#### **INSTRUCTIONS**

**ABOUT IDOT PROPOSALS:** All proposals are potential bidding proposals. Each proposal contains all certifications and affidavits, a proposal signature sheet and a proposal bid bond.

#### **PREQUALIFICATION**

Any contractor who desires to become pre-qualified to bid on work advertised by IDOT must submit the properly completed pre-qualification forms to the Bureau of Construction no later than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

#### WHO CAN BID?

Bids will be accepted from only those companies that request and receive written Authorization to Bid from IDOT's Central Bureau of Construction.

#### **REQUESTS FOR AUTHORIZATION TO BID**

Contractors wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) and the ORIGINAL "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued an Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction and the Chief Procurement Officer that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial.

**ABOUT AUTHORIZATION TO BID:** Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions. These documents must be received three days before the letting date.

**ADDENDA AND REVISIONS:** It is the bidder's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum or revision will be included with the Electronic Plans and Proposals. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription service emails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at <a href="http://www.dot.il.gov/desenv/delett.html">http://www.dot.il.gov/desenv/delett.html</a> before submitting final bid information.

#### IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

Addenda questions may be directed to the Contracts Office at (217)782-7806 or D&Econtracts@dot.il.gov

Technical questions about downloading these files may be directed to Tim Garman at (217)524-1642 or Timothy. Garman@illinois.gov.

#### **BID SUBMITTAL GUIDELINES AND CHECKLIST**

In an effort to eliminate confusion and standardize the bid submission process the Contracts Office has created the following guidelines and checklist for submitting bids.

This information has been compiled from questions received from contractors and from inconsistencies noted on submitted bids. If you have additional questions please refer to the contact information listed below.

**ABOUT SUBMITTING BIDS**: It is recommended that bidders deliver bid proposals in person to ensure they arrive at the proper location prior to the time specified for the receipt of bids. Any proposals received at the place of letting after the time specified will not be read.

#### STANDARD GUIDELINES FOR SUBMITTING BIDS

- All pages should be single sided.
- Use the Cover Page that is provided in the Bid Proposal (posted on the IDOT Web Site) as the first page of your submitted bid. This page has the Item number in the upper left-hand corner and lines provided for your company name and address in the upper right-hand corner.
- Do not use report covers, presentation folders or special bindings and do not staple multiple times on left side like a book. Use only 1 staple in the upper left hand corner. Make sure all elements of your bid are stapled together including the bid bond or guaranty check (if required).
- Do not include any certificates of eligibility, your authorization to bid, Addendum Letters or affidavit of availability.
- Do not include the Subcontractor Documentation with your bid (pages i iii and pages a g). This documentation is required only after you are awarded the contract.
- Use the envelope cover sheet (provided with the proposal) as the cover for the proposal envelope.
- Do not rely on overnight services to deliver your proposal prior to 10 AM on letting day. It will not be read if it is delivered after 10 AM.
- Do not submit your Substance Abuse Prevention Program (SAPP) with your bid. If you are awarded the contract this form is to be submitted to the district engineer at the pre-construction conference.

Use the following checklist to ensure completeness and the correct order in assembling your bid Illinois Office Affidavit (Not applicable to federally funded projects) insert your affidavit after page 4 along with your Cost Adjustments for Steel, Bituminous and Fuel (if applicable). Cover page (the sheet that has the item number on it) followed by your bid (the Pay Items). If you are using special software or CBID to generate your schedule of prices, do not include the blank pages of the schedule of prices that came with the proposal package. Page 4 (Item 9) – Check "YES" if you will use a subcontractor(s). Include the subcontractor(s) name. address, general type of work to be performed and the dollar amount (if over \$50,000). If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank. Page 10 (Paragraph J) - Check "YES" or "NO" whether your company has any business in Iran. Page 10 (Paragraph K) – (Not applicable to federally funded projects) List the Union Local Name and number or certified training programs that you have in place. Your bid will not be read if this is not completed. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT. Page 11 (Paragraph L) - A copy of your State Board of Elections certificate of registration is no longer required with your bid. Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.

Page 12 (Paragraph C) – This is a work sheet to determine if a completed Form A is required. It is not

part of the form and you do not need to make copies for each Form A that is filled out.

☐ Pages 14-17 (Form A) – One Form A (4 pages) is required for each applicable per Copies of the Forms can be used and only need to be changed when the financial infocertification signature and date must be original for each letting. Do not staple the form	ormation changes. The
If you answered "NO" to all of the questions in Paragraph C (page 12), complete the fi with your company information and then sign and date the Not Applicable statement o	
☐ Page 18 (Form B) - If you check "YES" to having other current or pending contract the phrase, "See Affidavit of Availability on file". Ownership Certification (at the botto N/A if the Form A you submitted accounts for 100 percent of the company ownership. percentage of ownership falls outside of the parameters that require reporting on the Findicates that the Form A you submitted is not correct and you will be required to submitted.	om of the page) - Check Check YES if any Form A. Checking NO
☐ Page 20 (Workforce Projection) – Be sure to include the Duration of the Project. the phrase "Per Contract Specifications".	It is acceptable to use
☐ <b>Bid Bond</b> – Submit your bid bond using the current Bid Bond Form provided in the The Power of Attorney page should be stapled to the Bid Bond. If you are using an elegatory bid bond number on the form and attach the Proof of Insurance printed from the Site.	ectronic bond, include
☐ <b>Disadvantaged Business Utilization Plan and/or Good Faith Effort</b> – The last it be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement supporting paperwork. If you have documentation for a Good Faith Effort, it should fol	(SBE 2025) and
The Bid Letting is now available in streaming Audio/Video from the IDOT Web Si will be placed on the main page of the current letting on the day of the Letting. The str 10 AM. The actual reading of the bids does not begin until approximately 10:20 AM.	
Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the link on the main page of the current letting.	day. You will find the
QUESTIONS: pre-letting up to execution of the contract	
Contractor/Subcontractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	217-785-4611
Contracts, Bids, Letting process or Internet downloadsEstimates Unit	21 <i>1-1</i> 02-1800 217-785-3483
Aeronautics	
IDNR (Land Reclamation, Water Resources, Natural Resources)	217-782-6302
QUESTIONS: following contract execution	
Including Subcontractor documentation, payments	217-782-3413
Railroad Insurance	

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Proposal Submitted By
Name
Address
City

#### Letting March 8, 2013

#### NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

## Notice to Bidders, Specifications, Proposal, Contract and Contract Bond



Springfield, Illinois 62764

Contract No. 97507
MADISON County
Section 10-00085-01-LS (Edwardsville)
Route FAP 789 (II 159/143)
Project TE-00D8(145)
District 8 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:	
☐ A <u>Bid</u> <u>Bond</u> is included.	
A Cashier's Check or a Certified Check is included	

Prepared by

F

Checked by

(Printed by authority of the State of Illinois)

#### Page intentionally left blank



**PROPOSAL** 

#### TO THE DEPARTMENT OF TRANSPORTATION

1.	Proposal of
Та	xpayer Identification Number (Mandatory)  For the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 97507 MADISON County Section 10-00085-01-LS (Edwardsville) Project TE-00D8(145) Route FAP 789 (II 159/143) District 8 Construction Funds

Remove and replace existing sidewalk, remove and replace curb and gutter and the installation of decorative lighting, located on North Main Street from High Street to L Street in the City of Edwardsville.

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.

- 3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, addenda form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>A</u>	mount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount o	Propo <u>f Bid</u> <u>Guara</u>	
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000\$100.	,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000\$150	,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000 \$250.	,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000\$400.	,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000\$500	,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000\$600.	,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000\$700	,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000\$800	,000
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000\$900.	,000
\$1,500,000	to	\$2,000,000	\$75,000	over		\$35,000,000\$1,000	,000

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the Treasurer, State of Illinois, when the state is awarding authority; the county treasurer, when a county is the awarding authority; or the city, village, or town treasurer, when a city, village, or town is the awarding authority.

If a combination bid is submitted, the proposal guaranties which accompany the individual proposals making up the combination will be considered as also covering the combination bid.

The amount of the proposal guaranty check is	\$(	). If this proposal is accepted
and the undersigned shall fail to execute a contract bond as required herein, i	t is hereby agreed that the amount of the	e proposal guaranty shall become
he property of the State of Illinois, and shall be considered as payment of dan	nages due to delay and other causes suf	fered by the State because of the
ailure to execute said contract and contract bond; otherwise, the bid bond sl	hall become void or the proposal guaran	ity check shall be returned to the
indersigned.		

# Attach Cashier's Check or Certified Check Here In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found. The proposal guaranty check will be found in the proposal for: Section No. County

Mark the proposal cover sheet as to the type of proposal guaranty submitted.

		RETURN WITH BID	
6.	combination, he combination be proportion to the	N BIDS. The undersigned further agrees that if awarded le/she will perform the work in accordance with the requid specified in the schedule below, and that the combine bid submitted for the same. If an error is found to exist ed in a combination, the combination bid shall be corrected.	quirements of each individual proposal comprising the ination bid shall be prorated against each section in it in the gross sum bid for one or more of the individual
	com If alt	n a combination bid is submitted, the schedule below prising the combination. ernate bids are submitted for one or more of the secti bination bid must be submitted for each alternate.	
		Schedule of Combination B	iids
Со	mbination	Costians Instruded in Combination	Combination Bid
	No.	Sections Included in Combination	Dollars Cents
7.	schedule of pr all extensions schedule are a is an error in th will be made of The scheduled	of PRICES. The undersigned bidder submits herewith, ces for the items of work for which bids are sought. The and summations have been made. The bidder unde pproximate and are provided for the purpose of obtaining the extension of the unit prices, the unit prices shall governing for actual quantities of work performed and accepted quantities of work to be done and materials to be furnishere in the contract.	e unit prices bid are in U.S. dollars and cents, and erstands that the quantities appearing in the bid g a gross sum for the comparison of bids. If there n. Payment to the contractor awarded the contract d or materials furnished according to the contract.
8.	500/20-43) pro	<b>FO DO BUSINESS IN ILLINOIS.</b> Section 20-43 of the vides that a person (other than an individual acting as a sthe State of Illinois prior to submitting the bid.	
9.	The services	of a subcontractor will be used.	
	Check box		
	their name	subcontractors with subcontracts with an annual value of address, general type of work to be performed, and the 500/20-120)	

10. **EXECUTION OF CONTRACT**: The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer (CPO) or the State Purchasing Officer (SPO) is for approval of the procurement process and execution of the contract by the Department. Neither the CPO nor the SPO shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Code.

STATE JOB #- C-98-355-10 PPS NBR -

MADISON NAME

CODE 119

DIST 08

SECTION NUMBER 10-00085-01-LS (EDWARDSVIL

# ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 97507

TION ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 02/07/13 RUN TIME - 183109

PROJECT NUMBER TE-00D8/145/000

ROUTE FAP 789

<u> </u>	68.000		DRIVE PAVEMENT REM	00020
1	151.000	SQ.	DETECTABLE WARNINGS	400800
	7,618.000	SQFT	PC CONC SIDEWALK 5	400200
	347.000	SQ YD	PCC DRIVEWAY PAVT 8	300400
	12.000	. ≺	PCC DRIVEWAY PAVT	300200
	5.000	TON	INCIDENTAL HMA SURF	800050
	000	T	AGGREGATE	20100
	0.250		SEEDING CL 1A	000110
	140.000	FOOT	LIGHT POLE FDN 30D SP	360310
	38.000	EACH	HANDHOLE SPL	140105
	1.000	EACH	ELECT SERV INSTALL SP	102
	1.000	US	TRAF CONT & PROT SPL	010216
	921.000	i	COMB CC&G TB6.12 SPL	064200
	20.000	EAC	DECOR LT TYPE B	00739
	56.00	AC	DECOR LT TYPE A	007393
DOLLARS CENTS DOLLARS CTS	QUANTITY	WEASURE	PAY ITEM DESCRIPTION	ITEM NUMBER

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ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 02/07/13 RUN TIME - 183109

FAP 789 10-00085-01-LS (EDWARDSVILLE) MADISON

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 97507

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	8,700.000 X	FOOT	EC C XLP USE 1C 10	1702
	3,100.000 X	FOOT	UNDRGRD C PVC 2	102835
1	1.000 X	AC.	ECT SERV INSTALL	040010
	282.000 X	FOOT	THPL PVT MK LINE 24	000
	487.000 X	FOOT	THPL PVT MK LINE 12	800060
	1.000 X	L SUM	MOBILIZATION	7100100
	. 000 X	F00	CONC CURB TB	0600605
1	8.000 X	SQ YD	CL D PATCH T2 12	4201789
	6.000 X	SQ YD	CL D PATCH T1 12	420178
1	615.000 X	SQ FT	SIDEWALK REM	400060
	886.000 X	F00	OMB CURB GUTTER R	40
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RUN DATE - 02/07/1	SCHEDULE OF PRICES	10-00085-01-LS (EDWARDSVILLE)
ECMS002 DT(	ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 789

CONTRACT NUMBER - 97507	CES	OIS DEPARTMENT OF TRANSPORTATION
RUN TIME -	RUN DATE - 02/07/13	ECMS002 DTGECM03 ECMR003 PAGE 3

TOTAL \$	\     				
	—×-	1.000	EACH	REM LT UNIT SALV	84200500
	DOLLARS	QUANTITY	MEASURE	PAY ITEM DESCRIPTION	NUMBER
ΙЩ	UNIT PRICE		UNIT OF		ITEM

# 1. EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.

NOTE:

- 2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.
- 3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
- 4. A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

# STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCUREMENT: ASSURANCES, CERTIFICATIONS AND DISCLOSURES

#### I. GENERAL

- **A.** Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- **B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the CPO to void the contract, and may result in the suspension or debarment of the bidder or subcontractor. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

#### **II. ASSURANCES**

The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

#### A. Conflicts of Interest

1. The Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

- (a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.
- (b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.
- (e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

#### B. Negotiations

1. The Code provides in pertinent part:

Section 50-15. Negotiations.

- (a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.
- 2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### C. Inducements

1. The Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-25, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### D. Revolving Door Prohibition

1. The Code provides:

Section 50-30. Revolving door prohibition. CPOs, SPOs, procurement compliance monitors, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-30, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### E. Reporting Anticompetitive Practices

1. The Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, CPO, SPO, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the CPO.

2. The bidder assures the Department that it has not failed to report any relevant facts concerning the practices addressed in Section 50-40 which may involve the contract for which the bid is submitted.

#### F. Confidentiality

1. The Code provides:

Section 50-45. Confidentiality. Any CPO, SPO, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

2. The bidder assures the Department that it has no knowledge of any fact relevant to the practices addressed in Section 50-45 which may involve the contract for which the bid is submitted.

#### G. Insider Information

1. The Code provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

2. The bidder assures the Department that it has no knowledge of any facts relevant to the practices addressed in Section 50-50 which may involve the contract for which the bid is submitted.

#### **III. CERTIFICATIONS**

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. Section 50-2 of the Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible CPO whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

#### A. Bribery

1. The Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
  - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
  - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

#### B. Felons

1. The Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

1. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

#### C. Debt Delinquency

1. The Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the CPO may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

#### D. Prohibited Bidders, Contractors and Subcontractors

1. The Code provides:

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

#### E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

#### F. Educational Loan

- 1. Section 3 of the Educational Loan Default Act provides:
- § 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.
- 2. The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

#### G. Bid-Rigging/Bid Rotating

- 1. Section 33E-11 of the Criminal Code of 1961 provides:
- § 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.
- (b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

2. The bidder certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.

#### H. International Anti-Boycott

- 1. Section 5 of the International Anti-Boycott Certification Act provides:
- § 5. State contracts. Every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or \$10,000.00, whichever is less, shall contain certification, as a material condition of the contract, by which the contractor agrees that neither the contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.
- 2. The bidder makes the certification set forth in Section 5 of the Act.

#### I. Drug Free Workplace

- 1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.
- 2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.
- (c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.
- (d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.
- (e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

#### J. <u>Disclosure of Business Operations in Iran</u>

Section 50-36 of the Code, 30ILCS 500/50-36 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offeror, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

- (1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.
- (2) The Company has, on or after August 5, 1996, made an investment of \$20 million or more, or any combination of investments of at least \$10 million each that in the aggregate equals or exceeds \$20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

The terms "Business operations", "Company", "Mineral-extraction activities", "Oil-related activities", "Petroleum resources", and "Substantial action" are all defined in the Code.

Failure to make the disclosure required by the Code shall cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid, offer, or proposal or awarding the contract. The name of each Company disclosed as doing business or having done business in Iran will be provided to the State Comptroller.

Check the appropriate statement:	
// Company has no business operations in Iran to disclose.	
/ / Company has business operations in Iran as disclosed the attached document.	

#### K. Apprenticeship and Training Certification (Does not apply to federal aid projects)

In accordance with the provisions of Section 30-22 (6) of the Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.

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The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

#### L. Political Contributions and Registration with the State Board of Elections

Sections 20-160 and 50-37 of the Code regulate political contributions from business entities and any affiliated entities or affiliated persons bidding on or contracting with the state. Generally under Section 50-37, any business entity, and any affiliated entity or affiliated person of the business entity, whose current year contracts with all state agencies exceed an awarded value of \$50,000, are prohibited from making any contributions to any political committees established to promote the candidacy of the officeholder responsible for the awarding of the contracts or any other declared candidate for that office for the duration of the term of office of the incumbent officeholder or a period 2 years after the termination of the contract, whichever is longer. Any business entity and affiliated entities or affiliated persons whose state contracts in the current year do not exceed an awarded value of \$50,000, but whose aggregate pending bids and proposals on state contracts exceed \$50,000, either alone or in combination with contracts not exceeding \$50,000, are prohibited from making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for awarding the pending contract during the period beginning on the date the invitation for bids or request for proposals is issued and ending on the day after the date of award or selection if the entity was not awarded or selected. Section 20-160 requires certification of registration of affected business entities in accordance with procedures found in Section 9-35 of The Election Code.

By submission of a bid, the contractor business entity acknowledges and agrees that it has read and understands Sections 20-160 and 50-37 of the Code, and that it makes the following certification:

The undersigned business entity certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. If the business entity is required to register, the CPO shall verify that it is in compliance on the date the bid or proposal is due. The CPO shall not accept a bid or proposal if the business entity is not in compliance with the registration requirements.

These requirements and compliance with the above referenced statutory sections are a material part of the contract, and any breach thereof shall be cause to void the contract under Section 50-60 of the Code. This provision does not apply to Federal-aid contracts.

#### M. Lobbyist Disclosure

Section 50-38 of the Code requires that any bidder or offeror on a State contract that hires a person required to register under the Lobbyist Registration Act to assist in obtaining a contract shall:

- (i) Disclose all costs, fees, compensation, reimbursements, and other remunerations paid or to be paid to the lobbyist related to the contract.
- (ii) Not bill or otherwise cause the State of Illinois to pay for any of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration, and
- (iii) Sign a verification certifying that none of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration were billed to the State.

This information, along with all supporting documents, shall be filed with the agency awarding the contract and with the Secretary of State. The CPO shall post this information, together with the contract award notice, in the online Procurement Bulletin.

Pursuant to Subsection (c) of this Section, no person or entity shall retain a person or entity to attempt to influence the outcome of a procurement decision made under the Code for compensation contingent in whole or in part upon the decision or procurement. Any person who violates this subsection is quilty of a business offense and shall be fined not more than \$10,000.

Bidder acknowledges that it is required to disclose the hiring of any person required to register pursuant to the Illinois Lobbyist Registration Act (25 ILCS 170) in connection with this contract.

	Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract.
Or	
	Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:
	address of person:ees, compensation, reimbursements and other remuneration paid to said person:

#### IV. DISCLOSURES

A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The bidder further certifies that the Department has received the disclosure forms for each bid.

The CPO may void the bid, or contract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Code. Furthermore, the CPO may void the contract and the surety providing the performance bond shall be responsible for completion of the contract.

#### B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all bids of more than \$25,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

The current annual salary of the Governor is \$177,412.00.

In addition, all disclosures shall indicate any other current or pending contracts, proposals, leases, or other ongoing procurement relationships the bidding entity has with any other unit of state government and shall clearly identify the unit and the contract, proposal, lease, or other relationship.

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.** 

#### C. Disclosure Form Instructions

#### Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YESNO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES NO
4.	Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable**. The person signing can be, but does not have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

#### Form B: Instructions for Identifying Other Contracts & Procurement Related Information

Disclosure Form B must be completed for each bid submitted by the bidding entity. *Note: Checking the <u>NOT APPLICABLE STATEMENT</u> on Form A <u>does not</u> allow the bidder to ignore Form B. Form B must be completed, checked, and dated or the bidder may be considered nonresponsive and the bid will not be accepted.* 

The Bidder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

Option I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.

Option II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type "See Affidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the Affidavit of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.

#### ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name		
Legal Address		
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City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
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Disclosure of the information contained in this Form is required by the Section 50-35 of the Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$25,000, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

The current annual salary of the Governor is \$177,412.00.

#### DISCLOSURE OF FINANCIAL INFORMATION

 Disclosure of Financial Information. The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 60% of the annual salary of the Governor. (Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)

FOR IND	IVIDUAL (type	or print information)		
NA	ME:			
AD	DRESS			
Тур	e of ownership	/distributable income share:	:	
stoo		sole proprietorship	Partnership	other: (explain on separate sheet):
% 0	r \$ value of own	ership/distributable income sh	are:	

- **2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.
  - (a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes No

If your answer is yes, please answer each of the following questions.

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois State
   Toll Highway Authority?
   Yes \_\_\_No \_\_
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary.

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3.	If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are you e (i) more than 7 1/2% of the total distributable income of your fire corporation, or (ii) an amount in excess of 100% of the annual salary	ntitled to receive n, partnership, association or
4.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you a or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amour salary of the Governor?	nd your spouse of the total distributable income
	employment of spouse, father, mother, son, or daughter, including con previous 2 years.	
If your	answer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employee Board or the Illinois State Toll Highway Authority?	of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appointed agency of the State of Illinois, and his/her annual salary exceeds 60 annual salary of the Governor, provide the name of the spouse and/of the State agency for which he/she is employed and his/her annual	d to or employed by any 0% of the or minor children, the name
3.	If your spouse or any minor children is/are currently appointed to or estate of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributable firm, partnership, association or corporation, or (ii) an amount in excannual salary of the Governor?	I salary of the Governor, e income of your
4.	If your spouse or any minor children are currently appointed to or er State of Illinois, and his/her annual salary exceeds 60% of the annual and your spouse or any minor children entitled to receive (i) more that aggregate of the total distributable income from your firm, partnership (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, are you an 15% in the
		Yes No
unit of	e status; the holding of elective office of the State of Illinois, the govern local government authorized by the Constitution of the State of Illinoic currently or in the previous 3 years.	
	onship to anyone holding elective office currently or in the previous 2 years daughter.	ears; spouse, father, mother, YesNo
Americ of the S	ntive office; the holding of any appointive government office of the State a, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in exceptance of that office currently or in the previous 3 years.	e State of Illinois or the statues
	nship to anyone holding appointive office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any registered lob	byist of the State government. YesNo

YesNo
us 3 years, by any registered election or reelection y county clerk of the State of Illinois, or any political of State or the Federal Board of Elections.  YesNo
or daughter; who was a compensated employee in the ommittee registered with the Secretary of State or any on committee registered with either the Secretary of
Yes No
er agent of the bidder or offeror who is not identified in municating, or may communicate with any State officer or a continuing obligation and must be promptly supplemented term of the contract. If no person is identified, enter "None

3.

**4. Debarment Disclosure.** For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental

entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below: Name of person(s): Nature of disclosure: APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge. Completed by: Signature of Individual or Authorized Representative Date NOT APPLICABLE STATEMENT Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A. This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page. Signature of Authorized Representative Date

The bidder has a continuing obligation to supplement these disclosures under Sec. 50-35 of the Code.

### ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Financial Related Information Disclosure

Contractor Name	)				
Legal Address					
City, State, Zip					
Telephone Numb	per		Email Address	Fax Number (if available)	
his information		art of the pub	s Form is required by the Section 5 slicly available contract file. This Fo contracts.		
	DISCLOSURE (	OF OTHER C	CONTRACTS AND PROCUREMEN	NT RELATED INFORM	<u>ATION</u>
has any pendi any other Stat	ing contracts (incl te of Illinois agend	luding leases cy: Yes _	ment Related Information. The B s), bids, proposals, or other ongoing No ocomplete the signature box on the	procurement relations	
	uch as bid or proje		relationship by showing State of Illi attach additional pages as necessa		
		THE FOL	LOWING STATEMENT MUST BE	CHECKED	
			Signature of Authorized Representative		Date
			OWNERSHIP CERTIFICATION	<u>ON</u>	
	ertify that the foll ownership.	owing staten	nent is true if the individuals for all	submitted Form A disc	losures do not total
,	Any remaining ov		erest is held by individuals received outive income or holding less than a		
[	☐ Yes ☐ No		Form A disclosure(s) established 10	00% ownership)	

#### **SPECIAL NOTICE TO CONTRACTORS**

The following requirements of the Illinois Department of Human Rights' Rules and Regulations are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

#### CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.



Contract No. 97507 MADISON County Section 10-00085-01-LS (Edwardsville) Project TE-00D8(145) Route FAP 789 (II 159/143) District 8 Construction Funds

PART I. IDENTIFIC	ATION																	
Dept. Human Rights	s #						_ Du	ration (	of Proj	ect: _								
Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract work projection including a projecti	bidder hark is to be	as analyz e perform	ed mir ed, an	d for th d fema	ne locati	ions fro	m whic	h the b	idder re	cruits	employe	ees, and he	ereb	y subm	its the foll	owir con	ng workfo	n orce
		TOTA	AL Wo	rkforce	Projec	tion for	Contra	ıct						(	CURRENT			ES
				MIN	ORITY I	EMPI O	YFFS			TRA	AINEES				TO BE			
JOB CATEGORIES	_	TAL OYEES F	BL/	ACK F	HISP			HER OR. F	APPI TIC M	REN-	ON T	HE JOB INEES F	-		OTAL LOYEES F			ORITY DYEES F
OFFICIALS (MANAGERS)	IVI	Г	IVI		IVI	Г	IVI	Г	IVI	-	IVI	Г	_	IVI	Г		IVI	Г
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
_		BLE C					,	Į.	_	,		FOR	DF	PARTN	IENT USE	: 01	IJΥ	
EMPLOYEES	OTAL Tra	aining Pro TAL	ojectio I	n for C	Contract		*^1	ΓHER	-						00_			
IN		OYEES	BL	ACK	HISP	ANIC		NOR.										
TRAINING	M	F	M	F	М	F	М	F										
APPRENTICES																		
ON THE JOB TRAINEES																		

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

Other minorities are defined as Asians (A) or Native Americans (N).
Please specify race of each employee shown in Other Minorities column.

Contract No. 97507 MADISON County Section 10-00085-01-LS (Edwardsville) Project TE-00D8(145) Route FAP 789 (II 159/143) District 8 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

B.	Included in "Total Employees" under Table A is the total event the undersigned bidder is awarded this contract.	I number of <b>new hires</b> th	at would be employed in the
	The undersigned bidder projects that: (number)		new hires would be
	recruited from the area in which the contract project is long new hires would	ocated; and/or (number)	rea in which the bidder's principal
	office or base of operation is located.		• •
C.	Included in "Total Employees" under Table A is a project undersigned bidder as well as a projection of numbers of		
	The undersigned bidder estimates that (number)be directly employed by the prime contractor and that (remployed by subcontractors.	number)	persons will persons will be
PART II	III. AFFIRMATIVE ACTION PLAN		
	The undersigned bidder understands and agrees that in utilization projection included under <b>PART II</b> is determined in any job category, and in the event that the undersigned commencement of work, develop and submit a written A (geared to the completion stages of the contract) where utilization are corrected. Such Affirmative Action Plan with the <b>Department of Human Rights</b> .	ned to be an underutilizat ed bidder is awarded this Affirmative Action Plan in By deficiencies in minorit	ion of minority persons or women s contract, he/she will, prior to cluding a specific timetable ty and/or female employee
	The undersigned bidder understands and agrees that the submitted herein, and the goals and timetable included to be part of the contract specifications.		
Compa	pany	Telephone Numb	per
Addres			
	NOTICE REGARDIN	IG SIGNATURE	
	Bidder's signature on the Proposal Signature Sheet will constituted completed only if revisions are required.	ite the signing of this form.	The following signature block needs
Signati	uture: 🗌	Title:	Date:
Instruction	tions: All tables must include subcontractor personnel in addition to	prime contractor personnel.	
Table A	A - Include both the number of employees that would be hired (Table B) that will be allocated to contract work, and include should include all employees including all minorities, apprent	e all apprentices and on-the-jol	trainees. The "Total Employees" column
Table B	<ul> <li>Include all employees currently employed that will be allocat currently employed.</li> </ul>	ed to the contract work including	ng any apprentices and on-the-job trainees
Table C	C - Indicate the racial breakdown of the total apprentices and on	-the-job trainees shown in Tab	le A.
			DO 4050 (D

#### ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. <u>CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:</u>

1.	Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES NO
2.	If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES NO

Contract No. 97507 MADISON County Section 10-00085-01-LS (Edwardsville) Project TE-00D8(145) Route FAP 789 (II 159/143) District 8 Construction Funds

#### PROPOSAL SIGNATURE SHEET

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
(IF A CO-PARTNERSHIP)		
(,		
		Name and Address of All Members of the Firm:
_		
	Corporate Name	
(IF A COPPORATION)	Бу	Signature of Authorized Representative
(IF A CORPORATION)		
		Typed or printed name and title of Authorized Representative
	Attest	
(IF A JOINT VENTURE, USE THIS SECTION		Signature
FOR THE MANAGING PARTY AND THE	Business Address	
SECOND PARTY SHOULD SIGN BELOW)		
	Corporate Name	
(IE A JOINT VENTURE)	Ву	Signature of Authorized Representative
(IF A JOINT VENTURE)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	Signature
	Business Address	
	Dusiliess Address	
If more than two parties are in the joint venture,	please attach an addit	ional signature sheet.

# Illinois Department of Transportation

#### **Return with Bid**

#### Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

			item No.
			Letting Date
KNOW ALL MEN BY THESE PRESE	ENTS. That We		
as PRINCIPAL, and			
as principal, and			
hald is other assembly and finally had	and water the CTATE OF	- II I INOIC : the menel -	as SURETY, ar
specified in the bid proposal under "	Proposal Guaranty" in ef	fect on the date of the Inv	sum of 5 percent of the total bid price, or for the amou ritation for Bids, whichever is the lesser sum, well and tru- ves, our heirs, executors, administrators, successors an
	h the Department of Tr	-	he PRINCIPAL has submitted a bid proposal to the provement designated by the Transportation Bulletin Ite
and as specified in the bidding and after award by the Department, the including evidence of the required iperformance of such contract and failure of the PRINCIPAL to make the to the Department the difference not	contract documents, sub- PRINCIPAL shall enter in insurance coverages and or the prompt payment of e required DBE submissing to exceed the penalty howith another party to pe	mit a DBE Utilization Plan into a contract in accordar d providing such bond as of labor and material furn on or to enter into such co nereof between the amour	ICIPAL; and if the PRINCIPAL shall, within the time in that is accepted and approved by the Department; and noce with the terms of the bidding and contract documents specified with good and sufficient surety for the faithful ished in the prosecution thereof; or if, in the event of the protect and to give the specified bond, the PRINCIPAL paint specified in the bid proposal and such larger amount for said bid proposal, then this obligation shall be null are
paragraph, then Surety shall pay the	penal sum to the Depart the Department may brir	ment within fifteen (15) dang an action to collect the	with any requirement as set forth in the preceding ays of written demand therefor. If Surety does not make for amount owed. Surety is liable to the Department for all in whole or in part.
In TESTIMONY WHEREOF, to	he said PRINCIPAL and	the said SURETY have ca	aused this instrument to be signed by
their respective officers this	day of		A.D., .
PRINCIPAL	<u> </u>	SURETY	
(Company Na	ma)		(Company Name)
		Dv	
By (Signatur	re & Title)	By:	(Signature of Attorney-in-Fact)
	Notary Ce	rtification for Principal and	d Surety
STATE OF ILLINOIS, County of	Trouting Co	- various var a various pur univ	
I,		a Notary P	ublic in and for said County, do hereby certify that
			asion in and ion card coality, as increasy contary and
	(Insert names of individu	and and als signing on behalf of PF	RINCIPAL & SURETY)
who are each personally known to m	ne to be the same persor this day in person and ac	ns whose names are subsi	cribed to the foregoing instrument on behalf of PRINCIPA that they signed and delivered said instrument as their from
Given under my hand and not	arial seal this	day of	A.D
My commission expires			
In Proceedings of the Control of the	the of the D	Fame the D	Notary Public
	Signature and Title line b	elow, the Principal is ensu	file an Electronic Bid Bond. By signing the proposal ar uring the identified electronic bid bond has been execute ons of the bid bond as shown above.
Electronic Bid Bond ID#	Company / Bido	der Name	Signature and Title



#### **DBE Utilization Plan**

#### (1) Policy

It is public policy that disadvantaged businesses as defined in 49 CFR Part 26 and the Special Provision shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal or State funds. Consequently the requirements of 49 CFR Part 26 apply to this contract.

#### (2) Obligation

Date

The contractor agrees to ensure that disadvantaged businesses as defined in 49 CFR Part 26 and the Special Provision have the maximum opportunity to participate in the performance of contracts or subcontracts financed in whole or in part with Federal or State funds. The contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 and the Special Provision to ensure that said businesses have the maximum opportunity to compete for and perform under this contract. The contractor shall not discriminate on the basis of race, color, national origin or sex in the award and performance of contracts.

(3) Pro	ject and Bid Identification			
Comple	te the following information concerning the project and bid:			
Route		Total Bid		<u> </u>
Section		Contract DBE Goal	<del></del>	
Project			(Percent)	(Dollar Amount)
County				
Letting [	Date			
Contrac	t No.			
Letting I	tem No.			
(4) Ass	urance			
	in my capacity as an officer of the undersigned bidder (or bidderly company: (check one)  Meets or exceeds contract award goals and has provided doctorial d	umented participation as for 2025, required by the Speciate each business will perform the effort documentation to make the signed participate of each business participate of the contract.	al Provision even a commercianeet the goals required by the ion statements pating in this plant	idencing availability and lly useful function in the and that my company has Special Provision in forms SBE 2025, an and assuring that each
Ву	Company	The "as read" Low Bidder is res		·
Title		submitted in accordance with the		
Hille		Bureau of Small Business Ente 2300 South Dirksen Parkway	erprises	Local Let Projects Submit forms to the

The Department of Transportation is requesting disclosure of information that is necessary to accomplish the purpose as outlined under State and Federal law. Disclosure of this information is **REQUIRED**. Failure to provide any information will result in the contract not being awarded. This form has been approved by the State Forms Manager Center.

Springfield, Illinois 62764

Local Agency

(R)	of Transportation	D	BE Participation	n Statement
Subcontrac	tor Registration	Le	etting	
Participation	on Statement	Ite	em No	
(1) Instruct	ions	С	ontract	
be submitte additional s	nust be completed for each disadvantaged business pared in accordance with the special provision and will be a pace is needed complete an additional form for the firm.	ttached to the Ut		
(2) Work Pay Item	I			
No.	Description	Quantity	Unit Price	Total
	<u> </u>		Total	
(4) Committee The unders has agreed execute a constant in that comple	ment igned certify that the information included herein is true to perform a commercially useful function in the work of ontract with the prime contractor. The undersigned furthay be made without prior approval from the Departmente and accurate information regarding actual work perforwided to the Department.	and correct, and f the contract iter her understand t nt's Bureau of Sm ormed on this pro	that the DBE firn m(s) listed above hat no changes to nall Business Ent	n listed below and to o this erprises and
Title	•			
Data	Det	_		
Contact				
		_		
_				
Jity/ State/2	Oity	, Clato, <b>L</b> ip		

The Department of Transportation is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the state and federal law. Disclosure of this information is **REQUIRED**. Failure to provide any information will result in the contract not being awarded. This form has been approved by the State Forms Management Center.

SBE 2025 (Rev. 11/03/09)

WC

#### PROPOSAL ENVELOPE



#### **PROPOSALS**

for construction work advertised for bids by the Illinois Department of Transportation

Item No.	Item No.	Item No.

#### Submitted By:

lame:	
address:	
Phone No.	

Bidders should use an IDOT proposal envelope or affix this form to the front of a 10" x 13" envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

Engineer of Design and Environment - Room 326 Illinois Department of Transportation 2300 South Dirksen Parkway Springfield, Illinois 62764

#### **NOTICE**

Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

#### **NOTICE**

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

Contract No. 97507 MADISON County Section 10-00085-01-LS (Edwardsville) Project TE-00D8(145) Route FAP 789 (II 159/143) District 8 Construction Funds



#### **SUBCONTRACTOR DOCUMENTATION**

Public Acts 96-0795, 96-0920, and 97-0895 enacted substantial changes to the provisions of the Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors that entered into a contractual agreement with a total value of \$50,000 or more with a person or entity who has a contract subject to the Code and approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Illinois Department of Transportation's CPO upon request within 15 calendar days after execution of the subcontract.

Financial disclosures required pursuant to Sec. 50-35 of the Code must be submitted for all applicable subcontractors. The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled <u>State Required Ethical Standards Governing Subcontractors</u>.

#### STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The CPO may terminate or void the contract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

Section 50-2 of the Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible CPO whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

#### A. Bribery

1. The Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
  - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
  - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

#### B. Felons

1. The Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

#### C. Debt Delinquency

#### 1. The Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the CPO may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

#### D. Prohibited Bidders, Contractors and Subcontractors

#### 1. The Code provides:

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

#### E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

The undersigned, on behalf of the subcontracting company, has read and understands the above certifications and makes the certifications as required by law.

Name of Subcontracting Company	_
Authorized Officer	Date

#### SUBCONTRACTOR DISCLOSURES

#### I. DISCLOSURES

**A.** The disclosures hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed. The subcontractor further certifies that the Department has received the disclosure forms for each subcontract.

The CPO may void the bid, contract, or subcontract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Code. Furthermore, the CPO may void the contract.

#### B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

The current annual salary of the Governor is \$177,412.00.

In addition, all disclosures shall indicate any other current or pending contracts, subcontracts, proposals, leases, or other ongoing procurement relationships the subcontracting entity has with any other unit of state government and shall clearly identify the unit and the contract, subcontract, proposal, lease, or other relationship.

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.** 

#### C. <u>Disclosure Form Instructions</u>

#### Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES NO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES NO
	(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4.	Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per subcontract</u> even if a specific individual would require a yes answer to more than one question.)
	answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in the

A "YES" answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in the subcontracting entity or the subcontracting entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable**. The person signing can be, but does not have to be, the person for which the form is being completed. The subcontractor is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> on page 2 of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

#### Form B: Instructions for Identifying Other Contracts & Procurement Related Information

Disclosure Form B must be completed for each subcontract submitted by the subcontracting entity. *Note: Checking the <u>NOT APPLICABLE STATEMENT</u> on Form A <u>does not</u> allow the subcontractor to ignore Form B. Form B must be completed, checked, and dated or the subcontract will not be approved.* 

The Subcontractor shall identify, by checking Yes or No on Form B, whether it has any pending contracts, subcontracts, leases, bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the subcontractor only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the subcontractor must list all non-IDOT State of Illinois agency pending contracts, subcontracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts or subcontracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included.

### ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form A Subcontractor: Financial Information & Potential Conflicts of Interest Disclosure

Subcontractor Name		
Legal Address		
9		
City, State, Zip		
Oity, Otato, Zip		
T 1 1 N 1	E 3.4.11	F N 1 (% 3111)
Telephone Number	Email Address	Fax Number (if available)
		, ,

Disclosure of the information contained in this Form is required by the Section 50-35 of the Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all openended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

The current annual salary of the Governor is \$177,412.00.

FOR INDIVIDUAL (type or print information)

#### DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the SUBCONTRACTOR (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than 60% of the annual salary of the Governor. (Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)

	7
NAMI	E:
ADDF	RESS
Type	of ownership/distributable income share:
stock % or \$	sole proprietorship Partnership other: (explain on separate shee value of ownership/distributable income share:
	ure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following inflict of interest relationships apply. If the answer to any question is "Yes", please attach additional describe.
	nployment, currently or in the previous 3 years, including contractual employment of services.  YesNo nswer is yes, please answer each of the following questions.
1. /	Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority?  YesNo
(	Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary.

-C-

	3.	If you are currently appointed to or employed by any agency of the S salary exceeds 60% of the annual salary of the Governor, are you er (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary	ntitled to receive , partnership, association or
	4.	If you are currently appointed to or employed by any agency of the S salary exceeds 60% of the annual salary of the Governor, are you ar or minor children entitled to receive (i) more than 15 % in the aggreincome of your firm, partnership, association or corporation, or (ii) are the salary of the Governor?	nd your spouse egate of the total distributable
(b)		employment of spouse, father, mother, son, or daughter, including coprevious 2 years.	ontractual employment services  YesNo
	If	your answer is yes, please answer each of the following questions.	. 66 <u></u> . 16 <u></u>
	1.	Is your spouse or any minor children currently an officer or employee Board or the Illinois State Toll Highway Authority?	of the Capitol Development YesNo
		Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appagency of the State of Illinois, and his/her annual salary exceed annual salary of the Governor, provide the name of your spouse and/of the State agency for which he/she is employed and his/her annual	pointed to or employed by any ds 60% of the for minor children, the name
	3.	If your spouse or any minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributab firm, partnership, association or corporation, or (ii) an amount in annual salary of the Governor?	Il salary of the Governor, le income of your
	4.	If your spouse or any minor children are currently appointed to or ere State of Illinois, and his/her annual salary exceeds 60% of the annual are you and your spouse or minor children entitled to receive (i) meaggregate of the total distributable income of your firm, partnership, (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, ore than 15% in the
(c)	Electiv	e status; the holding of elective office of the State of Illinois, the gover	rnment of the United States, any
		local government authorized by the Constitution of the State of Illinois currently or in the previous 3 years.	s or the statutes of the State of YesNo
(d)		onship to anyone holding elective office currently or in the previous 2 years daughter.	vears; spouse, father, mother, YesNo
(e)	Americ of the	ntive office; the holding of any appointive government office of the States, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in excharge of that office currently or in the previous 3 years.	ne State of Illinois or the statutes
		nship to anyone holding appointive office currently or in the previous 2 daughter.	2 years; spouse, father, mother, YesNo
(g)	Emplo	yment, currently or in the previous 3 years, as or by any registered lob	obyist of the State government. YesNo

(h) Relationship to anyone who is or was a registered lob son, or daughter.	byist in the previous 2 years; spouse, father, mother, YesNo
(i) Compensated employment, currently or in the previous committee registered with the Secretary of State or a action committee registered with either the Secretary of State or a state of the secretary of the secret	ny county clerk of the State of Illinois, or any political
(j) Relationship to anyone; spouse, father, mother, son, or last 2 years by any registered election or re-election or county clerk of the State of Illinois, or any political activate or the Federal Board of Elections.	ommittee registered with the Secretary of State or any
	Yes No
Communication Disclosure.  Disclose the name and address of each lobbyist and othe Section 2 of this form, who is has communicated, is commemployee concerning the bid or offer. This disclosure is a supplemented for accuracy throughout the process and the identified, enter "None" on the line below:	nunicating, or may communicate with any State officer o a continuing obligation and must be promptly
Name and address of person(s):	

3

**4. Debarment Disclosure.** For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly

supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below: Name of person(s): Nature of disclosure: APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge. Completed by: Signature of Individual or Authorized Officer Date **NOT APPLICABLE STATEMENT** Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A. This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page. Signature of Authorized Officer Date

## ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

Subcontractor Name				
Legal Address				
City, State, Zip				
Telephone Number	Email Address	Fax Number (if available)		
Disclosure of the information contained in this Form is required by the Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all open-ended contracts.				
DISCLOSURE OF OTHER CONTRA	CTS, SUBCONTRACTS, AND PR	OCUREMENT RELATED INFORMATIO	<u> N(</u>	
1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency:  Yes No  If "No" is checked, the subcontractor only needs to complete the signature box on the bottom of this page.				
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:			)	
THE FOLLOWING STATEMENT MUST BE CHECKED				
,	Signature of Authorized Officer	Date		
	OWNERSHIP CERTIFICATION	[		
Please certify that the following statement is of ownership	s true if the individuals for all submi	tted Form A disclosures do not total 100	%	
Any remaining ownership interest is parent entity's distributive income o		than \$106,447.20 of the bidding entity's of interest.	or	
☐ Yes ☐ No ☐ N/A (Form	A disclosure(s) established 100% of	ownership)		

## Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m March 8, 2013. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 97507 MADISON County Section 10-00085-01-LS (Edwardsville) Project TE-00D8(145) Route FAP 789 (II 159/143) District 8 Construction Funds

Remove and replace existing sidewalk, remove and replace curb and gutter and the installation of decorative lighting, located on North Main Street from High Street to L Street in the City of Edwardsville.

- 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 101.09 of the Standard Specifications for Road and Bridge Construction, 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 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.

By Order of the Illinois Department of Transportation

Ann L. Schneider, Secretary

#### **CONTRACT 97507**

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2013

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-12) (Revised 1-1-13)

#### SUPPLEMENTAL SPECIFICATIONS

Std. Sp	<del></del>	<u>ge No</u>
105	Control of Work	1
107	Legal Regulations and Responsibility to Public	2
202	Earth and Rock Excavation	4
211	Topsoil and Compost	5
407	Topsoil and Compost	6
420	Portland Cement Concrete Pavement	10
424	Portland Cement Concrete Sidewalk	12
503	Concrete Structures	13
504	Precast Concrete Structures	14
540	Box Culverts	15
603	Adjusting Frames and Grates of Drainage and Utility Structures	16
610	Shoulder Inlets with Curb	18
642	Shoulder Rumble Strips	19
643	Impact Attenuators	20
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860	Master Controller	27
1006	Metals	28
1042	Precast Concrete Products	29
1073	Controller	30
1083	Elastomeric Bearings	31
1101	General Equipment	32
1106	Work Zone Traffic Control Devices	34

#### RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

CHE	CK S	HEET#	<u>NO.</u>
1	X	Additional State Requirements for Federal-Aid Construction Contracts	
		(Eff. 2-1-69) (Rev. 1-1-10)	35
2	Χ	Subletting of Contracts (Federal-Aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	38
3	Χ	FFO (Fff 7-21-78) (Rev. 11-18-80)	39
4		Specific Equal Employment Opportunity Responsibilities Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94)	49
5		Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-13)	54
6		Ashestos Bearing Pad Removal (Fff. 11-1-03)	59
7		Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal (Eff. 6-1-89) (Rev. 1-1-09)	60
8		Haul Road Stream Crossings, Other Temporary Stream Crossings, and	
_		In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	61
9		Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07)	62
10		Construction Layout Stakes (Fff 5-1-93) (Rev. 1-1-07)	65
11		Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07)	99
12		Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07)	70
13		Hot-Mix Asphalt Surface Correction (Eff. 11-1-87) (Rev. 1-1-09)	74
14		Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-09)	76
15		PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07)	11
16		Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07)	79
17		Polymer Concrete (Eff. 8-1-95) (Rev. 1-1-08)	80
18		PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07)	82
19		Pine Underdrains (Eff. 9-9-87) (Rev. 1-1-07)	83
20		Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-12)	84
21		Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-12)	88
22		Temporary Modular Glare Screen System (Eff. 1-1-00) (Rev. 1-1-07)	90
23		Temporary Portable Bridge Traffic Signals (Eff. 8-1-03) (Rev. 1-1-07)	92
24		Work Zone Public Information Signs (Eff. 9-1-02) (Rev. 1-1-07)	05
25		Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	90
26		English Substitution of Metric Bolts (Eff. 7-1-96)	90
27		English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03)	97
28		Calcium Chloride Accelerator for Portland Cement Concrete (Eff. 1-1-01) (Rev. 1-1-13)	90
29		Portland Cement Concrete Inlay or Overlay for Pavements (Eff. 11-1-08) (Rev. 1-1-13)	102
30		Quality Control of Concrete Mixtures at the Plant (Eff. 8-1-00) (Rev. 1-1-11)	110
31		Quality Control/Quality Assurance of Concrete Mixtures (Eff. 4-1-92) (Rev. 1-1-11)	122
33		- Digital Lerrain Modeling for Estimoric Calculations (E.L. 4* L-U/)	

#### LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

The following LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

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				F-6641	Davised
<u>LR #</u>	<u>Pg #</u>	_	Special Provision Title	Effective	Revised
LR SD12		Ш	Slab Movement Detection Device	Nov. 11, 1984	Jan. 1, 2007
LR SD13			Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR SD406			Safety Edge	April 1, 2011	
LR 105	30	$\boxtimes$	Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
LR 107-2			Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-4	33		Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 107-7		Ħ	Wages of Employees on Public Works	Jan. 1, 1999	Jan. 1, 2012
LR 108			Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 109		Ħ	Equipment Rental Rates	Jan. 1, 2012	
LR 212		Ħ	Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1			Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		Ħ	Bituminous Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
		H	Bituminous Treated Earth Surface	Jan. 1, 2007	Apr. 1, 2012
LR 400-1		片	Bituminous Surface Plant Mix (Class B)	Jan. 1, 2008	7.p. 1, _0 1_
LR 400-2				Jan. 1, 2012	
LR 400-3		$\vdash$	Hot In-Place Recycling (HIR) – Surface Recycling	Apr. 1, 2012	Jun. 1, 2012
LR 400-4			Full-Depth Reclamation (FDR) with Emulsified Asphalt	Apr. 1, 2012 Apr. 1, 2012	Jun. 1, 2012
LR 400-5			Cold In-Place Recycling (CIR) With Emulsified Asphalt	June 1, 2012	Juii. 1, 2012
LR 400-6			Cold In Place Recycling (CIR) with Foamed Asphalt		
LR 400-7			Full-Depth Reclamation (FDR) with Foamed Asphalt	June 1, 2012	.1 4 0007
LR 402			Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-1			Surface Profile Milling of Existing, Recycled or Reclaimed Flexible	Apr. 1, 2012	Jun. 1, 2012
		_	Pavement  Bituaria and Het Min Sand Seel Coet	Aug. 1, 1969	Jan. 1, 2007
LR 403-2			Bituminous Hot Mix Sand Seal Coat	Jan. 1, 2008	Jan. 1, 2007
LR 406			Filling HMA Core Holes with Non-shrink Grout		Jan. 2, 2007
LR 420			PCC Pavement (Special)	May 12, 1964	
LR 442			Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451			Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1			Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2			Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542			Pipe Culverts, Type (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663			Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702			Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1000-1			Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with	Apr. 1, 2012	Jun. 1, 2012
		_	Emulsified Asphalt Mix Design Procedures		
LR 1000-2			Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with	June 1, 2012	
LIX 1000 Z			Foamed Asphalt Mix Design Procedures		
LR 1004		П	Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1030		H	Growth Curve	Mar. 1, 2008	Jan. 1, 2010
LR 1030 LR 1032-1		H	Emulsified Asphalts	Jan. 1, 2007	Feb. 7, 2008
LR 1032-1 LR 1102		H	Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007	•
LR 1102		Щ	Toda Mix of Travoling Flair Mix Equipmont		

### BDE SPECIAL PROVISIONS For the January 18 and March 8, 2013 Lettings

The following special provisions indicated by an "x" are applicable to this contract. An \* indicates a new or revised special provision for the letting.

File Name	<u>Pg.</u>		Special Provision Title	<u>Effective</u>	Revised
80240			Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
* 80274.			Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
* 80309	34	Х	Anchor Bolts	Jan. 1, 2013	1
80192			Automated Flagger Assistance Device	Jan. 1, 2008	
80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Jan. 1, 2012
80241			Bridge Demolition Debris	July 1, 2009	
80276			Bridge Relief Joint Sealer	Jan. 1, 2012	Aug. 1, 2012
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80292			Coarse Aggregate in Bridge Approach Slabs/Footings	April 1, 2012	
* 80310			Coated Galvanized Steel Conduit	Jan. 1, 2013	
80198			Completion Date (via calendar days)	April 1, 2008	
80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293		1	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	
80294			Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of	April 1, 2012	
			Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet		
* 80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	•
80261	35	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	
80029	38	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Aug. 2, 2011
* 80312			Drain Pipe, Tile, Drainage Mat, and Wall Drain Fabric Bearing Pads	Jan. 1, 2013 Jan. 1, 2013	
* 80313				Jan. 1, 2011	
80265			Friction Aggregate	April 1, 2009	July 1, 2009
80229			Fuel Cost Adjustment Granular Materials	Nov. 1, 2012	ouly 1, 2000
80303			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Jan. 1, 2013
* 80304 * 80169			High Tension Cable Median Barrier	Jan. 1, 2007.	Jan. 1, 2013
80246			Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
* 80315			Insertion Lining of Culverts	Jan. 1, 2013	
80045			Material Transfer Device	June 15, 1999	Jan. 1, 2009
80297			Modified Urethane Pavement Marking	April 1, 2012	
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
* 80253			Movable Traffic Barrier	Jan: 1, 2010	Jan. 1, 2013
80231			Pavement Marking Removal	April 1, 2009	
80298			Pavement Marking Tape Type IV	April 1, 2012	
80254	48	Х	Pavement Patching	Jan. 1, 2010	
80022	49	Х	Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
* 80316	51	Х	Placing and Consolidating Concrete	Jan. 1, 2013	
80278			Planting Woody Plants	Jan. 1, 2012	Aug. 1, 2012
* 80305	1	100	Polyurea Pavement Markings	Nov. 1, 2012 Jan. 1, 2012	Jan. 1, 2013 Jan. 1, 2013
* 80279	_54	Х	Portland Cement Concrete	April 1, 2012	JG.11. 2010
80300			Preformed Plastic Pavement Marking Type D - Inlaid	Jan. 1, 2009	April 1, 2012
80218			Preventive Maintenance – Bituminous Surface Treatment	Jan. 1, 2009	April 1, 2012
80219		L	Preventive Maintenance – Cape Seal	Jan. 1, 2009	/ (pin 1, 2012

<u>File Name</u>	Pg.		Special Provision Title	<u>Effective</u>	Revised
80220			Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	April 1, 2012
80221			Preventive Maintenance – Slurry Seal	Jan. 1, 2009	April 1, 2012
* 80281			Quality Control/Quality Assurance of Concrete Mixtures	Jan. 1, 2012	Jan. 1, 2013
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 1, 2013
80283			Removal and Disposal of Regulated Substances	Jan. 1, 2012	
80224			Restoring Bridge Approach Pavements Using High-Density Foam	Jan. 1, 2009	Jan. 1, 2012
80271			Safety Edge	April 1, 2011	
80307			Seeding	Nov. 1, 2012	
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2009
80255			Stone Matrix Asphalt	Jan. 1, 2010	Jan. 1, 2012
80143	97	Х	Subcontractor Mobilization Payments	April 2, 2005	April 1, 2011
* 80317			Surface Testing of Hot-Mix Asphalt Overlays (NOTE: This special provision was previously named "Surface Testing of Pavements".)	Jan. 1, 2013	
80308	98	Х	Synthetic Fibers in Concrete Gutter, Curb, Median and Paved Ditch	Nov. 1, 2012	
80286			Temporary Erosion and Sediment Control	Jan. 1, 2012	
80225			Temporary Raised Pavement Marker	Jan. 1, 2009	
* 80256			Temporary Water Filled Barrier		Jan. 1, 2013
80301	99	X	Tracking the Use of Pesticides	Aug. 1, 2012	
80273	100	Х	Traffic Control Deficiency Deduction	Aug. 1, 2011	
20338			Training Special Provisions	Oct. 15, 1975	
* 80318			Traversable Pipe Grate	Jan. 1, 2013	
80270			Utility Coordination and Conflicts	April 1, 2011	Jan. 1, 2012
80288			Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2012
80302	101	X	Weekly DBE Trucking Reports	June 2, 2012	
80289			Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	102	_X	Working Days	Jan. 1, 2002	

The following special provisions are either in the 2013 Standard Specifications, the 2013 Recurring Special Provisions, or the special provisions Portland Cement Concrete, QC/QA of Concrete Mixtures, or Placing and Consolidating Concrete:

<u>File Name</u>	Special Provision Title	New Location	Effective	Revised
80275	Agreement to Plan Quantity	Article 202.07	Jan. 1, 2012	
80291	Calcium Chloride Accelerator for Class PP-2	Recurring CS #28	April 1, 2012	
	Concrete			
80237	Construction Air Quality – Diesel Vehicle Emissions Control	Articles 105.03 and 107.41	April 1, 2009	Jan. 2, 2012
80239	Construction Air Quality – Idling Restrictions	Articles 105.03 and 107.41	April 1, 2009	
80177	Digital Terrain Modeling for Earthwork Calculations	Recurring CS #32	April 1, 2007	
80272	Drainage and Inlet Protection Under Traffic	Articles 603.02 and 603.07	April 1, 2011	Jan. 1, 2012
80228	Flagger at Side Roads and Entrances	Articles 701.13 and 701.20	April 1, 2009	
80109	Impact Attenuators	Section 643	Nov. 1, 2003	Jan. 1, 2012
80110	Impact Attenuators, Temporary	Section 706	Nov. 1, 2003	Jan. 1, 2012
80203	Metal Hardware Cast into Concrete	Articles 503.02, 504.02, and	April 1, 2008	Jan. 1, 2012
	Wetai Hardware Gast into Conside	1006.13	, 4,	
80290	Payrolls and Payroll Records	Recurring CS #5	Jan. 2, 2012	
80299	Portland Cement Concrete Inlay or Overlay	Recurring CS #29	April 1, 2012	
80280	Portland Cement Concrete Sidewalk	Article 424.07	Jan. 1, 2012	
00200	TOTALIN COMOTIC COMOTICIO		•	•

File Name	Special Provision Title	New Location	<b>Effective</b>	Revised
80152	Self-Consolidating Concrete for Cast-In-Place	The following special	Nov. 1, 2005	April 1, 2012
	Construction	provisions: Portland Cement		
		Concrete, QC/QA of		
		Concrete Mixtures and		
		Placing and Consolidating Concrete		
90122	Self-Consolidating Concrete for Precast and Precast	The following special	July 1, 2004	April 1, 2012
80132	Prestressed Products	provisions: Portland Cement	outy 1, 200 !	7 (p. 11 1, 2012
	Frestressed Froducts	Concrete, QC/QA of		
		Concrete Mixtures and		
		Placing and Consolidating		
		Concrete	•	
80284	Shoulder Rumble Strips	Article 642.05	Jan. 1, 2012	
80285	Sidewalk, Corner or Crosswalk Closure	Articles 701.03, 701.15, and 1106.02	Jan. 1, 2012	
80075	Surface Testing of Pavements (Section 406 overlay	Articles 407.09, 407.12,	April 1, 2002	Jan. 1, 2007
	portion will remain a special provision and will now be called "Surface Testing of HMA Overlays".)	420.10, 420.20, and 1101.10		
80287	Type G Inlet Box	Article 610.09	Jan. 1, 2012	

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation

- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012; the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways"; the "Manual of Test Procedures for Materials", in effect on the date of the invitation for bids; and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAP 789, City of Edwardsville, Section 10-00085-01-LS, North Main Street Streetscape; and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern the construction of plans.

#### **DESCRIPTION OF WORK**

The proposed improvement consists of furnishing all labor, equipment, and materials to remove and replace existing sidewalk on the west side of the road, installation of ADA-accessible ramps on the west side of the road, remove and replace driveway pavement on the west side of the road, remove and replace curb & gutter on the west side of the road, and decorative roadway lighting on both sides of the road, as well as other work according to the plans and these specifications. The total project length is approximately 2,370 feet (0.45 miles) and is located on North Main Street beginning at High Street and ending at West L Street.

#### SITE EXAMINATION

The Contractor shall be responsible for examination of the site prior to submitting a bid on this project. Upon receipt of a bid, it shall be assumed that the Contractor is fully familiar with the construction site.

#### **COOPERATION WITH UTILITIES**

The Contractor's attention is called to the utility facilities within the right of way and limits of construction. Unless otherwise provided, adjustments to the various facilities will be performed by the respective utility companies. The Contractor shall coordinate with the appropriate utility owner in their relocation of their facilities.

The plans may not show the location of all utility facilities or the manner in which the adjustment will be made. In the event the Contractor desires more detailed information on the location of facilities and the working schedules for adjusting same, he shall obtain this information directly from the utility company involved.

As far as it can be determined, the following utility companies have facilities within the project limits:

- A. City of Edwardsville (Water & Sewer) 200 Park Street Edwardsville, IL 62025 (618) 692-7535
- B. AT&T (Telephone) 2100 Troy Road Edwardsville, IL 62025 (618) 307-1900
- C. AmerenIP (Gas & Electric) 2600 North Center Street Maryville, IL 62062 (618) 346-1294
- D. Charter Communications (Cable TV)
   210 West Division Street
   Maryville, IL 62062
   (888) 438-2427

It is the Contractor's responsibility to fully coordinate construction operations with the existing utilities. It is understood and agreed that the Contractor has taken the foregoing into consideration in submitting his/her bid, and no additional compensation will be allowed for any delays or inconveniences caused by any conflicts with utilities.

#### SAFETY AND HEALTH

The Contractor shall be responsible for enforcing all O.S.H.A. Safety and Health Standards (29 CFR 1926/1910), pertaining to the construction industry, as established by the United States Department of Labor, Occupational Safety and Health Administration.

#### SAFETY AND PROTECTION

The Contractor shall be responsible for initiating, maintaining, and supervising all safety and precautions and programs in connection with the work in accordance with Section 107 of the "Standard Specifications for Road and Bridge Construction" and as follows:

The Contractor shall take all necessary precautions for the safety of and shall provide necessary protection to prevent damage, injury, or loss to:

- 1. All employees on the worksite and other persons and organizations who may be affected thereby;
- 2. All the work and materials and equipment to be incorporated therein, whether in storage on or off site; and
- 3. Other property at the site adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons and property or to protect them from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and of underground facilities and utility owners when progression of the work may affect them and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in Paragraph 2 or 3 caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor, Supplier, or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the work or for anyone whose acts, either of them, may be liable, shall be remedied by the Contractor (except damage or loss attributable to the fault of drawings or specifications or to the acts or omissions of Owner or Engineer either of them may be liable, and not attributable, directly or indirectly, in whole or in part to the fault or negligence of the Contractor). The Contractor's duties and responsibilities for the safety and protection of the work shall continue until such time as all the work is completed and the Engineer has issued a notice to the Owner and the Contractor that the portion(s) of the work is acceptable.

The Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent, unless otherwise designated in writing by the Contractor to the Owner.

In emergencies affecting the safety or protection of persons or the work or property at the site or adjacent thereto, the Contractor, without special instructions or authorization from the Engineer or the Owner, is obligated to act to

prevent threatened damage, injury, or loss. The Contractor shall give the Engineer prompt, written notice if the Contractor believes that any significant changes in the work or variations from the Contract Documents is required because of action taken in response to an emergency.

The cost incurred by the Contractor in complying with this requirement 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.

#### **COOPERATION BETWEEN CONTRACTORS**

The Contractor for this Contract is advised that other projects within or adjacent to the limits of this Contract section may be under construction during construction operations for this Contract. The Contractor for this section shall cooperate with the Contractor for the other projects in accordance with Article 105.08 of the Standard Specifications.

Projects that may be under construction while this Contract is in force are as follows:

- Streetscape Phase II Section Number TIF4-003
- Electric Meter Conversion Section Number TIF4-004
- Ameren Electric Overhead Conversion
   – Phase 1 Section Number TIF4-005
- Ameren Electric Overhead Conversion–Phase 2 Section Number TIF5-006
- AT&T Overhead Conversion Section Number TIF6-007
- Charter Communications Overhead Conversion Section Number TIF7-008

#### CONTROL OF THE WORK

The Contractor shall provide a minimum 48-hour notice to the City of Edwardsville for all work that is to be performed. All materials and each part or detail of the work shall be subject to inspection at all times by the Engineer.

#### NOTIFICATION OF RESIDENTS AND BUSINESSES

It will be the Contractor's responsibility to distribute flyers, approved in advance by the Engineer, to residents and businesses in the project area to notify them of scheduled construction activities at least 48 hours prior to commencing work. The flyers shall include information regarding driveway and sidewalk closures.

#### TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

This item shall consist of furnishing, installing, maintaining, relocating, and removing all signs, arrow boards, pavement markings, traffic cones, barricades, warning lights, flaggers, and other traffic control devices which are used for the purpose of regulating, warning, or directing traffic, including pedestrians, during the construction and maintenance of the improvement, as shown on the plans, according to the applicable sections of the "Standard Specifications for Road and Bridge Construction", the "Manual on Uniform Traffic Control Devices for Streets and Highways", the Illinois Supplement to said Manual, these Special Provisions, and any special details and Highway Standards contained herein and included in the plans.

The Contractor shall conduct his work at all times in a manner and in such a sequence that will minimize the interference with vehicular and pedestrian traffic. The work area shall be confined to the smallest area possible to allow maximum use of the street, entrances, or sidewalk. Throughout the construction period, all equipment, open excavations, or other obstructions or hazards to motorists or pedestrians shall be enclosed by fences or protected by barricades and proper lighting.

#### Add to Section 701 the following:

"To ensure a prompt response to incidents involving the integrity of the work zone traffic control devices, the Contractor shall provide a telephone number where the Contractor or authorized representative can be contacted on a 24-hour-a-day basis. The Engineer shall be the sole judge as to whether the deficiency is an immediate safety hazard. The Contractor shall dispatch sufficient resources within two (2) hours of notification of an immediate safety hazard to make needed corrections of deficiencies. Other deficiencies shall be corrected within 12 hours. If the Contractor fails to restore the required traffic control and protection within the time limits specified above, a daily monetary deduction for each 24-hour period (or portion thereof) the deficiency exists will be imposed. This time period will begin with the time of notification to the Contractor and will

end with completion of the corrections. For this project, the daily deduction will be \$1,000 per day. In addition, if the Contractor fails to respond, the Engineer may correct the deficiencies, and the cost thereof will be deducted from monies due the Contractor. The corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities."

Traffic control and protection shall conform to Section 700 of the "Standard Specifications for Road and Bridge Construction." This work will be paid for at the contract unit price per lump sum for TRAFFIC CONTROL AND PROTECTION. (SPECIAL).

#### AGGREGATE FOR TEMPORARY ACCESS

An estimated quantity of AGGREGATE FOR TEMPORARY ACCESS has been included in the Contract to be used as directed by the Engineer to provide temporary access to private entrances, commercial entrances, and multi-family entrances during construction operations.

The Contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances, multi-family entrances, and roads according to Article 402.07 of the Standard Specifications and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades specified below, except as modified by the plans or as directed by the Engineer.

- (a) Private Entrance. The minimum width shall be 12 feet. The minimum compacted thickness shall be 6 inches. The maximum grade shall be 8 percent, except as required to match existing grade.
- (b) Commercial Entrance. The minimum compacted thickness shall be 9 inches. The maximum grade shall be 6 percent, except as required to match existing grade.
- (c) Multi-Family Entrance. The minimum compacted thickness shall be 9 inches. The maximum grade shall be 6 percent, except as required to match existing grade.

Maintaining the temporary access shall include relocating and/or re-grading the aggregate surface course for any operation that may disturb or remove the

temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it.

When use of the temporary access is discontinued, the aggregate surface course shall be removed and utilized in the permanent construction or disposed of according to Article 202.03 of the Standard Specifications.

This work will be paid for at the contract unit price per ton for AGGREGATE FOR TEMPORARY ACCESS.

#### **SAW CUTTING**

This work shall consist of saw cutting existing concrete and hot-mix asphalt pavement, concrete curb, concrete curb and gutter, driveway pavement, and sidewalk as shown in the plans or as directed by the Engineer.

At all locations where proposed work will abut existing pavements, saw cuts shall be made to provide an even, uniform surface to match.

All saw cuts shall be of the existing thickness to be removed unless otherwise directed by the Engineer. Care shall be taken to prevent spalling or other damage to the pavement, structures, or other items to remain in place.

This work will not be paid for separately, but shall be considered included in the cost of the Contract for items to be removed; and no additional compensation will be allowed.

#### **ROOF DRAIN ADJUSTMENT**

This item shall consist of adjusting existing roof drains to match proposed conditions as directed by the Engineer. Underground roof drains have not been located. The Engineer will evaluate each roof drain separately and will determine the appropriate method of adjustment.

This work will not be measured separately for payment, but shall be considered as included in the cost for the various items included in the Contract; and no additional compensation will be allowed.

#### **EARTH EXCAVATION**

Earth excavation in accordance with Section 202 of the "Standard Specifications for Road and Bridge Construction" shall be required to construct the proposed

improvements; however, earth excavation shall not be measured and paid for separately, but shall be considered as included in the cost for the various items included in the Contract; and no additional compensation will be allowed.

#### PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH

This item shall consist of the construction of cast-in-place sidewalk and sidewalk aprons according to Section 424 of the "Standard Specifications for Road and Bridge Construction," except as modified herein:

The proposed sidewalk shall have a "picture frame" finish to match the existing streetscape sidewalk in the downtown area.

Expansion joints per Article 424.07 (b) shall be placed at not more than 25-foot intervals. Expansion joints per Article 424.07 (b) shall also be placed at saw cuts where removal has occurred.

Expansion material shall consist of ½-inch preformed expansion material and sealant. Contraction joints shall be placed at 5-foot intervals. Contraction joints are to be made using hand tools. Saw cuts are not permitted.

Where new sidewalks replace sidewalks that have been removed and the Engineer determines or the drawings indicate the new sidewalk must be higher than existing subgrade, the Contractor shall achieve the necessary subgrade elevation using CA-6. This item is included in the Contract unit price for the PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH; and no additional compensation shall be allowed.

#### **DETECTABLE WARNINGS**

This work shall consist of constructing detectable warning surfaces in curbs and ramps and other locations shown on the plans according to Articles 424.09 of the "Standard Specifications for Road and Bridge Construction" and Highway Standard 424001, and as modified herein:

Materials shall be:

Precast concrete panels, reinforced with stainless steel prestressed tendons. Concrete shall contain a waterproofing admixture and be surface treated with penetrating sealer, incorporating raised, truncated domes.

Color shall be red.

Panel fragments may not be used, unless approved by the Engineer.

Detectable warning panels shall be protected when applying curing compound to the adjacent concrete sidewalk. Any overspray on the panels shall be cleaned immediately to the satisfaction of the Engineer.

Joints between panels and around the perimeter of the panels shall be caulked with a self-leveling (pour grade) or nonsag (gun) grade urethane sealant. The color of the sealant shall be limestone, unless otherwise approved by the Engineer.

Thickness of concrete under panels shall be increased one (1) inch in depth. Prepare a well drained and properly compacted subgrade. Forms shall be positioned for proper grade, slopes, and uniform slab thickness.

Detectable warning panels shall be placed as shown in the drawings and as determined by the Engineer. Place warning panels per highway standard. Detectable warning panels must have a visual contrast with adjacent walking surfaces. Install per highway standard. Provide adequate drainage to prevent the accumulation of water and debris on or at the bottom of the ramp.

Install panels immediately in fresh concrete and adjust panels to grade and ensure 100% surface contact with square edges of panels butted tightly together. The base of the truncated dome should be flush with surfaces. Tolerance between panels and surrounding surfaces is 1/16 inch maximum. Immediately after placement, re-check slope and elevation for proper grade. Edge around panels with 1/8-inch radius edger and finish in accordance with project specifications.

This work will be paid for at the contract unit price per square foot for DETECTABLE WARNINGS as specified herein, and no additional compensation shall be allowed.

#### SIDEWALK REMOVAL

This work shall consist of removing all sidewalk to construct the proposed sidewalk and streetscape lighting in accordance with Section 440 of the "Standard Specifications for Road and Bridge Construction".

At various locations, it may be required to remove and replace a step or fence in order to perform work. This work will be incidental to the sidewalk removal.

This work will not be paid for separately, but shall be considered included in the contract unit price per square foot for SIDEWALK REMOVAL; and no additional compensation shall be allowed.

#### **EXPANSION JOINTS**

This work shall consist of constructing expansion joints in concrete pavement, sidewalk, curb, gutter, and combination curb and gutter according to Articles 420.05 (d), 424.07, and 606.07 of the "Standard Specifications for Road and Bridge Construction" and Highway Standards 420001, 424001, and 606001, except as modified herein.

Expansion joints shall be ½-inch-thick preformed flexible foam expansion joint filler according to Article 1051.09 of the "Standard Specifications for Road and Bridge Construction". Expansion joint filler and backer-rod materials must be non-impregnated type that will not bond with the sealant. Expansion joints shall be placed between any sidewalk or driveway pavement and a building or a structure.

Expansion joints shall be sealed with self-leveling (pour-grade) or nonsag (gun) grade urethane sealant. The color of the sealant shall be limestone, unless otherwise approved by the Engineer.

This work will not be paid for separately, but shall be included in the contract unit price of the various concrete items for which the expansion joints are required; and no additional compensation will be allowed.

#### PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 AND 8 INCH

Only driveway pavement as shown in the drawings and determined by the Engineer shall be saw cut and removed.

Driveway pavement shall be 6- or 8-inch-thick Portland Cement Concrete on an aggregate subbase consisting of a 4-inch-thick layer of compacted CA-6. This work shall not be paid for separately, but shall be included in the Contract unit price for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 and 8 INCH.

Sidewalk sections that are poured through a driveway shall be constructed as driveway pavement, but finished as sidewalks. These areas shall be measured for payment as driveway pavement.

The Contractor shall ensure that driveway access is available at all times by removing and replacing driveway pavement and patches adjacent to driveways one half at a time or as necessary to accommodate access to adjacent property. Driveway pavement to be replaced shall be removed and replaced according to Articles 423 and 440 of the "Standard Specifications for Road and Bridge Construction".

Driveway pavement removal shall be measured for payment in place and paid for at the Contract unit price per square yard for DRIVEWAY PAVEMENT REMOVAL. Driveway replacement, including the 4-inch-thick layer of compacted CA-6, shall be measured for payment in place and paid for at the Contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 AND 8 INCH.

#### INCIDENTAL HOT-MIX ASPHALT SURFACING

Incidental Hot-Mix Asphalt Surfacing shall be used to repair all street sections and parking lots that are damaged during saw-cutting and removal of existing sidewalk and curbing. Incidental Hot-Mix Asphalt Surfacing shall be placed as specified in Section 408 of the "Standard Specifications for Road and Bridge Construction".

This work will be paid for at the contract unit price per ton for INCIDENTAL HOT-MIX ASPHALT SURFACING, and no additional compensation will be allowed.

#### SEEDING, CLASS 1 A

This work shall consist of preparing the seed bed and furnishing, transporting, and placing the seed, fertilizer, and mulch required to restore all disturbed earth surfaces and placing temporary erosion control seeding, if necessary, according to Sections 250, 251, and 280 of the "Standard Specifications for Road and Bridge Construction".

Nitrogen Fertilizer Nutrient, Phosphorus Fertilizer Nutrient, and Potassium Fertilizer Nutrient shall be applied at a rate of 90 pounds per acre.

Final grading and seeding shall occur within <u>seven</u> (7) calendar days after a section of curb and gutter or sidewalk construction is accepted by the Engineer.

The Contractor shall guarantee a minimum of 90 percent uniform growth over the entire seeded area(s). Areas sustaining less than 90 percent uniform growth shall be inter-seeded or reseeded, as determined by the Engineer, at no additional cost.

The mulch shall be applied according to Mulch Method 1 in Article 251.03 (a) of the "Standard Specifications for Road and Bridge Construction".

Temporary Erosion Control Seeding 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 seven (7) 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 will not occur for a period of fourteen (14) or more calendar days. This work shall be done according to Article 280.04 (f) of the "Standard Specifications for Road and Bridge Construction".

This work will be paid for at the contract unit price per acre for SEEDING, CLASS 1A; and no additional compensation will be allowed.

#### COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 (SPECIAL)

This work shall consist of constructing combination concrete curb and gutter according to Section 606 of the "Standard Specifications for Road and Bridge Construction" and the details as shown in the plans. This work shall include constructing a variable height curb and gutter and all transitional curb and combination curb and gutter, which price shall include furnishing and placing all concrete, tie bars, and joints and all labor necessary to complete the work.

At various locations, it may be necessary to transition proposed combination curb and gutter to meet the elevation and alignment of existing sidewalks, existing curbs, and/or gutters as shown on the plans. The minimum length of transitional curb, gutter, or combination curb and gutter shall be 10 feet, unless directed otherwise by the Engineer. All transitions to existing sidewalk, existing curbs, and/or gutter, inlets, and locations of depressed gutter through entrances and side streets not associated with entrance pavement shall be measured for

payment as COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 (SPECIAL).

The proposed combination concrete curb and gutter grade shall match the existing pavement and/ or sidewalk elevation, unless otherwise noted in the plans. Where the proposed combination curb and gutter will be constructed adjacent to existing sidewalk, minor variations in the sidewalk elevation shall be ignored to insure a continuous and smooth curb profile.

This work shall be included in the contract unit price per foot for COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 (SPECIAL).

#### DOMESTIC MATERIAL REQUIREMENT

All material provided for this work shall be procured in accordance with the Steel Products Procurement Act (30 ilcs 565/1 et seg).

#### CLASS D PATCHES, TYPE SPECIFIED, 12 INCH

This work shall consist of the removal of existing pavement, the necessary excavation, and the replacement with Class D patches, Type Specified, 12 inches thick according to Section 442 of the "Standard Specifications for Road and Bridge Construction".

Pavement removal shall be performed using full depth saw cuts for the areas shown on the plans.

This work will be paid for at the contract unit price per square yard for CLASS D PATCHES, TYPE SPECIFIED, 12 INCH.

#### **ELECTRICAL SERVICE INSTALLATION, SPECIAL**

This item shall consist of all material and labor required to install electrical service and controller for street lighting. The installation shall conform to the details shown in the plans and Sections 804 and 825 of the "Standard Specifications for Road and Bridge Construction" dated January 1, 2012; the National Electrical Code; UL; and the following provisions:

ELECTRICAL SERVICE PEDESTAL ENCLOSURE: Pad-mounted, NEMA Type 3R rainproof construction, UL 508A listed as "Enclosed Industrial Control Equipment" and Service Entrance Rated. Pedestal enclosure shall be 44" wide by 24" deep by 60" tall. External construction shall be of aluminum with light

green industrial grade powder paint. Internal construction shall be galvanized steel. All external fasteners, rivets, screws, and bolts shall be stainless steel. No fasteners, except sealing screws, shall be removable by external access. Hinges shall be stainless steel, continuous piano hinge type. Pedestal enclosure shall include separate, isolated sections for metering, utility termination, and customer equipment. All isolated sections shall be pad-lockable. Pedestal enclosure shall be provided complete and be sized to house the meter socket, main breaker, remote breaker operating mechanism and externally-mounted operating handle, panelboards, contactor, hand-off-auto selector switch, photocell and accessories, surge suppressor, internally mounted light fixture, toggle switch and ground fault circuit interrupter (GFCI) duplex receptacle, neutral and grounding bars and options as indicated in the plans.

Basis of design is a completely assembled and enclosed, service entrance-rated industrial controller as manufactured by Millbank – Catalog Number CP3B52C1XDAGILSL Pedestal S1, or approved equal. Custom-made Electrical Service Pedestal Enclosures, suitable for use as service entrance equipment, shall be considered. The enclosure shall meet the requirements of the Electrical Service Pedestal Enclosure construction and be manufactured by Hoffmann, Cooper B-Line, Hubbell-Wiegmann, or approved equal. The enclosure shall be sized, and all electrical components shall be installed and all components wired by the custom fabricator per the National Electrical Code, the wiring diagrams, panel schedules and details shown on the plans, and meet the following requirements:

METER BASE: UL listed, self-contained, ringless. Meter base construction and manufacturers shall conform to Ameren service requirements.

MAIN BREAKER, REMOTE BREAKER OPERATING MECHANISM AND EXTERNALLY-MOUNTED OPERATING HANDLE: Main breaker shall be a UL 489, NEMA AB 1 molded case circuit breaker with interrupting capacity to comply with available fault currents indicated on the panel schedule, but not less than 10,000 rms symmetrical amperes according to Article 1068.01(e)(3), bolt-on type thermal magnetic trip circuit breaker with common trip handle for all poles, mounted inside the pedestal enclosure. The remote breaker operating mechanism shall be a flange or bracket-mounted breaker operator, standard construction, and listed for use with manufacturer's standard or special-order equipment and installed without drilling, tapping, or modifications that will void the UL listing of the breaker. Operator shall be either cable or shaft operated by an externally-mounted operating handle. The externally-mounted operating handle

shall be capable of being locked in both the ON and OFF position and located on the upper left side of the front of the enclosure. Handle construction shall be suitable for installation on the NEMA 3R enclosure and shall not compromise the integrity of the enclosure's NEMA rating.

Acceptable manufacturers: General Electric, Siemens, Square D, Cutler-Hammer, or approved equal.

PANELBOARDS AND BRANCH CIRCUIT BREAKERS: NEMA PB1, circuit breaker type with copper ground bus and 100% solid neutral. Panelboards shall be non-conducting per Article 1068.02(e)(9). Provide branch circuit breakers as indicated on the panel schedule and wiring diagram. Provide minimum integrated short circuit rating as indicated on the panel schedule. Molded case circuit breakers shall be NEMA AB 1 bolt-on type thermal magnetic trip circuit breakers with common trip handle for all poles. Do not use fandem circuit breakers. Enclosure shall be NEMA PB, standard 6" deep by 20 inches wide.

Acceptable manufacturers: General Electric, Siemens, Square D, Cutler-Hammer, or approved equal.

SURGE SUPPRESSOR: IEEE C62.41-compliant, solid-state, parallel-connected, with sine-wave tracking suppression and filtering modules, UL 1449, second edition, short-circuit current rating matching or exceeding the panelboard short-circuit rating, and with the following features and accessories:

- 1. LED indicator lights for power and protection status.
- 2. Audible alarm, with silencing switch, to indicate when protection has failed.
- 3. Minimum Single Impulse Surge Current Rating: 80 kA per mode/160 kA per phase.
- 4. Withstand Capabilities: 200kAlC IEEE C62.41, Category C1 (3kA), 8-by-20-mic.sec. surges with less than 5 percent change in clamping voltage.

Protection modes and UL 1449 VPR for 240/120V, single phase, three wire circuits shall not exceed the following:

- 1. Line to Neutral: 700 V.
- 2. Line to Ground: 700 V.
- 3. Neutral to Ground: 700 V.
- 4. Line to Line: 1200 V.

The lead length between the circuit breaker and suppressor shall be kept as short as possible to ensure optimum performance. Any excess conductor length shall be trimmed in order to minimize let-through voltage. The installation shall comply with the manufacturer's recommended installation and wiring practices.

Acceptable manufacturers: Current Technology, Liebert, Advanced Protection Technologies, Hubbell, General Electric, Siemens, Square D, Cutler-Hammer, or approved equal.

LIGHTING CONTACTOR: NEMA ICS 2, magnetic lighting contactor with electrically held, 2 wire control, 120V 60Hz coil, poles and contact ratings as indicated on the drawings. Provide with cover-mounted NEMA ICS 2, general duty type hand-off-auto selector switch. Enclosure shall be a ANSI/NEMA ICS 6.

Acceptable manufacturers: General Electric, Slemens, Square D, Cutler-Hammer, or approved equal.

PHOTOCELL: UV resistant, weatherproof, SPST, 2000VA, 120V thermal relay type with a built-in delay to prevent false switching due to momentary flashes of light. Device shall be designed to mount on a standard ½-inch knockout. Provide NEMA 4X enclosure or Form 7 "C" conduit fitting with each photocell. Provide slide/shutter for adjustment. Contact shall be normally closed and shall fail "ON".

Acceptable manufacturers: Tork, Intermatic, Paragon, Stonco, or approved equal.

<u>LIGHT FIXTURE</u>: Surface-mounted, incandescent fixture with steel backplate and UV stabilized clear prismatic polycarbonate lens. Lamping shall be one 100 watt A-lamp (max).

Acceptable manufacturers: Lithonia, Fail-Safe, Hubbell, General Electric, or approved equal.

TOGGLE SWITCH: NEMA WD 1, heavy-duty AC only general-use snap switch. Plastic device body with toggle handle – ivory color. Single pole, single throw, 20 amperes, rated 120-277 volts AC. Provide complete with junction box and coverplate.

Acceptable manufacturers: Hubbell, Leviton, Pass & Seymour, Cooper Wiring Devices, or approved equal.

GFCI DUPLEX RECEPTACLE: NEMA WD 1, industrial specification grade general-use receptacle. Plastic device body – ivory color. NEMA Type 5-20R convenience receptacle with integral ground fault circuit interrupter. Provide complete with junction box and coverplate.

Acceptable manufacturers: Hubbell, Leviton, Pass & Seymour, Cooper Wiring Devices, or approved equal.

ELECTRICAL SERVICE INSTALLATION, SPECIAL shall include all conduit, conduit elbows, wiring, electrical service pedestal enclosure, ground rods, concrete base, anchor bolts, and all other miscellaneous hardware indicated in the details in the plans or otherwise required for installation. This pay item shall include all material and work necessary to construct the service installation and lighting controller from the designated Ameren utility pole to the conductors serving the street lights. This work shall be paid for at the contract unit price per each for ELECTRICAL SERVICE INSTALLATION, SPECIAL.

#### **ELECTRICAL SERVICE INSTALLATION**

This item shall consist of all material and labor required to install electrical service and controller for street lighting. The installation shall conform to the details shown in the plans and Sections 804 and 825 of the "Standard Specifications for Road and Bridge Construction" dated January 1, 2012; the National Electrical Code; UL; and the following provisions:

ELECTRICAL SERVICE PEDESTAL ENCLOSURE: Pad-mounted, NEMA Type 3R rainproof construction, UL 508A listed as "Enclosed Industrial Control Equipment" and Service Entrance Rated. Pedestal enclosure shall be 44" wide by 24" deep by 60" tall. External construction shall be of aluminum with light green industrial grade powder paint. Internal construction shall be galvanized steel. All external fasteners, rivets, screws, and bolts shall be stainless steel. No fasteners, except sealing screws, shall be removable by external access. Hinges shall be stainless steel, continuous plano hinge type. Pedestal enclosure shall include separate, isolated sections for metering, utility termination, and customer

equipment. All isolated sections shall be pad-lockable. Pedestal enclosure shall be provided complete and be sized to house the meter socket, main breaker, remote breaker operating mechanism and externally-mounted operating handle, panelboards, contactor, hand-off-auto selector switch, photocell and accessories, surge suppressor, internally mounted light fixture, toggle switch and ground fault circuit interrupter (GFCI) duplex receptacle, neutral and grounding bars and options as indicated in the plans.

Basis of design is a completely assembled and enclosed, service entrance-rated industrial controller as manufactured by Millbank – Catalog Number CP3B52C1XDAGILSL Pedestal S2, or approved equal. Custom-made Electrical Service Pedestal Enclosures, suitable for use as service entrance equipment, shall be considered. The enclosure shall meet the requirements of the Electrical Service Pedestal Enclosure construction and be manufactured by Hoffmann, Cooper B-Line, Hubbell-Wiegmann, or approved equal. The enclosure shall be sized, and all electrical components shall be installed and all components wired by the custom fabricator per the National Electrical Code, the wiring diagrams, panel schedules and details shown on the plans, and meet the following requirements:

<u>METER BASE</u>: UL listed, self-contained, ringless. Meter base construction and manufacturers shall conform to Ameren service requirements.

MAIN BREAKER, REMOTE BREAKER OPERATING MECHANISM AND EXTERNALLY-MOUNTED OPERATING HANDLE: Main breaker shall be a UL 489, NEMA AB 1 molded case circuit breaker with interrupting capacity to comply with available fault currents indicated on the panel schedule, but not less than 10,000 rms symmetrical amperes according to Article 1068.01(e)(3), bolt-on type thermal magnetic trip circuit breaker with common trip handle for all poles, mounted inside the pedestal enclosure. The remote breaker operating mechanism shall be a flange or bracket-mounted breaker operator, standard construction, and listed for use with manufacturer's standard or special-order equipment and installed without drilling, tapping, or modifications that will void the UL listing of the breaker. Operator shall be either cable or shaft operated by an externallymounted operating handle. The externally-mounted operating handle shall be capable of being locked in both the ON and OFF position and located on the upper left side of the front of the enclosure. Handle construction shall be suitable for installation on the NEMA 3R enclosure and shall not compromise the integrity of the enclosure's NEMA rating.

Acceptable manufacturers: General Electric, Siemens, Square D, Cutler-Hammer, or approved equal.

PANELBOARDS AND BRANCH CIRCUIT BREAKERS: NEMA PB1, circuit breaker type with copper ground bus and 100% solid neutral. Panelboards shall be non-conducting per Article 1068.02(e)(9). Provide branch circuit breakers as indicated on the panel schedule and wiring diagram. Provide minimum integrated short circuit rating as indicated on the panel schedule. Molded case circuit breakers shall be NEMA AB 1 bolt-on type thermal magnetic trip circuit breakers with common trip handle for all poles. Do not use tandem circuit breakers. Enclosure shall be NEMA PB, standard 6" deep by 20 inches wide.

Acceptable manufacturers: General Electric, Siemens, Square D, Cutler-Hammer, or approved equal.

SURGE SUPPRESSOR: IEEE C62.41-compliant, solid-state, parallel-connected, with sine-wave tracking suppression and filtering modules, UL 1449, second edition, short-circuit current rating matching or exceeding the panelboard short-circuit rating, and with the following features and accessories:

- 1. LED indicator lights for power and protection status.
- 2. Audible alarm, with silencing switch, to indicate when protection has failed.
- 3. Minimum Single Impulse Surge Current Rating: 80 kA per mode/160 kA per phase.
- 4. Withstand Capabilities: 200kAIC IEEE C62.41, Category C1 (3kA), 8-by-20-mic.sec. surges with less than 5 percent change in clamping voltage.

Protection modes and UL 1449 VPR for 240/120V, single phase, three wire circuits shall not exceed the following:

- 1. Line to Neutral: 700 V.
- 2. Line to Ground: 700 V.
- 3. Neutral to Ground: 700 V.
- 4. Line to Line: 1200 V.

The lead length between the circuit breaker and suppressor shall be kept as short as possible to ensure optimum performance. Any excess conductor length shall be trimmed in order to minimize let-through voltage. The installation shall comply with the manufacturer's recommended installation and wiring practices:

Acceptable manufacturers: Current Technology, Liebert, Advanced Protection Technologies, Hubbell, General Electric, Siemens, Square D, Cutler-Hammer, or approved equal.

LIGHTING CONTACTOR: NEMA ICS 2, magnetic lighting contactor with electrically held, 2 wire control, 120V 60Hz coil, poles and contact ratings as indicated on the drawings. Provide with cover-mounted NEMA ICS 2, general duty type hand-off-auto selector switch. Enclosure shall be a ANSI/NEMA ICS 6.

Acceptable manufacturers: General Electric, Siemens, Square D, Cutler-Hammer, or approved equal.

PHOTOCELL: UV resistant, weatherproof, SPST, 2000VA, 120V thermal relay type with a built-in delay to prevent false switching due to momentary flashes of light. Device shall be designed to mount on a standard ½-inch knockout. Provide NEMA 4X enclosure or Form 7 "C" conduit fitting with each photocell. Provide slide/shutter for adjustment. Contact shall be normally closed and shall fail "ON".

Acceptable manufacturers: Tork, Intermatic, Paragon, Stonco, or approved equal.

<u>LIGHT FIXTURE</u>: Surface-mounted, incandescent fixture with steel backplate and UV stabilized clear prismatic polycarbonate lens. Lamping shall be one 100 watt A-lamp (max).

Acceptable manufacturers: Lithonia, Fail-Safe, Hubbell, General Electric, or approved equal.

TOGGLE SWITCH: NEMA WD 1, heavy-duty AC only general-use snap switch. Plastic device body with toggle handle – ivory color. Single pole, single throw, 20 amperes, rated 120-277 volts AC. Provide complete with junction box and coverplate.

Acceptable manufacturers: Hubbell, Leviton, Pass & Seymour, Cooper Wiring Devices, or approved equal.

GFCI DUPLEX RECEPTACLE: NEMA WD 1, industrial specification grade general-use receptacle. Plastic device body – ivory color. NEMA Type 5-20R convenience receptacle with integral ground fault circuit interrupter. Provide complete with junction box and coverplate.

Acceptable manufacturers: Hubbell, Leviton, Pass & Seymour, Cooper Wiring Devices, or approved equal.

ELECTRICAL SERVICE INSTALLATION shall include all conduit, conduit elbows, wiring, electrical service pedestal enclosure, ground rods, concrete base, anchor bolts, and all other miscellaneous hardware indicated in the details in the plans or otherwise required for installation. This pay item shall include all material and work necessary to construct the service installation and lighting controller from the designated Ameren utility pedestal to the conductors serving the street lights. This work shall be paid for at the contract unit price per each for ELECTRICAL SERVICE INSTALLATION.

#### HANDHOLE SPECIAL

This work shall consist of constructing composite handholes in accordance with Sections 814 of the "Standard Specifications for Road and Bridge Construction" dated January 1, 2012; the National Electrical Code; UL; and the following provisions:

CONSTRUCTION: The handhole shall be an open-bottom, underground enclosure made of concrete or polymer concrete and reinforced by a heavy weave fiberglass, concrete gray color and rated 8,000 lbs over a 10"x10" area designed and tested to temperatures of -50 Deg. F. Material compressive strength should be no less than 11,000 psi. The box shall be rated for vehicular traffic Load Category A16, Rated 22,568 lbs, 16,000 lbs live load. Lid shall have a skid resistant surface, waterproof gasketing, and secure with stainless steel penta-head bolts. Cover shall be embossed "ELECTRIC".

SIZE: The handhole shall be 12" X 12" X standard manufacturer's depth.

MANUFACTURERS: Quazite, CDR Systems Corporation, New Basis, or approved equal.

<u>PAYMENT</u>: This work will be paid for at the contract unit price per each for HANDHOLE SPECIAL, which price shall include all labor and materials.

#### **DECORATIVE LIGHT TYPE A**

The lighting shall be according to the applicable articles of Section 830 of the "Standard Specifications for Road and Bridge Construction" dated January 1, 2012; the National Electric Code; UL; and the following provisions:

The lighting shall be by **King Luminaire K124R-LAR-III-150(MOG)-MH-240(MT)-K5/K9-WRS with Stresscrete KT14-G-E11-S/F K5 C/W BA DR(GFI)**. The Contractor shall submit shop drawings, consisting of color and texture samples and manufacturer's specifications for installation of the street lighting, to the Engineer for approval according to the "Standard Specifications for Road and Bridge Construction."

<u>LUMINAIRES</u>: The luminaire shall be **King Luminaire K124 series 150** watt pulse start metal halide to match existing lighting. The luminaire shall consist of an acrylic rippled globe, internal specular spun aluminum louver assembly, cast aluminum capital/pole adapter, cast aluminum Westinghouse ring and struts, and a cast aluminum finial. The globe shall be secured to the luminaire body with a cast aluminum, tool-less rotary locking globe ring assembly. Finish for the capital/pole adapter and globe ring assembly shall be a polyester powder coating in black. Finish for the Westinghouse ring and struts and cast aluminum finial shall be gold. All hardware shall be stainless steel.

BALLASTS: The ballast shall be UL certified, high power factor (HPF) type ballast with a -30 $^{\circ}$ F (-34 $^{\circ}$ C) lamp starting capacity, a power factor of 90% or better, a  $\pm 5\%$  lamp power regulation, and a  $\pm 10\%$  input voltage regulation. The ballast shall be factory wired and tested and mounted on a removable plate which is fully integrated into the luminaire. A quick disconnect wiring system shall allow for fast and easy ballast maintenance. Mogul or medium base porcelain sockets shall be 4 kV rated. All electrical components shall be UL listed and labeled.

<u>FITTER</u>: The fitter shall be made with cast aluminum and accept a 7-inch O.D. ring pole top. The fitter shall attach to the pole top with three (3) set screws at 120 degrees. All hardware shall be stainless steel.

<u>LIGHT POLE</u>: Light pole shall comply with article 1069.01 of the "Standard Specifications for Road and Bridge Construction" and shall comply with AASHTO "Standard Specifications for Structural Support for Highway Signs, Luminaires and Traffic Signals" current at the time the

project is advertised. The pole shall be designed for 90 mph wind velocity and a minimum design life of 50 years.

The Light pole shall be a pre-stressed spun concrete, direct-bury pole with a 7-inch diameter aluminum post top ring, an integrated 2-5/8"x8" handhole and cover at 40 inches above grade, a single GFCl duplex receptacle with cast aluminum "in-use" coverplate located 11'-11" above grade and 1-inch I.P.S. pipe couplings with upper and lower banner arms with a cast aluminum banner ball extending 24 inches out on the roadway side of the pole and spaced 60 inches apart. Finish of pole shall be eclipse black. Finish of handhole coverplate, "in-use" coverplate, banner arm, and cast aluminum ball shall be a polyester powder coating in black. Light pole shall be Stresscrete KT14 Series.

<u>FINISHES</u>: Fixture finish shall consist of cleaning, etching, and rinsing followed by a protective chromate primer, deionized water rinse, over dry off and top coated with thermoset TGIC super polyester powder coat finish. The finish shall pass the AAMA 605.02 performance specification, which includes passing a 3,000-hour salt spray test for corrosion resistance. Color shall be **black** to match existing lighting. The application of all coatings, epoxy, galvanizing, painting, etc., to metal products shall be applied in The United States of America.

LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT: Per Article 1088.01(a)(4) of the Standard Specifications and shall be installed according to the plans.

This item of work shall be paid for at the contract unit price per each for DECORATIVE LIGHT TYPE A, which price shall include all labor and materials, including excavation, back-fill material, banner arms, lamps, and wiring, necessary to construct the light assembly.

#### **DECORATIVE LIGHT TYPE B**

The lighting shall be according to the applicable articles of Section 830 of the "Standard Specifications for Road and Bridge Construction" dated January 1, 2012; the National Electrical Code; UL; and the following provisions:

The lighting shall be by **Sternberg 1970SFGSR/CA6/9525STO/250MHPMT/R03S/BCC/BKT**. The Contractor shall submit shop drawings, consisting of color and texture samples and manufacturer's specifications for installation of the street

lighting, to the Engineer for approval according to the "Standard Specifications for Road and Bridge Construction."

<u>LUMINAIRES</u>: The luminaire shall be **Sternberg 1970 Series 250W Pulse Start Metal Halide** to match existing lighting. The luminaire shall consist of a cast aluminum ballast housing that is an integral section of the shade, a spun aluminum straight shade, an integral cast aluminum door frame, and ring to secure the lens. The optic assembly shall be an IP66 rated, type 3 distribution, sealed assembly with a specular anodized aluminum reflector and a flat glass lens. Lamp and ballast access shall be tool less. Finish shall be a polyester powder coating in **black**. All hardware shall be stainless steel.

<u>BALLASTS</u>: The ballast shall be UL certified, high power factor (HPF) type ballast with a  $-30^{\circ}$ F ( $-34^{\circ}$ C) lamp starting capacity, a power factor of 90% or better, a  $\pm 5\%$  lamp power regulation, and a  $\pm 10\%$  input voltage regulation. The ballast shall be factory wired and tested and mounted on a removable plate which is fully integrated into the luminaire. A quick disconnect wiring system shall allow for fast and easy ballast maintenance. Mogul or medium base porcelain sockets shall be 4 kV rated. All electrical components shall be UL listed and labeled.

BRACKET ARM: The bracket arm shall be **Sternberg CA6 Series**. The arm shall be curved galvanized steel with a cast aluminum hang straight coupling on the fixture end. Finish shall be a polyester powder coating in **black**.

<u>LIGHT POLE</u>: Light pole shall comply with article 1069.01 and 1069.03 of the "Standard Specifications for Road and Bridge Construction" and shall comply with AASHTO "Standard Specifications for Structural Support for Highway Signs, Luminaires and Traffic Signals" current at the time the project is advertised. The pole shall be designed for 90 mph wind velocity and a minimum design life of 50 years.

The light pole shall be a **Sternberg 9525SSTO/RBCC3/BK** flat sided, tapered octagonal pole constructed of ASTM A607 steel. The pole shall be a nominal **25 feet** in height with post mount adapter to accept the specified bracket arm and luminaire. The pole assembly will come complete with a matching cap and a two-piece clamshell base with one access panel that clamp around the base plate and lower shaft of the pole. All hardware shall be stainless steel. Finish shall be an epoxy primer with factory finish paint in **black** to match the bracket arm and luminaire.

<u>FINISHES</u>: Fixture finish shall consist of cleaning, etching, and rinsing followed by a protective chromate primer, deionized water rinse, over dry off and top coated with thermoset TGIC super polyester powder coat finish or factory finish. The finish shall pass the AAMA 605.02 performance specification, which includes passing a 3,000-hour salt spray test for corrosion resistance. Color shall be **black** to match existing lighting. The application of all coatings, epoxy, galvanizing, painting, etc., to metal products shall be applied in The United States of America.

This item of work shall be paid for at the contract unit price per each for DECORATIVE LIGHT TYPE B, which price shall include all labor and materials, including lamps and wiring, necessary to construct the light assembly.

#### LIGHT POLE FOUNDATION, 30" DIAMETER, SPECIAL

This item shall consist of all material and labor required to install light pole foundations for street lighting. The installation shall conform to the details shown in the plans and Section 836 of the "Standard Specifications for Road and Bridge Construction" dated January 1, 2012; the National Electrical Code; UL; and the following provisions:

LIGHT POLE FOUNDATION shall be constructed as indicated in the plans and per the manufacturer's recommendations. This pay item shall include all material and work necessary to construct the foundation including anchor bolts, reinforcing bars, conduit from the handhole to the foundation, ground rods, and all other miscellaneous hardware indicated in the details in the plans or otherwise required for installation. This work shall be paid for the contract unit price per foot for LIGHT POLE FOUNDATION, 30" DIAMETER, SPECIAL.

#### STREET LIGHT TURN-ON AND FINAL INSPECTION

Ensure that all electrical work is complete and ready for testing. All wiring shall be terminated prior to testing. Operate each luminaire after installation and connection. Inspect for improper connections and operation. Clean electrical parts to remove conductive and deleterious materials. Clean finishes and touch up damage. Relamp luminaires which have failed at time of Final Inspection.

The Department or responsible local agency will begin paying energy consumption charges on the turn-on date. Facility charges will be paid under the contract up to 30 days prior to the turn-on date. However, the Contractor is responsible for payment of any energy consumption charges prior to turn-on.

Facility charges prior to turn-on are to be submitted for payment under Article 109.05 of the "Standard Specifications for Road and Bridge Construction" along with the utility company connection charges in accordance with Section 804. Waiting for electric service to be connected by the utility company will not be a cause to suspend working day charges. However, working days will not be charged while waiting for turn-on if all other contract work is complete including electric service connection.

Subsequent to turn-on, a final inspection must be requested a minimum of 7 calendar days prior to the proposed inspection date. The Department or responsible local agency will assume maintenance responsibility, including knockdowns at the time that all deficiencies noted during the final inspection are corrected to the satisfaction of the Engineer. Acceptance of the controller will not be made until the requirements of Section 804 are met.

### ILLINOIS DEPARTMENT OF TRANSPORTATION 150W LUMINAIRE PERFORMANCE TABLE

# **GIVEN CONDITIONS**

ROADWAY DATA:	Pavement Width Number Of Lanes Median Width IES Surface Classification Q-Zero Value	24 FT 2 N/A R3 .07
LIGHT POLE DATA:	Mounting Height Mast Arm Length Pole Set-Back From Edge Of Pavement	16 FT 0 FT 15 FT
LUMINAIRE DATA:	Lamp Type Lamp Lumens IES Vertical Distribution IES Control Of Distribution IES Lateral Distribution Total Light Loss Factor	PSMH 14000 Short N 3 0.68
LAYOUT DATA:	Spacing Configuration Luminaire Overhang Over Edge Of Pavement Lane	55 FT Opp -15 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

# PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Uniformity Ratio, (E		9.0	Lux
LUMINANCE:	Average Luminance Uniformity Ratios:		0.6 3.5 6.0	Cd/m <sup>2</sup>
	Maximum Veiling Luminance Ratio:	(L <sub>v</sub> /L <sub>Ave</sub> )		

# Required Contract Provisions All Contracts Monthly Labor Summary and Activity Reporting System

Effective: 1-1-1995 Revised June 2001

#### I. Monthly Labor Summary Report, Form SBE 148

The <u>prime contractor and each first and second tier sub-contractor</u>, (hereinafter referred to as "subcontractor") shall submit a certified Monthly Labor Summary Report directly to the District Engineer.

This report is in lieu of submittal of the Monthly Workforce Analysis Report, Form SBE 956.

This report must be received in District Eight no later than the tenth day of the next month.

This Report shall be submitted by the prime contractor and each subcontractor, for each consecutive month, from the start, to the completion of their work on the contract.

The data source for this Report will be a summation of all personnel and hours worked on each subject contract for the month based on weekly payrolls for that month.

The Monthly Labor Summary Report is required to be submitted in one of the following formats:

- a.). For contractors having IDOT contracts valued in the aggregate at \$250,000 or less, the report may be typed or clearly handwritten using Form SBE 148 for submittal to the District Engineer for District Eight.
- b.) For contractors having IDOT contracts valued in the aggregate at more than \$250,000, the report must be submitted in a specific "Fixed Length Comma Delimited ASCII Text File Format". The subject file format is detailed on the next page. Submittal of this file may be by 3.5 inch disk or by e-mail.

#### II. Monthly Contract Activity Report, Form SBE 248

The prime contractor and each subcontractor shall submit a monthly report directly to the District Engineer, reflecting their contract activity on all Illinois Department of Transportation contracts they have in force in District Eight.

This report shall be submitted for each consecutive month, from the start, to the completion of all contracts in District Eight.

The report must be received in the District Office no later than the tenth day of the next month.

#### Monthly Labor Summary and Activity Reporting System Codes and Formats

Indicated below for your reference are the Employee Codes and File Formats required for this system.

#### I.) Monthly Labor Summary Report, Form SBE 148

The following employee codes are to be used to identify each individual on the Summary Report:

Gender: M - Male F - Female
 Ethnic Group: 1 - White 4 - American Indian/Alaskan Native
 Asian/Pacific Islander

FO - Foremen Work Classification: OF - Official SU - Supervisor **EO** - Operator ME - Mechanic CL - Clerical CA - Carpenter TD - Truck Driver IW - Ironworker PA - Painter OT - Other **PP** - Pipefitter TE - Technical LA - Laborer EL - Electrician CM -Cement Mason

C - Company

Employee Status: J - Journeyman O - Owner-Operator

A - Apprentice T - Trainee

Specific "Fixed Length Comma Delimited ASCII File Format"

3.

4.

<u>Order</u>	Field Name	Type	<u>Size</u>
1	Contractor Number	N	4
2	Contractor Reference Number	N	6
3	Contract Number	N	5
4	Period (07/28/2000)	D	10
5	SSN (111-11-1111)	N	11
6	Name	Α	40
7	Gender	Α	1
8	Ethnic Group	N	1
9	Work Classification	Α	2
10	Employee Status	Α	1
11	Total Hours (0000060.00)	N	10

File Name Conventions: (Contractor Number + Report Month/Year).Txt i.e. 20001298.Txt

### II.) Monthly Contract Activity Report, Form SBE 248

The following activity codes are to be used to identify the contractors contract status each month on the Monthly Activity Report, Form SBE 248:

A. Contract Status: 1 - Not Started 2 - Active 3 - No Work 4 - Suspended 5 - Complete

Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

All prime and subcontractors having contracts in the aggregate exceeding \$250,000 must provide a "Fixed Length Comma Delimited ASCII File" for approval prior to the start of construction.

This Special Provision must be included in each subcontract agreement.

monitor/molassp2

# State of Illinois Department of Transportation Bureau of Local Roads and Streets

# SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

Effective: January 1, 1999 Revised: January 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

Replace Article 105.07 of the Standard Specifications with the following:

"105.07 Cooperation with Utilities. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

- (a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:
  - (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.
  - In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.
  - (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
  - (3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.
- (b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:
  - (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
  - (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

# State of Illinois Department of Transportation Bureau of Local Roads and Streets

#### SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007 Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:  City of Edwardsville, Illinois			nder the Contractor's

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

#### **ANCHOR BOLTS (BDE)**

Effective: January 1, 2013

Revise the fourth sentence of the first paragraph of Article 1006.09 of the Standard Specifications to read:

"Stud bolts or fully threaded rods shall be according to either ASTM A 354 Grade BC, ASTM A 193 Grade B7, or ASTM F 1554 Grade 105."

Revise the second paragraph of Article 1006.09 of the Standard Specifications to read:

"Washers and nuts shall match with the hardness of the anchor bolt, stud, or rod. For ASTM F 1554 Grade 36 (Grade 250) or Grade 55 (Grade 380) anchor rods or bolts, washers shall be according to ASTM F 844 or ASTM F 436, and nuts shall be according to AASHTO M 291 Grade A. For ASTM F 1554 Grade 105 (Grade 725) bolts, ASTM A 354, or ASTM A 193 stud bolts, washers shall be according to AASHTO M 293 Type 1 or Type 3, and nuts shall be according to AASHTO M 291 Grade DH or DH3."

Revise the seventh paragraph of Article 1006.09 of the Standard Specifications to read:

"Anchor bolts, rods, studs, nuts, and washers requiring galvanizing shall be hot dipped, with zinc coatings conforming to the requirements of ASTM F 2329."

Revise the fourth paragraph of Article 1070.01 of the Standard Specifications to read:

"Fully threaded and galvanized anchor rods or stud bolts with washers and nuts shall be furnished with the foundations and shall be according to Article 1006.09. Anchors furnished according to ASTM F 1554 shall be Grade 105 (Grade 725)."

Revise the second paragraph of Article 1070.03 of the Standard Specifications to read:

"Top anchor rod nuts for all towers shall be the self-locking type with nylon or steel inserts."

80309

#### CONSTRUCTION AIR QUALITY - DIESEL RETROFIT (BDE)

Effective: June 1, 2010

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

<sup>1/</sup> Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) Verified Retrofit Technology List (<a href="http://www.epa.gov/otag/retrofit/verif-list.htm">http://www.epa.gov/otag/retrofit/verif-list.htm</a>), or verified by the California Air Resources Board (CARB) (<a href="http://www.arb.ca.gov/diesel/verde/verdev.htm">http://www.arb.ca.gov/diesel/verde/verdev.htm</a>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

<sup>2/</sup> Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices 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 not be grounds for a claim.

#### **Diesel Retrofit Deficiency Deduction**

When the Engineer determines that a diesel retrofit deficiency exists, 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.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment 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 the contract time, waiver of penalties, or be grounds for any claim.

80261

#### DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: August 2, 2011

<u>FEDERAL OBLIGATION</u>. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified 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.

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that 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.

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 that 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 that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 15,00% 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 that enough DBE participation has been obtained to meet the goal: or
- (b) The bidder documents that 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.
- <u>DBE LOCATOR REFERENCES</u>. 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 www.dot.il.gov.

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

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The names and addresses of DBE firms that will participate in the contract;

- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) if the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal if not met, evidence of good faith efforts.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that 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 performance 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. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that 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 that 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 prime 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.
- (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 that the apparent successful 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 that it is otherwise eligible for award. If the Department determines that 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 shall include a statement of reasons for the determination.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises. Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/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 forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order 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 consideration, 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.

<u>CALCULATING DBE PARTICIPATION</u>. 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 prime 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 owneroperator. 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 regular dealer or 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 Participation 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 submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217)785-4611. Telefax number (217)785-1524.
- (b) <u>TERMINATION OR REPLACEMENT</u>. 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 the Special Provision.
- (c) <u>CHANGES TO WORK</u>. 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, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated 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) That 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) That the DBE is aware that 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) That 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 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 prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime 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 1,200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor:
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice 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 contractor 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 prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime 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.
- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. 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 thirty 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 Regional 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 that 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 BDE 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) <u>ENFORCEMENT</u>. 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) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my 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.

80029

#### **PAVEMENT PATCHING (BDE)**

Effective: January 1, 2010

Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:

"In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area."

80254

#### PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

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 109.07 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.

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.

80022

#### PLACING AND CONSOLIDATING CONCRETE (BDE)

Effective: January 1, 2013

Revise the first paragraph of Article 503.06 of the Standard Specifications to read:

"503.06 Forms. Forms shall be set and maintained to the lines and grades shown on the plans, and shall be tight to prevent concrete leakage."

Revise Article 503.07 of the Standard Specifications to read:

**"503.07 Placing and Consolidating.** No concrete shall be placed on ice, snow, or frozen foundation material.

The method and manner of placing concrete shall be such as to avoid segregation or separation of the aggregates or the displacement of the reinforcement. The external surface of all concrete shall be thoroughly worked during the operations of placing in such a manner as to work the mortar against the forms to produce a smooth finish free of honeycomb and with a minimum of water and air pockets.

Open troughs and chutes shall extend as nearly as practicable to the point of deposit. Dropping the concrete a distance of more than 5 ft (1.5 m) or depositing a large quantity at any point and running or working it along the forms will not be permitted. The concrete for walls with an average thickness of 12 in. (300 mm) or less shall be placed with tubes so that the drop is not greater than 5 ft (1.5 m).

For self-consolidating concrete, the maximum distance of horizontal flow from the point of deposit shall be 15 ft (4.6 m). The distance may be increased if the dynamic segregation index (DSI) at the maximum flow distance is 10.0 percent or less according to Illinois Test Procedure SCC-8 (Option C). The maximum distance using the DSI shall be 25 ft (7.6 m). In addition, this specified horizontal flow distance shall apply to precast products. In the case of precast prestressed concrete products, refer to the Department's "Manual of Fabrication for Precast Prestressed Concrete Products" for the specified horizontal flow distance requirements.

When the form height for placing the self-consolidating concrete is greater than 10 ft (3.0 m), direct monitoring of form pressure shall be performed by the Contractor according to Illinois Test Procedure SCC-10. The monitoring requirement is a minimum, and the Contractor shall remain responsible for adequate design of the falsework and forms. The Contractor shall record the formwork pressure during concrete placement. This information shall be used by the Contractor to prevent the placement rate from exceeding the maximum formwork pressure allowed, to monitor the thixotropic change in the concrete during the pour, and to make appropriate adjustments to the mix design. This information shall be provided to the Engineer during the pour.

When concrete is pumped, the equipment shall be suitable in kind and adequate in capacity for the work and arranged so that vibrations will not damage freshly placed concrete. Aluminum

pipe or conduit will not be permitted in pumping or placing concrete. Mixed concrete shall be supplied to maintain continuous operation of the pumping equipment.

When air entrained concrete is pumped, an accessory or accessories shall be incorporated in the discharge components to minimize air loss. The maximum allowable air loss caused by the pumping operation shall be 3.0 percent with the minimum air content at the point of discharge meeting the requirements of Article 1020.04.

Placing of concrete shall be regulated so that the pressures caused by the wet concrete will not exceed those used in the design of the forms. Special care shall be taken to fill each part of the forms by depositing the concrete as near its final position as possible, to work the coarser aggregates back from the face, and to force the concrete under and around the reinforcement bars without displacing them. Leakage through forms onto beams or girders shall not be allowed to harden and shall be removed while in a plastic state.

The concrete shall be consolidated by internal vibration unless self-consolidating concrete is used. Self-consolidating concrete may be used for inaccessible locations where consolidation by internal vibration is not practicable. The self consolidating concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator may only be permitted if it can be used in a manner that does not cause segregation as determined by the Engineer. Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

The Contractor shall provide and use a sufficient number of vibrators to ensure that consolidation can be started immediately after the concrete has been deposited in the forms.

The vibrators shall be inserted into the concrete immediately after it is deposited and shall be moved throughout the mass so as to thoroughly work the concrete around the reinforcement, embedded fixtures, and into the corners and angles of the forms. Vibrators shall not be attached to the forms, reinforcement bars, or the surface of the concrete.

Application of vibrators shall be at points uniformly spaced and not farther apart than twice the radius over which the vibration is visibly effective. The duration of the vibration at the points of insertion shall be sufficient to thoroughly consolidate the concrete into place but shall not be continued so as to cause segregation. When consolidating concrete in bridge decks, the vibrator shall be vertically inserted into the concrete for 3 - 5 seconds or for a period of time determined by the Engineer. Vibration shall be supplemented by spading when required by the Engineer. In addition to the internal vibration required herein, formed surfaces which will be exposed to view after completion of the work shall be spaded with a spading tool approved by the Engineer.

Concrete shall be placed in continuous horizontal layers. When it is necessary by reason of an emergency to place less than a complete horizontal layer in one operation, such layer shall terminate in a vertical bulkhead. Separate batches shall follow each other closely and in no case shall the interval of time between the placing of successive batches be greater than 20 minutes.

If mix foaming or detrimental material is observed during placement or at the completion of a pour, the material shall be removed while the concrete is still plastic

After the concrete has taken its initial set, care shall be exercised to avoid jarring the forms or placing any strain on the ends of projecting reinforcement."

Revise Article 516.12(a) of the Standard Specifications to read:

"(a) Free Fall Placement. The free fall placement shall only be permitted in shafts that can be dewatered to ensure less than 3 in. (75 mm) of standing water exist at the time of placement without causing side wall instability. The height of free fall placement shall be a maximum of 60 ft (18.3 m) as measured from the discharge end, but it shall be reduced to a maximum of 30 ft (9.1 m) when self-consolidating concrete is used. The Contractor shall obtain approval from the Engineer to place self-consolidating concrete by free fall.

Concrete placed by free fall shall fall directly to the base without contacting either the rebar cage or shaft sidewall. Drop chutes may be used to direct concrete to the base during free fall placement.

Drop chutes used to direct placement of free fall concrete shall consist of a smooth tube of either one continuous section or multiple pieces that can be added and removed. Concrete may be placed through either a hopper at the top of the tube or side openings as the drop chute is retrieved during concrete placement. The drop chute shall be supported so that free fall does not exceed the specified maximum 60 ft (18.3 m) or 30 ft (9.1 m) at all times from the discharge end, and to ensure the concrete does not strike the rebar cage. If placement cannot be satisfactorily accomplished by free fall in the opinion of the Engineer, either a tremie or pump shall be used to accomplish the pour."

80316

## PORTLAND CEMENT CONCRETE (BDE)

Effective: January 1, 2012 Revised: January 1, 2013

Revise Notes 1 and 2 of Article 312.24 of the Standard Specifications to read:

"Note 1. Coarse aggregate shall be gradation CA 6, CA 7, CA 9, CA 10, or CA 11, Class D quality or better. Article 1020.05(d) shall apply.

Note 2. Fine aggregate shall be FA 1 or FA 2. Article 1020.05(d) shall apply."

Revise the first paragraph of Article 312.26 of the Standard Specifications to read:

"312.26 Proportioning and Mix Design. At least 60 days prior to start of placing CAM II, the Contractor shall submit samples of materials for proportioning and testing. The mixture shall contain a minimum of 200 lb (90 kg) of cement per cubic yard (cubic meter). Portland cement may be replaced with fly ash according to Article 1020.05(c)(1), however the minimum portland cement content in the mixture shall be 170 lbs/cu yd (101 kg/cu m). Blends of coarse and fine aggregates will be permitted, provided the volume of fine aggregate does not exceed the volume of coarse aggregate. The Engineer will determine the proportions of materials for the mixture. However, the Contractor may substitute their own mix design. Article 1020.05(a) shall apply and a Level III PCC Technician shall develop the mix design."

Revise the second paragraph of Article 503.22 of the Standard Specifications to read:

Other cast-in-place concrete for structures will be paid for at the contract unit price per cubic yard (cubic meter) for CONCRETE HANDRAIL, CONCRETE ENCASEMENT, and SEAL COAT CONCRETE."

Add the following to Article 1003.02 of the Standard Specifications:

- (e) Alkali Reaction.
  - (1) ASTM C 1260. Each fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II portland cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.03 percent will be assigned to limestone or dolomite fine

aggregates (manufactured stone sand). However, the Department reserves the right to perform the ASTM C 1260 test.

- (2) ASTM C 1293 by Department: In some instances, such as chert natural sand or other fine aggregates, testing according to ASTM C 1260 may not provide accurate test results. In this case, the Department may only test according to ASTM C 1293.
- (3) ASTM C 1293 by Contractor. If an individual aggregate has an ASTM C 1260 expansion value that is unacceptable to the Contractor, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The laboratory performing the ASTM C 1293 test shall be approved by the Department according to the current Bureau of Materials and Physical Research Policy Memorandum "Minimum Laboratory Requirements for Alkali-Silica Reactivity (ASR) Testing".

The ASTM C 1293 test shall be performed with Type I or II portland cement having a total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container, wick of absorbent material, or amount of coverage inside the container with blotting paper, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly. If the aggregate is manufactured into multiple gradation numbers, and the other gradation numbers have the same or lower ASTM C 1260 value, the ASTM C 1293 test result may apply to multiple gradation numbers.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 test result. When the Contractor performs the test, a split sample shall be provided to the Engineer. The Engineer may also independently obtain a sample at any time. The aggregate will be considered reactive if the Contractor or Engineer obtains an expansion value of 0.040 percent or greater.

Revise the first paragraph of Article 1004.01(e)(5) of the Standard Specifications to read:

"Crushed concrete, crushed slag, or lightweight aggregate for portland cement concrete shall be stockpiled in a moist condition (saturated surface dry or greater) and the moisture content shall be maintained uniformly throughout the stockpile by periodic sprinkling."

Revise Article 1004.02(d) of the Standard Specifications to read:

- "(d) Combining Sizes. Each size shall be stored separately and care shall be taken to prevent them from being mixed until they are ready to be proportioned. Separate compartments shall be provided to proportion each size.
  - (1) When Class BS concrete is to be pumped, the coarse aggregate gradation shall have a minimum of 45 percent passing the 1/2 in. (12.5 mm) sieve. The Contractor may combine two or more coarse aggregate sizes, consisting of CA 7, CA 11, CA 13, CA 14, and CA 16, provided a CA 7 or CA 11 is included in the blend.
  - (2) If the coarse aggregate is furnished in separate sizes, they shall be combined in proportions to provide a uniformly graded coarse aggregate grading within the following limits.

Class	Combined		Siev	Size	and Per	cent Pa	ssing	
of	Sizes	2 1/2	2	1 3/4	1 1/2	1	1/2	No.
Concrete 1/	Gizes -	in.	in.	in.	in.	in.	in.	4
PV 2/								
1	CA 5 & CA 7			100	98±2	72±22	22±12	3±3
	CA 5 & CA 11			100	98±2	72±22	22±12	3±3
SI and SC 2/								
]	CA 3 & CA 7	100	95±5		·	55±25	20±10	3±3
	CA 3 & CA 11	100	95±5			55±25	20±10	3±3
ļ	CA 5 & CA 7			100	98±2	72±22	22±12	3±3
·	CA 5 & CA 11			100	98±2	72±22	22±12	3±3

Class	Combined	S	ieve Siz	e (met	ric) and	Percen	t Passir	ng
of	Sizes	63	50	45	37.5	25	12.5	4.75
Concrete 1/	Oizes	mm	mm	mm	mm	mm	mm	mm
PV 2/	•							
	CA 5 & CA 7			100	98±2	72±22	22±12	3±3
	CA 5 & CA 11			100	98±2	72±22	22±12	3±3
SI and SC 21			•					
į	CA 3 & CA 7	100	95±5			55±25	20±10	3±3
	CA 3 & CA 11	100	95±5			55±25	20±10	3±3
	CA 5 & CA 7			100	98±2	72±22	22±12	3±3
	CA 5 & CA 11			100	98±2	72±22	22±12	3±3

- 1/ See Table 1 of Article 1020.04.
- 2/ Any of the listed combination of sizes may be used."

Add the following to Article 1004.02 of the Standard Specifications:

(g) Alkali Reaction.

- (1) ASTM C 1260. Each coarse aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II portland cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates. However, the Department reserves the right to perform the ASTM C 1260 test.
- (2) ASTM C 1293 by Department. In some instances testing a coarse aggregate according to ASTM C 1260 may not provide accurate test results. In this case, the Department may only test according to ASTM C 1293.
- (3) ASTM C 1293 by Contractor. If an individual aggregate has an ASTM C 1260 expansion value that is unacceptable to the Contractor, an ASTM C 1293 test may be performed by the Contractor according to Article 1003.02(e)(3).

Revise the first paragraph of Article 1019.06 of the Standard Specifications to read:

"1019.06 Contractor Mix Design. A Contractor may submit their own mix design and may propose alternate fine aggregate materials, fine aggregate gradations, or material proportions. Article 1020.05(a) shall apply and a Level III PCC Technician shall develop the mix design."

Revise Section 1020 of the Standard Specifications to read:

## "SECTION 1020. PORTLAND CEMENT CONCRETE

**1020.01 Description.** This item shall consist of the materials, mix design, production, testing, curing, low air temperature protection, and temperature control of concrete.

**1020.02 Materials.** Materials shall be according to the following.

ltem	Article/Section
(a) Cement	1001
(b) Water	
(c) Fine Aggregate	1003
(d) Coarse Aggregate	

(e) Concrete Admixtures	1021
(f) Finely Divided Minerals	
(g) Concrete Curing Materials	
(h) Straw	
(i) Calcium Chloride	

## **1020.03** Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Concrete Mixers and Trucks	1103.01
(b) Batching and Weighing Equipment	1103.02
(c) Automatic and Semi-Automatic Batching Equipment	
(d) Water Supply Equipment	1103.11
(e) Membrane Curing Equipment	1101.09
(f) Mobile Portland Cement Concrete Plants	

1020.04 Concrete Classes and General Mix Design Criteria. The classes of concrete shown in Table 1 identify the various mixtures by the general uses and mix design criteria. If the class of concrete for a specific item of construction is not specified, Class SI concrete shall be used.

For the minimum cement factor in Table 1, it shall apply to portland cement, portland-pozzolan cement, and portland blast-furnace slag except when a particular cement is specified in the Table.

The Contractor shall not assume that the minimum cement factor indicated in Table 1 will produce a mixture that will meet the specified strength. In addition, the Contractor shall not assume that the maximum finely divided mineral allowed in a mix design according to Article 1020.05(c) will produce a mixture that will meet the specified strength. The Contractor shall select a cement factor within the allowable range that will obtain the specified strength. The Contractor shall take into consideration materials selected, seasonal temperatures, and other factors which may require the Contractor to submit multiple mix designs.

For a portland-pozzolan cement, portland blast-furnace slag cement, or when replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the portland cement content in the mixture shall be a minimum of 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). When calculating the portland cement portion in the portland-pozzolan or portland blast-furnace slag cement, the AASHTO M 240 tolerance may be ignored.

Special classifications may be made for the purpose of including the concrete for a particular use or location as a separate pay item in the contract. The concrete used in such cases shall conform to this section.

		Gradations	(14)			1 4	CA 5 & CA 7,	CA 7, CA 11, or CA 14				CA 7. CA 11.	4.0 - 6.0 CA 13, CA 14,	or CA 16			4.0 - 7.0 CA 7, CA 11, or CA 14	5.0 - 8.0 CA 7, CA 11, (5) or CA 14 (7)	CA7, CA11,CA 13.		04 / & CA 10	O CA 11 (11), CA 13, CA 14 (11).	or CA 16	
	Air	% %					5.0 - 8.0	(2)	٠			4.0 - 7.0	4.0 - 6.0	4.0 - 6.0	4.0 - 6.0	4.0 - 6.0	4.0 - 7.0	5.0 - 8.0		5.0 - 8.0		5.0 - 8.0		
	ign sive	rength)	mum		28	-					7(e)(3)b.	urs	urs	urs	ırs	JIS	50) urs			n 1042		5000		3500
ERIA	Mix Design Compressive	(Flexural Strength)	psi, minimum	Days	14	. 2500			4	3200	Article 701.17(e)(3)b.	at 48 hours	at 24 hours	at 16 hours	at 8 hours	at 4 hours	3500 (650) at 48 hours	4000		See Section 1042	-			
N CRITI	∽ - =	E 		∐ . <u>≓</u> :	4) — 3	Ě	2 - 4   3500	(5) (650)	1		Arti	2-4	9-	4-	9-	2-8	2-4	2 - 4		1-4 0-1-0	+	-4		
MIX DESIG	Water /	Ratio	ql/ql				0.32 - 0.42 2					0.32 - 0.44 2	0.32 - 0.38 2 - 6	0.32 - 0.35 2 - 4	0.32 - 0.50 2 - 6	0.32 - 0.40   2	0.32 - 0.44 2	0.32 - 0.44		0.32 - 0.44   1	2	0.32 - 0.44   1 - 4		
TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA					Max		7.05					7.20 (Ty III) 0	8.20	7.35 (Ty III) (8) 0	6.25 (9) 0	(6	7.50 7.20 (Ty III) 0	7.05		7.05 (TV III) 0	Ι		(III Y 1) CU.	
CLASSES OF C	Cement	cwt/c	(6)		MIn.	٤.	5.65 (1)	6.05 (2)				6.50 6.20 (Ty III)	7.35	7.35 (Ty III) (8)	(6) 00.9	6.75 (9)	6.50 6.20 (Ty III)	6.05	·	5.65 (TY III)		5.65	(111 11) CD.C	-
TABLE 1. (	Specification Section	Reference				420 or 421 353	354	423 483 663	200	442							422	503		1042	504	512		639
	Use					Pavement Base Course	Base Course Widening	Driveway Pavement Shoulders Shoulder Curb	Danomart Dataking	Favernen Fatching Bridge Deck Patching (10)		PP-1	PP-2	PP-3	PP-4	PP-5	Railroad Crossing	Bridge Superstructure Bridge Approach Slab	Various Precast Concrete Items	Wer Cast Dry Cast	Precast Prestressed Members	Precast Prestressed Piles and	Extensions	Precast Prestressed Sight Screen
	Class	Conc.					₹			윤							H.	BS	6	2		S		

	Coarse Aggregate Gradations	(14)			5.0 - 8.0 CA 13, CA 14, CA 16, or a blend	or mese gradations.	CA 3 & CA 7, Optional CA 3 & CA 11, 6.0 max. CA 5 & CA 7.	CA 5 & CA 11,	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		CA 3 & CA 7.	(5) CA 3 & CA 11,	CA 5 & CA 7,	CA 7, CA 11, CA 13,	CA 14, or CA 16	(61)	
	Air Content %				5.0 - 8.0		Optional 6.0 max.			*****	5.0 - 8.0	(2)					
	gn Strength ength)	m		83													
TERIA	Mix Design Compressive Strength (Flexural Strength)	psi, minimum	Days	7	4000 (675)		3500 (650)				3500	(650)					
SN CRI	Comp (Flex	<u>م</u>		6													
DESIC	ω-⊐E	۵.	.⊑ 3	ŧ	6 - 8		. E				2 - 4	(2)					
AND MIX	Water / Cement Ratio	q/ql			0.32 - 0.44		0.32 - 0.44				0.32 - 0.44						
CONCRETE	t z t	ď.		Max	7.05		7.05				7.05						
TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA	Cement	(S)	Miss	WIII.	6.65		5.65 (1) 6.05 (2)			22.0	5.65 (1)	6.05 (2)	'.				
TABLE 1. (	Specification Section Reference				516 512 734	837	503		503 424 511	512	542	909	637	/34		836	ò
	Use				Drilled Shaft (12) Metal Shell Piles (12) Sign Structures	Drilled Shaft (12) Light Tower Foundation (12)	Seal Coat		Structures (except Superstructure)   Sidewalk Slone Wall	Encasement Box Culverts	End Section and Collar	Median, and Paved Ditch	Concrete Barrier	Spread Footing	Concrete Foundation	Pole Foundation (12) Traffic Signal Foundation	Drilled Shaft (12) Square or Rectangular
	Class of Conc.				SO		SC		0, 0, 0,	, <u>11, 12</u>	S		_				

Notes:

Sentral-mixed £00

ruck-mixed or shrink-mixed.

For Class SC concrete and for any other class of concrete that is to be placed underwater, except Class DS concrete, he cement factor shall be increased by ten percent. 4

, the maximum slump may be increased to 6 in. For Class PS, the 7 in. maximum slump may be increased to 8 The maximum slump may be increased to 7 in. when a high range water-reducing admixture is used for all classes of concrete, except Class PV, SC, and PP. For Class SC, the maximum slump may be increased to 8 in. For Class PP-/2 in. if the high range water-reducing admixture is the polycarboxylate type.

If concrete is placed to displace drilling fluid, or against temporary casing, the slump shall be 8 - 10 in. at the point of placement. If a water-reducing admixture is used in lieu of a high range water-reducing admixture according to The slump range for slipform construction shall be 1/2 to 2 1/2 in. and the air content range shall be 5.5 to 8.0 percent. Article 1020.05(b)(7), the slump shall be 2 - 4 in.

(9)

For Class BS concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, except CA 11 may be used for full-depth patching. 2

In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 °F, the Type III portiand cement may be replaced with Type I or II portland cement. <u>@</u>

The cement shall be a rapid hardening cement from the Department's "Approved List of Packaged, Dry, Rapid 6

except CA 11 may be used for full-depth patching. In addition, the mix design shall have 72 hours to obtain a For Class PP concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, Hardening Cementitious Materials for Concrete Repairs" for PP-4 and calcium aluminate cement for PP-5. 4,000 psi compressive or 675 psi flexural strength for all PP mix designs. 10

The nominal maximum size permitted is 3/4 in. Nominal maximum size is defined as the largest sieve which retains any of the aggregate sample particles. £

the Engineer's discretion, the Contractor may be required to conduct a minimum 2 cu yd trial batch to verify the mix The concrete mix shall be designed to remain fluid throughout the anticipated duration of the pour plus one hour. At 12)

CA 3 or CA 5 may be used when the nominal maximum size does not exceed two-thirds the clear distance between parallel reinforcement bars, or between the reinforcement bar and the form. Nominal maximum size is defined in Note (13)

Refer also Alternate combinations of gradation sizes may be used with the approval of the Engineer. Article 1004.02(d) for additional information on combining sizes. (14)

2

	TA	BLE 1. CLA	TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA (metric)	NCRETE AND	) MIX DESI	GN CRIT	ERIA (metric	(0)			
Class	Ose	Specification	Cem	tue	Water /	s-	Mix Design	sign	3,5		
Sonc.		Section	Factor	tor	Cement	- > E	(Flexural Strength)	trength)	Content	Aggregate	
			kg/cu m	E		۵	kPa, minimum	imum	ę	(14)	
			2		Kg/kg	4,	Davs	S			
			Min.	Max		( <del>4</del> )	3 14	28			_
	Pavement Base Course	420 or 421 353					Tv III 24 000			C A F B C A 7	
₹	Base Course Widening	354	335 (1)	418	0.32 - 0.42	50 - 100 24,000		 ?6	5.0 - 8.0	5.0 - 8.0 CA 5 & CA 11,	
	Shoulders Shoulder Curb	423 483 662	360 (2)			( <u>G</u>	(4500)		(2)	CA 7, CA 11, or CA 14	
g.	Pavement Patching Bridge Deck Patching (10)	442					22,100	8.6			
							Article 701.17(e)(3)b.	17(e)(3)b.			
	PP-1		385 365 (Ty III)	445 425 (Ty III)	0.32 - 0.44	50 - 100	at 48 hours	ours	4.0 - 7.0	4.0 - 7.0 CA 7, CA 11, GA 13, CA 14.	
	PP-2		-	485	0.32 - 0.38	50 - 150	at 24 hours	ours	4.0 - 6.0	4.0 - 6.0 or CA 16	
	PP-3		@	435 (Ty III) (8)	0.32 - 0.35 50 - 100	50 - 100	at 16 hours	ours	4.0 - 6.0		
	PP-4		355 (9)	370 (9)	0.32 - 0.50   50 - 150	50 - 150	at 8 hours	ours	4.0 - 6.0		
	7.4.0		400 (9)	400 (9)	0.32 - 0.40 50 - 200	50 - 200	at 4 hours	urs	4.0 - 6.0		
뜐	Railroad Crossing	422	385 365 (Ty III)	445 425 (Ty III)	0.32 - 0.44 50 - 100	50 - 100	24,000 (4500) at 48 hours	4500) ours	4.0 - 7.0	4.0 - 7.0 CA 7, CA 11, or CA 14	
BS	Bridge Superstructure Bridge Approach Slab	503	360	418	0.32 - 0.44	50 - 100 (5)	27,500	06	5.0 - 8.0	5.0 - 8.0 CA 7, CA 11,	_
	Various Precast Concrete Items									CA7 CA11 CA13	
<u>က</u>	Wet Cast	1042	335	418	0.32 - 0.44   25 - 100	25 - 100	See Section 1042	n 1042	5.0 - 8.0	5.0 - 8.0 CA 14, CA 16, or	
	Diy Cast	1	333 (TY III)	418 (1 Y III)	0.25 - 0.40	0-25			N/A	CA 7 & CA 16	
PS	Precast Prestressed Members Precast Prestressed Piles and	512	335	418	0.32 - 0.44   25 - 100	25 - 100		Plans 34.500		5.0 - 8.0 CA 11 (11), CA 13. CA 14 (11).	_
	Extensions		(111 11) ccc	410 (11 111)						or CA 16	
	Precast Prestressed Sight Screen	639						24,000			

_															
	Coarșe Aggregate Gradations	(14)		5.0 - 8.0 CA 13, CA 14,	CA 16, or a blend of these gradations.	CA 3 & CA 7, Optional CA 3 & CA 11, 6.0 max. CA 5 & CA 7,	CA 7, or CA 11,		0000	CA3&CA11,	CA 5 & CA 11,	CA 13, CA 14, or	CA 16 (13)		
	Air Content %			5.0 - 8.0		Optional 6.0 max.			·	5.0 - 8.0					
	n rength ngth)	·		28											
metric)	Mix Design Compressive Strength (Flexural Strength)	kPa, minimum	Days	27,500	(000+)	24,000 (4500)				24,000					
TERIA (	Compre (Flex	ΑŖ		n											
IGN CRI	∽ ¬ E	۵.	mm ·	(+) 150 -200 (6)	2	75 - 125				50 - 100 (5)	•				
D MIX DES	Water / Cement Ratio	kg/kg		0.32 - 0.44 150 -200		0.32 - 0.44 75 - 125				0.32 - 0.44					
CRETE AN	- I	E	Men	418		418				418					
TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA (metric)	Cement	kg/cu m (3)	Mis	395		335 (1) 360 (2)		2		335 (1) 360 (2)					
BLE 1. CLAS	Specification Section Reference			516 512	734	503	C	503 511	512 540	542	909 637	734		838 878	
TA	Use			Drilled Shaft (12) Metal Shell Piles (12)	Sign Structures Drilled Shaft (12) Light Tower Foundation (12)	Seal Coat	Standing (good Suppost	Sidewalk Sidewalk Slope Wall	Encasement Box Culverts	End Section and Collar Curb, Gutter, Curb & Gutter,	Median, and Paved Ditch Concrete Barrier	Sign Structures Spread Footing	Concrete Foundation	Fore Foundation (12) Traffic Signal Foundation	Drilled Shaft (12) Square or Rectangular
	Class of Conc.			SO	<u> </u>	S .	ď	o oo oo		<u>w</u>	O	(J)			

Notes:

Central-mixed.

- ruck-mixed or shrink-mixed. **E**Ø®
- or Class SC concrete and for any other class of concrete that is to be placed underwater, except Class DS concrete, he cement factor shall be increased by ten percent.
  - Class PP-1, the maximum slump may be increased to 150 mm. For Class PS, the 175 mm maximum slump may be The maximum slump may be increased to 175 mm when a high range water-reducing admixture is used for all classes of concrete except Class PV, SC, and PP. For Class SC, the maximum slump may be increased to 200 mm. ncreased to 215 mm if the high range water-reducing admixture is the polycarboxylate type. 4
    - The slump range for slipform construction shall be 13 to 64 mm and the air content range shall be 5.5 to 8.0 percent.
- If concrete is placed to displace drilling fluid, or against temporary casing, the slump shall be 200 250 mm at the point of placement. If a water-reducing admixture is used in lieu of a high range water-reducing admixture according o Article 1020.05(b)(7), the slump shall be 50 - 100 mm. (9)
  - or Class BS concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, except CA 11 may be used for full-depth patching. 6
- microsilica (silica fume) shall be used. For an air temperature greater than 30 °C, the Type III portland cement may be in addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of replaced with Type I or II portland cement. 8
  - The cement shall be a rapid hardening cement from the Department's "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs" for PP-4 and calcium aluminate cement for PP-5. 6
- For Class PP concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, except CA 11 may be used for full-depth patching. In addition, the mix design shall have 72 hours to obtain a 27,500 kPa compressive or 4,650 kPa flexural. 6
  - The nominal maximum size permitted is 19 mm. Nominal maximum size is defined as the largest sieve which retains any of the aggregate sample particles. Ê
- The concrete mix shall be designed to remain fluid throughout the anticipated duration of the pour plus one hour. At the Engineer's discretion, the Contractor may be required to conduct a minimum 1.5 cu m trial batch to verify the mix (12)
- CA 3 or CA 5 may be used when the nominal maximum size does not exceed two-thirds the clear distance between parallel reinforcement bars, or between the reinforcement bar and the form. Nominal maximum size is defined in Note (13)
- Alternate combinations of gradation sizes may be used with the approval of the Engineer. Refer also to Article 1004.02(d) for additional information on combining sizes. (14)

Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation. Self-consolidating concrete mix designs may be developed for Class BS, PC, PS, DS, and SI concrete. Self-consolidating concrete mix designs may also be developed for precast concrete products that are not subjected to Class PC concrete requirements according to Section 1042. The mix design criteria for the concrete mixture shall be according to Article 1020.04 with the following exceptions.

- (a) The slump requirements shall not apply.
- (b) The concrete mixture should be uniformly graded, and information in the "Portland Cement Concrete Level III Technician Course Manual of Instructions for Design of Concrete Mixtures" may be used to develop the uniformly graded mix design. The coarse aggregate gradations shall be CA 11, CA 13, CA 14, CA 16, or a blend of these gradations. However, the final gradation when using a single coarse aggregate or combination of coarse aggregates shall have 100 percent pass the 1 in. (25 mm) sieve, and minimum 95 percent pass the 3/4 in. (19 mm) sieve. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (c) The slump flow range shall be 22 in. (560 mm) minimum to 28 in. (710 mm) maximum and tested according to Illinois Test Procedure SCC-2.
- (d) The visual stability index shall be a maximum of 1 and tested according to Illinois Test Procedure SCC-2.
- (e) The J-Ring value shall be a maximum of 2 in. (50 mm) and tested according to Illinois Test Procedure SCC-3. The L-Box blocking ratio shall be a minimum of 80 percent and tested according to Illinois Test Procedure SCC-3. The Contractor has the option to select either test.
- (f) The hardened visual stability index shall be a maximum of 1 and tested according to Illinois Test Procedure SCC-6.
- (g) If Class PC concrete requirements do not apply to the precast concrete product according to Section 1042, the maximum cement factor shall be 7.05 cwt/cu yd (418 kg/cu m) and the maximum allowable water/cement ratio shall be 0.44.
- (h) If the measured slump flow, visual stability index, J-Ring value, or L-Box blocking ratio fall outside the limits specified, a check test will be made. In the event of a second failure, the Engineer may refuse to permit the use of the batch of concrete represented.

The Contractor may use water or self-consolidating admixtures at the jobsite to obtain the specified slump flow, visual stability index, J-ring value, or L-box blocking ratio. The maximum design water/cement ratio shall not be exceeded.

**1020.05** Other Concrete Criteria. The concrete shall be according to the following.

(a) Proportioning and Mix Design. For all Classes of concrete, it shall be the Contractor's responsibility to determine mix design material proportions and to proportion each batch of concrete. A Level III PCC Technician shall develop the mix design for all Classes of concrete, except Classes PC and PS. The mix design, submittal information, trial batch, and Engineer verification shall be according to the "Portland Cement Concrete Level III Technician" course material.

The Contractor shall provide the mix designs a minimum of 45 calendar days prior to production. More than one mix design may be submitted for each class of concrete.

The Engineer will verify the mix design submitted by the Contractor. Verification of a mix design shall in no manner be construed as acceptance of any mixture produced. Once a mix design has been verified, the Engineer shall be notified of any proposed changes.

Tests performed at the jobsite will determine if a mix design can meet specifications. If the tests indicate it cannot, the Contractor shall make adjustments to a mix design, or submit a new mix design if necessary, to comply with the specifications.

(b) Admixtures. The Contractor shall be responsible for using admixtures and determining dosages for all Classes of concrete, cement aggregate mixture II, and controlled low-strength material that will produce a mixture with suitable workability, consistency, and plasticity. In addition, admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Contractor shall obtain approval from the Engineer to use an accelerator when the concrete temperature is greater than 60 °F (16 °C). However, this accelerator approval by the Engineer will not be required for Class PP, RR, PC, and PS concrete. The accelerator shall be the non-chloride type unless otherwise specified in the contract plans.

The Department will maintain an Approved List of Corrosion Inhibitors. inhibitor dosage rates shall be according to Article 1020.05(b)(10). For information on approved controlled low-strength material air-entraining admixtures, refer to Article 1019.02. The Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted by the Contractor prior to the pour when determining an admixture dosage from this list or when making minor admixture dosage adjustments at the jobsite. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. The Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overlay pour, the initial set time shall be delayed until the deflections due

to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays.

The sequence, method, and equipment for adding the admixtures shall be approved by the Engineer. Admixtures shall be added to the concrete separately. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

Admixture use shall be according to the following.

- (1) When the atmosphere or concrete temperature is 65 °F (18 °C) or higher, a retarding admixture shall be used in the Class BS concrete and concrete bridge deck overlays. The proportions of the ingredients of the concrete shall be the same as without the retarding admixture, except that the amount of mixing water shall be reduced, as may be necessary, in order to maintain the consistency of the concrete as required. In addition, a high range water-reducing admixture shall be used in bridge deck concrete. At the option of the Contractor, a water-reducing admixture may be used with the high range water-reducing admixture in Class BS concrete.
- (2) At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 or RR concrete. When the air temperature is less than 55 °F (13 °C) and an accelerator is used, the non-chloride accelerator shall be calcium nitrite.
- (3) When Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1 or RR concrete, a water-reducing or high range water-reducing admixture shall be used.
- (4) For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture with the high range water-reducing admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite. For Class PP-2 concrete, the non-chloride accelerator shall be calcium nitrite when the air temperature is less than 55 °F (13 °C).
- (5) For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture with the high range water-reducing admixture. An accelerator shall not be used. For stationary or truck-mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use

a mobile portland cement concrete plant, but a retarding admixture shall not be used unless approved by the Engineer.

For PP-5 concrete, a non-chloride accelerator, high range water-reducing admixture, and air-entraining admixture shall be used. The accelerator, high range water-reducing admixture, and air-entraining admixture shall be per the Contractor's recommendation and dosage. The approved list of concrete admixtures shall not apply. A mobile portland cement concrete plant shall be used to produce the patching mixture.

- (6) When a calcium chloride accelerator is specified in the contract, the maximum chloride dosage shall be 1.0 quart (1.0 L) of solution per 100 lb (45 kg) of cement. The dosage may be increased to a maximum 2.0 quarts (2.0 L) per 100 lb (45 kg) of cement if approved by the Engineer. When a calcium chloride accelerator for Class PP-2 concrete is specified in the contract, the maximum chloride dosage shall be 1.3 quarts (1.3 L) of solution per 100 lb (45 kg) of cement. The dosage may be increased to a maximum 2.6 quarts (2.6 L) per 100 lb (45 kg) of cement if approved by the Engineer.
- (7) For Class DS concrete a retarding admixture and a high range water-reducing admixture shall be used. For dry excavations that are 10 ft (3 m) or less, the high range water-reducing admixture may be replaced with a water-reducing admixture if the concrete is vibrated. The use of admixtures shall take into consideration the slump loss limits specified in Article 516.12 and the fluidity requirement in Article 1020.04 (Note 12).
- (8) At the Contractor's option, when a water-reducing admixture or a high range water-reducing admixture is used for Class PV, PP-1, RR, SC, and SI concrete, the cement factor may be reduced a maximum 0.30 hundredweight/cu yd (18 kg/cu m). However, a cement factor reduction will not be allowed for concrete placed underwater.
- (9) When Type F or Type G high range water-reducing admixtures are used, the initial slump shall be a minimum of 1 1/2 in. (40 mm) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.
- (10) When specified, a corrosion inhibitor shall be added to the concrete mixture utilized in the manufacture of precast, prestressed concrete members and/or other applications. It shall be added, at the same rate, to all grout around post-tensioning steel when specified.

When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m), and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch.

When Rheocrete 222+ is used, it shall be added at the rate of 1.0 gal/cu yd (5.0 L/cu m), and the batching sequence shall be according to the manufacturer's instructions.

- (c) Finely Divided Minerals. Use of finely divided minerals shall be according to the following.
  - (1) Fly Ash. At the Contractor's option, fly ash from approved sources may partially replace portland cement in cement aggregate mixture II, Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete.

The use of fly ash shall be according to the following.

- a. Measurements of fly ash and portland cement shall be rounded up to the nearest 5 lb (2.5 kg).
- b. When Class F fly ash is used in cement aggregate mixture II, Class PV, BS, PC, PS, DS, SC, and SI concrete, the amount of portland cement replaced shall not exceed 25 percent by weight (mass).
- c. When Class C fly ash is used in cement aggregate mixture II, Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete, the amount of portland cement replaced shall not exceed 30 percent by weight (mass).
- d. Fly ash may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.
- (2) Ground Granulated Blast-Furnace (GGBF) Slag. At the Contractor's option, GGBF slag may partially replace portland cement in Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete. For Class PP-3 concrete, GGBF slag shall be used according to Article 1020.04.

The use of GGBF slag shall be according to the following.

- a. Measurements of GGBF slag and portland cement shall be rounded up to the nearest 5 lb (2.5 kg).
- b. When GGBF slag is used in Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC and SI concrete, the amount of portland cement replaced shall not exceed 35 percent by weight (mass).
- c. GGBF slag may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

(3) Microsilica. At the Contractor's option, microsilica may be added at a maximum of 5.0 percent by weight (mass) of the cement and finely divided minerals summed together.

Microsilica shall be used in Class PP-3 concrete according to Article 1020.04.

- (4) High Reactivity Metakaolin (HRM). At the Contractor's option, HRM may be added at a maximum of 5.0 percent by weight (mass) of the cement and finely divided minerals summed together.
- (5) Mixtures with Multiple Finely Divided Minerals. Except as specified for Class PP-3 concrete, the Contractor has the option to use more than one finely divided mineral in Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete as follows.
  - a. The mixture shall contain a maximum of two finely divided minerals. The finely divided mineral in portland-pozzolan cement or portland blast-furnace slag cement shall count toward the total number of finely divided minerals allowed. The finely divided minerals shall constitute a maximum of 35.0 percent of the total cement plus finely divided minerals. The fly ash portion shall not exceed 30.0 percent for Class C fly ash or 25.0 percent for Class F fly ash. The Class C and F fly ash combination shall not exceed 30.0 percent. The ground granulated blast-furnace slag portion shall not exceed 35.0 percent. The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed ten percent. The finely divided mineral in the portland-pozzolan cement or portland blast-furnace slag blended cement shall apply to the maximum 35.0 percent.
  - b. Central Mixed. For Class PV, SC, and SI concrete, the mixture shall contain a minimum of 565 lbs/cu yd (335 kg/cu m) of cement and finely divided minerals summed together. If a water-reducing or high-range water-reducing admixture is used, the Contractor has the option to use a minimum of 535 lbs/cu yd (320 kg/cu m).
  - c. Truck-Mixed or Shrink-Mixed. For Class PV, SC, and SI concrete, the mixture shall contain a minimum of 605 lbs/cu yd (360 kg/cu m) of cement and finely divided minerals summed together. If a water-reducing or high-range water-reducing admixture is used, the Contractor has the option to use a minimum of 575 lbs/cu yd (345 kg/cu m).
  - d. Central-Mixed, Truck-Mixed or Shrink-Mixed. For Class PP-1 and RR concrete, the mixture shall contain a minimum of 650 lbs/cu yd (385 kg/cu m) of cement and finely divided minerals summed together. For Class PP-1 and RR concrete using Type III portland cement, the mixture shall contain a minimum of 620 lbs/cu yd (365 kg/cu m).

For Class PP-2 concrete, the mixture shall contain a minimum of 735 lbs/cu yd (435 kg/cu m) of cement and finely divided minerals summed together. For Class BS concrete, the mixture shall contain a minimum of 605 lbs/cu yd (360 kg/cu m). For Class DS concrete, the mixture shall contain a minimum of 665 lbs/cu yd (395 kg/cu m).

If a water-reducing or high range water-reducing admixture is used in Class PP-1 and RR concrete, the Contractor has the option to use a minimum of 620 lbs/cu yd (365 kg/cu m) of cement and finely divided minerals summed together. If a water-reducing or high-range water-reducing admixture is used with Type III portland cement in Class PP-1 and RR concrete, the Contractor has the option to use a minimum of 590 lbs/cu yd (350 kg/cu m).

- e. Central-Mixed or Truck-Mixed. For Class PC and PS concrete, the mixture shall contain a minimum of 565 lbs/cu yd (335 kg/cu m) of cement and finely divided minerals summed together.
- f. The mixture shall contain a maximum of 705 lbs/cu yd (418 kg/cu m) of cement and finely divided mineral(s) summed together for Class PV, BS, PC, PS, DS, SC, and SI concrete. For Class PP-1 and RR concrete, the mixture shall contain a maximum of 750 lbs/cu yd (445 kg/cu m). For Class PP-1 and RR concrete using Type III portland cement, the mixture shall contain a maximum of 720 lbs/cu yd (425 kg/cu m). For Class PP-2 concrete, the mixture shall contain a maximum of 820 lbs/cu yd (485 kg/cu m).
- g. For Class SC concrete and for any other class of concrete that is to be placed underwater, except Class DS concrete, the allowable cement and finely divided minerals summed together shall be increased by ten percent.
- h. The combination of cement and finely divided minerals shall comply with Article 1020.05(d).
- (d) Alkali-Silica Reaction. For cast-in-place (includes cement aggregate mixture II and latex mixtures), precast, and precast prestressed concrete, one of the mixture options provided in Article 1020.05(d)(2) shall be used to reduce the risk of a deleterious alkalisilica reaction in concrete exposed to humid or wet conditions. The mixture options are not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate, or sodium formate. The mixture options will not be required for the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy.

The mixture options shall not apply to concrete revetment mats, insertion lining of pipe culverts, portland cement mortar fairing course, controlled low-strength material, miscellaneous grouts that are not prepackaged, Class PP-3 concrete, Class PP-4 concrete, and Class PP-5 concrete.

(1) Aggregate Groups. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

	Aggreg	ate Groups						
Coarse Aggregate or		Fine Aggregate Or						
Coarse Aggregate Blend								
ASTM C 1260 Expansion								
ASTM C 1260 Expansion	≤0.16%	>0.16% - 0.27%	>0.27%					
≤0.16%	Group I	Group II	Group III					
>0.16% - 0.27% Group II Group II Group III								
>0.27% Group III Group III Group IV								

(2) Mixture Options. Based upon the aggregate group, the following mixture options shall be used. However, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Re	duction of F	Risk for Delet	erious Alkali-	Silica Reaction	on
Aggregate		N	lixture Option	าร	
Groups	Option 1	Option 2	Option 3	Option 4	Option 5
Group I			tions are not ent or finely d		
Group II	. X	Х	х	х	x
Group III	Х	Combine Option 2 with Option 3	Combine Option 2 with Option 3	Х	X
Group IV	Х	Combine Option 2 with Option 4	Invalid Option	Combine Option 2 with Option 4	X

<sup>&</sup>quot;X" denotes valid mixture option for aggregate group.

a. Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used. Coarse aggregate may only be blended with another coarse aggregate. Fine aggregate may only be blended with another fine aggregate. Blending of coarse with fine aggregate to place the material in another group will not be permitted.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$ 

Where: a, b, c... = percentage of aggregate in the blend; A, B, C... = expansion value for that aggregate.

- b. Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. In addition, a blended cement with a finely divided mineral may be added to a separate finely divided mineral to meet the following requirements, provided the finely divided minerals are the same material. However, adding together two different finely divided minerals to obtain the specified minimum percentage of one material will not be permitted for 1), 2), 3), and 4). Refer to Mixture Option 5 to address this situation.
  - 1. Class F Fly Ash. For cement aggregate mixture II, Class PV, BS, PC, PS, MS, DS, SC and SI concrete, the Class F fly ash shall be a minimum 25.0 percent by weight (mass) of the cement and finely divided minerals summed together.

If the maximum total equivalent available alkali content (Na<sub>2</sub>O +  $0.658K_2O$ ) exceeds 4.50 percent for the Class F fly ash, it may be used only if it complies with Mixture Option 5.

2. Class C Fly Ash. For cement aggregate mixture II, Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete, Class C fly ash shall be a minimum of 25.0 percent by weight (mass) of the cement and finely divided minerals summed together.

If the maximum total equivalent available alkali content ( $Na_2O + 0.658K_2O$ ) exceeds 4.50 percent or the calcium oxide exceeds 26.50 percent for the Class C fly ash, it may be used only per Mixture Option 5.

3. Ground Granulated Blast-Furnace Slag. For Class PV, PP-1, PP-2, RR, BS, PC, PS, DS, SC, and SI concrete, ground granulated blast-furnace slag shall be a minimum of 25.0 percent by weight (mass) of the cement and finely divided minerals summed together.

If the maximum total equivalent available alkali content ( $Na_2O + 0.658K_2O$ ) exceeds 1.00 percent for the ground granulated blast-furnace slag, it may be used only per Mixture Option 5.

4. Microsilica or High Reactivity Metakaolin, Microsilica solids or high reactivity metakaolin shall be a minimum 5.0 percent by weight (mass) of the cement and finely divided minerals summed together.

If the maximum total equivalent available alkali content ( $Na_2O + 0.658K_2O$ ) exceeds 1.00 percent for the Microsilica or High Reactivity Metakaolin, it may be used only if it complies with Mixture Option 5.

- c. Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.60 percent. When aggregate in Group II is involved and the Contractor desires to use a finely divided mineral, any finely divided mineral may be used with the cement unless the maximum total equivalent available alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) exceeds 4.50 percent for the fly ash; or 1.00 percent for the ground granulated blast-furnace slag, microsilica or high reactivity metakaolin. If the alkali content is exceeded, the finely divided mineral may be used only per Mixture Option 5.
- d. Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.45 percent. When aggregate in Group II or III is involved and the Contractor desires to use a finely divided mineral, any finely divided mineral may be used with the cement unless the maximum total equivalent available alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) exceeds 4.50 percent for the fly ash; or 1.00 percent for the ground granulated blast-furnace slag, microsilica, or high reactivity metakaolin. If the alkali content is exceeded, the finely divided mineral may be used only per Mixture Option 5.
- e. Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The laboratory performing the ASTM C 1567 test shall be approved by the Department according to the current Bureau of Materials and Physical Research Policy Memorandum "Minimum Laboratory Requirements for Alkali-Silica Reactivity (ASR) Testing". The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly.

For latex concrete, the ASTM C 1567 test shall be performed without the latex.

The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content  $(Na_2O + 0.658K_2O)$ , a new ASTM C 1567 test will not be required.

The Engineer reserved the right to verify a Contractor's ASTM C 1567 test result. When the Contractor performs the test, a split sample may be requested by the Engineer. The Engineer may also independently obtain a sample at any time.

The proposed cement or finely divided mineral will not be allowed for use if the Contractor or Engineer obtains an expansion value greater than 0.16 percent.

1020.06 Water/Cement Ratio. The water/cement ratio shall be determined on a weight (mass) basis. When a maximum water/cement ratio is specified, the water shall include mixing water, water in admixtures, free moisture on the aggregates, and water added at the jobsite. The quantity of water may be adjusted within the limit specified to meet slump requirements.

When fly ash, ground granulated blast-furnace slag, high-reactivity metakaolin, or microsilica (silica fume) are used in a concrete mix, the water/cement ratio will be based on the total cement and finely divided minerals contained in the mixture.

**1020.07 Slump.** The slump shall be determined according to Illinois Modified AASHTO T 119.

If the measured slump falls outside the limits specified, a check test will be made. In the event of a second failure, the Engineer may refuse to permit the use of the batch of concrete represented.

If the Contractor is unable to add water to prepare concrete of the specified slump without exceeding the maximum design water/cement ratio, a water-reducing admixture shall be added.

1020.08 Air Content. The air content shall be determined according to Illinois Modified AASHTO T 152 or Illinois Modified AASHTO T 196. The air-entrainment shall be obtained by the use of cement with an approved air-entraining admixture added during the mixing of the concrete or the use of air-entraining cement.

If the air-entraining cement furnished is found to produce concrete having air content outside the limits specified, its use shall be discontinued immediately and the Contractor shall provide other air-entraining cement which will produce air contents within the specified limits.

If the air content obtained is above the specified maximum limit at the jobsite, the Contractor may have the concrete further mixed, within the limits of time and revolutions specified, to reduce the air content. If the air content obtained is below the specified minimum limit, the Contractor may add to the concrete a sufficient quantity of an approved air-entraining admixture at the jobsite to bring the air content within the specified limits.

1020.09 Strength Tests. The specimens shall be molded and cured according to Illinois Modified AASHTO T 23. Specimens shall be field cured with the construction item as specified in Illinois Modified AASHTO T 23. The compressive strength shall be determined according to Illinois Modified AASHTO T 22. The flexural strength shall be determined according to Illinois Modified AASHTO T 177.

Except for Class PC and PS concrete, the Contractor shall transport the strength specimens from the site of the work to the field laboratory or other location as instructed by the Engineer. During transportation in a suitable light truck, the specimens shall be embedded in straw,

burlap, or other acceptable material in a manner meeting with the approval of the Engineer to protect them from damage; care shall be taken to avoid impacts during hauling and handling. For strength specimens, the Contractor shall provide a field curing box for initial curing and a water storage tank for final curing. The field curing box will be required when an air temperature below 60 °F (16 °C) is expected during the initial curing period. The device shall maintain the initial curing temperature range specified in Illinois Modified AASHTO T 23, and may be insulated or power operated as appropriate.

**1020.10 Handling, Measuring, and Batching Materials.** Aggregates shall be handled in a manner to prevent mixing with soil and other foreign material.

Aggregates shall be handled in a manner which produces a uniform gradation, before placement in the plant bins. Aggregates delivered to the plant in a nonuniform gradation condition shall be stockpiled. The stockpiled aggregate shall be mixed uniformly before placement in the plant bins.

Aggregates shall have a uniform moisture content before placement in the plant bins. This may require aggregates to be stockpiled for 12 hours or more to allow drainage, or water added to the stockpile, or other methods approved by the Engineer. Moisture content requirements for crushed concrete, crushed slag or lightweight aggregate shall be according to Article 1004.01(e)(5).

Aggregates, cement, and finely divided minerals shall be measured by weight (mass). Water and admixtures shall be measured by volume or weight (mass).

The Engineer may permit aggregates, cement, and finely divided minerals to be measured by volume for small isolated structures and for miscellaneous items. Aggregates, cement, and finely divided minerals shall be measured individually. The volume shall be based upon dry, loose materials.

- **1020.11 Mixing Portland Cement Concrete.** The mixing of concrete shall be according to the following.
  - . (a) Ready-Mixed Concrete. Ready-mixed concrete is central-mixed, truck-mixed, or shrink-mixed concrete transported and delivered in a plastic state ready for placement in the work and shall be according to the following.
    - (1) Central-Mixed Concrete. Central-mixed concrete is concrete which has been completely mixed in a stationary mixer and delivered in a truck agitator, a truck mixer operating at agitating speed, or a nonagitator truck.

The stationary mixer shall operate at the drum speed for which it was designed. The batch shall be charged into the drum so that some of the water shall enter in advance of the cement, finely divided minerals, and aggregates. The flow of the water shall be uniform and all water shall be in the drum by the end of the first 15 seconds of the mixing period. Water shall begin to enter the drum from zero to

two seconds in advance of solid material and shall stop flowing within two seconds of the beginning of mixing time.

Some coarse aggregate shall enter in advance of other solid materials. For the balance of the charging time for solid materials, the aggregates, finely divided minerals, and cement (to assure thorough blending) shall each flow at acceptably uniform rates, as determined by visual observation. Coarse aggregate shall enter two seconds in advance of other solid materials and a uniform rate of flow shall continue to within two seconds of the completion of charging time.

The entire contents of the drum, or of each single compartment of a multiple-drum mixer, shall be discharged before the succeeding batch is introduced.

The volume of concrete mixed per batch shall not exceed the mixer's rated capacity as shown on the standard rating plate on the mixer by more than ten percent.

The minimum mixing time shall be 75 seconds for a stationary mixer having a capacity greater than 2 cu yd (1.5 cu m). For a mixer with a capacity equal to or less than 2 cu yd (1.5 cu m) the mixing time shall be 60 seconds. Transfer time in multiple drum mixers is included in the mixing time. Mixing time shall begin when all materials are in the mixing compartment and shall end when the discharge of any part of the batch is started. The required mixing times will be established by the Engineer for all types of stationary mixers.

When central-mixed concrete is to be transported in a truck agitator or a truck mixer, the stationary-mixed batch shall be transferred to the agitating unit without delay and without loss of any portion of the batch. Agitating shall start immediately thereafter and shall continue without interruption until the batch is discharged from the agitator. The ingredients of the batch shall be completely discharged from the agitator before the succeeding batch is introduced. Drums and auxiliary parts of the equipment shall be kept free from accumulations of materials.

The vehicles used for transporting the mixed concrete shall be of such capacity, or the batches shall be so proportioned, that the entire contents of the mixer drum can be discharged into each vehicle load.

(2) Truck-Mixed Concrete. Truck-mixed concrete is completely mixed and delivered in a truck mixer. When the mixer is charged with fine and coarse aggregates simultaneously, not less than 60 nor more than 100 revolutions of the drum or blades at mixing speed shall be required, after all of the ingredients including water are in the drum. When fine and coarse aggregates are charged separately, not less than 70 revolutions will be required. For self-consolidating concrete, a minimum of 100 revolutions is required in all cases. Additional mixing beyond 100 revolutions shall be at agitating speed unless additions of water, admixtures, or other materials are made at the jobsite. The mixing operation shall begin immediately after the cement and water, or the cement and wet aggregates, come in contact. The

ingredients of the batch shall be completely discharged from the drum before the succeeding batch is introduced. The drum and auxiliary parts of the equipment shall be kept free from accumulations of materials. If additional water or an admixture is added at the jobsite, the concrete batch shall be mixed a minimum of 40 additional revolutions after each addition.

- (3) Shrink-Mixed Concrete. Shrink-mixed concrete is mixed partially in a stationary mixer and completed in a truck mixer for delivery. The mixing time of the stationary mixer may be reduced to a minimum of 30 seconds to intermingle the ingredients. before transferring to the truck mixer. All ingredients for the batch shall be in the stationary mixer and partially mixed before any of the mixture is discharged into the truck mixer. The partially mixed batch shall be transferred to the truck mixer without delay and without loss of any portion of the batch, and mixing in the truck mixer shall start immediately. The mixing time in the truck mixer shall be not less than 50 nor more than 100 revolutions of the drum or blades at mixing speed. For selfconsolidating concrete, a minimum of 100 revolutions is required in the truck mixer. Additional mixing beyond 100 revolutions shall be at agitating speed, unless additions of water, admixtures, or other materials are made at the jobsite. Units designed as agitators shall not be used for shrink mixing. The ingredients of the batch shall be completely discharged from the drum before the succeeding batch is introduced. The drum and auxiliary parts of the equipment shall be kept free from accumulations of materials. If additional water or an admixture is added at the jobsite, the concrete batch shall be mixed a minimum of 40 additional revolutions after each addition.
- (4) Mixing Water. Wash water shall be completely discharged from the drum or container before a batch is introduced. All mixing water shall be added at the plant and any adjustment of water at the jobsite by the Contractor shall not exceed the specified maximum water/cement ratio or slump. If strength specimens have been made for a batch of concrete, and subsequently during discharge there is more water added, additional strength specimens shall be made for the batch of concrete. No additional water may be added at the jobsite to central-mixed concrete if the mix design has less than 565 lbs/cu yd (335 kg/cu m) of cement and finely divided minerals summed together.
- (5) Mixing and Agitating Speeds. The mixing or agitating speeds used for truck mixers or truck agitators shall be per the manufacturer's rating plate.
- (6) Capacities. The volume of plastic concrete in a given batch will be determined according to AASHTO T 121, based on the total weight (mass) of the batch, determined either from the weight (masses) of all materials, including water, entering the batch or directly from the net weight (mass) of the concrete in the batch as delivered.

The volume of mixed concrete in truck mixers or truck agitators shall in no case be greater than the rated capacity determined according to the Truck Mixer, Agitator,

and Front Discharge Concrete Carrier Standards of the Truck Mixer Manufacturer's Bureau, as shown by the rating plate attached to the truck. If the truck mixer does not have a rating plate, the volume of mixed concrete shall not exceed 63 percent of the gross volume of the drum or container, disregarding the blades. For truck agitators, the value is 80 percent.

(7) Time of Haul. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work.

The time elapsing from when water is added to the mix until it is deposited in place at the site of the work shall not exceed 30 minutes when the concrete is transported in nonagitating trucks.

The maximum haul time for concrete transported in truck mixers or truck agitators shall be according to the following.

Concrete Temperature at Point	Haul	Time
of Discharge °F (°C)	Hours	Minutes
50-64 (10-17.5)	1	30
>64 (>17.5) - without retarder	1	0
>64 (>17.5) - with retarder	1	30

To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer.

(8) Production and Delivery. The production of ready-mixed concrete shall be such that the operations of placing and finishing will be continuous insofar as the job operations require. The Contractor shall be responsible for producing concrete that will have the required workability, consistency, and plasticity when delivered to the work. Concrete which is unsuitable for placement as delivered will be rejected. The

Contractor shall minimize the need to adjust the mixture at the jobsite, such as adding water and admixtures prior to discharging.

- (9) Use of Multiple Plants in the Same Construction Item. The Contractor may simultaneously use central-mixed, truck-mixed, and shrink-mixed concrete from more than one plant, for the same construction item, on the same day, and in the same pour. However, the following criteria shall be met.
  - a. Each plant shall use the same cement, finely divided minerals, aggregates, admixtures, and fibers.
  - b. Each plant shall use the same mix design. However, material proportions may be altered slightly in the field to meet slump and air content criteria. Field water adjustments shall not result in a difference that exceeds 0.02 between plants for water/cement ratio. The required cement factor for central-mixed concrete shall be increased to match truck-mixed or shrink-mixed concrete, if the latter two types of mixed concrete are used in the same pour.
  - c. The maximum slump difference between deliveries of concrete shall be 3/4 in. (19 mm) when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the slump difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for slump by the Contractor. Thereafter, when a specified test frequency for slump is to be performed, it shall be conducted for each plant at the same time.
  - d. The maximum air content difference between deliveries of concrete shall be 1.5 percent when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the air content difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for air content by the Contractor. Thereafter, when a specified test frequency for air content is to be performed, it shall be conducted for each plant at the same time.
  - e. Strength tests shall be performed and taken at the jobsite for each plant. When a specified strength test is to be performed, it shall be conducted for each plant at the same time. The difference between plants for strength shall not exceed 900 psi (6200 kPa) compressive and 90 psi (620 kPa) flexural. If the strength difference requirements are exceeded, the Contractor shall take corrective action.
  - f. The maximum haul time difference between deliveries of concrete shall be 15 minutes. If the difference is exceeded, but haul time is within specification

limits, the concrete may be used. The Contractor shall take immediate corrective action and check subsequent deliveries of concrete.

- (b) Class PC Concrete. The concrete shall be central-mixed or truck-mixed. Variations in plastic concrete properties shall be minimized between batches.
- (c) Class PV Concrete. The concrete shall be central-mixed, truck-mixed, or shrink-mixed.

The required mixing time for stationary mixers with a capacity greater than 2 cu yd (1.5 cu m) may be less than 75 seconds upon satisfactory completion of a mixer performance test. Mixer performance tests may be requested by the Contractor when the quantity of concrete to be placed exceeds 50,000 sq yd (42,000 sq m). The testing shall be conducted according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Field Test Procedures for Mixer Performance and Concrete Uniformity Tests".

The Contractor will be allowed to test two mixing times within a range of 50 to 75 seconds. If satisfactory results are not obtained from the required tests, the mixing time shall continue to be 75 seconds for the remainder of the contract. If satisfactory results are obtained, the mixing time may be reduced. In no event will mixing time be less than 50 seconds.

The Contractor shall furnish the labor, equipment, and material required to perform the testing according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Field Test Procedures for Mixer Performance and Concrete Uniformity Tests".

A contract which has 12 ft (3.6 m) wide pavement or base course, and a continuous length of 1/2 mile (0.8 km) or more, shall have the following additional requirements.

- (1) The plant and truck delivery operation shall be able to provide a minimum of 50 cu yd (38 cu m) of concrete per hour.
- (2) The plant shall have automatic or semi-automatic batching equipment.
- (d) All Other Classes of Concrete. The concrete shall be central-mixed, truck-mixed, or shrink-mixed concrete.

1020.12 Mobile Portland Cement Concrete Plants. The use of a mobile portland cement concrete plant may be approved under the provisions of Article 1020.10 for volumetric proportioning in small isolated structures, thin overlays, and for miscellaneous and incidental concrete items.

The first 1 cu ft (0.03 cu m) of concrete produced may not contain sufficient mortar and shall not be incorporated in the work. The side plate on the cement feeder shall be removed

periodically (normally the first time the mixer is used each day) to see if cement is building up on the feed drum.

Sufficient mixing capacity of mixers shall be provided to enable continuous placing and finishing insofar as the job operations and the specifications require.

Slump and air tests made immediately after discharge of the mix may be misleading, since the aggregates may absorb a significant amount of water for four or five minutes after mixing.

**1020.13** Curing and Protection. The method of curing, curing period, and method of protection for each type of concrete construction is included in the following Index Table.

INDEX TABLE OF	CURING AND PROTECTION C		
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete 11/			1110120110N III.21110BC
Pavement :			
Shoulder	1020.13(a)(1)(2)(3)(4)(5) 3/5/	3	1020.13(c)
Base Course	21		· · · · · ·
Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) <sup>2</sup>	. 3	1020.13(c)
Driveway Median			
Necian Barrier			
Curb			
Gutter	1020.13(a)(1)(2)(3)(4)(5) 4/5/	3	1020.13(c) 16/
Curb & Gutter	1020.13(8)(1)(2)(3)(4)(3)	3	1020.13(0)
Sidewalk	•		
Slope Wall			
Paved Ditch			
Catch Basin			
Manhole	1020.13(a)(1)(2)(3)(4)(5) 4/	3	1020.13(c)
Inlet			
Valve Vault			
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>	3 12/	1020.13(c)
Bridge Deck Patching	1020.13(a)(3)(5)	3 or 7 <sup>12/</sup>	1020.13(c)
Railroad Crossing	1020.13(a)(3)(5)	11	1020.13(c)
Piles and Drilled Shafts	1020.13(a)(3)(5)	7	1020.13(d)(1)(2)(3)
Foundations & Footings	1020 13/5\/1\/2\/3\/4\/5\ 4/6/	_	
Seal Coat	1020.13(a)(1)(2)(3)(4)(3)	7	1020.13(d)(1)(2)(3)
Substructure	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(d)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) 8/	7	1020.13(d)(1)(2)
Deck			
Bridge Approach Slab	1020.13(a)(5)	7	1020.13(d)(1)(2) 17/
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(d)(1)(2)
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) 1/	7	1020.13(d)(1)(2)
Culverts	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(d)(1)(2) 18/
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)
ecast Concrete 11/			
Bridge Slabs			
Piles and Pile Caps	1020.13(a)(3)(5) 9/10/	As <sup>13/</sup>	9/
Other Structural Members		Required	
All Other Precast Items	1020.13(a)(3)(4)(5) 2/ 9/ 10/	As 14/	9/
		Required	
ecast, Prestressed Concrete 11/			
		Until Strand	
All Items	1020(a)(3)(5) 9/10/	Tensioning is	9/
		Released 15/	

## Notes-General:

- 1/ Type I, membrane curing only
- 2/ Type II, membrane curing only
- 3/ Type III, membrane curing only

- 4/ Type I, II and III membrane curing
- 5/ Membrane Curing will not be permitted between November 1 and April 15.
- 6/ The use of water to inundate foundations and footings, seal coats or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 45 °F (7 °C) or higher.
- 7/ Asphalt emulsion for waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.
- 8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed oil emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09(b).
- 9/ Steam, supplemental heat, or insulated blankets (with or without steam/supplemental heat) are acceptable and shall be according to the Bureau of Materials and Physical Research's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products" and the "Manual for Fabrication of Precast, Prestressed Concrete Products".
- 10/ A moist room according to AASHTO M 201 is acceptable for curing.
- 11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.
- 12/ Curing maintained only until opening strength is attained for pavement patching, with a maximum curing period of three days. For bridge deck patching the curing period shall be three days if Class PP concrete is used and 7 days if Class BS concrete is used.
- 13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.

- 15/ The producer has the option to continue curing after strand release.
- 16/When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(d)(1).
- 17/When Article 1020.13(d)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(d)(1).
- 18/ For culverts having a waterway opening of 10 sq ft (1 sq m) or less, the culverts may be protected according to Article 1020.13(d)(3).
- (a) Methods of Curing. Except as provided for in the Index Table of Curing and Protection of Concrete Construction, curing shall be accomplished by one of the following described methods. When water is required to wet the surface, it shall be applied as a fine spray so that it will not mar or pond on the surface. Except where otherwise specified, the curing period shall be at least 72 hours.
  - (1) Waterproof Paper Method. The surface of the concrete shall be covered with waterproof paper as soon as the concrete has hardened sufficiently to prevent marring the surface. The surface of the concrete shall be wetted immediately before the paper is placed. The blankets shall be lapped at least 12 in. (300 mm) end to end, and these laps shall be securely weighted with a windrow of earth, or other approved method, to form a closed joint. The same requirements shall apply to the longitudinal laps where separate strips are used for curing edges, except the lap shall be at least 9 in. (225 mm). The edges of the blanket shall be weighted securely with a continuous windrow of earth or any other means satisfactory to the Engineer to provide an air-tight cover. Any torn places or holes in the paper shall be repaired immediately by patches cemented over the openings, using a bituminous cement having a melting point of not less than 180 °F (82 °C). The blankets may be reused, provided they are air-tight and kept serviceable by proper repairs.
    - A longitudinal pleat shall be provided in the blanket to permit shrinkage where the width of the blanket is sufficient to cover the entire surface. The pleat will not be required where separate strips are used for the edges. Joints in the blanket shall be sewn or cemented together in such a manner that they will not separate during use.
  - (2) Polyethylene Sheeting Method. The surface of the concrete shall be covered with white polyethylene sheeting as soon as the concrete has hardened sufficiently to prevent marring the surface. The surface of the concrete shall be wetted immediately before the sheeting is placed. The edges of the sheeting shall be weighted securely with a continuous windrow of earth or any other means satisfactory to the Engineer to provide an air-tight cover. Adjoining sheets shall overlap not less than 12 in. (300 mm) and the laps shall be securely weighted with earth, or any other means satisfactory to the Engineer, to provide an air tight cover.

For surface and base course concrete, the polyethylene sheets shall be not less than 100 ft (30 m) in length nor longer than can be conveniently handled, and shall be of such width that, when in place, they will cover the full width of the surface, including the edges, except that separate strips may be used to cover the edges. Any tears or holes in the sheeting shall be repaired. When sheets are no longer serviceable as a single unit, the Contractor may select from such sheets and reuse those which will serve for further applications, provided two sheets are used as a single unit; however, the double sheet units will be rejected when the Engineer deems that they no longer provide an air tight cover.

(3) Wetted Burlap Method. The surface of the concrete shall be covered with wetted burlap blankets as soon as the concrete has hardened sufficiently to prevent marring the surface. The blankets shall overlap 6 in. (150 mm). At least two layers of wetted burlap shall be placed on the finished surface. The burlap shall be kept saturated by means of a mechanically operated sprinkling system. In place of the sprinkling system, at the Contractor's option, two layers of burlap covered with impermeable covering shall be used. The burlap shall be kept saturated with water. Plastic coated burlap may be substituted for one layer of burlap and impermeable covering.

The blankets shall be placed so that they are in contact with the edges of the concrete, and that portion of the material in contact with the edges shall be kept saturated with water.

(4) Membrane Curing Method. Membrane curing will not be permitted where a protective coat, concrete sealer, or waterproofing is to be applied, or at areas where rubbing or a normal finish is required, or at construction joints other than those necessary in pavement or base course. Concrete at these locations shall be cured by another method specified in Article 1020.13(a).

After all finishing work to the concrete surface has been completed, it shall be sealed with membrane curing compound of the type specified within ten minutes. The seal shall be maintained for the specified curing period. The edges of the concrete shall, likewise, be sealed within ten minutes after the forms are removed. Two separate applications, applied at least one minute apart, each at the rate of not less than 1 gal/250 sq ft (0.16 L/sq m) will be required upon the surfaces and edges of the concrete. These applications shall be made with the mechanical equipment specified. Type III compound shall be agitated immediately before and during the application.

At locations where the coating is discontinuous or where pin holes show or where the coating is damaged due to any cause and on areas adjacent to sawed joints, immediately after sawing is completed, an additional coating of membrane curing compound shall be applied at the above specified rate. The equipment used may be of the same type as that used for coating variable widths of pavement. Before the additional coating is applied adjacent to sawed joints, the cut faces of the joint shall be protected by inserting a suitable flexible material in the joint, or placing an

adhesive width of impermeable material over the joint, or by placing the permanent sealing compound in the joint. Material, other than the permanent sealing compound, used to protect cut faces of the joint, shall remain in place for the duration of the curing period. In lieu of applying the additional coating, the area of the sawed joint may be cured according to any other method permitted.

When rain occurs before an application of membrane curing compound has dried, and the coating is damaged, the Engineer may require another application be made in the same manner and at the same rate as the original coat. The Engineer may order curing by another method specified, if unsatisfactory results are obtained with membrane curing compound.

(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry or damp cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 4 ft (1.2 m) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3).

(b) Removing and Replacing Curing Covering. When curing methods specified above in Article 1020.13(a), (1), (2), or (3) are used for concrete pavement, the curing covering for each day's paving shall be removed to permit testing of the pavement surface with a profilograph or straightedge, as directed by the Engineer.

Immediately after testing, the surface of the pavement shall be wetted thoroughly and the curing coverings replaced. The top surface and the edges of the concrete shall not be left unprotected for a period of more than 1/2 hour.

(c) Protection of Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 32 °F (0 °C), or lower, or if the actual temperature drops to 32 °F (0 °C), or lower, concrete less than 72 hours old shall be provided at least the following protection.

Minimum Temperature	Protection		
25 – 32 °F (-4 – 0 °C)	Two layers of polyethylene sheeting, one layer of polyethylene and one layer of burlap, or two layers of waterproof paper.		
Below 25 °F (-4 °C)	6 in. (150 mm) of straw covered with one layer of polyethylene sheeting or waterproof paper.		

These protective covers shall remain in place until the concrete is at least 96 hours old. When straw is required on pavement cured with membrane curing compound, the compound shall be covered with a layer of burlap, polyethylene sheeting or waterproof paper before the straw is applied.

After September 15, there shall be available to the work within four hours, sufficient clean, dry straw to cover at least two days production. Additional straw shall be provided as needed to afford the protection required. Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced.

(d) Protection of Concrete Structures From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low below 45 °F (7 °C), or if the actual temperature drops below 45 °F (7 °C), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities, and equipment for protection are approved by the Engineer.

When directed by the Engineer, the Contractor may be required to place concrete during the winter period. When winter construction is specified, the Contractor shall proceed with the construction, including excavation, pile driving, concrete, steel erection, and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced.

(1) Protection Method I. The concrete shall be completely covered with insulating material such as fiberglass, rock wool, or other approved commercial insulating material having the minimum thermal resistance R, as defined in ASTM C 168, for

the corresponding minimum dimension of the concrete unit being protected as shown in the following table.

Minimum Pour Dimension		Thermal
in.	(mm)	Resistance R
6 or less	(150 or less)	R=16
> 6 to 12	(> 150 to 300)	R=10
> 12 to 18	(> 300 to 450)	R=6
> 18	(> 450)	R=4

The insulating material manufacturer shall clearly mark the insulating material with the thermal resistance R value.

The insulating material shall be completely enclosed on sides and edges with an approved waterproof liner and shall be maintained in a serviceable condition. Any tears in the liner shall be repaired in a manner approved by the Engineer. The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period.

On formed surfaces, the insulating material shall be attached to the outside of the forms with wood cleats or other suitable means to prevent any circulation of air under the insulation and shall be in place before the concrete is placed. The blanket insulation shall be applied tightly against the forms. The edges and ends shall be attached so as to exclude air and moisture. If the blankets are provided with nailing flanges, the flanges shall be attached to the studs with cleats. Where tie rods or reinforcement bars protrude, the areas adjacent to the rods or bars shall be adequately protected in a manner satisfactory to the Engineer. Where practicable, the insulation shall overlap any previously placed concrete by at least 1 ft (300 mm). Insulation on the underside of floors on steel members shall cover the top flanges of supporting members. On horizontal surfaces, the insulating material shall be placed as soon as the concrete has set, so that the surface will not be marred and shall be covered with canvas or other waterproof covering. The insulating material shall remain in place for a period of seven days after the concrete is placed.

The Contractor may remove the forms, providing the temperature is 35  $^{\circ}$ F (2  $^{\circ}$ C) and rising and the Contractor is able to wrap the particular section within two hours from the time of the start of the form removal. The insulation shall remain in place for the remainder of the seven days curing period.

(2) Protection Method II. The concrete shall be enclosed in adequate housing and the air surrounding the concrete kept at a temperature of not less than 50 °F (10 °C) nor more than 80 °F (27 °C) for a period of seven days after the concrete is placed. The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period. All exposed surfaces within the housing shall be cured according to the Index Table.

The Contractor shall provide adequate fire protection where heating is in progress and such protection shall be accessible at all times. The Contractor shall maintain labor to keep the heating equipment in continuous operation.

At the close of the heating period, the temperature shall be decreased to the approximate temperature of the outside air at a rate not to exceed 15 °F (8 °C) per 12 hour period, after which the housing maybe removed. The surface of the concrete shall be permitted to dry during the cooling period.

- (3) Protection Method III. As soon as the surface is sufficiently set to prevent marring, the concrete shall be covered with 12 in. (300 mm) of loose, dry straw followed by a layer of impermeable covering. The edges of the covering shall be sealed to prevent circulation of air and prevent the cover from flapping or blowing. The protection shall remain in place until the concrete is seven days old. If construction operations require removal, the protection removed shall be replaced immediately after completion or suspension of such operations.
- **1020.14 Temperature Control for Placement.** Temperature control for concrete placement shall be according to the following.
  - (a) Concrete other than Structures. Concrete may be placed when the air temperature is above 35 °F (2 °C) and rising, and concrete placement shall stop when the falling temperature reaches 40 °F (4 °C) or below, unless otherwise approved by the Engineer.

The temperature of concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C). If concrete is pumped, the temperature of the concrete at point of placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C). A maximum concrete temperature shall not apply to Class PP concrete.

(b) Concrete in Structures. Concrete may be placed when the air temperature is above 40 °F (4 °C) and rising, and concrete placement shall stop when the falling temperature reaches 45 °F (7 °C) or below, unless otherwise approved by the Engineer.

The temperature of the concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C). If concrete is pumped, the temperature of the concrete at point of placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C).

When insulated forms are used according to Article 1020.13(d)(1), the maximum temperature of the concrete mixture immediately before placement shall be 80 °F (25 °C).

When concrete is placed in contact with previously placed concrete, the temperature of the freshly mixed concrete may be increased to 80 °F (25 °C) by the Contractor to offset anticipated heat loss.

- (c) All Classes of Concrete. Aggregates and water shall be heated or cooled uniformly and as necessary to produce concrete within the specified temperature limits. No frozen aggregates shall be used in the concrete.
- (d) Temperature. The concrete temperature shall be determined according to Illinois Modified AASHTO T 309.
- 1020.15 Heat of Hydration Control for Concrete Structures. The Contractor shall control the heat of hydration for concrete structures when the least dimension for a drilled shaft, foundation, footing, substructure, or superstructure concrete pour exceeds 5.0 ft (1.5 m). The work shall be according to the following.
  - (a) Temperature Restrictions. The maximum temperature of the concrete after placement shall not exceed 150 °F (66 °C). The maximum temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface shall not exceed 35 °F (19 °C). The Contractor shall perform temperature monitoring to ensure compliance with the temperature restrictions.
  - (b) Thermal Control Plan. The Contractor shall provide a thermal control plan a minimum of 28 calendar days prior to concrete placement for review by the Engineer. Acceptance of the thermal control plan by the Engineer shall not preclude the Contractor from specification compliance, and from preventing cracks in the concrete. At a minimum, the thermal control plan shall provide detailed information on the following requested items and shall comply with the specific specifications indicated for each item.
    - (1) Concrete mix design(s) to be used. Grout mix design if post-cooling with embedded pipe.

The mix design requirements in Articles 1020.04 and 1020.05 shall be revised to include the following additional requirements to control the heat of hydration.

- a. The concrete mixture should be uniformly graded and preference for larger size aggregate should be used in the mix design. Article 1004.02(d)(2) shall apply and information in the "Portland Cement Concrete Level III Technician Course – Manual of Instructions for Design of Concrete Mixtures" may be used to develop the uniformly graded mixture.
- b. The following shall apply to all concrete except Class DS concrete or when self-consolidating concrete is desired. For central-mixed concrete, the Contractor shall have the option to develop a mixture with a minimum of 520 lbs/cu yd (309 kg/cu m) of cement and finely divided minerals summed together. For truck-mixed or shrink-mixed concrete, the Contractor shall have the option to develop a mixture with a minimum of 550 lbs/cu yd (326 kg/cu m) of cement and finely divided minerals summed together. A water-reducing or high range water-reducing admixture shall be used in the central mixed, truck-mixed or shrink-

mixed concrete mixture. For any mixture to be placed underwater, the minimum cement and finely divided minerals shall be 550 lbs/cu yd (326 kg/cu m) for central-mixed concrete, and 580 lbs/cu yd (344 kg/cu m) for truck-mixed or shrink-mixed concrete.

For Class DS concrete, CA 11 may be used. If CA 11 is used, the Contractor shall have the option to develop a mixture with a minimum cement and finely divided minerals of 605 lbs/cu yd (360 kg/cu m) summed together. If CA 11 is used and either Class DS concrete is placed underwater or a self-consolidating concrete mixture is desired, the Contractor shall have the option to develop a mixture with a minimum cement and finely divided minerals of 635 lbs/cu yd (378 kg/cu m) summed together.

- c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor shall provide freeze/thaw test results according to AASHTO T 161 Procedure A or B, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer.
- d. The maximum cement replacement with fly ash shall be 40.0 percent. The maximum cement replacement with ground granulated blast-furnace slag shall be 65.0 percent. When cement replacement with ground granulated blast-furnace slag exceeds 35.0 percent, only Grade 100 shall be used.
- e. The mixture may contain a maximum of two finely divided minerals. The finely divided mineral in portland-pozzolan cement or portland blast-furnace slag cement shall count toward the total number of finely divided minerals allowed. The finely divided minerals shall constitute a maximum of 65.0 percent of the total cement plus finely divided minerals. The fly ash portion shall not exceed 40.0 percent. The ground granulated blast-furnace slag portion shall not exceed 65.0 percent. The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed 5.0 percent.
- f. The time to obtain the specified strength may be increased to a maximum 56 days, provided the curing period specified in Article 1020.13 is increased to a minimum of 14 days.

The minimum grout strength for filling embedded pipe shall be as specified for the concrete, and testing shall be according to AASHTO T 106.

(2) The selected mathematical method for evaluating heat of hydration thermal effects, which shall include the calculated adiabatic temperature rise, calculated maximum concrete temperature, and calculated maximum temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface. The time when the maximum concrete temperature and maximum temperature differential will occur is required.

Acceptable mathematical methods include ACI 207.2R "Report on Thermal and Volume Change Effects on Cracking of Mass Concrete" as well as other proprietary methods. The Contractor shall perform heat of hydration testing on the cement and finely divided minerals to be used in the concrete mixture. The test shall be according to ASTM C 186 or other applicable test methods, and the result for heat shall be used in the equation to calculate adiabatic temperature rise. Other required test parameters for the mathematical model may be assumed if appropriate.

The Contractor has the option to propose a higher maximum temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface, but the proposed value shall not exceed 50 °F (28 °C). In addition, based on strength gain of the concrete, multiple maximum temperature differentials at different times may be proposed. The proposed value shall be justified through a mathematical method.

(3) Proposed maximum concrete temperature or temperature range prior to placement.

Article 1020.14 shall apply except a minimum 40 °F (4 °C) concrete temperature will be permitted.

(4) Pre-cooling, post-cooling, and surface insulation methods that will be used to ensure the concrete will comply with the specified maximum temperature and specified or proposed temperature differential. For reinforcement that extends beyond the limits of the pour, the Contractor shall indicate if the reinforcement is required to be covered with insulation.

Refer to ACI 207.4R "Cooling and Insulating Systems for Mass Concrete" for acceptable methods that will be permitted. If embedded pipe is used for post-cooling, the material shall be polyvinyl chloride or polyethylene. The embedded pipe system shall be properly supported, and the Contractor shall subsequently inspect glued joints to ensure they are able to withstand free falling concrete. The embedded pipe system shall be leak tested after inspection of the glued joints, and prior to the concrete placement. The leak test shall be performed at maximum service pressure or higher for a minimum of 15 minutes. All leaks shall be repaired. The embedded pipe cooling water may be from natural sources such as streams and rivers, but shall be filtered to prevent system stoppages. When the embedded pipe is no longer needed, the surface connections to the pipe shall be removed to a depth of 4 in. (100 mm) below the surface of the concrete. The remaining pipe shall be

completely filled with grout. The 4 in. (100 mm) deep concrete hole shall be filled with nonshrink grout. Form and insulation removal shall be done in a manner to prevent cracking and ensure the maximum temperature differential is maintained. Insulation shall be in good condition as determined by the Engineer and properly attached.

(5) Dimensions of each concrete pour, location of construction joints, placement operations, pour pattern, lift heights, and time delays between lifts.

Refer to ACI 207.1R "Guide to Mass Concrete" for acceptable placement operations that will be permitted.

(6) Type of temperature monitoring system, the number of temperature sensors, and location of sensors.

A minimum of two independent temperature monitoring systems and corresponding sensors shall be used.

The temperature monitoring system shall have a minimum temperature range of 32 °F (0 °C) to 212 °F (100 °C), an accuracy of  $\pm$  2 °F ( $\pm$  1 °C), and be able to automatically record temperatures without external power. Temperature monitoring shall begin once the sensor is encased in concrete, and with a maximum interval of one hour. Temperature monitoring may be discontinued after the maximum concrete temperature has been reached, post-cooling is no longer required, and the maximum temperature differential between the internal concrete core and the ambient air temperature does not exceed 35 °F (19 °C). The Contractor has the option to select a higher maximum temperature differential, but the proposed value shall not exceed 50 °F (28 °C). The proposed value shall be justified through a mathematical method.

At a minimum, a temperature sensor shall be located at the theoretical hottest portion of the concrete, normally the geometric center, and at the exterior face that will provide the maximum temperature differential. At the exterior face, the sensor shall be located 2 to 3 in. (50 to 75 mm) from the surface of the concrete. Sensors shall also be located a minimum of 1 in. (25 mm) away from reinforcement, and equidistant between cooling pipes if either applies. A sensor will also be required to measure ambient air temperature. The entrant/exit cooling water temperature for embedded pipe shall also be monitored.

Temperature monitoring results shall be provided to the Engineer a minimum of once each day and whenever requested by the Engineer. The report may be electronic or hard copy. The report shall indicate the location of each sensor, the temperature recorded, and the time recorded. The report shall be for all sensors and shall include ambient air temperature and entrant/exit cooling water temperatures. The temperature data in the report may be provided in tabular or graphical format, and the report shall indicate any corrective actions during the monitoring period. At the

completion of the monitoring period, the Contractor shall provide the Engineer a final report that includes all temperature data and corrective actions.

- (7) Indicate contingency operations to be used if the maximum temperature or temperature differential of the concrete is reached after placement.
- (c) Temperature Restriction Violations. If the maximum temperature of the concrete after placement exceeds 150 °F (66 °C), but is equal to or less than 158 °F (70 °C), the concrete will be accepted if no cracking or other unacceptable defects are identified. If cracking or unacceptable defects are identified, Article 105.03 shall apply. If the concrete temperature exceeds 158 °F (70 °C), Article 105.03 shall apply.

If a temperature differential between the internal concrete core and concrete 2 to 3 in. (50 to 75 mm) from the exposed surface exceeds the specified or proposed maximum value allowed, the concrete will be accepted if no cracking or other unacceptable defects are identified. If unacceptable defects are identified, Article 105.03 shall apply.

When the maximum 150 °F (66 °C) concrete temperature or the maximum allowed temperature differential is violated, the Contractor shall implement corrective action prior to the next pour. In addition, the Engineer reserves the right to request a new thermal control plan for acceptance before the Contractor is allowed to pour again.

(d) Inspection and Repair of Cracks. The Engineer will inspect the concrete for cracks after the temperature monitoring is discontinued, and the Contractor shall provide access for the Engineer to do the inspection. A crack may require repair by the Contractor as determined by the Engineer. The Contractor shall be responsible for the repair of all cracks. Protective coat or a concrete sealer shall be applied to a crack less than 0.007 in. (0.18 mm) in width. A crack that is 0.007 in. (0.18 mm) or greater shall be pressure injected with epoxy according to Section 590.

# SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005 Revised: April 1, 2011

To account for the preparatory work and 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 Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

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.

# SYNTHETIC FIBERS IN CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH (BDE)

Effective: November 1, 2012

Add the following to Article 606.02 of the Standard Specifications.

- (h) Synthetic Fibers (Note 1)

Note 1. Synthetic fibers may be used in the concrete mixture for slipform applications. Synthetic fibers shall be Type III according to ASTM C 1116. The synthetic fiber shall have a minimum length of 1/2 in. (13 mm) and a maximum length of 0.75 in. (19 mm).

The synthetic fibers shall be added to the concrete and mixed per the manufacturer's recommendation. The maximum dosage rate in the concrete mixture shall be 1.5 lb/cu yd (0.9 kg/cu m).

The Department will maintain an "Approved List of Synthetic Fibers"."

Revise the second paragraph of Article 606.11 of the Standard Specifications to read:

"Forms shall be removed within 24 hours after the concrete has been placed, and minor defects shall be filled with grout consisting of one part cement and two parts sand mixed with water."

# TRACKING THE USE OF PESTICIDES (BDE)

Effective: August 1, 2012

Add the following paragraph after the first paragraph of Article 107.23 of the Standard Specifications:

"Within 48 hours of the application of pesticides, including but not limited to herbicides, insecticides, algaecides, and fungicides, the Contractor shall complete and return to the Engineer, Operations form "OPER 2720"."

# TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: August 1, 2011

Revise the third sentence of the third paragraph of Article 105.03(b) of the Standard Specifications to read:

"The daily monetary deduction will be \$2,500."

# **WEEKLY DBE TRUCKING REPORTS (BDE)**

Effective: June 2, 2012

The Contractor shall provide 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 on the jobsite; or used for the delivery and/or removal of equipment/material to and from the jobsite. The jobsite shall also include offsite locations, such as plant sites or storage sites, when those locations are used solely for this contract.

The report shall be submitted on the form provided by the Department within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur. The report shall be submitted to the Engineer and a copy shall be provided to the district EEO Officer.

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.

# WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within  $\,\,$  65 working days.

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### **ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- 2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
  - "It is the policy of this Company to assure 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 onthe-job training."
- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

- 3. Dissemination of Policy: 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:
- a. 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.
- b. 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.
- c. 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 minorities and women.
- d. 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.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. 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, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will 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 will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will 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 will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will 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 will inform every complainant of all of their avenues of appeal.

## 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- 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. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will 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 the contracting agency 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 referrals within the time limit set forth in the collective bargaining agreement, the contractor will, 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 women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 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. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

### 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor 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 DOT-assisted contracts. 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 contracting agency deems appropriate.
- 11. 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 the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
  - a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and non-minority group members and women 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 women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

# III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color,

religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

## 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

# 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such

action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose Wage and Hour Division Web http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

## 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees:
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

### **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

## 18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

# IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

# X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

# 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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# 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

# Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

### MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

#### **NOTICE**

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <a href="http://www.dot.state.il.us/desenv/delett.html">http://www.dot.state.il.us/desenv/delett.html</a>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <a href="http://www.dot.state.il.us/desenv/subsc.html">http://www.dot.state.il.us/desenv/subsc.html</a>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.