pole with foundation and new roadway light pole with foundation and fixtures, electrical wiring, and any other accessories completed by the Contractor and accepted by the Engineer. These prices shall consist of full compensation for furnishing and material, backfilling and compacting trenches, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Item AR106511 – TYPE A AREA LIGHT POLE W/1 FIXTURE – per each

Item AR106512 – TYPE A AREA LIGHT POLE W/2 FIXTURES – per each

Item AR106524 – TYPE B AREA LIGHT POLE W/4 FIXTURES – per each

Item AR106905 - REMOVE LIGHT POLE & FIXTURE – per each.

ELECTRICAL ROOM MODIFICATIONS

DESCRIPTION

SP3-1.1 This item shall consist of modifications of the existing electrical room per these specifications and per the design shown in the plans. This work shall also include the installation of conduits in the floor and foundation, the furnishing of all incidentals that are necessary to produce a complete unit. This work shall also include the painting of equipment and conduit: the marking and labeling of equipment and the labeling or tagging of wires: the testing of the installation; and the furnishing of all incidentals necessary to place it in operating condition as a completed unit to the satisfaction of the RPR.

This item shall consist of the modification of the existing electrical room to accommodate new lighting circuits and associated conduit, conductors and breakers. This installation shall meet all requirements of the National Electrical Code (NEC).

MATERIALS

SP3-2.1

a. Airport lighting equipment and materials covered by advisory circulars (AC) shall be certified in AC 150/5345-53, Airport Lighting Equipment Certification Program (ALECP) and listed in the ALECP Addendum.

b. All other equipment and materials covered by other referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification when requested by the RPR.

c. Manufacturer's certifications shall not relieve the Contractor of the responsibility to provide materials per these specifications. Materials supplied and/or installed that do not comply with these specifications shall be removed (when directed by the RPR) and replaced with materials that comply with these specifications at the Contractor's cost.

d. All materials and equipment used to construct this item shall be submitted to the RPR for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify products or models applicable to this project. Indicate all optional equipment and delete any non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment to which they apply on each submittal sheet. Markings shall be made bold and clear with arrows or circles (highlighting is not acceptable). The Contractor is solely responsible for delays in the project that may accrue directly or indirectly from late submissions or resubmissions of submittals.

e. The data submitted shall be sufficient, in the opinion of the RPR, to determine compliance with the plans and specifications. The Contractor's submittals shall be provided in electronic pdf format, tabbed by specification section. The RPR reserves the right to reject any and all equipment, materials or procedures that do not meet the system design and the standards and codes, specified in this document.

f. All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least twelve (12) months from final acceptance by the Owner. The defective materials and/or

equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

Electrical room modifications under this item shall be:

-3#2 XLP-USE, 1#8 Ground in 3/4" GRS conduit

-3#6 XLP-USE, 1#8 Ground in 3/4" GRS conduit

-30A, 15A 480V breakers for existing panel

To further reduce the possibility of water (moisture) entrance into the connector between the cable and the field attached connector, heat shrinkable tubing with interior adhesive shall be applied over all cable connections.

No splices will be allowed in the new cable unless at the end of a spool of cable. Splices due to termination points shall be done in splice cans, manholes, handholes and light cans. Any repairs necessary to cable damaged during installation shall be done at the Contractor's expense and shall consist of replacing the entire length of damaged cable between pull points.

In line connections for existing cables to be spliced or those which are cut curing construction shall be repaired with the cast splice kit. The Contractor shall have a minimum of five (5) splice kits on the job site at all times for emergency repairs. Splice markers shall be installed over each splice in cables not to be abandoned. Cast splice kits shall be as specified in paragraph (a). All splices shall be covered with a flexible polyolefin heat-shrinkable sleeve.

Location of electrical equipment must be verified on site by contractor.

CONSTRUCTION METHODS

SP3-3.1 The electrical room must comply with NEC Article 110.31, Enclosure for Electrical Installations, Item (B) Indoor Installations.

Any damages to existing utilities or equipment because of the Contractor's operations shall be repaired immediately at his/her expense.

SP3-3.2 Distribution transformers, oil switches, cutouts, relays, terminal blocks, transfer relays, circuit breakers, and all other regularly used commercial items of electrical equipment not covered by FAA equipment specifications and ACs shall conform to the applicable rulings and standards of the Institute of Electrical and Electronic Engineers (IEEE) or the National Electrical Manufacturers Association (NEMA). When specified, test reports from a testing laboratory indicating that the equipment meets the specifications shall be supplied. In all cases, equipment shall be new and a first-grade product. This equipment shall be supplied in the quantities required for the specific project and shall incorporate the electrical and mechanical characteristics specified in the proposal and plans. Equipment selected and installed by the Contractor shall maintain the interrupting current rating of the existing systems or specified rating whichever is greater.

SP3-3.3 For wire rated up to 600 volts, moisture and heat resistant thermoplastic wire conforming to Commercial Item Description A-A-59544A Type THWN-2 shall be used. The wires shall be of the type, size, number of conductors, and voltage shown in the plans or in the proposal.

a. Control circuits. Unless otherwise indicated on the plans, wire shall be not less than No. 12 American wire gauge (AWG) and shall be insulated for 600 volts

b. Power circuits. 600 volts maximum – Wire shall be No. 6 AWG or larger and insulated for at least 600 volts.

Contractor shall use cast splicing kits as described in Article 108-2.4 for any splices made inside the electric handholes. The cast splicing kits shall be series 82-B1 Scotch cast as manufactured by 3M or equal. Contractor shall provide shop drawing for splicing method and cast splicing kit. Contractor shall also leave minimum 30” of slack on each side of the cable being spliced.

Cable used shall be #6 XLP-USE and #8 bare copper ground or #2 XLP-USE and #8 bare copper ground.

If, due to the length of spool ordered by the Contractor, it is necessary to install additional handholes, the Contractor shall supply same at no additional cost to the project. The handhole shall be the size as directed by the Engineer.

SP3-3.4 The Contractor shall, based upon the equipment provided, include as a part of the submittal process the electrical system “Short Circuit / Coordination / Device evaluation / Arc Flash Analysis”. The analysis shall be performed by the equipment manufacturer and submitted in a written report. The analysis shall be signed and sealed by a registered professional Engineer from the state in which the project is located. The analysis shall comply with NFPA-70E and IEEE 1584.

The analysis will include: one line diagrams, short circuit analysis, coordination analysis, equipment evaluation, arc flash analysis and arc flash labels containing at a minimum, equipment name, voltage/current rating, available incident energy and flash protection boundary.

The selected firms field service Engineer shall perform data gathering for analysis completion and device settings, perform device setting as recommended by the analysis and will furnish and install the arc flash labels. The components worst case incident energy will be considered the available arc flash energy at that specific point in the system. Submit three written copies and one electronic copy of the report.

INSTALLATION OF EQUIPMENT IN ELECTRICAL ROOM

SP3-4.1 The Contractor shall furnish, install, and connect all equipment, equipment accessories, conduit, cables, wires, buses, grounds, and support necessary to ensure a complete and operable electrical distribution center for the airport lighting system as specified herein and shown in the plans. When specified, an emergency power supply and transfer switch shall be provided and installed.

The equipment installation and mounting shall comply with the requirements of the National Electrical Code and local code agency having jurisdiction. All electrical work shall comply with the NEC and local code agency having jurisdiction including the separation of under 600V work from 5,000V work.”

SP3-4.2 Transfer switches, panels, panel boards, and other similar items shall be furnished and installed at the location shown in the plans or as directed by the RPR. Wall or ceiling mounted items shall be attached to the wall or ceiling with galvanized bolts of not less than 3/8-inch (9 mm) diameter engaging metal expansion shields or anchors in masonry or concrete.

Existing panel shall be modified to accommodate new 30A and 15A 3 pole 480V breaker. These breakers shall be used to feed the lighting circuits in the entrance road.

SP3-4.3 Conduit shall be used between square ducts and equipment or between different items of equipment when the equipment is designed for conduit connection. When the equipment is not designed for conduit connection, conductors shall enter the square-type control duct through insulating bushings in the duct or on the conduit risers.

The length of all XLP-USE and Ground cable installed in the proposed conduit to be paid for shall be the number of lineal feet measured in place, completed and ready for operation, and accepted as satisfactory, and no extra quantity will be allotted for any vertical distances or the required cable slack, as stated under Item 108-3.3, in the Standard Specifications.

The cost of routing the cable through duct, splicing, marking, trenching, backfilling, and all connections shall be included in the unit price bid for the cable.

The cost of removing cable as called out in the plans shall not be measured separately for payment but shall be considered incidental to the unit bid price for the cables.

SP3-4.4 The Contractor shall make all necessary electrical connections in the electrical room per the wiring diagrams furnished and as directed by the RPR. In wiring to the terminal blocks, the Contractor shall leave sufficient extra length on each control lead to make future changes in connections at the terminal block. This shall be accomplished by running each control lead the longest way around the box to the proper terminal. Leads shall be neatly laced in place.

SP3-4.5 All equipment, control wires, terminal blocks, etc., shall be tagged, marked, or labeled as specified below:

a. Wire identification. The Contractor shall furnish and install self-sticking wire labels or identifying tags on all control wires at the point where they connect to the control equipment or to the terminal blocks. Wire labels, if used, shall be of the self-sticking preprinted type and of the manufacturer’s recommended size for the wire involved. Identification -markings designated in the plans shall be followed. Tags, if used, shall be of fiber not less than 3/4 inch (19 mm) in diameter and not less than 1/32 inch (1 mm) thick. Identification markings designated in the plans shall be stamped on tags by means of small tool dies. Each tag shall be securely tied to the proper wire by a nonmetallic cord.

b. Labels. The Contractor shall stencil identifying labels on the breakers, and distribution and control relay cases with white oil paint as designated by the RPR. The letters and numerals shall be not less than one inch (25 mm) in height and shall be of proportionate width. The Contractor shall also mark the correct circuit designations per the wiring diagram on the terminal marking strips, which are a part of each terminal block.

METHOD OF MEASUREMENT

SP3-5.1 The quantity of equipment to be paid for under this item shall consist of all equipment installed, connected and accepted as a complete unit ready for operation within an existing electrical room.

BASIS OF PAYMENT

SP3-6.1 Payment will be made at the contract unit price for each completed and accepted

electrical room equipment installation. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

These prices shall be full compensation for furnishing all materials and for all preparation and installation of these materials, all connections, and installation, and for all labor, equipment, tools and incidentals necessary to complete these items.

The cables measured under Item 108-4.2 shall be paid for under this item. these prices shall be full compensation for furnishing all materials and for all preparation and installation of these materials, trenching, backfilling and compacting trenches, all connections, line marking tape and installation, and for all labor, equipment, tools and incidentals necessary to complete these items. The line marking tape installed shall be considered incidental to the work and shall not be paid for separately.

Payment will be made under:

Item AR801508 - ELECTRICAL MODIFICATIONS – per lump sum.

APPENDIX 1

Density Acceptance of Bituminous Pavements
Policy Memorandum 87-2
Issued February 20, 2014
4 Pages

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

February 20, 2014	Springfield	Number: 87-2

TO: CONSULTING ENGINEERS

SUBJECT: DENSITY ACCEPTANCE OF BITUMINOUS PAVEMENTS

I. Introduction

This Policy Memorandum deals with the implementation of the bituminous density quality assurance specifications as outlined in the Standard Specifications for Construction of Airports, Sections 401-4.15 and 403-4.15.

II. Sampling

After completion of compaction and when the pavement has reached ambient temperature, the paved area shall be divided into Sublots of 500 tons per type of mix. One core sample (2 cores per sample) shall be taken from each Sublot. The longitudinal and transverse location for each sample shall be determined by use of a random number "Deck" provided by the Division. No core shall be taken closer than two (2) feet from the edge of the mat. A core extraction device shall be used to obtain all cores from the mat. All cores are to be taken by the contractor under the supervision and remain in the possession of the Engineer. It is imperative that the Engineer and the contractor realize that the cores are "money" and that improper coring, extraction, shipping and/or testing can be costly.

One mix sample per 1000 tons of mix laid shall be taken for Extraction, Maximum Specific Gravity (G_{mm}) and Air Void tests. The mix samples shall be sampled by the contractor and split in half.

The Resident Engineer shall randomly designate and send the split samples to an independent laboratory for testing. The laboratory will be verified to be ASTM- certified for all the required testing and be contracted through the Consultant. The frequency of testing split samples shall be 1 per 5000 tons. Higher frequencies may be necessary if the contractor’s tests, and/or mix quality control are inconsistent.

III. Testing

All cores shall be tested for Bulk Specific Gravity (G_{mb}) in accordance with ASTM D2726 using Procedure 10.1, "For Specimens That Contain Moisture." The Theoretical Maximum Gravity (G_{mm}) shall be determined according to ASTM D2041. From these tests the in-place air voids of the compacted pavement are calculated according to ASTM

D3203 for "dense bituminous paving mixtures." Selection of the proper G_{mm} shall be based on a running average of four (4) tests per Lot.

E.g. Lot 1 - Use the average of the two (2) tests for Lot 1.
Lot 2 - Use the average of the four (4) tests from Lots 1 and 2.
Lot 3 - Use the average of the four (4) tests from Lots 2 and 3.

NOTE: When more than four (4) Sublots are used, still use a running average of four (4) tests per Lot.

IV. Acceptance Calculations

The first step in calculating the quantities for pay is to calculate the Mean ($\overline{X}$) and the Standard Deviation (S) of the Sublot tests. From this data the Lot samples should first be tested for outliers. After consideration for outliers, the Percent Within Tolerance (PWT) and the Percent Within Limits (PWL) are calculated to determine the final pay quantities for the Lot.

EXAMPLE

1. Test Data

Lot Quantity = 2000 tons
Sublot Test 1 = 4.35 % Air Voids
Sublot Test 2 = 3.96 % Air Voids
Sublot Test 3 = 6.75 % Air Voids
Sublot Test 4 = 6.25 % Air Voids

2. Calculating the Mean and Standard Deviation

Sublot	X	$(X - \overline{X})$	$(X - \overline{X})^2$
1	4.35	-0.978	0.956
2	3.96	-1.368	1.871
3	6.75	1.422	2.022
4	6.25	0.922	0.850
Sum =	21.31		5.699

N = 4

Mean $(\overline{X})$ = 21.34 / 4 = 5.328

Variance $(S)^2 = \text{Sum}\ \frac{(X - \overline{X})^2}{3} = \frac{5.699}{3} = 1.900$

Standard Deviation $S = \sqrt{1.900} = 1.378$

3. Test for Outliers

Check for Critical "T" Values

$$T = \left|\frac{(X_1 - \overline{X})}{S}\right|^* = \left|\frac{3.96 - 5.328}{1.378}\right| = 0.99$$

* Difference between the suspect test value (X_1) and the Mean ($\overline{X}$).

If the T value exceeds the critical "T" Value in the table below and no assignable cause can be determined for the outlier, discard the suspected test measurement and obtain another random sample from the Sublot in question. If the new test exceeds the Mean ($\bar{X}$) in the same direction from the Mean as the suspected test, recalculate the T value including all tests (original test, suspected test, and new test) for an outlier and for computing final payment.

TABLE OF CRITICAL "T" VALUES

Number of observations (N)	Critical "T" Value 5% Significance Level
3	1.15
4	1.46
5	1.67
6	1.82
7	1.94
8	2.03
9	2.11
10	2.18
11	2.23
12	2.29

Based on the above table, the "T" value of 0.99 does not exceed the Critical "T" Value of 1.46 for N = 4. Therefore, the value (3.96) is not an outlier and shall be used in calculating the Lot payment.

4. Calculation of Lot Payment

To calculate the Lot Payment use the Acceptance Criteria as outlined under Item 401-4.15(c) or Item 403-4.15(c).

$$Q_L = \frac{(\bar{X} - 1)}{S} = \frac{5.328 - 1}{1.378} = 3.141$$

$$Q_u = \frac{(7 - \bar{X})}{S} = \frac{7 - 5.328}{1.378} = 1.213$$

From this data the Percentage Within Tolerance (PWT) for both the lower and upper tolerance limits is determined by Table 6 (see Item 401 Bituminous Surface Course and/or Item 403 Bituminous Base Course in the Standard Specifications) for the number (N) of samples tested.

Eq. PWT (lower) = 99.0%
PWT (upper) = 90.4%

We now calculate the Percent Within Limits (PWL) for the Lot.

PWL = [PWT (lower)] + [PWT (upper)] - 100
PWL = (99.0 + 90.4) - 100 = 89.4%

Using Table 5, the % Adjustment in Lot Quantity is:

% Adjustment = 0.5 PWL + 55.0
% Adjustment = 0.5 (89.4) + 55.0
% Adjustment = 99.7

Adjusted Quantities = % Adjustment x Lot Quantities
Adjusted Quantities = 0.997 x 2000 tons
Adjusted Quantities = 1994 tons

5. Resampling and Retesting

The contractor has the right to request the resampling and retesting of a complete Lot. This privilege is only allowed once for each Lot and must be requested in writing by the contractor within 48 hours of receiving the official report from the Engineer.

6. Reporting

After completion of the tests for each Lot, the Engineer shall complete the necessary calculations for final adjustment in quantities on the Form AER-1 and have both the Engineer and the Contractor sign the report for copying to both the FAA and IDOA.

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

Supersedes Policy Memorandum 87-2, dated April 1, 2010

APPENDIX 2

Requirements for Quality Assurance on Projects with Bituminous Concrete Paving
Policy Memorandum 96-3
Issued February 20, 2014
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 (G_{mm}) of Mixture	0.026
Bulk Specific Gravity (G_{mb}) 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

APPENDIX 3

Pavement Marking Paint Acceptance
Policy Memorandum 97-2
Issued December 3, 2020
2 Pages

State of Illinois Department of
Transportation Division of
Aeronautics

POLICY MEMORANDUM

December 3, 2020	Springfield, Illinois	Number 97-2

TO: CONSULTING ENGINEERS

SUBJECT: PAVEMENT MARKING PAINT AND GLASS BEADS ACCEPTANCE

I. SCOPE

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

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 and glass beads 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-pint cans taken per batch number. Before drawing samples, the contents of the component's container must be thoroughly 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.
Bureau Chief of Airport Engineering

Supersedes policy memorandum 97-2 dated June 22, 2018

APPENDIX 4

Requirements for Laboratory, Testing, Quality Control, and Paving of Superpave HMA Concrete Mixtures for Airports
Policy Memorandum 2003-1
Issued June 12, 2014
11 Pages

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

June 12, 2014	Springfield, Illinois	Number 2003-1

TO: 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) 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 and approved by the Illinois Division of Aeronautics (IDA). The laboratory shall be of sufficient size and be furnished with the necessary equipment and supplies for adequately and safely performing the Contractor's Quality Control testing as well as the Resident Engineer's acceptance testing as described in Policy Memorandum 87-2.

The effective working area of the laboratory shall be a minimum of 600 square feet with a ceiling height of not less than 7.5 feet. Lighting shall be adequate to illuminate all working areas. It shall be equipped with heating and air conditioning units to maintain a temperature of 70º F ±5ºF.

The laboratory shall have equipment that is in good working order and that meets the requirements set forth in the following ASTM test standards:

ASTM D 70	Test Method for Specific Gravity and Density of Semi-Solid Materials
ASTM C 117	Test Method for Materials Finer than 75 µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve or Screen Analysis of Fine and Coarse Aggregate
ASTM C 566	Total Moisture Content of Aggregate by Drying
ASTM D 75	Sampling Aggregates
ASTM D 2041	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures

ASTM D 2172	Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
AASHTO T 308-09	Ignition Method for Determining Asphalt Content (Illinois Modified)
ASTM D 2726	Bulk Specific Gravity of Compacted Bituminous Mixtures using Saturated Surface Dry Specimens
ASTM D 3203	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D 2950	Density of Bituminous Concrete in Place by Nuclear Method
ASTM D 4125	Asphalt Content of Bituminous Mixtures by Nuclear Method
ASTM C 127	Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate
ASTM C 128	Standard Test Method for Specific Gravity and Absorption of Fine Aggregate

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 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 sent 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. Preliminary Mix Design Submittal

Top half of the IDOT Mix Design Software Cover Sheet (QC/QA Package) should be completed for the aggregate mix design parameters and should include the following:

1. Producer name, Producer # and Producer location of each aggregate (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. 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 – 3.2 JOB MIX FORMULA, Table 2. (Appendix A)

6. Producer name, Producer #, and specific gravity of the proposed asphalt cement

7. IDOT approved PG Binder 64-22 shall be used unless otherwise specified by the IDA Engineer of Construction & Materials.

B. Mixture Design & Testing

Design Parameters

Gyrations (N_{des}) – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 1
Asphalt Content – AC% per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 2
Maximum Specific Gravity – G_{mm} (ASTM D 2041)
Bulk Specific Gravity – G_{mb} (ASTM D 2726)
% air voids – V_a (ASTM D3203) per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 2
VFA % – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 1

Mixture Tests

After verification and approval by IDA of the proposed design information from step A., the Contractor shall perform mixture tests on 4 gyratory brix (4 point mix design) to determine the optimum AC content for the target Air Voids.

C. Mix Design Submittal

The Preliminary JMF including all test results shall be reported to IDA, Construction/Material Section, Attn: Certification and Mixtures 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_{mb}, G_{mm}, VMA, Voids (Total Mix), Voids Filled, V_{be}, P_{be}, P_{ba}, G_{se}
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

D. Mix Approval

Once the proposed JMF is reviewed and approved by IDA, a JMF approval letter will be issued to the contractor. Production of HMA is not authorized until a JMF letter has been issued. When a Test Section is specified as part of the contract, the proposed JMF shall be considered preliminary until it passes all Test Section requirements.

E. Change in Material Sources

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

IV. MIX PRODUCTION TESTING

The Quality Control of the manufacture and placement of HMA mixtures is the responsibility of the Contractor. 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 M-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 work day. 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.

A. Gradations for Mixture Proportioning: Aggregate gradations for proportioning (ASTM C-136) are required at a minimum of one per week when mix is produced. Aggregate gradations can be either hot bin gradations for batch plants or stockpile gradations for drier drum plants. Hot bin gradations may be reported on either form AER 9 or on the Division of Highways QC/QA package "Grad 1" Tab in the Daily HMA Plant Reporting Module. Stockpile gradations shall be shown on form MI504QC from the "Print Out" Tab in the Aggregate Stockpile Module of The Division of Highways QC/QA Package.

B. Production Mixture Testing: 1 per 1000 tons of the following (if total daily quantity is < /= 200 tons (small quantity) then a mix sample is not required and this quantity may be added on to next day's total for testing. Two consecutive days without testing is not allowed.): Reflux extraction (ASTM D2172) or Ignition oven test showing gradation and AC Content, Maximum Specific Gravity (ASTM D 2041), Bulk Specific Gravity (ASTM D 2726) and % Air Voids (ASTM D 3203). Calculations of the results (including weight data) shall be shown on the "Voids 1" and "IGN & NUC AC 1" tab printouts from the Division of Highways QC/QA Package Daily HMA Plant Reporting module.

C. A certification from the quarry for the total quantity of aggregate listing the source, gradation type, and quality designation of aggregate shipped. The Aggregate Certification of Compliance (AER18) may be used by the contractor for this purpose.

D. Original asphalt shipping tickets listing the source and type of asphalt shipped.

E. Check sample tests at a rate of 1/5000 tons randomly selected by the R.E. shall be sent with an identification sheet to an independent laboratory designated by the Division of Aeronautics. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

F. Bituminous Test Summary (AER 14) Note: The R.E. should make certain that the Contractor fills this form out daily (for mix production days) and distributes it daily to the Division of Aeronautics and R.E. The Contractor (QC Manager) is required to note any adjustments to the mix or to the plant (proportioning) in the "Remarks/Corrective Measures" section of the AER 14.

V. QUALITY CONTROL

A. Control Limits (Control Charts used for projects > 4000 tons per bituminous concrete pay item)

Target values shall be determined from the approved JMF. The target values shall be plotted on the control charts within the following control limits:

Control Limits

Parameter	Individual Test	Moving Avg. of 4
% Passing		
1/2 in.	± 7 %	±4 %
No. 4	±7 %	±4 %
No. 8	±5 %	±3 %
No. 30	±4 %	±2.5 %
No. 200 *	±2.0 % *	±1.0 % *
Asphalt Content	±0.45 %	±0.2 %

* No. 200 material percent's shall be based on washed samples. Dry sieve gradations (-200) shall be adjusted based on anticipated degradation in the mixing process.

B. Control Charts (Control Charts used for projects > 4000 tons per bituminous concrete pay item)

Standardized control charts shall be maintained by the Contractor at the field laboratory. The control charts shall be displayed and be accessible at the field laboratory at all times for review by the Engineer. The individual required test results obtained by the Contractor shall be recorded on the control chart immediately upon completion of a test, but no later than 24 hours after sampling. Only the required plant tests and resamples shall be recorded on the control chart. Any additional testing of check samples may be used for controlling the Contractor's processes, but shall be documented in the plant diary.

The results of assurance tests performed by the Resident Engineer will be posted as soon as available.

The following parameters shall be recorded on control charts:

1. Combined Gradation of Hot-Bin (Batch Plant) or Combined Belt Aggregate Samples (Drier Drum Plant) (% Passing 1/2 in., No. 4., No. 8, No. 30, and No. 200 Sieves)

2. Asphalt Content

3. Bulk Specific Gravity (G_{mb})

4. Maximum Specific Gravity of Mixture (G_{mm}) C.

Corrective Action for Required Plant Tests

Control Limits for each required parameter, both individual tests and the average of four tests, shall be exhibited on control charts. Test results shall be posted within the time limits previously outlined.

1. Individual Test Result. When an individual test result exceeds its control limit, the Contractor shall immediately resample and retest. If at the end of the day no material remains from which to resample, the first sample taken the following day shall serve as the resample as well as the first sample of the day. This result shall be recorded as a retest. If the retest passes, the Contractor may continue the required plant test frequency. Additional check samples should be taken to verify mix compliance.

2. Asphalt Content. If the retest for asphalt content exceeds control limits, mix production shall cease and immediate corrective action shall be instituted by the Contractor. After corrective action, mix production shall be restarted, the mix production shall be stabilized, and the Contractor shall immediately resample and retest. Mix production may continue when approved by the Engineer. The corrective action shall be documented.

   Inability to control mix production is cause for the Engineer to stop the operation until the Contractor completes the investigation identifying the problems causing failing test results.

3. Combined Aggregate/Hot-Bin. For combined aggregate/hot-bin retest failures, immediate corrective action shall be instituted by the Contractor. After corrective action, the Contractor shall immediately resample and retest. The corrective action shall be documented.

   a. Moving Average. When the moving average values trend toward the moving average control limits, the Contractor shall take corrective action and increase the sampling and testing frequency. The corrective action shall be documented.

      The Contractor shall notify the Engineer whenever the moving average values exceed the moving average control limits. If two consecutive moving average values fall outside the moving average control limits, the

Contractor shall cease operations. Corrective action shall be immediately instituted by the Contractor. Operations shall not be reinstated without the approval of the Engineer. Failure to cease operations shall subject all subsequently produced material to be considered unacceptable.

b. Mix Production Control. If the Contractor is not controlling the production process and is making no effort to take corrective action, the operation shall stop.

VI. TEST SECTION AND DENSITY ACCEPTANCE **(Note: Applies only when specified.)**

A. The purpose of the test section is to determine if the mix is acceptable and can be compacted to a consistent passing density.

A quick way to determine the compaction of the mix is by the use of a nuclear density gauge in the construction of a growth curve. An easy way to construct a growth curve is to use a good vibratory roller. To construct the curve, an area the width of the roller in the middle of the mat is chosen and the roller is allowed to make one compaction pass. With the roller stopped some 30 feet away, a nuclear reading is taken and the outline of the gauge is marked on the pavement. The roller then makes a compaction pass in the opposite direction and another reading is taken. This scenario is continued until at least two (2) passes are made past the maximum peak density obtained.

The maximum laboratory density potential of a given mix is a direct function of the mix design air voids. Whereas, the actual maximum field density is a function of the type of coarse aggregates, natural or manufactured sands, lift thickness, roller type (static or vibratory), roller and paver speed, base condition, mix variation, etc. All of these items are taken into consideration with the growth curve.

1. <u>High Density in the Growth Curve</u>. If the growth curve indicates a maximum achievable field density of between 95 to 98 percent of the Theoretical Maximum Density (D), you can proceed with the Rolling Pattern. On the other hand, if the maximum achievable density is greater than 98 percent, a quick evaluation (by use of an extractor, hot bin gradations, nuclear asphalt determination, etc.) must be made of the mix. When adjustments are made in the mix, a new growth curve shall be constructed.

2. <u>Low Density in the Growth Curve</u>. If the growth curve indicates the maximum achievable density is below 94 percent, a thorough evaluation of the mix, rollers, and laydown operations should be made. After a thorough evaluation of all factors (mix, rollers, etc.), asphalt or gradation changes may be in order as directed by the Engineer. Again, any changes in the mix will require a new growth curve. Note that the nuclear density test is a quality control tool and not an acceptance test. All acceptance testing is to be conducted by the use of cores, unless otherwise specified.

3. Acceptance of Test Section. The Contractor may proceed with paving the day after the test section provided the following criteria have been met:

   a. Four random locations (2 cores per location cut longitudinally and cored by the Contractor) will be selected by the Engineer within the test strip. All the cores must show a minimum of 94% density.

   b. All Superpave and extraction test results from mix produced for the test section must be within the tolerances required by specification.

   c. The Contractor shall correlate his nuclear gauge to the cores taken in the test section. Additional cores may be taken at the Contractor's expense for this purpose within the test section area, when approved by the Engineer.

4. Density Acceptance under Production Paving. The responsibility for obtaining the specified density lies with the Contractor. Therefore, it is important that the nuclear density gauge operator communicate with the roller operators to maintain the specified density requirements. The Contractor shall provide a qualified HMA Density Tester who has successfully completed the Department's "HMA Nuclear Density Testing Course" to run all required density tests on the job site. Density acceptance testing, unless otherwise specified, is described as follows:

   a. The Contractor shall cut cores at random locations within 500 ton sublots as directed by the Resident Engineer.

   b. The cores should be extracted so as not to damage them, since they are used to calculate the Contractor's pay.

   c. The Engineer will run preliminary G_{mb} tests on the cores to give the Contractor an indication of how compaction is running for the next day's paving.

   d. A running average of four (4) Maximum Theoretical Gravities (G_{mm}) will be used for calculating percent compaction.

   e. Final core density tests and pay calculations will be performed by the Resident Engineer and delivered to the Contractor.

   f. Should the contractor wish to resample the pavement as a result of pay calculations resulting in less than 100% payment the request must be made within 48 hours of receipt of the original payment calculation.

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

Supersedes Policy Memorandum 2003-1 dated May 1, 2014

APPENDIX A

AGGREGATE BITUMINOUS BASE COURSE

Percentage by Weight Passing Sieves Job Mix Formula (JMF)		
Sieve Size	Gradation B Range 1” Maximum	Ideal Target
1-1/4 in.	---	---
1 in.	100	100
3/4 in.	93 – 97	95
1/2 in.	75 – 79	77
3/8 in.	64 – 68	66
No. 4	45 – 51	48
No. 8	34 – 40	37
No. 16	27 – 33	30
No. 30	19 – 23	21
No. 100	6 – 10	8
No. 200	4 – 6	5
Bitumen %: Stone	4.5 – 7.0	5.5

AGGREGATE BITUMINOUS SURFACE COURSE

Percentage by Weight Passing Sieves Job Mix Formula (JMF)		
Sieve Size	Gradation B Range ¾" Maximum	Ideal Target
1 in.	100	---
3/4 in.	100	100
1/2 in.	99 - 100	100
3/8 in.	91 - 97	94
No. 4	56 – 62	59
No. 8	36 - 42	39
No. 16	27 - 32	30
No. 30	19 - 25	22
No. 100	7 – 9	8
No. 200	5 – 7	6
Bitumen %: Stone	5.0 – 7.0	6.0

APPENDIX 5
Comparison Samples Memorandum
Issued February 20, 2014
3 Pages

Illinois Department of Transportation

Memorandum

To: Airport Consultants and Contractors

From: Mike Wilhelm

Subject: Comparison Samples

Date: February 20, 2014

In accordance with Policy Memorandum 96-3, the Resident Engineer (R.E.) shall obtain split comparison samples from the contractor for testing by an ASTM-certified, independent testing laboratory. In order to reduce splitting errors, the R.E. shall request that the contractor split the sample down to individual test sample size. The split samples shall be placed in individual paper bags for each test.

The following list shows the number and size of each sample:

3 Superpave Gyratory Brix (Gmb)..... 3 bags: 4800 grams each
Vacuum Pycnometer Test (Gmm)……...2 bags: 1500 grams each
Ignition Oven or Extraction……2 bags: 1500 grams each

Each paper bag shall be identified with the following information:

Airport Name:
Illinois Project Number:
Type of Mix (Base or Surface):
Date Sampled:
Lot-Sublot Number:
Type of test (Brix - Pycnometer - Ignition Oven or Extraction):

For the samples identified as brix the R.E. shall also include the number of gyrations that are required in the construction contract: Illinois Standard Spefications for Construction of Airports (April 1, 2012), Item 401, 403 Table 1, Superpave Design Criteria.

NUMBER OF SAMPLES TO BE SUBMITTED FOR TESTING

One per test section for each type of mix, then one randomly selected sample for each 5000 tons of mix produced under production paving. Projects with less than 5000 tons of mix shall have one split sample tested per mix type for the project in addition to the test section split sample, if a test section is specified. The split samples not selected shall be stored by the contractor for use at the discretion of the Division of Aeronautics.

The R.E. shall place all seven (7) bags in a box along with all samples and ship them to an ASTM-certified, independent lab for testing. The cost of all testing

is to be borne by the Consultant. The lab shall be chosen by the Consultant, but shall not be the same one used by the Contractor. All testing results shall be obtained in a timely manner. The R.E. shall also fill out the sample identification sheet, which shall be sent to the laboratory. Copies of the sample identification sheet and all testing results shall be faxed or emailed to:

Illinois Department of Transportation, Division of Aeronautics
Attn: Mr. Michael F. Wilhelm, P.E.
Engineer of Construction & Materials
Email: michael.wilhelm@illinois.gov

Supersedes Comparison Samples Memorandum, dated May 31, 2007

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS

SAMPLE IDENTIFICATION

AIRPORT_____ LOCATION_____

ILLINOIS PROJECT NO. _____

MIX PRODUCER _____

PRODUCER NUMBER _____

LOCATION _____

TYPE OF MIX _____

LOT NUMBER _____ SUBLOT NUMBER _____

DATE SAMPLED _____

SAMPLED FROM _____

OF GYRATIONS _____

COMMENTS _____

FILL IN ALL BLANKS

_____
R.E. or REPRESENTATIVE SIGNATURE

EMAIL OR FAX COPY TO:

Division of Aeronautics
Attn: Michael F. Wilhelm, P.E.
1 Langhorne Bond Drive
Springfield, IL 62707-8415
Email: michael.wilhelm@illinois.gov
FAX: (217) 558-1328

NOTE: Samples should be submitted on day of sampling but no later than 48 hours.

APPENDIX 6
Policy Memorandum 87-3
Issued December 3, 2020
5 Pages

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020 Springfield Number: **87-3**

TO: CONSULTING ENGINEERS & CONTRACTORS

SUBJECT: MIX DESIGN, TEST BATCH, QUALITY CONTROL, AND ACCEPTANCE TESTING OF PCC PAVEMENT MIXTURE

I. SCOPE

This Policy Memorandum addresses the Mix Design, Test Batch, Quality Control and Acceptance Testing of PCC pavement mixtures specified by Item 501, Portland Cement Concrete Pavement, in accordance with the Standard Specifications for Construction of Airports, Special Provisions, and policies of the Division of Aeronautics.

II. MIX DESIGN

Prior to the start of paving operations and after approval by the Division of Aeronautics (IDA) of all materials to be used in the manufacture of the concrete, the contractor shall provide a preliminary mix design(s) for evaluation at the Test Batch. The mix design shall indicate saturated surface dry batch weights per cubic yard for each material component. In addition, each material component, including chemical admixtures, shall be identified by the IDOT material code number, the IDOT producer code number, and the producer name and location. Saturated surface dry and oven dry specific gravities, as well as absorption values, for each proposed aggregate to be used in the mix shall be indicated on the mix design.

The Mix Design and the contractor's approved Job Mix Formula (JMF) will be issued by our office subject to verification of the mix by strength tests obtained from mix prepared from a Test Batch(es) according to the approved JMF. The water-cementitious ratio established from the approved test batch is the maximum water-cementitious ratio allowed during production paving.

III. TEST BATCH

At least 28 days prior to the start of production, the contractor and/or producer shall prepare a Test Batch under the direction of the Engineer. The Test Batch shall be prepared at the concrete plant proposed for use in the production of the concrete mix for

the project and shall be in accordance with the approved Job Mix Formula (JMF). When approved by the Engineer, the Test Batch may be prepared at a different plant provided that the same materials specified in the JMF are used. The plant shall have been surveyed and approved by the Engineer prior to preparation of the Test Batch. As required by these Special Provisions, the contractor shall provide Quality Control for production of the concrete. The contractor shall have his Quality Control Manager and a representative of the contractor familiar with the paving operation, present at the Test Batch preparation. The Test Batch shall be prepared as follows:

A. Proportioning

Prior to preparation of the mix, the Proportioning Technician shall perform a minimum of two (2) gradation analysis and two (2) moisture tests on each aggregate used. The gradation analysis shall be reported on form AER-12. From this data, the JMF shall be adjusted for moisture, in accordance with form AER-12. A microwave type moisture probe (or equal) may be allowed to adjust proportions for sand moisture when approved by the Engineer.

B. Preparation of the Mix:

1.) Prepare a Test Batch that is at least one-half (1/2) the manufacturer's rated capacity of the mixing drum (in cubic yards). The Test Batch shall be prepared with the approved JMF, adjusted for moisture.

2.) Mixing requirements shall be:

a.) Central Mix Plant: Mixing time shall be a minimum of 90 seconds. If transit mixer trucks are used to transport the mix, the mix shall be agitated, after mixing, at 2-5 RPM for the approximate time anticipated between batching at the plant and deposit of the concrete in the forms. If non-mixing trucks are used to transport the mix, the mix shall remain in the central mixer with no mixing or agitation for the approximate time anticipated from when the water contacts the cement and deposit of the concrete in the forms.

b.) Transit Mix Plant: Allowed for projects ≤5000 CY. Mixing shall consist of 70-100 Revolutions @ 5-16 RPM. After initial mixing, agitate mix at 2-5 RPM for the approximate time anticipated between batching at the plant and deposit of the concrete in the forms.

3.) Slump and Air: If the air content after aging is 6.0% ±1.5% and provides the required workability for paving, the contractor will make cylinders and/or beams for testing at 3, 7, 14 and 28 days. If the slump is below that required for placement, the contractor may add additional water to increase the slump as necessary up to the maximum water/cement ratio (or water/cementitous material) ratio listed herein. Additional mixing of at least 40 Revolutions will be required with each addition of water. Cylinders and/or beams will be made for testing at 3, 7, 14 and 28 days when the slump is obtained, at 6.0% ±1.5% air content. The water/cement ratio (or water/cementitious material) ratio shall be according to the Standard Specifications, Section 501-4.1, b, (3).

4.) The Proportioning Technician shall complete Form AER-15, PCC Testing Summary and Form AER-6, Concrete Moisture Determination (Adjusted Oven Dry Method), to be given to the Resident Engineer after completion of the Test Batch. The Flask Method, Dunagan Method, and Pycnometer Jar Method (Form AER 19) are also acceptable test methods for the determination of aggregate moisture.

5.) The Resident Engineer and contractor shall each independently complete Form AER-4, Concrete Plant Production, Mix Verification.

6.) The concrete test cylinders and/or beams shall be tested at 3, 7, 14 and 28 days to establish a growth curve of concrete strength vs. age. The compressive strength shall be at least 400 psi, over the specified strength, at 28 days. Flexural strength concrete shall have at least 100 psi over the specified strength at 28 days.

IV. QUALITY CONTROL

Quality control testing is the responsibility of the contractor and must be performed by qualified testing personnel approved by the Engineer. The proportioning technician shall be PCC Level II certified and must perform his or her duties on a full-time basis whenever concrete is produced for an IDA project.

If a QC or QA test for slump, air content, or mix temperature meets or exceeds the Suspension Limits of the Standard Specifications, section 501-5.4, Control Chart Limits the contractor shall reject the batch. In the case of a failing test, the contractor shall take corrective action according to the Standard Specifications, section 501-5.5. Adjustments are subject to the time limitations of 1 hour from time of batching when the concrete is transported in mixer trucks. Time limitations shall be increased by 30 minutes when the concrete mixture contains a retarding admixture. When concrete has been rejected due to failing test results, the contractor shall continue to run tests for the failed test parameter until at least 3 consecutive passing tests are achieved. This testing is in addition to the normal QC and QA testing.

A. Duties of the Proportioning Technician:

1.) Check and maintain shipment tickets of each material used in the manufacture of the concrete. These tickets are to be given to the Resident Engineer for each day's production of concrete. The aggregates shall indicate the quality on the ticket and a statement that the coarse aggregate is a non “D” cracking (freeze-thaw rated by IDOT) aggregate. In lieu of having these statements on each ticket, the contractor may use Form AER-18, Aggregate Certification of Compliance.

2.) Inspect and maintain proper storage of all aggregates and materials daily.

3.) Perform at least two (2) sieve analysis for each aggregate daily.

4.) Inspect all weighing or measuring devices daily.

5.) Twice daily check the actual weighing or measuring of aggregates, cement, water, and admixtures for conformance to adjusted batch proportions. Record data on Form AER-4, Concrete Plant Production, Mix Verification, and calculate the water/cement (or water/cementitious material) ratio.

6.) See that the volume of the batch does not exceed the allowable capacity of the mixer and that the proper mixing time is used.

7.) Make at least two (2) moisture tests of each aggregate daily and correct batch weights as required.

8.) Adjust the dosage rates of the admixtures as required to meet concrete temperature changes and paving conditions.

9.) Complete AER-15, PCC Testing Summary, and Form AER-4, Concrete Plant Production, Mix Verification for each day's production and deliver same to the Resident Engineer at the end of the day for which the data pertains. Provide to the Resident Engineer load tickets for all aggregates, cement, and admixtures used in the mix.

The Resident Engineer will also be required to complete Form AER-4, Concrete Plant Production, Mix Verification. Forms AER-4, AER-12, and AER-15 shall be submitted to the R.E. on a daily basis.

V. ACCEPTANCE TESTING

Acceptance testing shall be according to the Standard Specifications, section 501-6.1-6.6.

As required by Item 501-6.3 of the Standard Specifications, acceptance and payment of the final pavement is based on the strength of either cylinders or beams taken at random during the time of construction. The pavement shall be divided into Lots of 1200 cubic yards with sublots of 300 cubic yards each. The final sublot of the project shall be separated into an additional sublot if the concrete quantity is greater than or equal to 150.0 cubic yards. Otherwise, this remaining quantity shall be incorporated into the previous sublot.

Lots and sublots shall not be separated by mix design or day of paving if the project is using more than one mix design. The grouping of Lots and sublots is to be done solely by the quantity of cubic yards poured on the project.

One random sample (two cylinders or two beams) shall be obtained from each sublot for testing at 28 days to calculate final payment. At the time a sublot sample is taken, one (1) slump, one (1) air test and one (1) temperature check shall be taken.

The above-mentioned tests including Test Batch results will be reported by the R.E. on the AER 15, PCC Testing Summary, and submitted to IDA when updated.

In addition to the above described sample frequency, three (3), seven (7) and fourteen (14) day tests. The Engineer may require additional tests to maintain Quality Control.

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

Supersedes Policy Memorandum 87-3, dated April 1, 2010

APPENDIX 7
Policy Memorandum 96-1A
Issued March 28, 2022
2 Pages

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

March 28, 2022	Springfield	Number 96-1A

TO: CONSULTING ENGINEERS

SUBJECT: FOR AERONAUTICS 2020 STANDARD SPECIFICATIONS, 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. An Item 501 PCC Pavement mix can be used in lieu of a Class SI mix, with the approval of the Division.

b. The Resident Engineer should verify that each component of the proposed mix meets the requirements set forth under Item 610 of the *2020 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. When directed by the Resident Engineer, the Contractor shall make, cure and store one set of cylinders in accordance with AASHTO T23 for acceptance testing for each day the mix is used. In addition, at least one slump, one mix temperature, and one air test shall be conducted for each day the mix is used.

b. The concrete shall have a maximum slump of four inches (4") and minimum slump of two inches (2") when tested in accordance with AASHTO T119.

c. The air content of the concrete shall be between 5% and 8% by volume when tested in accordance with AAHSTO T152.

d. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.

e. Acceptance testing for concrete provided under this item shall have a 14-day compressive strength of not less than 3,500 psi when tested in accordance with AASHTO T22. The testing lab shall be IDOT or AASHTO approved. The Resident Engineer will be responsible for the strength tests on the specimens at no expense to the contractor.

f. If more than 100 cubic yards of the mix is placed in a given day, additional tests at a frequency of 1 per 100 cubic yards shall be taken for strength, slump, mix temperature, and air.

g. 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.

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

Supersedes Policy Memorandum 96-1 (2020) dated December 3, 2020

APPENDIX 8
Policy Memorandum 2001-1
Issued December 3, 2020
8 Pages

State of Illinois
Department of Transportation
Division of Aeronautics

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

1. 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

1. 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

1. 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 $F*hr*ft^2/BTU$) 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.

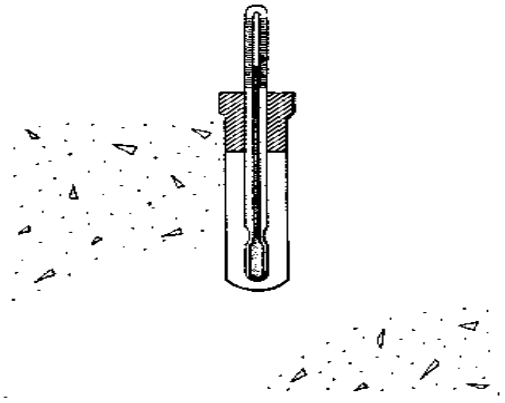
E. In-Place Concrete Temperature Monitoring

1. 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 surface and sub-surface 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.

4. 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)

Slab thickness, in. (m)	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance **R**, hr-ft^2-F/Btu (m^2-K/W), is used			
	R = 2 (0.35)	**R** = 4 (0.70)	**R** = 6 (1.06)	**R** = 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/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/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)	#	#

* > 50 F (10 C): additional heat required

<< -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)

Slab thickness, in. (m)	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance **R**, hr-ft^2-F/Btu (m^2-K/W), is used			
	R = 2 (0.35)	**R** = 4 (0.70)	**R** = 6 (1.06)	**R** = 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)	#	#

* > 50 F (10 C): additional heat required

< -60 F (-51 C)

Thermal Resistance of Various Insulating Materials

Insulating Material	Thermal resistance "R" for these thicknesses of material*	
	1 in., hr·ft3·F / Btu	10 mm, m3·K / W
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

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

APPENDIX 9

Storm Water Pollution Prevention Plan
6 Pages

Storm Water Pollution Prevention Plan

Route N/A Marked N/A

Section Bloomington – Central Illinois Regional Airport Project No. BMI-4776

County McLean County

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Date

Central Illinois Regional Airport - Executive Director
Title

1. Site Description

a. The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):

The Bloomington Normal Airport Authority and the Illinois Department of Transportation – Division of Aeronautics propose to rehabilitate the Airport entrance roads at the Central Illinois Regional Airport in Bloomington, IL. The project includes the rehabilitation of existing pavement structures and construction of new bituminous pavement overlay, pavement marking, lighting, shoulder adjustment and other incidental work as shown in the plans.

b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading (use additional pages, as

The improvements will consist of the following: Removal of existing bituminous pavement shoulders, constructing new bituminous pavement, installing new lighting and underground utility and electric cabling. All disturbed areas will be turfed at the completion of the project.

c. The total area of the construction site is estimated to be **9±** acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities **1.6±** acres.

d. ~~The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan~~.

e. The ~~design/project report, hydraulic report, or~~ plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water.

f. ~~The names of receiving water(s) and areal extent of wetland acreage at the site are in the design/project report or plan documents which are incorporated by reference as a part of this plan.~~

2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

a. Erosion and Sediment Controls

(i) Stabilization Practices. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.

(A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

Description of Stabilization Practices (use additional pages, as necessary):

1. **Temporary Stabilization - In areas of new soil embankments, existing vegetation and inlet protection will serve to intercept the waterborne silts and prevent it from entering the storm drain system or leaving the site.**
2. **Permanent Stabilization - All areas disturbed by construction operations will be stabilized with permanent seeding and mulching following final grading. See plan sheets.**

(ii) Structural Practices. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Description of Structural Practices (use additional pages, as necessary):

- ***Inlet Protection*** **- In-place before all earthmoving activities to prevent waterborne silts from entering the existing storm drain system. The purpose of this practice is to help prevent sediment from entering storm drains until the contributing watershed is stabilized and allows early use of the storm drainage system.**

b. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

(I) Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.

(ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls (use additional pages, as necessary):

The existing storm water management system will continue to be utilized after construction.

c. Other Controls

(i) Waste Disposal. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.

(ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

(iii) Prevent offsite tracking of sediments and generation of dust. Stabilized construction entrances or vehicle washing racks should be installed at locations where vehicles leave the site. Where dust may be a problem, implement dust control measures such as irrigation.

d. Approved State or Local Plans

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

Not applicable.

3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan (use additional pages, as necessary):

During construction, the contractor shall:

- **Clean up, stabilize and grade work area to eliminate concentration of runoff.**
- **Maintain or replace erosion control items as directed by the Resident Engineer.**

All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of each 0.5 inches or greater rainfall, or an equivalent snowfall.

Contractor shall follow inspection procedures as described in the Inspections section below. The contractor's responsibility shall end *after* final acceptance of the project.

4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.

b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.

c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.

d. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an “Incidence of Noncompliance” (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

5. Non-Storm Water Discharges

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge. (Use additional pages as necessary to describe non-storm water discharges and applicable pollution control measures).

Not applicable.

Contractor Certification Statement

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency on May 14, 1998.

Project Information: Realign and Widen Taxiway C

Route N/A Marked N/A

Section Bloomington – Central Illinois Regional Airport Project No. BMI-4776

County McLean County

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature

Date

Title

Name of Firm

Street Address

City

IL
State

Zip Code

Telephone Number