# **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 <u>Timothy.Garman@illinois.gov.</u>

# **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, <u>do not include the blank pages of the schedule of prices that came with the proposal package.</u>

**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 person in your company. Copies of the Forms can be used and only need to be changed when the financial information changes. The certification <u>signature and date must be original</u> for each letting. Do not staple the forms together.

If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.

**Page 18 (Form B)** - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". **Ownership Certification** (at the bottom of the page) - Check N/A if the Form A you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A you submitted is not correct and you will be required to submit a revised Form A.

**Page 20 (Workforce Projection)** – Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".

**Bid Bond** – Submit your bid bond using the current Bid Bond Form provided in the proposal package. The Power of Attorney page should be stapled to the Bid Bond. If you are using an electronic bond, include your bid bond number on the form and attach the Proof of Insurance printed from the electronic bond Web Site.

Disadvantaged Business Utilization Plan and/or Good Faith Effort – The last item in your bid should be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE 2025) and supporting paperwork. If you have documentation for a Good Faith Effort, it should follow the SBE Forms.

The Bid Letting is now available in streaming Audio/Video from the IDOT Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 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 day. You will find the link on the main page of the current letting.

#### QUESTIONS: pre-letting up to execution of the contract

Contractor/Subcontractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	
Contracts, Bids, Letting process or Internet downloads	217-782-7806
Estimates Unit	217-785-3483
Aeronautics	217-785-8515
IDNR (Land Reclamation, Water Resources, Natural Resources)	217-782-6302

#### **QUESTIONS:** following contract execution

Including Subcontractor documentation, payments	217-782-3413
Railroad Insurance	217-785-0275

Proposal Submitted By

229

Name

Address

City

# Letting June 14, 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. 91479 MCLEAN County Section 00-00206-00-RP (Normal) Route FAU 6375 (Northtown Road) Project M-5227(056) District 5 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

A Bid Bond is included.

A Cashier's Check or a Certified Check is included

Prepared by Checked by

Printed by authority of the State of Illinois)

F

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# PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of \_\_\_\_\_\_

Taxpayer Identification Number (Mandatory)

For the improvement identified and advertised for bids in the Invitation for Bids as:

Contract No. 91479 MCLEAN County Section 00-00206-00-RP (Normal) Project M-5227(056) Route FAU 6375 (Northtown Road) District 5 Construction Funds

- Construct three lanes of PCC pavement, combination curb and gutter, storm sewer, sidewalks and a HMA pedestrian trail, located 1200' west of Linden Street to Towanda Avenue in the Town of Normal.
- 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:

			Proposal				Proposal
:	Amount of	of Bid	<u>Guaranty</u>	<u>An</u>	nount o	of Bid	<u>Guaranty</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, it is hereby agreed that the amount of the proposal guaranty shall become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond shall become void or the proposal guaranty check shall be returned to the undersigned.

#### 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.

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

6. **COMBINATION BIDS.** The undersigned further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual proposal comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.

If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.

#### **Schedule of Combination Bids**

Combination		Combination	n Bid
No.	Sections Included in Combination	Dollars	Cents

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. AUTHORITY TO DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Procurement Code (the Code) (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to do business in the State of Illinois prior to submitting the bid.

#### 9. The services of a subcontractor will be used.

Check box	Yes	
Check box	No	

For known subcontractors with subcontracts with an annual value of more than \$50,000, the contract shall include their name, address, general type of work to be performed, and the dollar allocation for each subcontractor. (30 ILCS 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.

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#### 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 Delinguency

#### 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. No corporation shall be 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. 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. Disclosure of Business Operations in Iran

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 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 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 yot 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.

# NA-FEDERAL

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 committee established to promote the candidacy of the officeholder responsible for making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for 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 guilty 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 this contract.

Or

Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:

#### Name and address of person:

All costs, fees, 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 <u>NOT APPLICABLE STATEMENT</u> 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? YES <u>NO</u>
- 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		
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). 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. <u>See Disclosure Form Instructions</u>.

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

# DISCLOSURE OF FINANCIAL INFORMATION

1. 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 INDIVIDUAL	(type or print information)		
NAME:			
ADDRESS			
Type of own	ership/distributable income share	:	
stock	sole proprietorship	Partnership	other: (explain on separate sheet):
% or \$ value	of ownership/distributable income sh	nare:	

**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 contractua	al employ	ment of s	services.
		Yes	No	

If your answer 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? Yes \_\_\_\_No \_\_\_
- 2. 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.

- 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, are you entitled to receive
   (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes \_\_\_\_ No \_\_\_
- 4. 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, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes No \_\_\_
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes \_\_\_\_No \_\_\_
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes \_\_\_\_ No \_\_\_
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes \_\_\_ No \_\_\_

Yes No

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_No \_\_\_

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statues of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years.

(f) Relationship to anyone holding appointive	office currently or in the previous 2	2 years; sp	ouse, father,	mother,
son, or daughter.		Yes	<u>No</u>	

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes \_\_\_No \_\_\_

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_No \_\_\_
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes No
- (j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes <u>No</u>

## 3. Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s):

**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

# 

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 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 bids in excess of \$25,000, and for all open-ended contracts.

# DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

**1. Identifying Other Contracts & Procurement Related Information.** The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes No ...

If "No" is checked, the bidder only needs to complete the signature box on the bottom of this page.

**2.** If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

# THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Representative	Date

# **OWNERSHIP CERTIFICATION**

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership.

Any remaining ownership interest is held by individuals receiving less than \$106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

🗌 Yes 🗌 N	o 🗌 N/A	(Form A	disclosure(s)	established	100% ownership)
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# 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. 91479 MCLEAN County Section 00-00206-00-RP (Normal) Project M-5227(056) Route FAU 6375 (Northtown Road) District 5 Construction Funds

#### PART I. IDENTIFICATION

Dept. Human Rights #

Duration of Project:

Name of Bidder:

#### PART II. WORKFORCE PROJECTION

A. The undersigned bidder has analyzed minority group and female populations, unemployment rates and availability of workers for the location in which this contract work is to be performed, and for the locations from which the bidder recruits employees, and hereby submits the following workforce projection including a projection for minority and female employee utilization in all job categories in the workforce to be allocated to this contract: TABLE A TABLE B

		TOTA	AL Workforce Projection for Contract CURRENT EMPLOYEES TO BE ASSIGNED									S					
				MING	ORITY I	EMPLC	YEES	6		TRA	AINEES			TO CO			
JOB CATEGORIES		TAL OYEES	BI /	ACK	HISP			THER NOR.	APPI TIC	REN-	ON TH	HE JOB		OTAL OYEES		MINO	
GATEGORIES		F	M	F	M	F	M	F	M	F	M	F	M	F		M	F
OFFICIALS (MANAGERS)																	
SUPERVISORS																	
FOREMEN																	
CLERICAL																	
EQUIPMENT OPERATORS																	
MECHANICS																	
TRUCK DRIVERS																	
IRONWORKERS																	
CARPENTERS																	
CEMENT MASONS																	
ELECTRICIANS																	
PIPEFITTERS, PLUMBERS																	
PAINTERS																	
LABORERS, SEMI-SKILLED																	
LABORERS, UNSKILLED																	
TOTAL																	
									_		Г	FOF	PARTM	IENT USE	ON		
		aining Pro	ojectio	n tor C	ontract		*~		4			. 01	 			·•	
EMPLOYEES	10	TAL					0"	THER									

10		аншу ги	Jection		Unitiaci			
EMPLOYEES	TO	TAL					*OT	HER
IN	EMPLO	OYEES	BLA	٩CK	HISP	ANIC	MIN	JOR.
TRAINING	М	F	Μ	F	М	F	Μ	F
APPRENTICES								
ON THE JOB TRAINEES								

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

BC 1256 (Rev. 12/11/07)

Note: See instructions on page 2

Contract No. 91479 MCLEAN County Section 00-00206-00-RP (Normal) Project M-5227(056) Route FAU 6375 (Northtown Road) District 5 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) \_\_\_\_\_\_ new hires would be recruited from the area in which the contract project is located; and/or (number) new hires would be recruited from the area in which the bidder's principal

office or base of operation is located.

C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) \_\_\_\_\_\_ persons will be directly employed by the prime contractor and that (number) \_\_\_\_\_\_ persons will be employed by subcontractors.

## PART III. AFFIRMATIVE ACTION PLAN

- A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Department of Human Rights**.
- B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company \_\_\_\_\_

Address

	NOTICE REGARDING SIGNATURE
	signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs ed only if revisions are required.
Signature:	Title: Date:
Instructions:	All tables must include subcontractor personnel in addition to prime contractor personnel.
Table A -	Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.
Table B -	Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.
Table C -	Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

Telephone Number

# **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 \_\_\_\_\_
  - 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. 91479 MCLEAN County Section 00-00206-00-RP (Normal) Project M-5227(056) Route FAU 6375 (Northtown Road) District 5 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	
Signature of Owner	
Business Address	
Firm Name	
Ву	
(IF A CO-PARTNERSHIP) Business Address	
	Name and Address of All Members of the Firm:
Corporate Name	
Ву	Signature of Authorized Representative
	Signature of Admon250 httpresentative
	Typed or printed name and title of Authorized Representative
Attact	
Allesi	Signature
Business Address	
Corporate Name	
Dy	Signature of Authorized Representative
	Typed or printed name and title of Authorized Representative
Attest	Signature
	Signature of Owner Business Address Firm Name By Business Address Corporate Name By Attest Business Address Corporate Name



**Return with Bid** 

**Division of Highways Proposal Bid Bond** (Effective November 1, 1992)

Item No.

Letting Date

KNOW ALL MEN BY THESE PRESENTS, That We

as PRINCIPAL, and

as SURETY, are

\_\_\_\_\_

held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, that whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents, submit a DBE Utilization Plan that is accepted and approved by the Department; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to make the required DBE submission or to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by

their respective officers this	day of		A.D., .	
PRINCIPAL	CIPAL SURETY			
(Company Na	me)		(Company Name)	
Ву		By:		
(Signature & Title)		(Signature of Attorney-in-Fact)		
	Notary Certif	fication for Principal and Su	ırety	
STATE OF ILLINOIS,				
County of				
l,		, a Notary Publ	c in and for said County, do hereby certify that	
		and		
	Insert names of individuals		CIPAL & SURETY)	
	his day in person and ackno		ed to the foregoing instrument on behalf of PRING t they signed and delivered said instrument as the	
Given under my hand and nota	arial seal this	day of	A.D.	
My commission expires				
			Notary Public	
	ignature and Title line belo	w, the Principal is ensurin	an Electronic Bid Bond. By signing the proposa g the identified electronic bid bond has been exe of the bid bond as shown above.	
Electronic Bid Bond ID#	Company / Bidder	Name	Signature and Title	
			BDE 356B (REV. 9/26/1	1)



## (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

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) Project and Bid Identification

Complete the following information concerning the project and bid:

Route	Total Bid		
Section	Contract DBE Goal	(Percent)	(Dollar Amount)
Project		(Feicent)	(Donar Amount)
County			
Letting Date			
Contract No.			
Letting Item No.			

# (4) Assurance

I, acting in my capacity as an officer of the undersigned bidder (or bidders if a joint venture), hereby assure the Department that on this project my company : (check one)

Meets or exceeds contract award goals and has provided documented participation as follows:

Disadvantaged Business Participation \_\_\_\_\_ percent

Attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

Failed to meet contract award goals and has included good faith effort documentation to meet the goals and that my company has provided participation as follows:

Disadvantaged Business Participation \_\_\_\_\_ percent

The contract goals should be accordingly modified or waived. Attached is all information required by the Special Provision in support of this request including good faith effort. Also attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

Company	The "as read" Low Bidder is required to comply with the Special Provision.	
Ву	Submit only one utilization plan for each project. The utilization plan submitted in accordance with the special provision.	
Title	Bureau of Small Business EnterprisesLocal Let Projects2300 South Dirksen ParkwaySubmit forms to theSpringfield, Illinois 62764Local Agency	

Date

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.



**DBE Participation Statement** 

Subcontractor Registration	_ Letting
Participation Statement	Item No.
(1) Instructions	Contract

This form must be completed for each disadvantaged business participating in the Utilization Plan. This form shall be submitted in accordance with the special provision and will be attached to the Utilization Plan form. If additional space is needed complete an additional form for the firm.

# (2) Work

Pay Item No.	Description	Quantity	Unit Price	Total
			Total	

# (3) Partial Payment Items

For any of the above items which are partial pay items, specifically describe the work and subcontract dollar amount:

# (4) Commitment

The undersigned certify that the information included herein is true and correct, and that the DBE firm listed below has agreed to perform a commercially useful function in the work of the contract item(s) listed above and to execute a contract with the prime contractor. The undersigned further understand that no changes to this statement may be made without prior approval from the Department's Bureau of Small Business Enterprises and that complete and accurate information regarding actual work performed on this project and the payment therefore must be provided to the Department.

Signature for Prime Contractor	Signature for DBE Firm
Title	Title
Date	Data
Contact	Contact Person
Phone	Dhana
Firm Name	Firm Name
Address	
City/State/Zip	City/State/Zip
	E
The Department of Transportation is requesting disclosure of information that is necessary t	o accomplish the statutory purpose as outlined under the state and federal WC

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.

# **PROPOSAL ENVELOPE**



# PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:	
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. 91479 MCLEAN County Section 00-00206-00-RP (Normal) Project M-5227(056) Route FAU 6375 (Northtown Road) District 5 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 subcontract or 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.

 Nome of Subcentrating Company	
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. Disclosure Form Instructions

#### 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 <u>NOT APPLICABLE STATEMENT</u> 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 per person per subcontract 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 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</u> <u>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		
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). 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.

# 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)

FOR INDIVIDUAL	(type or print information)		
NAME:			
ADDRESS			
Type of owne	ership/distributable income share	:	
stock	sole proprietorship	Partnership	other: (explain on separate sheet):
% or \$ value of	of ownership/distributable income sh	nare:	

**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.

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes \_\_\_\_No \_\_\_
- 2. 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.

3. 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, are you entitled to receive
(i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?

Yes No

- 4. 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, are you and your spouse or minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes \_\_\_\_No \_\_\_
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes <u>No</u>

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes \_\_\_\_No \_\_\_
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of of 100% of the annual salary of the Governor? Yes \_\_\_\_No \_\_
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes <u>No</u>

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.
Yes \_\_\_\_No \_\_\_

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_No \_\_\_

- (e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes \_\_\_\_No \_\_\_
- (f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes No
- (g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes \_\_\_\_No \_\_\_

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes <u>No</u>
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes \_\_\_\_No \_\_\_
- (j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes <u>No</u>

# 3 Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s):

**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	
	ed on behalf of the INDIVIDUAL named on p tents of this disclosure to be true and accur	
Completed by:		
	Signature of Individual or Authorized Officer	Date
	NOT APPLICABLE STATEMENT	
Under penalty of perjury, I have de the criteria that would require the c	termined that no individuals associated with completion of this Form A.	h this organization meet
This Disclosure Form A is submitted	ed on behalf of the SUBCONTRACTOR liste	d on the previous page.
	Signature of Authorized Officer	Date

# ILLINOIS DEPARTMENT OF TRANSPORTATION

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

ail Address	Fax Number (if available)
1	ail Address

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 CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

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 relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

# THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Officer	Date

# **OWNERSHIP CERTIFICATION**

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership

Any remaining ownership interest is held by individuals receiving less than \$106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

🗌 Yes	🗌 No	□ N/A (Form A disclosure(s) established 100% ownership)
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# 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 June 14, 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. 91479 MCLEAN County Section 00-00206-00-RP (Normal) Project M-5227(056) Route FAU 6375 (Northtown Road) District 5 Construction Funds

Construct three lanes of PCC pavement, combination curb and gutter, storm sewer, sidewalks and a HMA pedestrian trail, located 1200' west of Linden Street to Towanda Avenue in the Town of Normal.

- **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** 91479

## 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

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20		Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-12) Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-12)	04
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31		Quality Control/Quality Assurance of Concrete Mixtures (Eff. 4-1-92) (Rev. 1-1-11)	110
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# LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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LR SD13		Ħ	Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR SD406		<b>H</b>	Safety Edge	April 1, 2011	
LR 105		Н	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	56		Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 107-7		Ħ	Wages of Employees on Public Works	Jan. 1, 1999	Jan. 2, 2013
LR 107-7		H	Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 108		H	Equipment Rental Rates	Jan. 1, 2012	
LR 109 LR 212		H	Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
		H	Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-1			Bituminous Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
LR 355-2 LR 400-1		H	Bituminous Treated Earth Surface	Jan. 1, 2007	Apr. 1, 2012
		님	Bituminous Surface Plant Mix (Class B)	Jan. 1, 2008	•
LR 400-2		H	Hot In-Place Recycling (HIR) – Surface Recycling	Jan. 1, 2012	
LR 400-3			Full-Depth Reclamation (FDR) with Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
LR 400-4 LR 400-5		H	Cold In-Place Recycling (CIR) With Emulsified Asphalt	Apr. 1, 2012	Jun. 1, 2012
			Cold In Place Recycling (CIR) with Foamed Asphalt	June 1, 2012	·
LR 400-6		님	Full-Depth Reclamation (FDR) with Foamed Asphalt	June 1, 2012	
LR 400-7			Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 402			Surface Profile Milling of Existing, Recycled or Reclaimed Flexible	Apr. 1, 2012	Jun. 1, 2012
LR 403-1			Pavement	·	
			Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 403-2			Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	
LR 406				May 12, 1964	Jan. 2, 2007
LR 420			PCC Pavement (Special) Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 442		님	Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 451		님	Crack Filling Diturninous Pavenient with Fiber-Asphan	Oct. 1, 1973	Jan. 1, 2002
LR 503-1		님	Furnishing Class SI Concrete	Jan. 1, 1989	Jan. 1, 2002
LR 503-2			Furnishing Class SI Concrete (Short Load) Pipe Culverts, Type (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 542			Pipe Culverts, Type (Furnished) Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 663			Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 702	57		Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with	Apr. 1, 2012	Jun. 1, 2012
LR 1000-1			Cold in-Place Recycling (CIR) and Full Depth Recialitation (FDR) with	Apr. 1, 2012	
		<b></b>	Emulsified Asphalt Mix Design Procedures Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with	June 1, 2012	
LR 1000-2			Cold In-Place Recycling (CIR) and Full Depth Reciamation (FDR) with	50116 1, 2012	
			Foamed Asphalt Mix Design Procedures	Jan. 1, 2002	Jan. 1, 2007
LR 1004		H	Coarse Aggregate for Bituminous Surface Treatment	Mar. 1, 2002	Jan. 1, 2007
LR 1030			Growth Curve	Jan. 1, 2007	Feb. 7, 2008
LR 1032-1			Emulsified Asphalts	Jan. 1, 2007	100.7,2000
LR 1102		$\Box$	Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007	

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# BDE SPECIAL PROVISIONS For the April 26 and June 14, 2013 Lettings

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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	Effective	Revised
80240	<u>ı y.</u>		Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
80240			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
		~	Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
80274			Anchor Bolts	Jan. 1, 2013	0an. 1, 2010
80309				Jan. 1, 2008	
80192			Automated Flagger Assistance Device	Nov2, 2006	Jan. 1, 2012
80173-			Bituminous Materials Cost Adjustments	July 1, 2009	
80241			Bridge Demolition Debris	Jan. 1, 2012	Aug. 1, 2012
80276			Bridge Relief Joint Sealer Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2012
50261			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481				Sept. 1, 1990	April 1, 2010
50491		<u> </u>	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531			Building Removal-Case IV (No Asbestos)	April 1, 2012	April 1, 2013
* 80292	1. N. 18		Coarse Aggregate in Bridge Approach Slabs/Footings	Jan. 1, 2012	April 1, 2010
80310		<u> </u>	Coated Galvanized Steel Conduit	April 1, 2013	
80198			Completion Date (via calendar days)	April 1, 2008	
80199	-0		Completion Date (via calendar days) Plus Working Days		
80293	58	Х	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 Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	April 1, 2012	
80311			Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
80277			Concrete Mix Design – Department Provided	Jan. 1, 2012	
80261			Construction Air Quality – Diesel Retrofit	June 1, 2010	
80029	73	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Aug. 2, 2011
80312	10	<u> </u>	Drain Pipe, Tile, Drainage Mat, and Wall Drain	Jan. 1, 2013	
80313		<u> </u>	Fabric Bearing Pads	Jan. 1, 2013	
80265			Friction Aggregate	Jan. 1, 2011	
80229			Fuel Cost Adjustment	April 1, 2009	July 1, 2009
80303	83	X	Granular Materials	Nov. 1, 2012	<b>,</b> -,
80304	00		Grooving for Recessed Pavement Markings	Nov. 1, 2012	Jan. 1, 2013
80304			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
			Insertion Lining of Culverts	Jan. 1, 2013	· .p, .=
80315 * 80320	84	X		April 1, 2013	
80045	04		Material Transfer Device	June 15, 1999	Jan. 1, 2009
			Modified Urethane Pavement Marking	April 1, 2012	oun. 1, 2000
80297			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80165			Movable Traffic Barrier	Jan. 1, 2010	Jan. 1, 2013
80253			Pavement Marking Removal	April 1, 2009	oun. 1, 2010
80231				April 1, 2000	
80298	05		Pavement Marking Tape Type IV	Jan. 1, 2012	
80254	85	X	Pavement Patching	April 1, 2013	
* 80321	86	X		June 1, 2000	Jan. 1, 2006
80022	87		Payments to Subcontractors	Jan. 1, 2003	Jan. 1, 2000
80316	89		Placing and Consolidating Concrete	Jan. 1, 2013	Aug. 1, 2012
80278			Planting Woody Plants	Nov. 1, 2012	Jan. 1, 2012
80305	~~		Polyurea Pavement Markings		Jan. 1, 2013 Jan. 1, 2013
80279	92	X	Portland Cement Concrete	Jan. 1, 2012 April 1, 2012	Jan. 1, 2013
80300			Preformed Plastic Pavement Marking Type D - Inlaid	Αμπ τ, 2012	

File Name	<u>Pg.</u>		Special Provision Title	Effective	Revised
80218			Preventive Maintenance – Bituminous Surface Treatment	Jan. 1, 2009	April 1, 2012
80219			Preventive Maintenance – Cape Seal	Jan. 1, 2009	April 1, 2012
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	134	Х	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt	Nov. 1, 2012	Jan. 1, 2013
	****		Shingles (RAS)		
* 80283	12 - C - C - C - C - C - C - C - C - C -	X	Removal and Disposal of Regulated Substances	Jan. 1, 2012	Nov. 2, 2012
* 80319	149	X	Removal and Disposal of Surplus Materials	Nov. 2, 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	150	<u>X</u>	Steel Cost Adjustment	April 2, 2004	April 1, 2009
80255			Stone Matrix Asphalt	Jan. 1, 2010	Jan. 1, 2012
80143	154	_X	Subcontractor Mobilization Payments	April 2, 2005	April 1, 2011
80317			Surface Testing of Hot-Mix Asphalt Overlays (NOTE: This special	Jan. 1, 2013	
			provision was previously named "Surface Testing of Pavements".)		
80308	155	X	Synthetic Fibers in Concrete Gutter, Curb, Median and Paved Ditch	Nov. 1, 2012	
80286	156	X	Temporary Erosion and Sediment Control	Jan. 1, 2012	
80225			Temporary Raised Pavement Marker	Jan. 1, 2009	lan ( 0040
80256			Temporary Water Filled Barrier	Jan. 1, 2010	Jan. 1, 2013
80301			Tracking the Use of Pesticides	Aug. 1, 2012	
80273	157	X	Traffic Control Deficiency Deduction	Aug. 1, 2011	
20338	158	X	Training Special Provisions	Oct. 15, 1975	1 114 0040
* 80318			Traversable Pipe Grate	Jan. 1, 2013	April 1, 2013
80270	161	X	Utility Coordination and Conflicts	April 1, 2011	Jan. 1, 2012
80288	167	X	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2012
80302	173	<u>X</u>	Weekly DBE Trucking Reports	June 2, 2012	
80289			Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	174	Х	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> 80275 80291	<u>Special Provision Title</u> Agreement to Plan Quantity Calcium Chloride Accelerator for Class PP-2 Concrete	<u>New Location</u> Article 202.07 Recurring CS #28	<u>Effective</u> Jan. 1, 2012 April 1, 2012	<u>Revised</u>
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 1006.13	April 1, 2008	Jan. 1, 2012
80290 80299 80280	Payrolls and Payroll Records Portland Cement Concrete Inlay or Overlay Portland Cement Concrete Sidewalk	Recurring CS #5 Recurring CS #29 Article 424.07	Jan. 2, 2012 April 1, 2012 Jan. 1, 2012	

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<u>File Name</u> 80152	Special Provision Title Self-Consolidating Concrete for Cast-In-Place Construction	<u>New Location</u> The following special provisions: Portland Cement Concrete, QC/QA of Concrete Mixtures and Placing and Consolidating Concrete	<u>Effective</u> Nov. 1, 2005	<u>Revised</u> April 1, 2012
80132	Self-Consolidating Concrete for Precast and Precast Prestressed Products	The following special provisions: Portland Cement Concrete, QC/QA of Concrete Mixtures and Placing and Consolidating Concrete	July 1, 2004	April 1, 2012
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 portion will remain a special provision and will now be called "Surface Testing of HMA Overlays".)	Articles 407.09, 407.12, 420.10, 420.20, and 1101.10	April 1, 2002	Jan. 1, 2007
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

# STATE OF ILLINOIS

# SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2012; hereafter referred to as the Standard Specifications; the "Supplemental Specifications and Recurring Special Provisions," adopted January 1, 2013 (as indicated on the check sheet included herein), the Manual of practice for the design of Public Improvements for the Town of Normal, the 2009 edition of the Standard Specifications For Water And Sewer Main Construction In Illinois, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways"; and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids. These Special Provisions included herein apply to and govern the proposed construction of Section 00-00206-00-RP, Northtown Road, Town of Normal, from 1200' west of Linden Street to Towanda Avenue, McLean County, Illinois and in case of conflict with any part or parts of said specifications, said Special Provisions shall take precedence and shall govern.

# DESCRIPTION OF WORK

The work will consist of constructing three lanes of Portland Cement Concrete pavement combination concrete curb and gutter, driveways, sidewalks, bike trail, storm sewers, manholes, inlets, culverts and all necessary incidental work as shown on the plans or as described herein. The Project extends from 1200' west of Linden Street to Towanda Avenue.

# EXAMINATION OF EXISTING CONDITIONS

It is the responsibility of each bidder to satisfy himself/herself as to conditions he/she will encounter in performing the work. Failure to do so will not be considered as grounds for additional compensation for unforeseen adverse conditions encountered during the progress of the work.

# REMOVAL OF UNCLASSIFIED MATERIAL

Existing hazard markers, delineators, right-of-way markers, U.S.C.& G.S. markers, and other unclassified materials shall be removed as designated by the Engineer. The material removed, as required in this Special Provision, shall be disposed of outside the limits of the right-of-way in accordance with Article 202.03 of the Standard Specifications.

#### REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL:

This work shall consist of the removal and disposal of any material deemed unsuitable by the Engineer. Primarily, this work is anticipated to be required on the Ironwood detention basin outfall which will need to be prepared for the proposed culvert extension. All work shall be performed in accordance with Article 202.03 of the Standard Specifications. This work shall not commence until after the banks of the swale have been allowed to dry for three consecutive good weather drying days.

Material remaining, after the area of the proposed culvert extension has been cut to rough grade, which is

in the opinion of the Engineer to be unsuitable, shall be removed and disposed of offsite. An estimated quantity for this work is included in the plans. No change in the unit price bid for this work will be allowed due to any increase or decrease in the actual quantity incorporated into the work.

# MEASUREMENT AND PAYMENT:

This work shall be measured in feet of length and width of area involved and an average depth of the area shall be measured. The volume of the area shall be determined by taking the length times the width times the average depth and the volume shall be calculated in cubic yards. This work will be paid for a the contract unit price bid per Cubic Yard for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

#### EARTH EXCAVATION

This work shall be performed in accordance with the applicable articles of Section 202 of the Standard Specifications.

The removal of asphalt pavement on a flexible base shall be considered Earth Excavation. No separate pay item is included in this contract for removing asphalt pavement on a flexible base, except as specifically noted on the plans.

Add the following provision to Article 202: Material suitable for growing grass shall be excavated and stockpiled within the right-of-way for Topsoil Placement. This material shall be a part of Earth Excavation and no additional compensation will be allowed.

Any Earth Excavation that is suitable for fill embankment material shall be placed and compacted in fill areas as shown on the cross sections. All unsuitable material and all excess excavation shall be the property of the Contractor. No payment for overhaul will be allowed for earth moved from any source.

From Station 37+00 to Station 38+00 and from Station 58+00 to Station 62+00 the underlying soils have been identified as frost susceptible. Earth excavation in these locations shall extend to a depth of three feet below the finished profile grade line and be replaced with suitable soils which have sufficient clay content to adequately react with the lime and be compacted. This work shall be included in Earth Excavation. This material maybe placed outside of the bike trail or sidewalks in fill sections; it may not be used under any rigid improvement.

A contingency amount of earth excavation (340 cubic yards) is included in the quantities to remove aggregate base which may be extending into the area of proposed processing soil. This quantity is from Station 77+50 to 82+00 and Station 83+75 to 91+30. After initial excavation of the subbase to the lines and grades shown on the plans, the Town Engineer shall inspect this area to determine if the additional earth excavation is warranted or not. All additional earth excavation shall be measured by the end area method and paid for in Cubic Yards at the contract unit price bid per cubic yard for EARTH EXCAVATION.

All excess Earth Excavation shall be the property of the Contractor. No payment for overhaul will be allowed for earth moved from any source. Should the Contractor have any disagreement in the quantity of the Earth Excavation volume, he/she shall submit earthwork calculations showing such disagreement at the pre-construction conference. Otherwise, the plan quantity shall be used as the basis for payment

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for the project for both Earth Excavation and Embankment, as long as the project is constructed according to plans. Changes in the lines, grades or length of the project may result in changes to the quantities.

# PIPE CULVERT REMOVAL

This work shall consist of removing and disposing of pipe culverts. Pipe culvert removal shall consist of the complete removal and disposal, to the satisfaction of the Engineer, of all driveway and crossroad culvert pipes conflicting with the construction and all culvert pipes designated on the plans to be removed. This work also includes the complete removal and disposal of any headwalls associated with the culverts to be removed except as noted in the plans. Any holes or depressions left after removing a culvert, which will be under or within two feet of proposed improvements, shall be filled with trench backfill, paid for separately. The remaining ground surface shall be leveled to the satisfaction of the Engineer. All driveway culvert pipe removal shall be included in the contract unit price bid per cubic yard for Earth Excavation. Cross road culverts designated on the plans for removal shall be paid at the contract unit price bid per foot for PIPE CULVERT REMOVAL, of the diameter noted, which unit price shall include the removal of any headwall or end sections associated with the pipe culvert. All headwall removal and pipe culvert removal work shall be performed in accordance with Section 501 of the Standard Specifications, except as modified herein.

### EMBANKMENT

Embankment shall be placed in accordance with Section 205 of the Standard Specifications except that: (1) the embankment material shall not be placed and compacted at moisture contents in excess of 110 percent of optimum moisture unless authorized in writing by the Engineer; (2) no separate payment for borrow shall be made, borrow shall be included in the contract unit price bid per cubic yard for furnished excavation; and, (3) all existing earth surfaces to receive embankment placement shall be disked and compacted in accordance with Articles 205.01 through 205.10 of the Standard Specifications. No volume adjustment for the clearing, grubbing or disking and compaction shall be made. Embankment shall not be paid for as a separate pay item. Embankment shall be paid as Furnished Excavation for that volume in excess of Earth Excavation less shrinkage.

## FURNISHED EXCAVATION

This work shall consist of placing embankment in areas where the existing soil has been identified as being frost susceptible or non-reactive with Lime. The areas of furnished excavation are identified in the Soils Report as being 3.0 feet below top of pavement from Station 37+00 to Station 38+00 and from Station 58+00 to Station 62+00. These soils shall be removed and replaced with Furnished Excavation. Samples of the Furnished Excavation material shall be provided to the Engineer for testing four weeks prior to placing the material. The Engineer, after testing is complete, will indicate to the contractor whether or not the soil from the borrow area meets the requirements for being non-susceptible to frost and of being a reactive soil with lime. All work shall be performed in accordance with Sections 204 and 205 of the Standard Specifications. If soil from excavation on the project site is found to meet the requirements of a lime reactive soil which is not frost susceptible, the soil may be used for the replacement; however, it shall not be paid for as Furnished Excavation. Soil from the site excavation shall be placed in accordance with Section 205 and no payment for Embankment will be

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made. If the soil is produced from a borrow area off the project site, this work shall be paid at the contract unit price bid per cubic yard for Furnished Excavation and only these replacement areas shall be paid for as FURNISHED EXCAVATION.

#### TEST ROLLING OF SUBGRADE AND BASE COURSE

The Contractor will provide, at his/her own expense, a loaded truck and test roll the lime modified subgrade in the presence of the Engineer before any sub-base, base or surface material is placed. The truck shall be loaded as follows: 27,000 pounds on two axles or 45,000 pounds on three axles with a tolerance not to exceed 10 percent. The density requirements of Section 302 shall still be enforced and this test roll will be in addition to the requirements of Section 302. If the lime modified soil is not incorporated into the contract, this test roll is still required.

The truck shall make one pass over the entire sub-grade area to be constructed. Any areas which show rutting, cracking or rolling of the compacted sub-grade upon test rolling will not be accepted. The Contractor will recompact and/or reconstruct the section that fails and test roll again prior to acceptance. Reconstruction areas will be paid for as specified in the Special Provision for Granular Subgrade Repair or Replacement. No additional compensation shall be allowed for any test rolling of repaired areas. This work shall be included in the contract unit price bid per ton of Sub-base Granular Material of the type specified.

## SUBBASE GRANULAR MATERIAL TYPE B

Description: This work shall be done in accordance with Section 311 of the Standard Specifications except as modified by the following:

This work, as provided for herein, shall consist of furnishing all materials, equipment and labor for the removal of unsuitable material and the placement of Geotechnical Fabric for Ground Stabilization and/or Granular Blanket in sub-grades or embankment foundations. Following topsoil excavation and roadway excavation to the lines and grades shown on the plans, the Resident Engineer shall determine the limits of the area requiring repair or replacement and so advise the Contractor of the approximate quantities. It is hereby understood that the Contractor shall notify the Engineer not less than forty-eight (48) hours (5:00 p.m. Friday to 8:00 a.m. Monday excluded) prior to any undercutting of the sub-base.

Placement of Granular Material: The Sub-base Granular Material, Type B shall be CA-6 or CA-10 in accordance with Article 1004.04 of the Standard Specifications.

Method of Measurement and Payment: Any excavation of unstable or unsuitable material to complete this work shall be measured in its original position and the volume in cubic yards computed by the method of average end areas. This work shall be paid for at the contract unit price per cubic yard for Earth Excavation.

The Granular Material shall be measured for payment in tons as shown on the plans and will be paid for at the contract unit price per Ton for SUB-BASE GRANULAR MATERIAL, TYPE B. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION shall be paid at the contract unit price bid per Square Yard.

# TRENCH BACKFILL

Material for Trench Backfill shall comply with Article 1003.04 of the Standard Specifications except that the upper twelve inches of the trench shall be compacted CA-6 in the areas of pavement where concrete trucks will be operating on the sub-grade. Bedding material shall conform to Article 1003.04. Compaction of the trench shall be accomplished by Methods 1, 2 or 3 as noted under article 550.07 of the Storm Sewer Section; except for trenches which may delay the placement of curb and gutter or pavement. Time is of the essence on this project. Since waterjetting the trench requires a ten day waiting period to allow drying and settlement, the Contractor shall utilize Method 1, mechanical compaction on any trench that would delay the placement of curb and gutter, pavement or lime modification due to a delay in waiting for the trench to dry and settle. The cost for compaction shall be included in the unit price bid per cubic yard for Trench Backfill and no additional compensation shall be allowed regardless of compaction method used.

## TOPSOIL EXCAVATION AND PLACEMENT

Add to Article 211.07(b) the following: In cut and fill sections, the disturbed areas not improved with pavement or shoulders will require four inches of topsoil. Material suitable for growing grass shall be excavated and stockpiled within the right-of-way for topsoil placement. Excavating and stockpiling of suitable material will be considered incidental and no additional compensation will be allowed. Any holes or depressions made while excavating topsoil from within the project site shall be filled and graded by the Contractor. No additional compensation shall be allowed for filling holes due to topsoil excavation. All costs associated with furnishing or placing Topsoil in the areas designated on the plans or obtaining and placing topsoil from outside the right-of-way as determined in the field, will be paid for at the contract unit price bid per cubic yard for TOPSOIL EXCAVATION AND PLACEMENT.

# MAIL BOXES TO BE MOVED

Mail Boxes shall not be moved other than laterally without the permission of the Engineer and Postal Authority. Mail Boxes or posts broken or damaged during moving shall be replaced or repaired to their original condition at the Contractor's expense. The Contractor shall provide a temporary location for the delivery of mail while the road is under construction.

During the time that construction will block existing driveways along Northtown Road, Stage II, the Contractor shall remove the mailboxes between Sta. 39+00 to 57+00 and move all mailboxes to a single accessible location at the south east corner in the intersection of Linden and Northtown.

This work will not be paid for separately but shall be considered as incidental to Earth Excavation, and no additional compensation will be allowed.

# TEMPORARY EROSION CONTROL

Temporary erosion control shall be the responsibility of the Contractor. The Contractor shall follow the Storm Water Pollution Prevention Plan (SWPPP) and the Erosion Control Plan as shown in the plans and in these special provisions. The Contractor, as a stipulation of this contract, is required to sign the Contractor Certification included with the SWPPP. Systems utilized for temporary erosion control shall be

in accordance with Standard 280001-02. Estimated quantities for Temporary Ditch Checks to be paid at the contract unit price bid per each for TEMPORARY DITCH CHECKS, Perimeter Erosion Barrier to be paid at the contract unit price bid per foot for PERIMETER EROSION BARRIER and TEMPORARY EROSION CONTROL SEEDING to be paid at the contract unit price bid per pound and INLET AND PIPE PROTECTION at the contract unit price bid per each for INLET AND PIPE PROTECTION and inlet filters to be paid per Each for INLET FILTERS are included in the summary of quantities. No change in contract unit price shall be allowed for additions or deletions from the estimated quantities. Upon completion of the project, all materials used for temporary erosion control shall be removed and become the property of the Contractor.

#### **EXPLORATION TRENCH 52-INCH**

The contractor shall use Exploration Trench 52-Inch as designated by the Engineer, to determine the location of existing field tiles. This work shall be paid at the contract unit price bid per foot of EXPLORATION TRENCH-52 INCH. Field tile so located shall be repaired in accordance with these special provisions for Treatment of Existing Field Tile Systems.

# PROCESSING MODIFIED SOIL

This work shall consist of the furnishing and constructing a modified soil layer sub-base for this project. The modifier shall be lime. The work shall be performed in accordance with Section 302 of the Standard Specifications. The Contractor shall strictly abide by the second paragraph of Article 302.07 which states "Dry Modifiers shall not be applied when wind conditions are such that blowing lime becomes objectionable to adjacent property owners or creates a hazard to traffic on adjacent highways as determined by the Engineer." The Town Engineer will be the judge of adequate weather conditions.

Furthermore, dumping of lime from trucks will not be allowed. The lime shall be spread using a pneumatic spreader to restrict the possibility of blowing lime.

# HOT MIX ASPHALT BINDER, SURFACE COURSE OR INCIDENTAL HOT-MIX ASPHALT SURFACING

This work shall consist of constructing all Hot-Mix Asphalt (HMA) Courses. HMA used for Surface Course or Incidental HMA Surfacing shall be of the mix noted. HMA Surface Course fine graded leveling binder shall not be placed in lifts greater than 2". For thicknesses greater than 2

inches, two or more lifts will be required. Viscosity for all HMA material base, binder, or surface courses shall be PG-64-22. All work shall be in accordance with Section 406 of the Standard Specifications. This work shall be measured for payment in tons and paid for at the contract unit price bid per ton for the respective pay item.

# PORTLAND CEMENT CONCRETE PAVEMENT 8" (SPECIAL)

This work shall be performed in accordance with Section 420 of the Standard Specifications and as noted herein. Sawed transverse joints shall not be greater than 15 feet apart and shall conform to the details in the plans. All equipment and labor required to perform the necessary jointing operation shall be available to begin sawing no later than 4 hours after the paving operation begins. Said operation shall start 4 hours after paving begins unless excess raveling occurs. The Contractor shall provide the necessary equipment and labor needed to carry on the sawing at the same rate per longitudinal foot as the paving

# operation.

The Contractor shall stop the paving operation at 4:30 P.M. unless approved otherwise by the Engineer. Sawing shall continue at the same rate as stated above until sunset. If joints are not completed by sunset, sawing shall commence at sunrise and continue at the same rate as the previous day until all joints are complete. All costs shall be included in the cost of Portland Cement Concrete Pavement (Special) - 8".

Trucks and mixer trucks will be allowed to operate on the subgrade, however, should subgrade show any sign of distress, all operations will cease until these items are corrected to the satisfaction of the Engineer. Any subgrade distressed by trucks and mixer trucks shall be repaired at the Contractor's expense. No additional compensation shall be allowed.

Curb and gutter is to be formed in a separate operation from the pavement. Monolithic curb will not be permitted.

Final finish shall be Type B, except burlap drag or light broom may be substituted for the artificial turf drag. Dowel bars, one and a half inch in diameter on an approved assembly shall be placed on twelve (12) inch centers across each and every transverse saw joint and expansion joint. A sixteen (16) foot straightedge will be used for surface testing. This work shall include all saw joints, hot applied joint sealer, expansion joints and concrete connector pad and all work to complete in place. All work shall be included in the contract unit price bid per square yard for PORTLAND CEMENT CONCRETE PAVEMENT 8"(SPECIAL).

## PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT

12' - 24'

This work shall be performed in accordance with Section 423 of the Standard Specifications and as noted herein. Where shown on the plans, driveway pavement shall be removed and replaced with concrete pavement. Thickness shall be as indicated but in no case shall be less than 6 inches. Edges shall be cut with a saw prior to removal and/or replacement. Sawed transverse and longitudinal joints shall conform to the following table:

Driveway Width at Widest Point	No. of Longitudinal Saw Cuts		
0 - 12' 12' - 24' 24' - 36'	0 1 2		
Maximum Driveway Length	Number of Transverse Saw Cuts		
0 - 12'	0		

The sawed joints shall be spaced evenly throughout the driveway. The sawed joints shall be 1/8 inch wide with a minimum depth of one-fourth the pavement thickness. Joints shall be sealed with hot applied material meeting the requirements of specification for Concrete Joint Sealer Hot Poured Elastic Type - ASTM Designation D3405 in Section 452.

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Three-quarter inch thick expansion joints shall be placed between driveway pavement and sidewalks (on both sides) and between driveway pavement and curb and gutter.

All costs to perform this work shall be included in the contract unit price bid per square yard for P.C.C. DRIVEWAY PAVEMENT of the thickness noted.

# EXPANSION JOINTS

Expansion Joints shall be placed at 50-foot intervals and between pours in sidewalks. Expansion Joints shall be placed at RPC's, P.C.'s and P.T.'s in curb and gutter and pavement and at maximum 1,000 foot intervals. Joints in pavement and curb and gutter shall be made with 1-inch thick bituminous pre-molded joint filler. The cost of the expansion joints shall be included in the contract unit bid per square foot for sidewalk, per foot for curb and gutter and per square yard for pavement.

Expansion joints in pavement shall be supported by a concrete connector pad, per the detail in the plans. The connector pad and expansion joint shall be included in the cost bid per square yard for pavement.

# SAW JOINTS

This work shall include sawing proposed pavement or other existing improvements where this proposed project will match to existing. All work shall be performed in accordance with Section 440 of the Standard Specifications. Saw joints will not be paid for separately but shall be included in the unit price bid per square yard for Portland Cement Concrete Pavement (Special) - 8" and the unit price bid per foot for combination concrete curb and gutter of the type noted.

# PORTLAND CEMENT CONCRETE SIDEWALK

Section 424 of the Standard Specifications shall govern all construction of Portland Cement Concrete Sidewalk. All sidewalks shall be 4-inches thick except at all driveways where sidewalk shall be thickened to 6-inches at residential driveways and 8-inches at commercial entrances. This work will be paid for at the contract unit price per square foot bid for PORTLAND CEMENT CONCRETE SIDEWALK of the thickness noted.

# PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH, SPECIAL

This work shall be done in accordance with the applicable articles of Section 424 of the Standard Specifications and details and notes as shown on the plans.

The contract unit price per square foot for Portland Cement Concrete Sidewalk 4 Inch, Special shall include all labor, materials and equipment required to furnish and construct the sidewalk.

This work will be paid for at the contract unit price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH, SPECIAL.

# HANDICAPPED SIDEWALK RAMPS

Handicapped ramps shall be provided at all proposed intersections of curb and sidewalk. This work shall be performed in accordance with Standard 424001-02. Sidewalk for handicapped ramps shall be paid at the contract unit price per square foot bid for P.C.C. Sidewalk 4".

# CLASS C PATCHES

This work shall consist of removing and patching existing concrete pavements as noted on the plans or requested by the Engineer. All work shall be performed in accordance with Section 442 of the Standard Specifications. However, the pavement patch shall consist of eight inches of Concrete tied to the existing adjacent pavement by drilling and epoxy grouting #6 epoxy coated tie bars placed at 30" centers.

This patching is proposed to resurface a trench for a storm sewer crossing and repair joints which are spalling and deteriorating. Only one lane at a time shall be patched to maintain one travel lane open to the NICOR Gas Regulator Station driveway at Sta. 36+31.14.

Joints to be repaired with patching shall be determined during construction by the Town. An assumed quantity for patching is included in the schedules and no change in unit price for this work shall be allowed due to additions or deductions of the quantity noted.

This work shall be measured in horizontal area computed in square yards.

All costs for sawing and removing the existing pavement, drilling and placing epoxy coated tie bars, replacing the pavement with a eight inch concrete, maintaining traffic during construction, all labor, equipment and materials to complete in place shall be included in the contract unit price bid per square yard for CLASS C PATCHES EIGHT INCH of the type noted.

# COMBINATION CURB AND GUTTER REMOVAL SPECIAL

This work shall consist of removing special sections of curb and gutter. A curb and gutter section that flares in width and transitions the curb from a standard height which tapers to flat shall be measured in feet along the face of the curb extended to the end of the concrete gutter section. Or curb and gutter that outlets to a ditch by converting to a gutter section that flairs away from edge of pavement to outlet to the ditch shall be measured in feet along the flowline of the section to the end of the concrete to be removed regardless of width of the outlet. All work shall be performed in accordance with Section 440 of the Standard Specifications. Excess materials shall be disposed of in accordance with Article 202.03 of the Standard Specifications. This work shall be paid for at the contract unit price bid per FOOT for COMBINATION CURB AND GUTTER REMOVAL SPECIAL.

#### CURB REMOVAL SPECIAL

This work shall consist of saw cutting and removing the curb portion of combination concrete curb and

gutter where noted on the plans. All work shall be performed in accordance with Section 440 of the Standard Specifications. The Contractor shall take care to not damage any appurtenances to remain in place. Should any appurtenances be damaged by the Contractor's removal operations. The appurtenance shall be removed and replaced by the Contractor at his/her own expense. All excess materials shall be disposed of in accordance with Article 202.03 of the Standard Specifications.

This work shall be measured in feet along the base of the curb near the flowline of the curb so removed. This work shall be paid for at the contract unit price bid per FOOT for CURB REMOVAL SPECIAL.

# PAVEMENT REMOVAL

This work shall consist of the removal and satisfactory disposal of all existing concrete pavement. The contract unit price bid per square yard for PAVEMENT REMOVAL shall be full compensation for furnishing all labor, material and equipment required to complete this work in accordance with Section 440 of the Standard Specifications and as specified.

# HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH

This work shall consist of removing the Hot-Mix Asphalt (HMA) Surface on Linden Street in depths of varying thickness. The HMA Surface shall be removed to an approximate depth of 2 ¼" along the two main travel lanes of Linden Street. In areas transitioning into and out of the resurfaced intersection, the grades along the pavement edges will need to be transitioned to eventually match into the existing super elevated sections of the roadway. Portions of the pavement may remain in tact, portions may be removed in total and portions may have varying depth surface removal to accommodate the transition. The roadway surface to be removed which is not in varying depth shall be 2 ¼" of surface removal and shall be paid for under HOT-MIX ASPHALT SURFACE REMOVAL, 2 ¼". This work shall be measured in feet of length and width of surface to be removed in varying depth and the area computed in SQUARE YARDS. This work shall be paid for at the contract unit price bid per SQUARE YARD for HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH. Surface which does not need to be removed shall not be paid for. Asphalt pavement on a flexible base which is to be removed to the full depth of the asphalt and either partially or fully to the depth of the aggregate base shall be paid for as EARTH EXCAVATION.

# PIPE CULVERT OR STORM SEWER GRADE CHANGE

The Contractor shall be aware that at times the Engineer may require a change in pipe culvert or storm sewer elevation due to a utility or other obstruction. If such a grade change does not alter the pipe type, the additional excavation or sheeting required shall be considered as incidental to the cost of the pipe culvert.

However, if the revised grade results in a change in pipe type, as set forth in Article 542.03 of the Standard Specifications, payment will be for the revised type of pipe culvert or storm sewer.

# STORM SEWERS OR PIPE CULVERTS, CLASS A

All Storm Sewers or Pipe Culverts Class A Type 1 or Type 2 shall be reinforced concrete culvert storm drain and sewer pipe, AASHTO M-170. Joints shall be mastic and the bedding shall be as shown on the plans.

# STORM SEWERS, DUCTILE IRON

This work shall consist of furnishing and installing storm sewers with ductile iron pipe. In cases where a storm sewer crosses over the top of a water main or proper separation cannot be provided, the Contractor shall construct the sewer as outlined in Division IV, Section 41-2.01C of the "Standard Specifications for Water and Sewer Main Construction in Illinois," Fifth Edition, dated May 1996.

All work pertaining to these items shall be done in accordance with Section 550 of the Standard Specifications except as follows:

The storm sewer pipe shall be Ductile Iron and may be Class 50 or Class 52. This work shall be paid at the contract unit price bid per foot for STORM SEWER DUCTILE IRON of the diameter noted.

### STORM SEWERS (SPECIAL)

This work shall be done in accordance with Section 611 of the Standard Specifications Treatment of Existing Field Tile Systems and to connect sump pump drain lines to the proposed storm sewer system. Pipe materials for twelve inch and larger shall be reinforced concrete pipe and for ten inch and smaller shall be PVC SDR 26 pipe.

This work shall be paid at the contract unit price bid per foot for STORM SEWERS (SPECIAL) of the size indicated. When connecting sump pump lines, all fittings needed to reduce or expand the line to connect to a minimum six inch storm sewer special, and to make any bends or turns shall be included in the cost per foot of the storm sewer special. The storm sewer shall then be run to the nearest proposed inlet and connected to same. All costs to cut or bore a hole into the inlet, insert the sewer and seal the hole with cement grout shall be included in the contract price bid per foot for the STORM SEWER SPECIAL SIX INCH.

# STORM SEWERS, RUBBER GASKET, CLASS A

This work shall consist of furnishing and installing concrete rubber gasketed storm sewers, Class A as noted on the plans. All concrete rubber gasket pipe shall be a pressure rated pipe conforming to the latest AWWA Standard C300, C301, C303. This pipe shall be incorporated when proper separation between the storm sewer and watermain cannot be obtained. Excavation, bedding and backfill requirements shall be in accordance with Section 550 of the Standard Specifications.

This work shall be measured in lineal feet along the top of the pipe from end to end. This work shall be

paid at the contract unit price bid per Foot for STORM SEWER RUBBER GASKET, CLASS A of the Type and Size noted.

## REMOVE EXISTING FLARED END SECTION

This work shall consist of removing existing flared end sections where noted on the plans and delivering same to the Town of Normal or disposing of the end section. Removal of the flared end section shall include the toe wall if one exists. The Contractor shall take care not to damage the flared end section during the removal or delivery of same. Any damage caused by the Contractor's removal process shall be repaired by the Contractor at his/her own expense. The flared end section shall be delivered to the Town of Normal's Public Works facility at 1306 Warriner Drive, if so indicated by the Town's Engineer. If the Town doesn't want the flared end section, the Contractor shall dispose of it off site in accordance with Article 202.03.

This work shall be measured on an EACH basis regardless of size and paid for at the contract unit price bid per EACH for REMOVE EXISTING FLARED END SECTION.

#### FIRE HYDRANT TO BE MOVED

This work shall consist of removing and relocating fire hydrants as noted on the plans or as requested by the Engineer. All work shall be performed in accordance with Section 564 of the Standard Specifications, The Town of Normal "Recurring Special Provisions for Water Main Improvements" and these Special Provisions. Any new Ductile Iron Pipe Water Main necessary to complete the reinstallation of the fire hydrant shall be included in the contract unit price bid per each for FIRE HYDRANT TO BE MOVED. No additional compensation shall be allowed.

#### MANHOLES

This work shall consist of furnishing and installing manholes as noted on the plans all in accordance with Section 602 of the Standard Specifications. The Contractor's attention is called to article 602.15 Basis of Payment which states "...which price shall include..., steps and flat slab tops,..." If flat slab tops are required to complete the manhole construction, they shall be included in the contract unit price per each bid for the manhole and no additional compensation shall be allowed.

## MANHOLES TYPE A WITH SPECIAL FRAME AND GRATE

This work shall consist of furnishing and constructing Manholes Type A with a Special Frame and Grate. All work shall be in accordance with Section 602 of the Standard Specifications. The Special Frame and Grate shall be a cast iron frame and grate meeting the requirements of Section 604 of the Standard Specifications and as noted on the detail in the plans for Special Frame and Grate (for Curb Inlet). The Special Frame and Grate (previously known in the Town of Normal as a Type 50) shall be equivalent to a Neenah R-3067 with a Type A pattern for a bicycle safe grate. This work shall be measured on an EACH basis. This work shall be paid for at the contract unit price bid per EACH for MANHOLES TYPE A, of the size

## noted, WITH SPECIAL FRAME AND GRATE.

## MANHOLES TO BE ADJUSTED WITH FRAME AND GRATE (SPECIAL)

This work shall consist of adjusting manholes where noted on the plans and furnishing and installing a new frame and grate special. Adjustment of the manhole shall be in accordance with Section 602 of the Standard Specifications except that adjustment shall not be reclassified as reconstruction if the vertical level of adjustment exceeds two feet. This work shall remain classified an adjustment regardless of the amount of vertical change.

The frame and grate special shall be a cast iron frame and grate in accordance with Section 604 of the Standard Specifications and the details on the plans. The frame and grate special (previously known in the Town of Normal as Type 50) is intended to be placed in a curb and gutter section. The frame and grate special shall be a Neenah R 3067-bicycle safe grate with Type A pattern or equivalent.

This work shall be measured on an EACH basis and paid for at the contract unit price bid EACH for MANHOLES TO BE ADJUSTED WITH FRAME AND GRATE (SPECIAL).

## INLETS TYPE B WITH SPECIAL FRAME AND GRATE

This work shall consist of furnishing and installing Inlets Type B with a Special Frame and Grate, as shown on the details in the plans. The contract unit price bid per each for Inlets Type B with a Special Frame and Grate shall include all labor, materials and equipment required to construct the inlet in accordance with the details as shown in the plans and Section 602 of the Standard Specifications. The Special Frame and Grate (previously known in the Town of Normal as a Grate Type 60) is intended to be used on an area inlet and not on a curb inlet. The Frame and Grate shall be Neenah R-4341-A ditch grate, stool type or equivalent. Only cast iron grates shall be used. This work shall be paid at the contract unit price bid per Each for the INLETS TYPE B WITH SPECIAL FRAME AND GRATE.

## INLET TYPE SPECIAL WITH SPECIAL FRAME AND GRATE

This work shall consist of furnishing and installing Inlets Type Special with a Special Frame and Grate as shown on the details in the plans. The contract unit price bid per each for Inlet Type Special With Special Frame and Grate shall include all labor, materials and equipment required to furnish and construct the inlet in accordance with the details as shown on the plans. Sections 602 and 604 of the Standard Specifications shall govern the construction of the Inlet and the Special Frame and Grate. The Special Frame and Grate (previously known in the Town of Normal as a Type 50) is intended to be used on curb inlets and shall be a Neenah R-3067 or equivalent. Only cast iron grates shall be used. The Special Frame and Grate shall be a bicycle safe grate with a Type A pattern. Connection of existing storm sewers, where required, to the Inlet Type Special shall be included in the unit price. This work shall be paid for at the contract unit price bid per Each for INLET TYPE SPECIAL WITH SPECIAL FRAME AND GRATE.

## COMBINATION CONCRETE CURB AND GUTTER

This work shall be performed in accordance with Section 606 of the Standard Specifications and as noted herein. The Combination Concrete Curb and Gutter shall be sawed or scored at intervals coinciding with the joint intervals of the adjoining concrete pavement. The minimum joint depth of the gutter shall be 2 inches and on the curb shall be 1 inch. The curb and gutter may be jointed instead of sawed providing the stated depths are obtained. Expansion joints in curb and gutter shall correspond to location of expansion joints in pavement. If adjacent pavement is not a concrete pavement, maximum spacing of saw joints shall be 15 feet and expansion joints shall be placed at the RPC's.

The sawing of the curb and gutter shall commence within four hours of the start of the pour unless otherwise approved by the Engineer. Sawing shall continue until all the joints are completed or until sunset, whichever comes first. If all joints are not completed by sunset, sawing shall commence at sunrise and continue to completion.

All costs shall be included in the contract unit price bid per Foot for COMBINATION CONCRETE CURB AND GUTTER of the type specified.

#### OUTLET SPECIAL

This work shall consist of furnishing and installing concrete outlet specials in accordance with the detail on the plans. This work shall be measured on an EACH basis. The contract unit price bid per EACH for OUTLET SPECIAL shall include all labor, material and equipment required to construct the inlet or outlet at the end point of the proposed curb and gutter as shown in the plans and in accordance with the applicable articles of Section 606 of the Standard Specifications.

## CONCRETE COLLAR

This work consist of furnishing and installing concrete collars in accordance with the detail as shown on the plans where Storm Sewer Ductile Iron connects to Storm Sewer, Type 1 or proposed storm sewer connects to existing storm sewers. This work shall not be paid for separately. All costs for this collar shall be included in the contract unit price bid per foot for the various storm sewer sizes.

#### MODIFY SPRINKLER SYSTEM

This work shall consist of modifying an existing lawn sprinkler system which extends onto the road right-of-way (ROW) and will be in conflict with the construction. The Contractor shall communicate with the owner of the sprinkler system and locate the lines extending into the ROW. After locating the lines and determining their size and material, the Contractor shall cut and cap the lines with material compatible to the existing piping and in a manner that leaves the system remaining on private property operational. If necessary, the Contractor may have to run a connecting pipe across the front of the property to maintain operation of both sides of the system. The Contractor shall carefully remove the existing sprinkler heads in conflict with the construction and offer them to the property owner. This work shall be completed in place to the satisfaction of the Engineer. This work shall be paid for at

## the contract LUMP SUM price bid for MODIFY SPRINKLER SYSTEM.

#### ADJUSTMENT OF QUANTITIES

The quantities for Subbase Granular Materials and Geotechnical Fabric for Ground Stabilization have been estimated in order to establish a unit bid price. No change in contract unit price will be allowed because of an adjustment of these quantities due to actual conditions encountered in the field. Should these items be deleted or adjusted, no change in unit price shall be allowed for adjustment and no payments shall be made for deleted work.

## AGGREGATE FOR TEMPORARY ACCESS

This work shall consist of furnishing and installing aggregate for temporary access roads as noted on the plans or as requested by the Engineer. All work shall be performed in accordance with Section 402 of the Standard Specifications and these special provisions. The aggregate for temporary access shall be constructed to the width and length as determined necessary in the field to a compacted thickness of eight inches. The aggregate used shall be Type B. This work shall be paid for at the contract unit price bid per Ton of Aggregate For Temporary Access which price shall include an initial grading for the road, furnishing, placing and compacting the aggregate and removal of the aggregate once permanent access has been established. The Contractor shall provide weight tickets for all aggregate placed. This work may be increased or decreased in quantity as determined by field conditions and other construction projects in the area. The Contractor shall be responsible for maintaining the temporary surface and shall fill potholes or regrade the temporary access road whenever requested to do so by the Engineer. Rock added during maintenance shall be weighed and paid for at the contract unit price bid per Ton for AGGREGATE FOR TEMPORARY ACCESS. No additional Compensation shall be allowed for regrading. No change in unit price shall be allowed due to increased or decreased quantities.

#### TRAFFIC CONTROL AND PROTECTION (SPECIAL)

This work shall consist of providing traffic control and protection on the existing Northtown Road, Linden Street, and Towanda Avenue in accordance with the applicable portions of Articles 107.9, 107.14, 107.15, 107.29, Sections 701 and 702 of the Standard Specifications, the detailed drawings included in the plans and as determined in the field. Traffic Control and Protection (Special) shall consist of providing all materials, signs, barricades, flaggers, labor and other control necessary to perform the work including all signing for Standards 701001-01, 701006-04, 701201-04, 701326-04, 701501-06, 701606-08, 701901-02, BLR 21-9, BLR 22-7.

These Standards are included in the contract to allow for construction to proceed as far as possible prior to closing the existing roads and also to reduce the amount of time that existing roads will need to be closed when necessary to complete the construction. The Contractor may not close Northtown Road for the winter months. Two lane two-way travel must be open to traffic after the Contractor ceases construction for the winter. If the Contractor cannot complete all stages of pavement construction prior to the winter shut down, the Contractor shall install signing and drums (or barricades) to shift traffic from one stage to the other. All signing and drums (or barricades) shall be included in Traffic Control and Protection (Special). Temporary pavement to

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accommodate the lane shifts shall be installed using hot-mix asphalt surface and binder courses and aggregate base course as deemed necessary by the Town. Hot-mix asphalt courses and aggregate base course shall be measured and paid for per the contract unit prices for their respective pay items and the quantity installed. Temporary pavement marking line shall be four inch and shall be measured and paid for at its respective contract unit price. If the contractor cannot complete an individual stage of construction and open same to traffic prior to the winter shutdown, he/she shall not open cut the existing pavement for the installation of storm sewer laterals or other work. If the existing roadway is open cut for lateral installation or other work and due to unusual weather the Contractor is unable to complete the proposed pavement construction, the Contractor shall be responsible for patching the existing roadway and maintaining same thruthe winter shut down period at his/her own expense. Pavement patches for this work shall consist of 3" of HMA on an 8" aggregate base. Traffic Control and Protection Standards shall not be paid for separately but shall be included in the contract lump sum price bid for Traffic Control and Protection (Special).

This project will be divided into three main stages to maintain access to Northtown Road residences and to maintain traffic on Linden Street. The staging shall be coordinated with the Town of Normal and Stage I, Stage II and Stage III may be reversed by the Town if need be to coordinate with other construction in the area.

Stage I road work shall consist of constructing the storm sewer, manholes and inlets along the north side of Northtown. No inlets on the south side of Northtown or laterals crossing Northtown Road shall be installed from sta 30+00 to sta 57+67. This will allow the existing pavement to remain intact for an access road to be used by the residences/businesses along Northtown Road. From sta 57+67 to Towanda Avenue, the road may be closed and all work performed. Linden Street widening shall be performed on the west side of the road from sta 3+03 to sta 9+50 and on the east side of the road from sta 10+50 to sta 17+27 all under Traffic Control and Protection Standard 701326.

Once Stage I is complete, Stage II road work may commence including installation of a temporary aggregate access on the south side of Northtown from sta 38+50 to sta 55+20. The driveway at sta 57+67 is to be half constructed under stage I to allow access to it in Stage II. Then Northtown may be closed between Linden Street and sta 57+67 to complete all work except driveways in that area. Work on Linden Street shall include widening the east side from sta 3+03 to sta 9+50 and the west side from sta 10+50 to sta 17+27. Widening the south side of Northtown Road from sta 33+10 to 37+00 may commence. However, access to the NICOR Gas Regulator Station driveway at right sta 36+31.14 must be maintained at all times. NICOR must be able to get to the driveway entrance in case of an emergency. The driveway need not be constructed but personnel must be able to drive up to it at all times. Any closure of the roadway in this area shall be coordinated with Mike Roy of NICOR at phone number (309)726-2748 48 hours in advance of traffic pattern changes.

Once Stage II work is completed, Stage III work may commence. Northtown Road may be closed from sta 30+00 to sta 38+00 to complete that segment of the project. The contractor must however coordinate with NICOR to ensure access to the gas regulating station #272 at sta 36+30. Linden Street existing asphalt pavement shall have variable depth surface removal performed and the pavement shall be resurfaced. This work shall be performed under traffic utilizing Traffic Control and Protection Standard 701201. Northtown Road sta 38+50 to sta 57+67 shall remain closed to

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thru traffic. Driveways and sidewalks on the south side of the road shall be constructed.

The Contractor shall place Type III Barricades across the full width of Northtown Road at Towanda Avenue and at the division of Stage I and Stage II near Sta. 57+80. Warning signs as noted on Standards BLR 21-9 and BLR 22-7 shall be placed ahead of the barricades. When the Northtown Road staging changes from Stage I to Stage II the barricades and signs shall be revised accordingly. Staggered Type III Barricades with Road Closed To Thru Traffic signs shall be placed at the closest intersection prior to the actual construction limits to allow local traffic access to the area ahead of construction. The Contractor shall place Temporary Pavement Marking Tape III and Arrows on Linden Street to indicate the direction of traffic flow. The tape-shall-be placed during construction whenever any portion of Linden Street traffic is shifted.

Staging of the Northtown Road and Linden Street intersection and construction on Linden Street shall consist of the stages as noted on the plans. Contingency quantity for temporary pavement marking arrows, lines or symbols are included in the plans for the Contractor to shift traffic lanes if desired. Temporary pavement marking may be paint markings when the surface is not the final surface. Temporary pavement markings on final surfaces shall be Temporary Pavement Marking TapeType III. All work shall be performed with one lane open during the day and two lanes open after work ceases for the day.

Traffic Control and Protection (Special) shall include the placement of Type III barricades with "Road Closed" signs in accordance with Standards 701001-02, 701006-04, 701201-04, 701326-04, 701504-06, 701606-08, 701901-02, BLR 21-9, BLR 22-7 and the staging plans. These barricades shall be placed in accordance with Standards BLR 21-9 and BLR 22-7. Construction Ahead and Road Closed Ahead signs shall be placed by the Contractor at every intersection prior to construction for every street affected by construction. Detour signing shall be installed by the Contractor.

The Contractor shall notify the Town Engineer at least 72 hours prior to any road closing so that adequate notice may be given to the media. Additionally, the Contractor shall also notify the Normal Fire Department, Normal Police Department, McLean County Sheriff's Department ESDA Emergency Services, Unit 5 School District and the U.S. Postal Services of any impending road closures.

The Contractor shall place additional traffic control whenever conditions warrant or whenever requested to do so by the Engineer.

All traffic control and protection, surveillance, signs, barricades, equipment and labor to install, maintain, relocate and remove same shall be included in the contract lump sum price bid for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

## SEQUENCE OF OPERATIONS

The Contractor shall coordinate this construction with the Town of Normal Engineering Department.

Prior to beginning construction operations, the Contractor shall submit to the Engineer for approval a Sequence of Construction Operations. This sequence shall provide for following the schedule as Northtown/Normal 17 0111380.00

outlined in the Plans and Special Provisions. No deviation from the approved sequence will be permitted except by written permission from the Engineer.

The Contractor shall notify the Engineer, and the Town of Normal of any impending street closing prior to beginning work and shall notify the same departments when the street is opened. No streets shall be closed without 72 hours prior notice to and approval by the Engineer. The Contractor shall notify the above entities of the progress of the work on a weekly basis, when significant items of work are to be performed or whenever changes in traffic control will precipitate changes in traffic patterns.

All open excavations left overnight throughout this project shall be protected by fences and barricades with flashing lights.

#### CONNECTION INTO EXISTING STORM SEWER MANHOLE

The price for connecting proposed Storm Sewer into an existing manhole shall be included in the contract unit price bid per foot for the respective sewer. This shall include all labor, material and equipment necessary to satisfactorily complete the connection.

## CHAIN LINK FENCE, 5' (SPECIAL)

This work shall consist of furnishing and constructing chain link fence to the lines shown on the contract plans and as requested by the Engineer. Materials shall be according to Article 664.02 of the 2012 Standard Specifications. The chain link fence shall be constructed in accordance with Section 664 of the Standard Specifications except as modified herein. Fabric shall be galvanized chain-link fabric.

In addition, the fence shall be constructed with a top and bottom rail of 1 5/8 inches of O.D. hotdipped galvanized Schedule 40 pipe weighing 2.27 lbs. per lineal foot complete with fabric ties on 24-inch maximum centers.

Chain Link Fence, 5' (Special) shall be measured for payment in feet. The chain link fence will be measured from center-to-center of the beginning and terminating posts as shown on the plans. This work shall be paid for at the contract unit price per foot for CHAIN LINK FENCE, 5' (SPECIAL).

#### SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE)

This work shall consist of furnishing and installing solar-powered flashing beacon assemblies where noted on the plans. The assembly shall include the solar power pack, the flashing LED blinker lights, the sign (either "STOP" or "STOP AHEAD" sign), the post and all labor, materials and equipment to install same. The solar power pack and sign with eight flashing blinker lights shall be programmed to flash 24 hours a day/7 days a week. The "STOP AHEAD" sign shall be yellow and the "STOP" sign shall be red both in accordance with MUTCD. All sign posts shall be a breakaway type support per Section 727 of the Standard Specifications. All work shall be in accordance with

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the Manual on Uniform Traffic Control Devices (MUTCD) and Section 720 of the Standard Specifications and Standard 701901. The battery in the solar power pack shall be Nickel Metal Hydride (NiHM) with 14,000 mAh or equivalent. The LED lights shall be high power Luxeon, 1 watt lights.

The "STOP AHEAD" sign shall be 30" X 30" on yellow background per W3-1 of MUTCD and placed 6 to 12 foot from the edge of shoulder and approximately 300 feet in advance of the stop. The "STOP" sign shall be a red sign with white lettering per R1-1 of MUTCD and placed as noted on the plans.

This work shall be measured on an EACH basis and shall include either the "STOP" sign or the "STOP AHEAD" sign. This work shall be paid for at the contract unit price bid per EACH for SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE).

#### CONSTRUCTION LAYOUT

The Contractor shall be required to furnish and place construction layout stakes for this project. The Town will provide adequate reference points to the centerline of survey and benchmarks as shown on the plans. Any additional control points set by the Town shall be identified in the field to the Contractor and the field notes shall be kept by the Resident Engineer.

The Contractor shall provide field forces, equipment and materials to set all additional stakes for this project which are needed to establish offset stakes and reference points for culverts, sewer drain structures, appurtenances and any other horizontal and vertical controls necessary to supply a correct layout for construction work. Stakes for line and grade shall be set at sufficient station intervals (not to exceed 50 feet) to assure substantial conformance to the plan line and grade. The Contractor will not be required to set additional stakes to locate a utility line which is not included as a pay item in the contract nor to determine property lines between private properties.

The Contractor shall be responsible for having the finished work substantially conform to the lines, grades, elevations, and dimensions called for in the plans. Any inspection or checking of the Contractor's layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his/her responsibility to secure the proper dimensions, grades, and elevations of the several parts of the work. The Contractor shall exercise care in the preservation of stakes and benchmarks and shall have them reset at his/her expense when any are damaged, lost, displaced, or removed or otherwise obliterated. The Contractor shall use competent personnel and suitable equipment to the layout work required.

Individuals comprising a survey party performing work which is primarily professional or sub-professional in character and who, incidental to their primary duties, perform a minor amount of manual work such as clearing brush and sharpening stakes, are not classed as laborers or mechanics under the Davis-Bacon Act of Section 113 of Title 23, U.S. Code. Individuals whose primary duties are the performance of manual work such as clearing brush and sharpening stakes are classified as laborers within the meaning of the Davis-Bacon Act and Section 113 of Title 23, U.S. Code, and shall be paid at least the minimum wage rate determined by the Secretary of Labor.

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### **RESPONSIBILITY OF THE TOWN**

- A. The Town will locate and identify the centerline of all roads and streets. The centerline of private entrances and short street intersection returns need not be located or referenced by the Town. Locating and identifying the centerline of survey will consist of establishing and locating the control points of the centerline of survey at PC's, PT's, and as many POT's as are necessary to provide a line of sight. Details of the location of the points are shown in the plans.
- B. Benchmarks shall be established along the project. Descriptions of these benchmarks are included in the plans.
- C. Points set for A and B above shall be identified in the field to the Contractor and the field notes shall be kept by the Resident Engineer for reference.
- D. The Town shall make random checks of the Contractor's staking to determine if the work is in substantial conformance with the plans. Where the Contractor's work will tie into the work that is being or will be done by others, checks will be made to determine if the work is in conformance with the proposed overall grade and horizontal alignment.
- E. The Town will set all stakes for utility adjustments and for building fences along the right-ofway line by parties other than the Contractor.
- F. The Town will make all measurements and take all cross sections from which the various pay items that are to be field measured will be calculated.
- G. Where the Contractor, in setting construction stakes, discovers discrepancies in the plans, the Town shall check to determine their nature and make whatever revisions are necessary in the plans, including the re-cross sectioning of the areas involved and all additional re-staking necessary.
- H. The Town will accept responsibility for the accuracy of the initial control points as provided herein.
- I. It is not the responsibility of the Town, except as herein provided, to check the correctness of the Contractor's stakes; however, any errors that are apparent will be immediately called to the Contractor's attention and he/she shall be required to make the necessary correction before the stakes are used for construction purposes. The Contractor will provide the Engineer a copy of any field notes, cut/fill sheets, and layout diagrams produced during the course of the project.
- J. Where the plan quantities for excavation are to be used as the final pay quantity, the Town will make sufficient checks to determine if the work has been completed in substantial conformance with the plan cross sections.
- K. All measurements necessary to determine the final pay quantities will be made independently by the Town.

## RESPONSIBILITY OF THE CONTRACTOR

- A. The Contractor shall set all other stakes necessary to establish lines and grades for the work. It is the Contractor's responsibility to tie in centerline control points in order to preserve them during construction operations.
- B. At the completion of the grading operations, the Contractor will be required to set stakes at 100' station intervals along each profile grade line. These stakes will be used for final cross sectioning by the Town.

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- C. The Contractor will not be required to set additional stakes to locate a utility line or to determine the property line between private properties. The Contractor will be required to stake the location of any fencing included in the contract.
- D. Field notes shall be kept in standard hard cover survey field notebooks and the books shall become the property of the Town of Normal, Illinois at the completion of the project. All notes shall be neat, orderly and in accepted form.
- E. The Contractor will establish and maintain adequate tie points for accurate referencing and reestablishing the centerline of survey noted under "Responsibility of the Town", Part A.
- F. For drainage structures, including pipe culverts, over four square feet of waterway opening, the Contractor shall supply sufficient initial layout for the approval of the Engineer. If required by the Engineer, the Contractor will adjust final construction staking without additional cost to the contract.
- G. It is not to be considered the responsibility of the Contractor to make a detailed check of the accuracy of the plans, however, it is expected that the Contractor will advise the Town promptly of known errors in the plans.
- H. For highway structure staking, the Contractor shall use diligent care and appropriate accuracy. Points shall be positioned to allow reuse throughout the construction process. Prior to the beginning of construction activities, all structure centerlines and pier lines are to be established by the Contractor and checked by the Engineer. The Contractor will provide a detailed structure layout drawing showing span dimensions, staking lines and offset distances.

#### MEASUREMENT AND PAYMENT

This item will be paid for at the contract LUMP SUM price for CONSTRUCTION LAYOUT, which price shall be payment in full for all services, materials, labor, and incidental items required to complete the work.

## STANDARDS IN THE PLANS

The Standards with the revision number listed in the Index to Sheets included in the plans shall hold precedence over Standard Numbers listed elsewhere in the plans or Special Provisions for this contract.

## DAMAGE TO EXISTING STRUCTURES

If damage is done to existing or new structures during construction of the proposed improvement, they shall be replaced or repaired in a satisfactory manner by the Contractor at his/her own expense.

## UTILITIES

The utility companies have been notified of the impending project and the plans indicate the general location of the utility main lines. The Contractor shall have the responsibility before any construction work has begun, of obtaining from all utilities the exact location of any underground facilities in the area of construction, whether indicated on the plans or not. Any facilities disturbed by the Contractor shall be restored by him/her at his/her own expense. The Contractor shall coordinate with the proper utility the relocation of any facility designated on the plans or deemed necessary to be relocated by the Engineer in order to complete construction of the project. Special attention is called to Article 107.31. Residents shall be notified of impending service outages and no residence shall be without service overnight.

#### JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS

Whenever a question arises regarding the existence or location of a buried utility, call the toll free J.U.L.I.E. telephone number, 1-800-892-0123, before starting excavation. Allow 48 hours for other than emergency assistance.

#### COMMITMENTS

There are no formal commitments for this project. However, all property owners that attended the informational meeting were told that the Town would maintain access to their properties during construction. The staging plans were designed to accommodate access.

## TOWN OF NORMAL RECURRING SPECIAL PROVISIONS FOR WATER MAIN IMPROVEMENTS

Following these Special Provisions herein are the "Town of Normal, Illinois Recurring Special Provisions For Water Main Improvements". Those improvements or requirements so indicated by a check mark shall be a part of this contract. Any items so marked and included but which are not specifically noted to be paid for separately, such as Retainer Glands, shall be constructed according to the Town's Recurring Special Provisions and shall be incidental to the contract.

#### ADJUSTING WATERMAIN

This work shall consist of lowering existing watermain where adequate cover cannot be maintained. The Town of Normal Water Department shall determine where the sections of the main are to be lowered. The Contractor shall shut the watermain down at the nearest valve locations and cut, remove and lower the existing watermain. The line shall be flushed, pressure tested and chlorinated prior to placing it back in service. If this work requires the line to be out of service for longer than four hours, the Contractor shall provide a temporary service to those residents who are out of service. To reinstall the existing watermain the Contractor shall use a cut-in sleeve.

A sampling and chlorination tap shall be placed on each end of the main being lowered so that it

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can be chlorinated and flushed.

This work shall be measured in FEET along the top of the watermain which is adjusted. This work shall be paid for at the contact unit price bid per FOOT for ADJUSTING WATERMAIN of the size noted, which price shall include all work, cutting the watermain, reinstalling, furnishing and installing a cut in sleeve, furnishing and installing sampling and chlorination taps, providing temporary service and all testing requirements to meet IEPA guidelines prior to placing the main back in service.

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#### (X) Connections to Existing Mains

If the connection to an existing water main requires a shutdown of the existing main, the Contractor shall notify all users of the affected main a minimum of 48 hours ahead of the shutdown. The Contractor shall rechlorinate that portion of the existing water main which is shut down before it is put back into service. The Contractor shall provide the necessary blocking or restraining of the existing main when he makes the new connection.

#### () Tapping Valve, Sleeve and Box

When connections to existing mains are to be made, the Water Department shall do all the work that is required to make the connection, including making the actual tap and supplying the tapping valve, sleeve and box. Contractor shall make all excavations and coordinate his operation with the Town of Normal Water Department personnel who will perform the tap. All costs shall be included in the unit cost for Tapping Valve, Sleeve and Box of the size specified.

#### (X) Leakage Test

When performing a hydrostatic pressure test, all water used must be potable and contain a chlorine residual of not less than 0.2 parts per million of free chlorine or 0.5 parts per million of combined chlorine. The hydrostatic pressure test will be made in accordance with ANSI/AWWA C-600 latest edition. The hydrostatic pressure shall be 90 psi (620kpa) for at least one-hour duration and not vary more than 5 psi (35kpa). Before applying the specified test pressure, the air shall be expelled from the pipe. The allowable leakage shall be determined by the following formula:

$$L = \frac{SD\sqrt{P}}{133200} \, 1$$

L = allowable leakage in gallons per hour

S = length of pipe in feet

D = nominal diameter of pipe in inches

P = average test pressure during test in psig

All visible leaks are to be repaired regardless of the amount of leakage. After the hydrostatic test has been successfully completed, the main shall be flushed attaining the minimum velocity of at least 2-1/2 feet per second (0.75 mps). Flushing must continue until all particulate matter and discoloration has been removed.

#### (X) Flushing of New Mains

There will be no charge by the Town of Normal to the Contractor for the water used to flush the mains, provided it is not necessary to flush the mains more than three times. If it is necessary to flush the mains more than three times, then the Contractor will be charged by the Town of Normal for water used to flush the mains. The Contractor shall provide and install any hose necessary to direct the water being flushed away from any area it might damage. The Contractor shall take whatever precautions necessary during flushing to prevent ecological damage to any receiving stream, lake or other body of water.

## (X) Sampling and Chlorinating Taps

At the extreme ends of the proposed new water main or at locations as directed by the Director of Water, sampling and chlorinating taps shall be installed by the Contractor in accordance with the details as shown on the plans. After the chlorinating, sampling and testing is approved by the Town of Normal Water Department, the corporation stop shall be shut off and the piping removed from the corporation stop.

#### (X) Disinfection of Mains

Disinfection following flushing must be accomplished by either the continuous feed method or slug method. The tablet method is not acceptable and is not to be used except with the expressed written permission of the Director of Water. A chlorine residual of at least 50 parts per million must be attained initially and 25 parts per million residual present after 24 hours when the preferred continuous feed method is used. If the slug method is used, 300 parts per million must be retained for a minimum of 3 hours, or 500 parts per million retained for 30 minutes. Attainment of initial and final chlorine residuals must be verified by the Town of Normal Water Department. Disinfecting chlorine doses shall not remain in the pipe for more than 24 hours.

In order to provide proper conditions for disinfection following construction, installation option 'A' or 'B' must be followed.

- A. A minimum of three low density foam swabs shall be introduced into the first unit of pipe being installed and shall remain until the job is completed whereupon the swabs shall be propelled a minimum of three times, or until water is clear, in the direction of the extreme ends of the construction project during the initial filling and flushing process. When a dead-end main is involved the Contractor may return the swabs to the point of origin by using another water source with sufficient volume and pressure to propel the swabs, or he may retrieve the swabs at the exit point and reintroduce the swabs at the origin repeating the process until exit water is clear. The process must be performed on every run of pipe from each branch of newly constructed water main. In cases where foam swabs are too large to be retrieved from a fire hydrant, an exit tee or wye and a means of directing the water away from the trench must be provided. All swabs that are used must be accounted for when cleaning is completed.
- B. Each unit of pipe, fitting and valve shall be hand swabbed or otherwise mechanically cleaned with a prior approved method before installation, and a cap or plug inserted in the pipe and retained until just prior to joining with the next unit of pipe. Two caps or plugs must be utilized, one inserted in the last unit of pipe laid and one to be used in the unit of pipe being prepared for installation. The plug or cap in the last unit of pipe installed shall not be removed until the next pipe unit is lowered into the trench and is ready to be inserted. At the end of each working day a <u>watertight</u> plug or cap shall reside in the last unit of pipe or fitting installed, until construction resumes. During installation workman's hands, gloves, rags, tools, or any other foreign object must not be introduced into the open ends of any previously cleaned pipe. If dirt or mud is kicked into or falls into the open ends of the pipe during handling or joining, recleaning of the pipe or fitting affected must be performed. Cleaning water must be clear water containing a minimum of 10 ppm chlorine, and shall be changed whenever appropriate. Muddy or overly discolored cleaning solutions shall not be used at any time.

In the event a project is constructed where a flushing velocity of two and a half feet per second (2-

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1/2 fps) (0.75 mps) cannot be attained the hand cleaning method <u>must</u> be employed. Where the hand cleaning method is employed, chlorine in the form of high test hypochlorite (HTH) may be introduced into each unit of pipe during construction to satisfy the disinfection requirements, providing a minimum of fifty parts per million (50 ppm) of chlorine is present in both ends of the new main following initial filling.

### (X) Bacteriological Testing

After disinfection, bacteriological testing must be done to insure the public health of the main. All samples must be collected by a designated sample collector of the Town of Normal Water Department and tested at an IEPA approved laboratory.

Water mains that fail the initial bacterial test shall be flushed again before additional sampling is commenced. If the second sample also fails the bacterial test, then disinfection shall be repeated and flushing prior to additional sampling shall be required. If the third sample fails the bacterial test, then the next step shall be determined by the Director of Water.

#### (X) Trench Backfill

Approved compacted granular material shall be required in all trenches extending two feet (0.6 m) either side of all sidewalks, driveways and street pavements.

#### () Curb and Gutter Crossing

Contractor may remove and replace the curb and gutter at the street crossings or he may tunnel the curb and gutter at his option. All excavated material shall be disposed of off site and the trench backfilled with approved compacted granular material.

#### () Pavement Removal and Replacement

All Street Pavement Removal and Replacement shall be done in accordance with Chapter 2 of A Manual of Practice for the Design of Public Improvements in the Town of Normal.

#### (X) Damage to Existing Structures

If damage is done to existing or new structures during construction of the proposed improvement, they shall be replaced or repaired in a satisfactory manner by the Contractor at his own expense.

## (X) <u>Utilities</u>

The utility companies shall be notified of the impending project and the plans shall indicate the general location of the utility main lines. The Contractor shall have the responsibility before any construction work has begun, of obtaining from all utilities the exact location of any underground facilities in the area of construction, whether indicated on the plans or not. Any facilities disturbed by the Contractor shall be restored by him at his own expense. The Contractor shall coordinate with the proper utility the relocation of any facility designated on the plans or deemed necessary to be relocated by the Engineer in order to complete construction of the project.

Residents shall be notified a minimum of 48 hours in advance of impending service outages, and no residence shall be without service overnight.



**Storm Water Pollution Prevention Plan** 

Route	FAU 6375	 	Marked Rte.	Northtown Road	
Section	00-00206-00-RP		Project No.	M-5227 (56) Town of Normal	
County	McLean	 ·	Contract No.	·	•

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

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

	Gene Brown		• • •		Jer		<u> </u>	5_		
, <u>, , , , , , , , , , , , , , , , </u>	Print Name	•		-			1	Signature		
	Town Engineer					<u> </u>	17	200)		<u></u>
<u> </u>	Title						1	Date		
	Town of Normal									
	Agency								•	

#### Site Description:

A. Provide a description of the project location (include latitude and longitude):

The project is Northtown Road and Linden Street with the majority of the project approximately one half mile north of I-55 in Normal. Latitude, 40°-32'-46" Longitude, 89°-01'-56"

B. Provide a description of the construction activity which is the subject of this plan:

Clearing, earth excavation and excavation for storm sewers.

- C. Provide the estimated duration of this project:
  - 160 working days or approximately one year.
- D. The total area of the construction site is estimated to be 20 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 15 acres.

- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:
- F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:
- G. Provide an aerial extent of wetland acreage at the site:

N/A

H. Provide a description of potentially erosive areas associated with this project:

Any slopes steeper than 3:1.

1. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

All earth excavation will expose bare earth. Slopes are to be held at 3:1 or flatter. Any slopes steeper than 3:1 are subject to erosion.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Town of Normal

1: .

The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

The receiving water is a normally dry grass swale along the north side of Northtown Road.

M. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

All slopes will receive temporary erosion control seeding and ditches will be protected with temporary ditch checks.

N. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

П П

1.

Wetland Riparian

Floodplain

Threatened and Endangered Species

Historic Preservation

303(d) Listed receiving waters for suspended solids, turbidity, or siltation

Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation Applicable Federal, Tribal, State or Local Programs

Other

303(d) Listed receiving waters (fill out this section if checked above):

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

- b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:
- c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:
- d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:
- TMDL (fill out this section if checked above)
  - The name(s) of the listed water body:

2.

- b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
- c. If a specific r

If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

O. The following pollutants of concern will be associated with this construction project:

	Soil Sediment Concrete Concrete Truck Waste Concrete Curing Compounds Solid Waste Debris Paints Solvents Eertilizers / Pesticides	Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants Waste water from cleaning construction equipment Other (specify) Other (specify) Other (specify) Other (specify) Other (specify)
$\Box$ .	Fertilizers / Pesticides	Other (specify)

#### Controls:

1.

Н.

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

#### A. Erosion and Sediment Controls

**Stabilized Practices:** Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven (7) days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

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

The following stabilization practices will be used for this project:

- Erosion Control Blanket / Mulching Preservation of Mature Vegetation  $\Box$ Sodding Vegetated Buffer Strips Geotextiles  $\Box$ Protection of Trees Other (specify) Temporary Erosion Control Seeding  $\boxtimes$ Other (specify) Temporary Turf (Seeding, Class 7) Other (specify) **Temporary Mulching**
- Permanent Seeding

Describe how the stabilization practices listed above will be utilized during construction:

As soon as bare earth slopes are graded and ready for seeding, temporary erosion control seeding shall be applied.

Other (specify)

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Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Permanent seeding will be applied as soon as practical. Storm waters will be collected in inlets and outletted onto rip rap areas to control erosion.

2. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following structural practices will be used for this project:

				•
ব	Perimeter Erosion Barrier			Rock Outlet Protection
ব	Temporary Ditch Check		$\boxtimes$	Riprap
ব	Storm Drain Inlet Protection			Gabions
Ē	Sediment Trap			Slope Mattress
ī	Temporary Pipe Slope Drain			Retaining Walls
٦.	Temporary Sediment Basin			Slope Walls
Ę	Temporary Stream Crossing			Concrete Revetment Mats
Ē	Stabilized Construction Exits			Level Spreaders
Ŧ	Turf Reinforcement Mats	1		Other (specify)
Ξ.	Permanent Check Dams			Other (specify)
F	Permanent Sediment Basin			Other (specify)
F	Aggregate Ditch		·□	Other (specify)
Ē	Paved Ditch			Other (specify)

Describe how the structural practices listed above will be utilized during construction.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

Most surface waters will be collected in inlets and drained through storm sewers to a controlled outlet protected with rip rap to slow velocity and prevent erosion.

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

a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

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

Description of storm water management controls:

3.

30

Approved State or Local Laws: The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources

are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

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

5. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.

- a. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
  - Approximate duration of the project, including each stage of the project
  - Rainy season, dry season, and winter shutdown dates
  - Temporary stabilization measures to be employed by contract phases
  - Mobilization timeframe
  - Mass clearing and grubbing/roadside clearing dates
  - Deployment of Erosion Control Practices
  - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
  - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
  - Paving, saw-cutting, and any other pavement related operations
  - Major planned stockpiling operations
  - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
  - Permanent stabilization activities for each area of the project
- b. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
  - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
  - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
  - Stockpile Management Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
  - Waste Disposal Discuss methods of waste disposal that will be used for this project.
  - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
  - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
  - Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
  - Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Additional measures indicated in the plan.

#### III. Maintenance:

4.

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures

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identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

## IV Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm that is 0.5 inch or greater or equivalent snowfall.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: <u>epa.swnoncomp@illinois.gov</u>, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

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

#### V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

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BDE 2342 (Rev. 1/28/2011) 01111380.00



**Contractor Certification Statement** 

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.5 of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route	FAU RTE 6375	Marked Rte.	
Section	00-00206-00-RP	Project No.	
County	McLean	Contract No. 91479	

This certification statement is a part of the SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in the SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

Contractor

Sub-Contractor

	Print Name	• • •		Signature	
			•		
<u>.                                    </u>	Title	<u> </u>		Date	
. 1			•		
·	Name of Firm	· ·		Telephone	.*
Υ.					<u> </u>
	Street Address	· · · · · · · · · · · · · · · · · · ·		City/State/ZIP	

Items which this Contractor/subcontractor will be responsible for as required in Section II.5. of the SWPPP:

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY **NOTICE OF INTENT (NOI)** GENERAL PERMIT TO DISCHARGE STORM WATER CONSTRUCTION SITE ACTIVITIES

## **OWNER INFORMATION**

COMPANY/ OWNER NAME:	Town of Normal	• • •	OWNER 7	TYPE: SELECT ONE City MS4 Community ☑Yes □No
MAILING ADDRESS:	305 S. Linden St.			PHONE: Area Code(309 )Number454-9574 ext.
CITY:	Normal	STATE: IL	ZIP CODE: 61761	FAX: Area Code ( ) Number
CONTACT PERSON: Gene	e Brown, P.E.		EMAIL: g	brown@normal.org

## CONTRACTOR INFORMATION

CONTRACTOR NAME:			
MAILING ADDRESS:	PHONE: Area Code ( )	Number	ext.
		STATE:	ZIP CODE:

## CONSTRUCTION SITE INFORMATION

SELECT ONE:	<u>и П</u>	IEW SITÈ	🗌 сн	IANGE OF INFORM	MATION FO	R: ILR1	10		<u> </u>		
PROJECT NAME:	Town	ofNorma	al Northtov	vn Road				COUN McLe			
STREET ADDRESS/ LOCATION		. •				CITY: Norn		•	IL		CODE: 61761
, •	DEG.	MIN.	SEC.		DEG.	MIN.	SEC.	SECTION:	TOWNS	HIP:	RANGE:
LATITUDE:	· · ·			LONGITUDE:			<u> </u>		<u>].</u>		
APPROX CONST START DATE / /	г	APPROX CONSTEN	ID DATE	TOTAL SIZE C	OF CONS cre, is site	TRUCTIO	N SITE IN ger commo	ACRES:	opment?	YE	s 🗌 NO

## STORM WATER POLLUTION PREVENTION PLAN INFORMATION

HAS STORM WATER POLLUTION P (SUBMIT SWPPP ELEC	REVENTION PLAN BEEN SUBMI TRONICALLY TO: epa.constilr10		] YES	∏ NO
WILL STORM WATER POLLUTION	PREVENTION PLAN BE AVAILAB	LE AT SITE?		0
LOCATION OF SWPPP FOR VIEWIN	IG: ADDRESS:			CITY:
SWPPP CONTACT INFORMATION: NAME:			•	INSPECTOR QUALIFICATIONS: SELECT ONE P.E.
PHONE:	FAX:	EMAIL:		
PROJECT INSPECTOR, IF DIFFERE	NT THAN ABOVE:	<u>.</u>		INSPECTOR QUALIFICATIONS: SELECT ONE Other
PHONE:	FAX:	EMAIL:		

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY **NOTICE OF INTENT (NOI)** GENERAL PERMIT TO DISCHARGE STORM WATER CONSTRUCTION SITE ACTIVITIES

SELECT ONE Other			SIC Code:	• •
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HISTORIC PRESERVATIO			COMPLIANCE	•
HAS THIS PROJECT BEEN SUBMITTE COMPLIANCE WITH ILLINOIS LAW ON		G STATE AGENCIES TO SA	TISFY APPLICABLE REQUIREMEN	TS FOR
HISTORIC PRESER			oishistory.gov/PS/rcdocument.htm	
ENDANGERED SPE		NO <u>http://dnrecoca</u>	t.state.il.us/ecopublic/	·* · · ·
<u>,</u>	· ·	· · ·		
RECEIVING WATER INFO	RMATION			
DOES YOUR STORM WATER DISCHA	RGE DIRECTLY TO:	WATERS OF THE ST	TATE OR STORM SEWI	ER
		•		
OWNER TO STORM SEWER SYSTEMS	5:			
NAME OF CLOSEST RECEIVING WAT	document and all atta	achments were prepared un	der my direction and supervision i	n accordance with
I certify under penalty of law that this system designed to assure that qual person or persons who manage this is, to the best of my knowledge and I information including the possibility	document and all atta lified personnel prope system, or those pers belief, true, accurate, a v of fine and imprise	achments were prepared un rly gather and evaluate the sons directly responsible fo and complete. I am aware onment. In addition. I cei	e information submitted. Based o r gathering the information, the inf that there are significant penalties rtify that the provisions of the pe	n my inquiry of th ormation submitte for submitting fals ermit, including th
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## SECTION NO 00 0206 00 RP

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MC LEAN COUNTY

## <u>UTILITIES</u>

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The utility companies were forwarded final plans. Listed below are the utilities and any known adjustments to be made.

Utility Co. & Contact	Adjustment	Status of Adjustment
Frontier Communications (Adam Gangloff)	*Not known at this time	unknown
Comcast Communications (Tim Helphinstine)	*Not known at this time	unknown
Ameren Illinois Power (Marty Behrens)	Pole relocation along N. Linden	To be determined
NICOR Gas Co. (Connie Lane)	*Not known at this time	unknown
Cornbelt Energy (Keith Erickson)	*Not known at this time	unknown
Town of Normal Water Department (Steve Gerdes)	Watermain adjustment	Included in plans

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## NON-VERTICAL IMPACT ROLLER FOR HOT-MIX ASPHALT

#### Eff. October 13, 2011

For all Hot-Mix Asphalt Mixtures placed at a rate exceeding 85 tons per hour (75 metric tons per hour), a Non-Vertical Impact roller may be used as the finish roller. The roller shall meet the requirements outlined below.

The roller shall be capable of operating in a mode that will provide non-vertical impacts and operate at a speed to produce not less than 10 impacts/ft (30 impacts/m). The roller shall be self-propelled and provide a smooth operation when starting, stopping or reversing directions. The non-vertical impact drum(s) amplitude and frequency shall be approximately the same in each direction and meet the following minimum requirements: drum diameter 48 in. (1200 mm), length of drum 66 in. (1650 mm), unit static force on drum(s) 125 lb/in. (22 N/m), adjustable eccentrics, and reversible eccentrics on non-driven drum(s). The total applied force and the direction it is applied for various combinations of VPM and eccentric positions shall be shown on decals on the vibrating roller or on a chart maintained with the roller. The roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup.

This work will not be measured for payment or paid for separately, but shall be considered as included in the price per ton (metric ton) or square yard (square meter) of the various items of HOT-MIX ASPHALT, of the mixture and Ndesign (if applicable) specified.

Non-vertical roller

#### HOT-MIX ASPHALT MIXTURE IL-19.0FG

Effective: December 1, 2009 Revised: April 5, 2013

<u>Description</u>. This work shall consist of constructing fine graded hot-mix asphalt (HMA) binder course with an IL-19.0FG mixture. Work shall be according to Sections 406, 407 and 1030 of the Standard Specifications, except as modified herein.

Materials. Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21,or FA 22. For mixture IL-19.0FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20, FA 21 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof."

The coarse aggregate shall be the same as those specified on the table in Article 1004.03 for IL-19.0 mixtures.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA.

Mixture Design. Add the following to the table in Article 1030.04(a)(1):

"High ESAL, MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>				
Sieve	IL-19.0F	G		
Size	min	max		
1 1/2 in (37.5 mm)				
1 in. (25 mm)		100		
3/4 in. (19 mm)	90	100		
1/2 in. (12.5 mm)	69	89		
3/8 in. (9.5 mm)				
#4 (4.75 mm)	45	60		
#8 (2.36 mm)	30	45		
#16 (1.18 mm)	20	35		
#30 (600 μm)				
#50 (300 μm)	8	15		
#100 (150 μm)	6	9		
#200 (75 μm)	3.5	5.5		
Ratio Dust/Asphalt Binder		1.0		

Revise the table in Article 1030.04(b)(1) of the Standard Specifications to read:

	"VOLUME High ESA	TRIC REQU	IREMENTS			
Voids in the Mineral Aggregate (VMA), % minimum					Voids Filled with Asphalt Binder (VFA), %	
Ndesign	IL-25.0	IL-19.0	IL-19.0FG	IL-12.5	IL-9.5	
50 70 90 105	12.0	13.0	13.5	14.0	15	<u>65 - 78</u> 65 - 75

<u>Quality Control/Quality Assurance (QC/QA)</u>. Revise the second table in Article 1030.05(d)(4) to read:

DENSITY CONTROL LIMITS		
Mixture Composition	Parameter	Individual Test
IL-4.75	N <sub>design =</sub> 50	93.0 – 97.4% <sup>1/</sup>
IL-9.5, IL-12.5	N <sub>design</sub> ≥ 90	92.0 - 96.0 %
IL-9.5, IL-9.5L, IL-12.5	N <sub>design</sub> < 90	92.5 - 97.4 %
IL-19.0, IL-19.0FG, IL-25.0	N <sub>design</sub> ≥ 90	93.0 - 96.0 %
IL-19.0, IL-19.0FG, IL-19.0L, IL-25.0	N <sub>design</sub> < 90	93.0 - 97.4 %
All Other	N <sub>design</sub> = 30.	93.0 <sup>2</sup> - 97.4 %

1/ Density shall be determined by cores or by correlated, approved thin lift gauge.

2/ 92.0 % when placed as first lift on an unimproved subgrade.

Lift Thickness. Revise the table of Article 406.06(d) of the Standard Specifications to read:

MINIMUM COMPACTED LIFT THICKNESS			
Mixture Composition	Thickness, in. (mm)		
IL-9.5FG	1 (25)		
IL-9.5, IL 9.5L	1 1/4 (32)		
IL-12.5	1 1/2 (38)		
IL-19.0, IL-19.0FG, IL-19.0L	2 1/4 (57)		
IL-25.0	3 (75)		

Basis of Payment. Add the following two paragraphs after the third paragraph of Article 406.14 of the Standard Specifications:

Mixture IL-19.0FG will be paid for at the contract unit price per ton (metric ton) for HOT-MIX ASPHALT BINDER COURSE, IL-19.0FG, of the Ndesign specified.

Mixture IL-19.0FG in which polymer modified asphalt binders are required will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0FG, of the Ndesign specified."

HMA IL-19 0 FG

#### Individual Density Sites

Effective: September 1, 2007 Revised: October 12, 2011

<u>Description</u>: This work shall consist of evaluating the daily average offset density value as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows:

Revise the Density Control Limits table in 1030.05(d)(4) of the Standard Specifications to read:

INDIVIDUAL OFFSET DENSITY CONTROL LIMITS					
		Mat	Confined & Unconfined Edge		
Mixture Composition	Parameter	Daily Average Density Value	Daily Average Density Value		
IL-4.75	Ndes=50	93.0 – 97.4% <sup>1/</sup>	90.0%		
IL-9.5, IL-12.5	N <sub>des</sub> ≥90	92.0 – 96.0 %	90.0%		
IL-9.5, IL-9.5L, IL-12.5	N <sub>des</sub> < 90	92.5 - 97.4 %	90.0%		
IL-19.0, IL-19.0FG, IL-25.0	N <sub>des</sub> ≥ 90	93.0 - 96.0 %	90.0%		
IL-19.0, IL-19.0FG, IL-19.0L, IL-25.0	N <sub>des</sub> < 90	93.0 – 97.4 %	90.0%		
IL-9.5FG <1 ¼ in (32 mm)	N <sub>des</sub> 50-105	91.0 – 97.0 %	90.0%		
IL-9.5FG ≥1 ¼ in (32 mm)	N <sub>des</sub> 50-105	93.0 – 97.0 %	90.0%		
SMA	N <sub>des</sub> 50 & 80	93.5% - 97.4%	91.0%		
All Other	N <sub>des</sub> = 30	93.0 <sup>4427</sup> - 97.4%	90.0%		

1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

2/ 92.0% when placed as first lift on an unimproved subgrade.

Insert the following after the sixth paragraph Article 1030.05(d)(7) of the Standard Specifications:

When the daily average density value for a given offset exceeds the control limits, the Engineer shall be notified immediately.

If a daily average density value failure occurs at a given offset due to low density for a given mixture, additional compactive effort or paver adjustment shall be required and approved by the Engineer prior to additional paving. If a daily average density value failure occurs at a given offset due to high density for a given mixture, production shall cease until the problem has been investigated and corrected. Reducing compactive effort for failing high densities will not be allowed.

If two daily average density value failures occur at a given offset for a given mixture, the Engineer shall cease production.

103005(a)(4)

## HOT-MIX ASPHALT – REQUIRED FIELD TESTS (D5LR)

Effective 01/01/11

Revise the first paragraph of Article 1030.05(d)(3) to read as follows:

Required Field Tests. The Contractor shall control the compaction process by testing the mix density at random locations determined by the Engineer in accordance with the QC/QA document, "Determination of Random Density Test Site Locations", and recording the results on forms approved by the Engineer. The density locations will be disclosed and marked by the Engineer after all compaction efforts have been completed. Locations shall be laid out using a tape measure or an approved measuring wheel. The Contractor shall follow the density testing procedures detailed in the QC/QA document, "Illinois-Modified ASTM D 2950, Standard Test Method for Determination of Density of Bituminous Concrete In-Place by Nuclear Method".

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## LONGITUDINAL JOINT DENSITY (D5-FG)

Eff.: January 1, 2010 Rev.: <u>February 14, 2011</u> October 13, 2011

<u>Description</u>. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

<u>Quality Control/Quality Assurance (QC/QA)</u>. Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of <u>2</u> <u>4</u> in. (<del>50</del> <u>100</u> mm), from each pavement edge. (i.e. for a 4 in. (100 mm) lift the near edge of the density gauge or core barrel shall be within 4 in. (100 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes	Unconfined Edge Joint Density
		confined edges)	Minimum
IL-4.75	Ndesign=50	<u>93.0 – 97.4% <sup>1/</sup></u>	<u>90.0%</u>
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 - 96.0%	90.0%
IL-9.5,IL-9.5L,IL-12.5	Ndesign < 90	92.5 - 97.4%	90.0%
IL-19.0,IL-19.0FG, IL-25.0	Ndesign ≥ 90	93.0 - 96.0%	90.0%
IL-19.0, IL-19.0FG,IL-19.0L,IL-25.0	Ndesign < 90	93.0 - 97.4%	90.0%
IL-9.5FG < 1 ¼ in (32 mm)	Ndesign = 50 - 105	<del>91<u>90</u>.0 –</del> 9 <u>5</u> 7.0%	90.0%
IL-9.5FG > 1 ¼ in (32 mm)	Ndesign = 50 - 105	93.0 - 97.0%	90.0%
SMA	Ndesign = 50 & 80	93.5 - 97.4%	91.0%
All Other	Ndesign = 30	93.0 <sup>42</sup> - 97.4%	90.0%

1/ Density shall be determined by cores or by correlated, approved thin lift gauge.

2/ 92.0% when placed as first lift on an unimproved subgrade.

## HOT-MIX ASPHALT MIXTURE IL-9.5FG (D5LR)

Effective: July 1, 2005 Revised: September 1, 2012

<u>Description</u>. This work shall consist of constructing fine graded hot-mix asphalt (HMA) surface course or leveling binder with an IL-9.5FG mixture. Work shall be according to Sections 406, 407 and 1030 of the Standard Specifications, except as modified herein.

Equipment. Add the following to Article 406.03

(i) Non-Vertical Impact Roller.....1101.01

Materials. Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22. For mixture IL-9.5FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20, FA 21 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof."

Mixture Design. Add the following to the table in Article 1030.04(a)(1):

"High ESAL, MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>				
Sieve	IL-9.5	FG		
Size	min	max		
1 1/2 in (37.5 mm)				
1 in. (25 mm)				
3/4 in. (19 mm)		·		
1/2 in. (12.5 mm)		100		
3/8 in. (9.5 mm)	90	100		
#4 (4.75 mm)	65	80		
#8 (2.36 mm)	50	65		
#16 (1.18 mm)	25	40		
#30 (600 μm)	15	30		
#50 (300 μm)	8	15		
#100 (150 μm)	6	10		
#200 (75 μm)	4	6.5		
Ratio Dust/Asphalt Binder		1.0		

Revise the table in Article 1030.04(b)(1) of the Standard Specifications to read:

"VOLUME High ESA		QUIREME	NTS		
Voids in the Mineral Aggregate (VMA), % minimum				Voids Filled with Asphalt Binder (VFA),	
N <sub>design</sub>	IL-25.0	IL-19.0	IL-12.5	IL-9.5	%
50	1	1			65 - 78
70	70 12.0 13.0 14.0 15 <sup>1/</sup>				
90	12.0	65 - 75 <sup>2/</sup>			
105			<u> </u>	<u> </u>	

1/ The VMA for IL-9.5FG shall be a minimum of 15.0 percent.2/ The VFA range for IL-9.5FG shall be 65 - 78 percent."

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<u>Quality Control/Quality Assurance (QC/QA)</u>. Revise the second table in Article 1030.05(d)(4) to read:

DENSITY C	ONTROL LIMITS	·	
Mixture Composition		Parameter	Individual Test
IL-4.75		Ndesign = 50	93.0 – 97.4% <sup>1/</sup>
	Lifts < 1.25 in. (32 mm)	N <sub>design</sub> 50 - 105	90.0 - 95.0% 1/
IL-9.5FG	Lifts ≥ 1.25 in. (32 mm)	N <sub>design</sub> 50 - 105	93.0 - 97.0%
IL-9.5, IL-12	2.5	N <sub>design</sub> ≥ 90	92.0 - 96.0 %
IL-9.5, IL-9.5L, IL-12.5		N <sub>design</sub> < 90	92.5 - 97.4 %
IL-19.0, IL-25.0		N <sub>design</sub> ≥ 90	93.0 - 96.0 %
IL-19.0, IL-19.0L, IL-25.0		N <sub>design</sub> < 90	93.0 - 97.4 %
All Other		N <sub>design</sub> = 30	93.0 27 - 97.4 %

- 1/ Density shall be determined by cores or by two (2) correlated thin lift nuclear gauges approved by the Engineer and supplied by the Contractor. The gauges will be utilized for Quality Control and Quality Assurance testing for this contract only.
- 2/ 92.0 % when placed as first lift on an unimproved subgrade.

#### CONSTRUCTION REQUIREMENTS

<u>Leveling Binder</u>. Revise the table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder	
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition
≤ 1 1/4 (32)	IL 4.75, IL-9.5, IL-9.5 FG, or IL-9.5L
> 1 1/4 to 2 (32 to 50)	IL-9.5, IL-9.5FG, IL-9.5L, or IL-12.5

The density requirements of Article 406.07 (c) shall apply for leveling binder, machine method, when the nominal, compacted thickness is: 3/4 in. (19 mm) or greater for IL-9.5FG and IL 4.75 mixtures, 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures, and 1 1/2 in. (38 mm) or greater for IL-12.5 mixtures."

Compaction. Revise Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABLE	1 – MINIMUM F	ROLLER REQ	UIREMENTS FOR	R HMA"
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P <sup>3/</sup>		V <sub>S</sub> , P <sup>3/</sup> , T <sub>B</sub> , T <sub>F</sub> , 3W	To the satisfaction of the Engineer.
Level Binder: (When placed at ≤ 1 ¼ (32 mm) and density requirements of Article 406.05 (c) apply.)	V <sub>N</sub> ,T <sub>B</sub> , 3W	P <sup>3/</sup>	V <sub>S</sub> , T <sub>B</sub> , T <sub>F</sub>	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).

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Level Binder <sup>1/</sup> >1 ¼ in. (32 mm) Binder and Surface <sup>1/</sup>	V <sub>D</sub> , P <sup>3/</sup> , T <sub>B</sub> , 3W	P <sup>3/</sup>	V <sub>S</sub> , T <sub>B</sub> , T <sub>F</sub>	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Bridge Decks <sup>2/</sup>	Тв		T <sub>F</sub>	As specified in Articles: 582.05 and 582.06.

- 1/ If the average delivery at the job site is 85 ton/hr (75 metric ton/hr) or less, any roller combination may be used provided it includes a steel wheeled roller and the required density and smoothness is obtained.
- 2/ One T<sub>B</sub> may be used for both breakdown and final rolling on bridge decks 300 ft (90 m) or less in length, except when the air temperature is less than 60 °F (15 °C).
- 3/ A vibratory roller (V<sub>D</sub>) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder.
- 4/ For mixture IL-4.75 a minimum of two T<sub>B</sub> and one T<sub>F</sub> roller shall be provided. Both the T<sub>B</sub> and T<sub>F</sub> rollers shall be a minimum of 280 lb/in. (49 N/mm). P and V rollers will not be permitted.

#### Add the following to EQUIPMENT DEFINITION

 $V_N$  - Non-Vertical Impact roller operated in a mode that will provide non-vertical impacts and operate at a speed to produce not less than 10 impacts/ft (30 impacts/m).

Rollers. Add the following to Article 1101.01 of the Standard Specifications:

h) The non-vertical impact roller shall be self-propelled and provide a smooth operation when starting, stopping or reversing directions. Non-vertical impact drum(s) amplitude and frequency shall be approximately the same in each direction and meet the following minimum requirements: drum diameter 48 in. (1200 mm), length of drum 66 in. (1650 mm), unit static force on drum(s) 125 lb/in. (22 N/m), adjustable eccentrics, and reversible eccentrics on non-driven drum(s). The total applied force and the direction it is applied for various combinations of VPM and eccentric positions shall be shown on decals on the roller or on a chart maintained with the roller. The roller shall be equipped with water tanks and sprinkling devices, or other approved methods, which shall be used to wet the drums to prevent material pickup.

<u>Basis of Payment</u>. Add the following two paragraphs after the third paragraph of Article 406.14 of the Standard Specifications:

"Mixture IL-9.5FG will be paid for at the contract unit price per ton (metric ton) for LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified.

Mixture IL-9.5FG in which polymer modified asphalt binders are required will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified."

#### HMA IL-9 5 FGLR

# HOT MIX ASPHALT - MIXTURE DESIGN COMPOSITION AND VOLUMETRIC REQUIREMENTS (BMPR)

Effective: December 19, 2012 Revised: January 1, 2013

Revise Article 406.14(b) of the Standard Specifications to read.

"(b) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was not produced within 2.0 to 6.0 percent air voids or within the individual control limits of the JMF, the mixture and test strip will not be paid for and the mixture shall be removed at the Contractor's expense. An additional test strip and mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Revise Article 406.14(c) of the Standard Specifications to read.

"(c) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was produced <u>within 2.0 to 6.0 percent air</u> <u>voids and within the individual control limits</u> of the JMF, the mixture shall be removed. Removal will be paid in accordance to Article 109.04 of the Standard Specifications. This initial mixture and test strip will be paid for at the contract unit prices. The additional mixture will be paid for at the contract unit price, and any additional test strips will be paid for at one half the unit price of each test strip."

Revise Article 1030.04(a)(1) of the Standard Specifications to read.

"(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

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			-							
High ESAL, MIXTURE COMPOSITION (% PASSING) 1/										
Sieve	IL-25.0 mm   IL-19.			0 mm   IL-12		.5 mm   IL-9		5 mm	<u>lL-4.75 mm</u>	
Size	min	max	min	max	min	max	min	max	min	<u>max</u>
1 1/2 in (37.5 mm)		100								
1 in. (25 mm)	90	100		· · 100· ·						
3/4 in. (19 mm)		90	82	100		100 ·				
1/2 in. (12.5 mm)	45	75	50	85	90	<sup>·</sup> 100		100		<u>100</u>
3/8 in. (9.5 mm)						89	90	<sup>.</sup> 100	· •	<u>100</u>
#4 (4.75 mm)	24	42 <sup>2/</sup>	24	<sup>·</sup> 50 <sup>2/</sup>	28	65	<u>32</u>	<u>69</u>	<u>90</u>	<u>100</u>
#8 (2.36 mm)	16	31	20	36	28	48 <sup>3/</sup>	<u>32</u>	<u>52</u> 3/	<u>70</u>	. <u>90</u>
#16 (1.18 mm)	10	22	10	25	10	32	10	32	<u>50</u>	<u>65</u>
#50 (300 μm)	4	12	4	12	4	15	. 4	15	<u>15</u>	<u>30</u>

#100 (150 μm)	3	9	3	9	3	10	3	10	<u>10</u>	<u>18</u>
#200 (75 μm)	3	6	3	6	4	6	4	6	Z	<u>9</u>
Ratio Dust/Asphait Binder		1.0		1.0		1.0		1.0		<u>1.0 <sup>/4</sup></u>

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 40 percent passing the #4 (4.75 mm) sieve for binder courses with Ndesign  $\geq$  90.
- 3/ The mixture composition shall not exceed  $4\underline{4}$  percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign  $\geq$  90.
- 4/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer."

Delete Article 1030.04(a)(4) of the Standard Specifications.

Revise Article 1030.04(b)(1) of the Standard Specifications to read.

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS High ESAL									
	Voids Filled with Asphalt Binder								
Ndesign	IL-25.0	IL-19.0	IL-12.5	IL-9.5	<u>IL-4.75<sup>1/</sup></u>	(VFA), %			
50 70 90 105	12.0	13.0	14.0	15	<u>18.5</u>	65 – 78 <sup>2/</sup> 65 - 75			

1/ Maximum Draindown for IL-4.75 shall be 0.3% 2/ VFA for IL-4.75 shall be 76-83%"

Delete Article 1030.04(b)(4) of the Standard Specifications.

	"C	ONTROL LIMI	ITS	-	
Parameter	High ESAL Low ESAL	High ESAL Low ESAL	All Other	IL-4.75	IL-4.75
	Individual Test	Moving Avg. of 4	Individual Test	Individual Test	Moving Avg. of 4
% Passing: 1/					•
1/2 in. (12.5 mm)	±6%	±4%	± 15 %	· · ·	
No. 4 (4.75 mm)	± 5 %	±4%	± 10 %		
No. 8 (2.36 mm)	± 5 %	±3%			
No. 16 (1.18 mm)				±4%	±3%
No. 30 (600 μm)	±4%	± 2.5 %			
Total Dust Content No. 200 (75 μm)	± 1.5 %	± 1.0 %	± 2.5 %	± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.5 %	± 0.3 %	± 0.2 %
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.2 %	± 1.0 %
VMA	-0.7 % <sup>2/</sup>	-0.5 % 2/		<u>-0.7 % <sup>2/</sup></u>	<u>-0.5 % <sup>2/</sup></u>

Revise the Control Limits Table in Article 1030.05(d)(4) of the Standard Specifications to read.

Based on washed ignition oven
 Allowable limit below minimum design VMA requirement"

## HOT MIX ASPHALT - MIXTURE DESIGN VERIFICATION AND PRODUCTION (BMPR)

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

<u>Description</u>. This special provision states the requirements for Hamburg Wheel and Tensile Strength testing for High ESAL, IL-4.75, and SMA hot mix asphalt (HMA) mixes during mix design verification and production. This special provision also states the plant requirements for hydrated lime addition systems used in the production of High ESAL, IL-4.75, and SMA mixes.

When the options of Warm Mix Asphalt, Reclaimed Asphalt Shingles, or Reclaimed Asphalt Pavement are used by the Contractor, the Hamburg Wheel and tensile strength requirements in this special provision will be superseded by the special provisions for Warm Mix Asphalt, Reclaimed Asphalt Shingles, or Reclaimed Asphalt Pavement as applicable.

Mix Design Testing. Add the following to Article 1030.04 of the Standard Specifications:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make necessary changes to the mix and provide passing Hamburg Wheel and Tensile Strength test results from a private lab. The Department will verify the passing results.

All new and renewal mix designs shall meet the following requirements for verification testing.

(1) Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

PG Grade	Number of Passes
PG 58-xx (or lower)	5,000
PG 64-xx	7,500
PG 70-xx	15,000
PG 76-xx (or higher)	20,000

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 415 kPa (60 psi) for non-polymer modified performance graded (PG) asphalt binder and 550 kPa (80 psi) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 1380 kPa (200 psi)." <u>Start-up and Production Testing</u>. Add the following to Article 1030.06 of the Standard Specifications:

"(c) Hamburg Wheel Test. During start-up, for all asphalt mix designs verified with the Hamburg Wheel, the Contractor shall sample the mix, compact gyratory specimens, and the Department will conduct Hamburg Wheel testing (IL modified AASHTO T-324). The Contractor shall either stop production until the Department completes the testing with passing results or the Contractor may proceed with production at their own risk.

The Department may conduct additional Hamburg Wheel Tests on production material as determined by the Engineer. If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria."

<u>System for Hydrated Lime Addition</u>. Revise the last sentence of the third paragraph of Article 1030.04(c) of the Standard Specifications to read:

"The method of application shall be according to Article 1102.01(a)(10)."

Revise the first three sentences of the second paragraph of Article 1102.01(a)(10) of the Standard Specifications to read:

"When hydrated lime is used as the anti-strip additive, a separate bin or tank and feeder system shall be provided to store and accurately proportion the lime onto the aggregate either as a slurry, as dry lime applied to damp aggregates, or as dry lime injected onto the hot aggregates prior to adding the liquid asphalt cement. If the hydrated lime is added either as a slurry or as dry lime on damp aggregates, the lime and aggregates shall be mixed by a power driven pugmill to provide a uniform coating of the lime prior to entering the dryer. If dry hydrated lime is added to the hot dry aggregates in a drum plant, the lime will be added in such a manner that the lime will not become entrained into the air stream of the dryer and that thorough dry mixing will occur prior to the injection point of the liquid asphalt. When a batch plant is used, the hydrated lime shall be added to the mixture in the weigh hopper or as approved by the Engineer."

<u>Basis of Payment</u>. Revise the seventh paragraph of Article 406.14 of the Standard Specifications to read:

"For mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

If an anti-stripping additive is required for any other HMA mix, the cost of the additive will be paid for according to Article 109.04. The cost incurred in introducing the additive into the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive."

3

### SPECIAL PROVISION FOR FRICTION AGGREGATE (D5FG)

Effective: January 1, 2010 Revised: April 11, 2013

Revise Article 1004.01 (a) (4) of the Standard Specifications to read:

"(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.

(i) Carbonate Crushed Stone. Carbonate Crushed Stone shall be either Dolomite or Limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).

(ii) Crystalline Crushed Stone. Crystalline Crushed Stone shall be either Metamorphic or Igneous Stone to include but is not limited to, Quartzite, Granite, Rhyolite and Diabase."

Revise Article 1004.03 (a) of the Standard Specifications to read:

**"1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA.** The aggregate shall be according to Article 1004.01 and the following.

Use	Mixture	Aggregates Percent (%) Allowed by Volume
Class A	Seal or Cover	Allowed Alone or in Combination: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA All Other	Stabilized Subbase or Shoulders	Allowed Alone or in Combination: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-25.0, IL-19.0, IL-19.0FG or IL-19.0L SMA Binder	Allowed Alone or in Combination: Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete <sup>3/</sup>
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-12.5,IL-9.5, IL-9-5FG or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Combination: Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>

(a) Description. The coarse aggregate for HMA shall be according to the following table.

	T						
HMA High ESAL	D Surface and Leveling Binder IL-12.5, IL-9.5 or IL-9.5FG SMA Ndesign 50 Surface	Allowed Alone or in Combination: Crushed Gravel Carbonate Crushed Stone (other than Limestone) <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) <sup>5/</sup> Crushed Steel Slag <sup>4/5/</sup> Crushed Concrete <sup>3/</sup>					
		Other Combinations Allow	ved:				
		Up to	With				
		25% Limestone	Dolomite				
		50% Limestone	Any Mixture D aggregate other than Dolomite				
		75% Limestone	Crushed Slag (ACBF) <sup>5/</sup> or Crushed Sandstone				
HMA High ESAL	E Surface IL-12.5, IL-9.5 or IL-9.5FG SMA Ndesign 80 Surface	Allowed Alone or in Com Crushed Gravel Crystalline Crushed Ston Crushed Sandstone Crushed Slag (ACBF) <sup>5/</sup> Crushed Steel Slag <sup>5/</sup> Crushed Concrete <sup>3/</sup> No Limestone. <u>Other Combinations Allor</u> <i>Up to</i> 50% Dolomite <sup>2/</sup>	e wed: With Any Mixture E aggregate				
		75% Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF) <sup>5/</sup> , Crushed Steel Slag <sup>5/</sup> , or Crystalline Crushed Stone				
		75% Crushed Gravel or Crushed Concrete <sup>3/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF) <sup>5/</sup> , or Crushed Steel Slag <sup>5/</sup>				
HMA High ESAL	F Surface IL-12.5, IL-9.5 or IL-9.5FG SMA Ndesign 80 Surface	Allowed Alone or in Com Crystalline Crushed Stor Crushed Sandstone Crushed Slag (ACBF) <sup>5/</sup> Crushed Steel Slag <sup>5/</sup> No Limestone.					
		Other Combinations Allo	wed:				
		Up to	With				
		50% Crushed Gravel, Crushed Concrete <sup>3/</sup> , or Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF) <sup>5/</sup> , Crushed Steel Slag <sup>5/</sup> , or Crystalline Crushed Stone				

1/

Crushed Steel Slag allowed in Shoulder Surface Only Carbonate Crushed Stone shall not be used in SMA Ndesign 80. In SMA Ndesign 50, Carbonate Crushed Stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA Binder or Ndesign 50 SMA Surface Crushed Concrete will not be permitted in SMA mixes Crushed Steel Slag shall not be used as leveling binder When either slag is used, the blend percentages listed shall be by volume" 2/

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3/

4/

5/

2012 Friction Policy

# IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION (TPG)

#### Effective: August 1, 2012

In addition to the Contractor's equal employment opportunity affirmative action efforts undertaken as elsewhere required by this Contract, the Contractor is encouraged to participate in the incentive program to provide additional on-the-job training to certified graduates of IDOT's community college pre-apprenticeship programs outlined by this Special Provision.

It is the policy of IDOT to fund IDOT pre-apprenticeship training programs based at Illinois Community Colleges throughout Illinois, by Intergovernmental Agreement with the Illinois Community College Board, to provide training and skill-improvement opportunities to assure the increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The intent of this IDOT Training Program Graduate (TPG) Special Provision is to place certified graduates of these IDOT funded pre-apprentice training programs on IDOT project sites when feasible, and provide the graduates with meaningful on-the-job training intended to lead to journey-level employment. IDOT and its sub-recipients, in carrying out the responsibilities of a state contract, shall determine which state funded construction contracts shall include "Training Program Graduate (TPG) Special Provisions." To benefit from the incentives to encourage the participation in the additional on-the-job training under this Training Program Graduate (TPG) Special Provision, the Contractor shall make every reasonable effort to employ certified graduates of the IDOT funded Pre-apprenticeship Training Program to the extent such persons are available within a reasonable recruitment area.

Participation pursuant to IDOT's requirements by the Contractor or subcontractor in this Training Program Graduate (TPG) Special Provision entitles the Contractor or subcontractor to be reimbursed at \$10.00 per hour for training given a certified graduate trainee on this contract. As approved by the Department, reimbursement will be made for training persons as specified herein. This reimbursement will be made even though the Contractor or subcontractor may receive additional training program funds from other sources for other trainees, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving other reimbursement. For purposes of this Special Provision the Contractor is not relieved of requirements under the Illinois Prevailing Wage Act and is not eligible for other training fund reimbursements in addition to the Training Program Graduate (TPG) Special Provision reimbursement.

No payment shall be made to the Contractor if the Contractor or subcontractor fails to provide the required training. It is normally expected that a TPG will begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project through completion of the contract, so long as training opportunities exist in his work classification or until he has completed his training program. Should the TPG's employment end in advance of the completion of the contract, the Contractor shall promptly notify the designated IDOT staff member under this Special Provision that the TPG's involvement in the contract has ended and supply a written report of the reason for the end of the involvement, the hours completed by the TPG under the Contract and the number of hours for which the incentive payment provided under this Special Provision will be or has been claimed for the TPG.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting its performance under this Special Provision.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$10.00 per hour for TRAINEES TRAINING PROGRAM GRADUATE. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

The Contractor shall provide training opportunities aimed at developing full journeyworker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is 1. During the course of performance of the Contract the Contractor may seek approval from the Department for additional incentive eligible TPGs. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the TPGs are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Special Provision. The Contractor shall also insure that this Training Program Graduate Special Provision is made applicable to such subcontract if the TPGs are to be trained by a subcontractor and that the incentive payment is passed on to each subcontractor.

For the Contractor to meet the obligations for participation in this TPG incentive program under this Special Provision, the Department has contracted by Intergovernmental Agreement with the Illinois Community College Board to provide screening, tutoring and pre-training to individuals interested in working in the applicable construction classification and has certified those students who have successfully completed the program and are eligible to be TPGs. A designated IDOT staff member, the Director of the Office of Business and Workforce Diversity (OBWD), will be responsible for providing assistance and referrals to the Contractor for the applicable TPGs. For this contract, the Director of OBWD is designated as the responsible IDOT staff member to provide the assistance and referral services related to the placement for this Special Provision. For purposes of this Contract, contacting the Director of OBWD and interviewing each candidate he/she recommends constitutes reasonable recruitment.

Prior to commencing construction, the Contractor shall submit to the Department for approval the TPGs to be trained in each selected classification. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. No employee shall be employed as a TPG in any classification in which he/she has successfully completed a training course leading to journeyman status or in which he/she has been employed as a journeyman. Notwithstanding the on-the-job training purpose of this TPG Special Provision, some offsite training is permissible as long as the offsite training is an integral part of the work of the contract and does not comprise a significant part of the overall training.

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program

Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT Illinois Community College Program to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate TPG Special Provision \$10.00 an hour incentive.

The Contractor or subcontractor shall provide each TPG with a certification showing the type and length of training satisfactorily completed.

#### 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:

Town of Normal

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



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

#### SPECIAL PROVISION FOR CONSTRUCTION AND MAINTENANCE SIGNS

#### Effective: January 1, 2004 Revised: June 1, 2007

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

701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

# CONCRETE BOX CULVERTS WITH SKEWS > 30 DEGREES AND DESIGN FILLS ≤ 5 FEET (BDE)

#### Effective: April 1, 2012

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

"Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-inplace concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577."

## Revise the fourth paragraph of Article 540.06 of the Standard Specifications to read:

"The excavation and backfilling for precast concrete box culverts shall be according to the requirements of Section 502, except where the design fill is less than or equal to 8 ft (2.4 m), or the design fill is less than the clear span of the box. In these cases ASTM C 1577 requires a select granular backfill (porous granular material) over the box. If a porous granular backfill is required but is not detailed on the plans for the culvert(s), the Contractor shall have the option of either furnishing porous granular backfill where required to satisfy ASTM C 1577, or submitting an alternate design, sealed by an Illinois licensed Structural Engineer, which precludes the use of a porous granular backfill. In addition for all precast boxes a layer of porous granular material, at least 6 in. (150 mm) in thickness, shall be placed below the elevation of the bottom of the box. The porous granular material shall extend at least 2 ft (600 mm) beyond each side of the box. The precast concrete box culvert shall be laid according to the applicable requirements of Article 542.04(d). After installation, the interior and exterior joint gap between precast concrete box culvert shall be a maximum of 1 1/2 in. (38 mm)."

Add the following after the seventh paragraph of Article 540.06 of the Standard Specifications:

"Precast concrete box culverts with skews greater than 30 degrees and having design covers less than or equal to 5 feet are not covered by the standard design table shown in ASTM C 1577. The design table provided herein is provided to address this design range. The same notes, reinforcement configurations, clearances, and requirements of ASTM C 1577 apply to this special design table. A box designated 7 x 6 x 8 indicates a span of 7 ft, a rise of 6 ft, and top slab, bottom slab, walls and haunches of 8 in. unless otherwise noted on the tables.

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			<u></u>						•		
Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth <sup>-</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.168	0.900	0.295	0.096	0.269	0.168	0.853	0.144	•		
2<3	0.134	0.180	0.182	0.096					31		
3-5	0.096	0.115	0.117	0.096		• •		·	29		
*top slab 7 ii	n., botton	n slab 6.0	in.								
•					•••	• •					
		· · · · ·	. 3	B ft by 3 ft	by 4 in.						
Design	•		Circumfe	erential R	einforcen	ient Areas	, sq in./ fl		•		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2*	0.168	0.956	0.326	0.096	0.290	0.168	0.849	0.144	-		
2<3	0.101	0.214	0.218	0.096		. · ·		. •	31		
3-5	0.096	0.136	0.140	0.096	· ·	· .			31		
*top slab 7.0	) in., bott	om slab 6	.0 in.								
. •					•		· .	•			
				4 ft by 2 f	t by 5 in.		<u></u> ,	•			
Design			Circumfe	erential R	einforcer	nent Areas	s, sq in./ f	t.			
Earth Cover, ft.	As1	- As2	As3	As4	As5	As6	As7	As8	"M", in		
0<2*	0.204	0.790	0.262	0.120	0.268	0.180	0.846	0.144			
2<3	0.201	0.203	0.196	0.120		•			32		
3-5	0.129	0.134	0.136	0.120					32		

			4 ft	: by 3 ft by	/ 5 in.			•	•
Design		C	ircumfere	ntial Rein	forcemen	t Areas, :	sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M"
0<2*	0.180	0.876	0.303	0.120	0.305	0.180	0.831	0.144	
2<3.	0.160	0.245	0.238	0.120		•		•	3
3-5	0.120	0.161	0.165	0.120	· · · ·				3
*top slab 7.	5 in., botto	m slab 6.0	) in.		•			•	
•	·								
			4 f	t by 4 ft by	y 5 in.				
Design	·,	• • • •	Circumfere	ential Reir	forcemer	it Areas,	sq in./ ft	•	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M
0<2*	0.180	0.927	0.334	0.120	0.327	0.180	0.822	0.144	
2<3	0.130	0.277	0.270	0.120					3
3-5	0.120	0.181	0.188	0.120	•		•		
*top slab 7.	5 in., botto	m slab 6.0	) in.		•				
	•			·					
			5 f	t by 3 ft b	y 6 in.				•
Design		(	Circumfere	ential Reir	nforcemer	nt Areas,	sq in./ ft	•	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M
0<2*	0.197	0.682	0.269	0.144	0.280	0.192	0.705	0.168	
2<3	0.20Ģ	0.259	0.246	0.144		a .	•		:
3-5	0.144	Ó.180	0.179	0.144			•		

				by 4 ft by					
Design		Ci	rcumfere	ntial Rein	forcemer	nt Areas, s	sq in./ ft.		•
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2*	0.192	0.735	0.299	0.144	0.307	0.192	0.693	0.168	•
2<3	0.180	0.294	0.282	0.144		•			46
3-5	0.144	0.204	0.205	0.144					40
*top slab 8.	0 in., botto	m slab 7.0	in.	•					•
			5 f	t by 5 ft b	y 6 in.				
	<u> </u>			ential Reir		nt Areas,	sq in./ ft		
Design Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2*	0.192	0.774	0.324	0.144	0.327	0.192	0.685	0.168	•
2<3	0.155	0.322	0.312	0.144					45
3-5	0.144	0.224	0.228	0.144					. 45
*top slab 8	.0 in., botto	om slab 7.0	) in.						
						• ·			 
· · ·			6	ft by 3 ft b	oy 7 in.			·	
Design			Circumfe	rential Rei	inforcem	ent Areas	, sq in./ f	t	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", ir
0<2*	0.270	0.566	0.257	0.168	0.263	0.192	0.575	0.168	
2<3	0.260	0.269	0.273 <sup>.</sup>	0.168	• •				41
3-5	0.186	0.192	0.197	0.168	· .	•		:	39
*top slab	8.0 in.								

•			6 f	t by 4 ft b	y 7 in.				
Design		C	ircumfere	ential Rei	nforceme	nt Areas,	sq in./ ft.		
Earth <sup>—</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2*	0.245	0.617	0.297	0.168	0.293	0.192	0.565	0.168	· •
2<3	0.225	0.305	0.313	0.168					42
3-5	0.168	0.220	0.227	0.168					41
*top slab 8.0	in.								
. •	•	•							
			6	ft by 5 ft l	by 7 in.	· · ·			
 Design			Circumfer	ential Rei	nforceme	ent Areas,	sq in. / f	t	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2*	0.226	0.657	0.331	0.168	0.317	0.192	0.551	0.168	
2<3	0.198	0.338	0.348	0.168					59
3-5	0.168	0.242	0.252	0.168				·	48
*top slab 8.0	) in.								· .
				•					· · · · · · · · · · · · · · · · · · ·
	<u>-</u> -		6	ift by 6 ft	by 7 in.			•	
Design			Circumfe	erential Re	einforcem	ent Areas	s, sq in./ f	t	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2*	0.208	0.692	0.363	0.168	0.337	0.192 <sub>.</sub>	0.540	0.168	
2<3	0.176	0.364	0.379	0.168					52
3-5	0.168	0.261	0.275	0.168					52
*top slab 8.	0 in.			•	· ·				
				•					

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			7 f	t by 4 ft by	y 8 in.			·	. <u></u>
Design		C	ircumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.		·
Earth <sup>-</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.339	0.599	0.372	0.192	0.271	0.192	0.697	0.192	•
2<3	0.287	0.335	0.342	0.192			•		44 <sup>.</sup>
3-5	0.206	0.241	0.248	0.192					42
				• *			•		
			7	ft by 5 ft b	y 8 in.			•	
Design		(	Circumfer	ential Rei	nforceme	ent Areas	, sq in./ ft	•	<u> </u>
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2	0.317	0.637	0.417	0.192	0.293	0.192	0.684	0.192	·.
2<3	0.256	0.370	0.381	0.192		·.			49
3-5	0.192	0.266	0.276	0.192				<u>.                                    </u>	46
				•					
			7	ft by 6 ft	by 8 in.				
Design	. <u> </u>		Circumfe	rential Re	inforcem	ent Areas	s, sq in./ f	t	· · · · · · ·
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", i
0<2	0.296	0.672	0.458	0.192	0.312	0.192	0.658	0.192	
2<3	0.230	0.401	0.416	0.192					59
3-5	0.192	0.288	0.302	0.192				••	55

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·									
•			7 f	t by 7 ft b	y 8 in.	,	•		
Design	 ,.	(	Circumfere	ential Rei	nforcemer	nt Areas,	sq in./ ft.	· ·	
Earth <sup>—</sup> Cover, ft.	As1	As2	As3	∘ As4	As5	As6	As7	As8	"M", in.
0<2	0.276	0.703	0.496	0.192	0.330	0.192	0.653	0.192	
2<3	0.210	0.428	0.447	0.192					59
3-5	0.192	0.307	0.326	0.192		•			59
							•		
		·							•.
				ft by 4 ft b		·			
Design		·. ··-	Circumfer	ential Rei					
Earth <sup>-</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.397	0.510	0.400	0.192	0.283	0.192	0.568	0.192	
2<3	0.399	0.415	0.423	0.192					45
<sup>.</sup> 3-5	0.285	0.298	0.306	0.192					45
				. •					•
<b>~.</b>	· · ·	•		. <u>.</u>		<u> </u>			
	· · · · · ·			ft by 5 ft					
Design Earth	· · · ·	· .			inforceme				SER #11 !
Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.368	0.555	0.446	0.192	0.305	0.192	0.559	0.192	•
2<3	0.360	0.458	0.470	0.192					48
3-5	0.259	0.328	0.340	0.192		. <u></u>			45
						•			
					· .				

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	•	•	81	ft by 6 ft b	oy 8 in.		•	<u> </u>	
Design		(	Circumfer	ential Rei	nforceme	ent Areas,	sq in./.ft.	•	· ·
Earth <sup>-</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.342	0.596	0.488	0.192	0.325	0.192	0.556	0.192	
2<3	0.328	0.496	0.512	0.192		·			56
3-5	0.237	0.355	0.371	0.192		•	·		50
•		:			·				· ·
			8	ft by 7 ft l	by 8 in.				
Design			Circumfer	rential Re	inforcem	ent Areas,	sq in./ ft	•	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2	0.319	0.633	0.527	0.192	0.343	0.192	0.555	0.192	•
2<3	0.301	0.529	0.551	0.192	•			•.	65
3-5	0.219	0.379	0.399	0.192			•		61
					···				
	<u></u>		. 8	ft by 8 ft	by 8 in.				
Design			Circumfe	rential Re	einforcem	ent Areas	, sq in./ f	t.	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2	0.297	0.668	0.565	0.192	0.360	0.192	0.531	0.192	
2<3	0.280	0.560	0.587	0.192	:	·		• • •	65
3-5	0.204	0.400	0.427	0.192					65

			91	ft by 5 ft b	y 9 in.				<u> </u>
Design	•		Circumfer	ential Rei	nforceme	ent Areas,	sq in./ ft.	1	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.361	0.411	0.416	0.216	0.275	0.216	0.465	0.216	•
2<3	0.425	0.484	0.496	0.216		ø		•	49
3-5	0.306	0.348	0.360	0.216		-			49
•									
			-	•				<u> </u>	:
· · ·			9	ft by 6 ft l	by 9 in.	· · · ·	• •	·	
Design		(	Circumfer	ential Rei	inforceme	ent Areas,	sq in. / ft	•	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.335	0.439	0.455	0.216	0.294	0.216	0.467	0.216	
2<3	0.390	0.524	0.541	0.216	•		. *		55
3-5	0.282	0.376	0.393	0.216					52
					· · ·				
			. 9	ft by 7 ft	by 9 in.				
Design			Circumfe	rential Re	inforcem	ent Areas	, sq in. / f	i.	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2	0.313	0.464	0.491	0.216	0.311	0.216	0.453	0.216	
2<3	0.360	0.561	0.583	0.216			•	•	64
3-5	0.262	0.402	0.423	0.216				•	58

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· · · · ·		•				·					
Design		<u> </u>	Circumfere	ential Rein	forcemer	nt Areas,	sq in./ ft.	· ·	•		
Earth Cover, ft.	· As1	As2	As3	As4	As5	As6	As7	As8	"M", in		
0<2	0.286	0.488	0.514	0.216	0.327	0.216	0.454	0.216	:		
2<3	0.336	0.594	0.621	0.216					72		
3-5	0.244	0.426	0.453	0.216	<u> </u>				73		
			•	·	•			· · ·			
			9 f	t by 9 ft b	y 9 in.						
Design	•	(	Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.				
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in		
0<2	0.274	0.511	0.557	0.216	0.342	0.216	0.452	0.216			
2<3	0.316	0.625	0.659	0.216			•		<b>72</b>		
3-5	0.231	0.448	0.481	0.216					72		
			ţ								
			10.	ft by 5 ft b	y 10 in.				· · · · ·		
Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", ir		
0<2	0.370	0.393	0.392	0.240	0.263	0.240	0.240	0.240			
2<3	0.492	0.509	0.522	0.240			·		52		
	0.354	0.366	0.379	0.240					52		

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	· · · · · · · · · · · · · · · · · · ·		10 ft	by 6 ft by	/ 10 in.		•	·	
Design	<u> </u>	C	ircumfere	ential Rein	forcemer	nt Areas,	sq in./ ft.		
Earth <sup>-</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.348	0.420	0.432	0.240	0.282	0.240	0.418	0.240	
2<3	0.455	0.552	0.570	0.240			•		56
3-5	0.329	0.397	0.414	0.240	• •			•	52
				· · · · · · · · · · · · · · · · · · ·	N				
			10 f	t by 7 ft b	y 10 in.				
Design Circumferential Reinforcement Areas, sq in./ ft.									
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2	0.321	0.445	0.463	0.240	0.298	0.240	0.240	0.240	
2<3	0.423	0.591	0.614	0.240					59
3-5	0.307	0.425	0.447	0.240					56
				а 1-					•
	· · · · ·		10	ft by 8 ft b	y 10 in.			•	
Design	· · · · · · · · · · · · · · · · · · ·	(	Circumfere	ential Reir	nforceme	nt Areas,	sq in. / ft		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", ir
0<2	0.301	0.469	0.496	0.240	0.314	0.240	0.240	0.240	·
<u>2</u> <3	0.394	0.627	0.655	0.240					72
3-5	0.288	0.451	0.478 <sup>·</sup>	0.240					66

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Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth <sup>–</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.284	0.492	0.527	0.240	0.329	0.240	0.240	0.240	÷		
2<3	0.371	0.660	0.694	0.240					79		
3-5	0.272	0.475	0.508	0.240	· ·	•	·	<del>.</del>	85		
	· · · ·										
			10 ft	by 10 ft b	y 10 in.						
Design		. • (	Circumfere	ential Reir	forceme	nt Areas,	sq in./ ft.				
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.272	0.514	0.559	0.240	0.344	0.240	0.240	0.240			
2<3	0.353	0.691	0.732	0.240					79		
3-5	0.259	0.497	0.537	0.240	· .	•		•	79		
					· ·	•					
			5 11 f	t by 4 ft b	y 11 in.	· · · ·					
Design		•	Circumfere	ential Rei	nforceme	ent Areas,	sq in./ ft	•			
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in		
0<2	0.414	0.341	0.333	0.264	0.264	0.264	0.264	0.264			
2<3	0.609	0.481	0.491	0.264					60		
3-5	0.436	0.348	0.357	0.264					56		

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			11 ft	by 6 ft by	/ 11 in.			-			
Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.356	0.399	0.407	0.264	0.265	0.264	0.264	0.264	•		
2<3	0.521	0.580	0.597	0.264		·			56		
3-5	0.377	0.418	0.435	0.264		н. 			56		
								. •			
					•						
	· · ·		11 ft	by 8 ft b	y 11 in.						
Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in		
0<2	0.314	0.449	0.471	0.264	0.298	0.264	0.264	0.264			
2<3	0.457	0.659	0.687	0.264				• .	. 67		
3-5	0.333	0.475	0.502	0.264	· ·				63		
	·	· ·	•				•				
			11 ft	by 10 ft k	by 11 in.	·····		· · ·			
Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", ir		
0<2	0.285	0.494	0.532	0.264	0.328	0.264	0.264	0.264			
2<3	0.409	0.727	0.769	0.264					86		
3-5	0.300	0.524	0.565	0.264		• •		•	86		

				•							
	,		11 ft	by 11 ft b	y 11 in.						
Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth <sup>-</sup> Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.276	0.516	0.562	0.264	0.342	0.264	0.264	0.264	• .		
2<3	0.391	0.758	0.808	0.264					86		
3-5	0.289	0.548	0.596	0.264			•		- 86		
	•		·····			•					
		•									
• *			12 f	t by 4 ft b	y 12 in.	-					
Design		(	Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft				
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in		
0<2	0.426	0.329	0.316	0.288	0.288	0.288	0.321	0.288	•		
2<3	0.682	0.503	0.512	0.288					64		
3-5	0.489	0.364	0.373	0.288					60		
	•	·. ·		•				•	· .		
		# 				·	•	. <u></u>	•		
				ft by 6 ft b							
Design	Circumferential Reinforcement Areas, sq in./ ft.										
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", ir		
0<2	0.367	0.385	0.387	0.288	0.288	0.288	0.320	0.288			
2<3	0.590	0.606	0.624	0.288					60		
3-5	0.427	0.438	0.456	0.288	•			•	56		

· .			12 t	t by 8 ft by	$\frac{12}{12}$ in.				·····
Design		. C	Circumfere	ential Rein	forceme	nt Areas,	sq in./ ft		<u>.</u>
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.326	0.435	0.449	0.288	0.288	0.288	0.288	0.288	
2<3	0.521	0.690	0.719	0.288	:	•			67
3-5	0.381	0.499	0.527	0.288					64
•						•		•	
			12 ft	: by 10 ft b	y 12 in.				
Design		. (	Circumfer	ential Rein	forceme	nt Areas	, sq in./ ft		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2	0.298	0.481	0.507	0.288	0.305	0.288	0.288	0.288	
2<3	0.467	0.762	0.804	0.288					93
3-5	0.344	0.551	0.592	0.288					79
			· · ·				· ·	·	
			12 f	t by 12 ft b	oy 12 in.				
Design			Circumfer	ential Reir	nforceme	ent Areas	, sq in./ f	t.	
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in
0<2	0.288	0.525	0.566	0.288	0.333	0.288	0.288	0.288	
2<3	0.431	0.827	0.886	0.288					93
	0.320	0.599	0.656	0.288					. 93"

#### 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.

<u>STATE OBLIGATION</u>. 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.

<u>OVERALL GOAL SET FOR THE DEPARTMENT</u>. 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.

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. 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  $\underline{9.00}$ % 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 <u>www.dot.il.gov</u>.

<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.

<u>CONTRACT COMPLIANCE</u>. 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) <u>NO AMENDMENT</u>. 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) <u>PAYMENT RECORDS</u>. 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 does not have the full amount of work indicated in the Utilization Plan performed by the BDE companies indicated in the Utilization Plan performed by the BDE companies indicated in the Utilization Plan performed by the BDE companies indicated 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.

#### **GRANULAR MATERIALS (BDE)**

#### Effective: November 1, 2012

Revise the title of Article 1003.04 of the Standard Specifications to read:

"1003.04 Fine Aggregate for Bedding, Trench Backfill, Embankment, Porous Granular Backfill, Sand Backfill for Underdrains, and French Drains."

Revise Article 1003.04(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradations for granular embankment, granular backfill, bedding, and trench backfill for pipe culverts and storm sewers shall be FA 1, FA 2, or FA 6 through FA 21.

The fine aggregate gradation for porous granular embankment, porous granular backfill, french drains, and sand backfill for underdrains shall be FA 1, FA 2, or FA 20, except the percent passing the No. 200 (75  $\mu$ m) sieve shall be 2±2."

Revise Article 1004.05(c) of the Standard Specifications to read:

"(c) Gradation. The coarse aggregate gradations shall be as follows.

Application	Gradation
Blotter	CA 15
Granular Embankment, Granular Backfill, Bedding, and Trench Backfill for Pipe Culverts and Storm Sewers	CA 6, CA 9, CA 10, CA 12, CA17, CA18, and CA 19
Porous Granular Embankment, Porous Granular Backfill, and French Drains	CA 7, CA 8, CA 11, CA 15, CA 16 and CA 18"

# LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2013

Revise the table in Article 108.09 of the Standard Specifications to read:

	Schedule of Ded Day of Overrun ir		
Original Con	tract Amount	Daily C	harges
From More Than	To and Including	Calendar Day	Work Day
\$ 0 100,000 500,000 1,000,000 3,000,000 6,000,000	\$ 100,000 500,000 1,000,000 3,000,000 6,000,000 12,000,000	\$ 475 750 1,025 1,275 1,425 2,300	\$ 675 1,050 1,425 1,725 2,000 3,450
12,000,000	And over	6,775	9,525"

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# 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."

#### PAVEMENT REMOVAL (BDE)

Effective: April 1, 2013

Revise Article 440.07(c) of the Standard Specifications to read:

"(c) Adjustment of Quantities. The quantity of pavement removal will be adjusted if the thickness of the existing pavement varies more than 15 percent from that shown on the plans. The quantity will be either increased or decreased according to the following table.

% change of thickness	% change of quantity
0 to less than 15	0
15 to less than 20	10
20 to less than 30	15
30 to less than 50	20

If the thickness of the existing pavement varies by 50 percent or more from that shown on the plans, the character of the work will be considered significantly changed and an adjustment to the contract will be made according to Article 104.02.

When an adjustment is made for variations in pavement thickness a resulting adjustment will also be made in the earthwork quantities when applicable.

No adjustment will be made for variations in the amount of reinforcement."

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#### 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.

#### 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."

### 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 (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) 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	Sieve Size and Percent Passing						
of	Sizes	2 1/2	2	1 3/4	1 1/2	1	.1/2	No.
Concrete <sup>1/</sup>	01263	in.	in.	in.	in.	in.	in.	4
· 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 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
	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	Combined Sieve Size (metric) and Percent Passing							
of	Sizes	63	50	45	37.5	25	12.5	4.75	
Concrete 1/	01263	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 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	
· ·	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 (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) 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.

Item	Article/Section
(a) Cement	
(b) Water	
(c) Fine Aggregate	
(d) Coarse Aggregate	

	•	
(e)	Concrete Admixtures	
	Finely Divided Minerals	
	Concrete Curing Materials	
	Straw	
(11)	Sliaw	
(1)	Calcium Chloride	

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

Item	Article/Section
(a) Concrete Mixers and Trucks	
(b) Batching and Weighing Equipment	
(c) Automatic and Semi-Automatic Batching Equipment	1103.03
(d) Water Supply Equipment	
(e) Membrane Curing Equipment	
(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, portlandpozzolan 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.

<u> </u>	Class of Conc.	Ise	TABLE 1. ( Specification Section Reference	TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA       Specification     Cement     S     Mix I       Specification     Cement     Vater /     I     Comp       Section     Factor     Cement     U     Site       Reference     cwt/cu yd     In/lib     P     Dsit.m	CONCRETE AN tor	D MIX DESI Water / Cement Ratio	C S S S S S S S S S S S S S S S S S S S	ATTERIA Mix Design Compressive Strength (Flexural Strength) psi. minimum	Air Content %	Coarse Aggregate Gradations (14)	
				Min	Max		in. (4)	Days 3 14 28			
<u> </u>	PZ	Pavement Base Course Base Course Widening Driveway Pavement Schoulders	420 or 421 353 354 423 483 662	5.65 (1) 6.05 (2)	7.05	0.32 - 0.42	2 - 4 (5)	Ty III 3500 3500 (650) (650)	5.0 - 8.0 (5)	CA 5 & CA 7, CA 5 & CA 11, CA 7, CA 11, or CA 14	
	d d	Pavement Patching Bridge Deck Patching (10)	. 442					3200 (600) Article 701.17(e)(3)b.			
		PP-1	-	6.50 6.20 (Ty III)	7.50 7.20 (Ty III)	0.32 - 0.44	2-4	at 48 hours	4.0 - 7.0		•
		PP-2 DD 3	<b></b> 1	7.35 (Tv III) (8)	8.20 7.35 (Tv III) (8)	0.32 - 0.38 0.32 - 0.35	2-6 2-4	at 24 hours at 16 hours	4.0 - 6.0 4.0 - 6.0	CA 13, CA 14, or CA 16	
		PP-4		6.00 (9)		0.32 - 0.50	2-6	at 8 hours	4.0 - 6.0		
	BB	PP-5 Railroad Crossing	422	6.75 (9) 6.50 6.20 (Tv III)	· 6.75 (9) 7.50 7.20 (Ty III)	0.32 - 0.40 0.32 - 0.44	2-8 2-4	at 4 nours 3500 (650) at 48 hours	4.0 - 7.0	CA 7, CA 11, or CA 14	
	BS	Bridge Superstructure Bridge Approach Slah	503	6.05	7.05	0.32 - 0.44	2 - 4 (5)	4000 (675)	5.0 - 8.0 (5)	CA 7, CA 11, or CA 14 (7)	
	PC	Verticus Precast Concrete Items Wet Cast Drv Cast	1042	5.65 (TY III)	7.05 7.05 (TY III)	0.32 - 0.44 0.25 - 0.40	1-4 0-1	See Section 1042	5.0 - 8.0 N/A	CA7, CA11,CA 13, CA 14, CA 16, or CA 7 & CA 16	
	PS	Precast Prestressed Members Precast Prestressed Piles and Extensions	504 512	5.65 (TY III)	7.05 7.05 (TY III)	0.32 - 0.44	1 - 4	500 5500 3500	5.0 - 8.0	CA 11 (11), CA 13, CA 14 (11), or CA 16	
		Precast Prestressed Sign Screen	600								

TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA	S         Mix Design         Air         Coarse           I         Mix Design         Air         Coarse           u         Compressive Strength         Content         Aggregate           m         (Flexural Strength)         %         Gradations           p          (14)	Days	(4) 3 14 28	6 - 8 4000 5.0 - 8.0 CA 13, CA 14, (6) (675) 5.0 - 8.0 CA 16, or a blend of these gradations.	3 - 5 3500 Optional CA 3 & CA 7, (650) 6.0 max. CA 5 & CA 11, CA 5 & CA 11, CA 5 & CA 11, CA 5 & CA 11, CA 7, or CA 11,	2 - 4 3500 5.0 - 8.0 CA 3 & CA 7, (5) (650) (5) CA 3 & CA 7, CA 5 & CA 11, CA 5 & CA 11, CA 5 & CA 11, CA 14, or CA 16 (CA 14, or CA 16 (13)
MIX DE	Water / Cement Ratio	al/a		0.32 - 0.44	0.32 - 0.44	0.32 - 0.44
TE AND		₽ ───Ţ		0.32	0.32	0.32
CONCRE	or yd		Max	7.05	7.05	7.05
CLASSES OF	Cement Factor cwt/cu yd	(2)	Min.	6.65	5.65 (1) 6.05 (2)	5.65 (1) 6.05 (2)
TABLE 1. (	Specification Section · Reference			516 512 734 837	203	503 424 511 512 542 542 542 542 542 537 637 637 836 836 836
	Use U	•		Drilled Shaft (12) Metal Shell Piles (12) Sign Structures Drilled Shaft (12)	Beal Coat	Structures (except Superstructure) 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 Pole Foundation Pole Foundation Pole Shart (12) Traffic Signal Foundation Ditled Shart (12) Stuare or Flectingular
	Class of Conc.			DS	sc	ō

Notes: (1) Central-mixed (2) Truck-mixed o (3) For Class SC

- <sup>-</sup>or Class SC concrete and for any other class of concrete that is to be placed underwater, except Class DS concrete, ruck-mixed or shrink-mixed.
- the cement factor shall be increased by ten percent. 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-1, the maximum slump may be increased to 6 in. For Class PS, the 7 in. maximum slump may be increased to 8 1/2 in if the high range water-reducing admixture is the polycarboxylate type. 4
  - 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. ලබ
    - 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 E
- 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 ºF, the Type III portland cement may be replaced with Type I or II portland cement. Ò
  - he 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
- except CA 11 may be used for full-depth patching. In addition, the mix design shall have 72 hours to obtain a 4,000 psi compressive or 675 psi flexural strength for all PP mix designs. For Class PP concrete used in bridge deck patching, the coarse aggregate gradation shall be CA 13, CA 14, or CA 16, (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. (11)
- 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 2 cu yd trial batch to verify the mix design. (12)
  - parallel reinforcement bars, or between the reinforcement bar and the form. Nominal maximum size is defined in Note CA 3 or CA 5 may be used when the nominal maximum size does not exceed two-thirds the clear distance between (13)
- 9 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)

Instant         Matter I.         Curvesses         Matter I.         Constant         Matter II.         Constant         Air         Constant         Constant         Air         Constant         C								EBIA (matric)				
Section         Cament         Water / Lattor         Social         Compressive Strength           Reference         Factor         Tatio         Pation         Factor         Nater / Lattor         I         Compressive Strength           Reference         Kg/cu         Ratio         Factor         Compressive Strength         Prescription           Reference         Kg/cu         Nin.         Nation         Nation         Park         APA           Acro			ABLE 1. CLP		NUCHE LE AINL			לאוחבווו) עונום				
Use         Specification         Factor         Nater / in the ment         Comment / in the ment         Comment / in the mainimum           Reference         section         Reference         (3)         Min.         Min.         Participation         Factor         Reference         (3)         reg/kg         min.         (3)         reg/kg         min.         (4)         2         Days           Pavement         353         335         (3)         418         0.32 - 0.42         50 - 100         24,000         4500         4500         4500         4500         4500         4500         4500         22,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000         24,000							<b>က</b> -	Mix Design	4	, i	essee.	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	ass	•	Specification Section	Cem Fac	tor	Water / Cement	- >	Compressive of (Flexural Strei	rrengin ngth) .	Content	Aggregate	
Region (3)         Kg/kg         mm (4)         m (4)	ja Li		Reference			Ratio	E	PDe minim	· 1	%	Gradations	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		•		kg/ci	87		<u>а</u> ,	Kra, munu			(±1)	
				2		kg/kg	mm (4)	Days				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				Min.	Max		E IIII					
Data Course Widening         354         335 (1)         418         0.32 - 0.42         50 - 100         24,000         (4500)           Driveway Pavement         483         - 360 (2)         360 (2)         418         0.32 - 0.42         50 - 100         24,000         (4500)           Driveway Pavement         483         - 360 (2)         445         - 22,100         22,100           Pavement Patching         10)         442         - 365 (1)         425 (1/11)         0.32 - 0.44         50 - 100         at 360 (3)           Proteiner		Pavement	420 or 421			•		Tv III 24,000			CA 5 & CA 7,	
Driveway Pavement         423         560 (2)         560 (2)         (4000)           Shoulders         662         560 (2)         (4000)         (4000)           Shoulders         662         701 (1700)         22,100         22,100           Pavement Patching         483         385         445         50 - 100         at 48 hours           Pro-1         385 (Ty III)         425 (Ty III)         425 (Ty III)         0.32 - 0.44         50 - 100         at 24 hours           Pro-2         435 (Ty III)         435 (Ty III)         0.32 - 0.44         50 - 100         at 24 hours           Pro-3         355 (9)         370 (9)         0.32 - 0.44         50 - 100         at 24 hours           Pro-4         355 (9)         370 (9)         0.32 - 0.44         50 - 100         at 4 hours           Pro-4         355 (Ty III)         425 (Ty III)         0.32 - 0.44         50 - 100         at 4 hours           Pro-5         365 (Ty III)         0.32 - 0.44         50 - 100         at 4 hours           Pro-5         365 (Ty III)         425 (Ty III)         0.32 - 0.44         50 - 100         24,000           Bridge Superstructure         503         360         418         0.32 - 0.44         50 - 100		Base Course Widening	354	335 (1)	418	0.32 - 0.42	50 - 100	24,000 (4500)		5.0 - 8.0	CA 5 & CA 11,	
Shoulder Curb         662         442         22,100         22,100         4150           Pavement Patching         10)         442         385         445         0.32<0.44		Driveway Pavement Shoulders	423	ب 360 (2) ا				(4500)	•	<u>(</u> )	CA 14 CA 11, U	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Shoulder Curb	662									
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	٩	Pavement Patching Bridge Deck Patching (10)	442					22,100 (4150) Article 701.17(	e)(3)b.			
PP-2         435         485         0.32         0.38         50         150         at 24 hours           PP-3         PP-3         435 (Ty III) (8)         435 (Ty III) (8)         0.32         0.310         at 16 hours           PP-4         355 (9)         370 (9)         0.32         0.415         50         at 16 hours           PP-5         355 (9)         370 (9)         0.32         0.44         50         at 4 hours           Railroad Crossing         422         365 (Ty III)         435 (Ty III)         0.32         0.44         50         at 4 hours           Bridge Superstructure         503         360         418         0.32         0.44         50         100         24,000 (4500)           Bridge Superstructure         503         360         418         0.32         0.44         50         100         27,500           Wattos         700 (9)         0.32         0.44         50         100         27,500           Wattos         700 (9)         0.32         0.44         50         100         27,500           Wattos         700 (9)         0.32         0.44         50         100         27,500           Dry Cast         0r		PP-1		385 365 (Ty III)	445 425 (Ty III)	0.32 - 0.44	50 - 100	at 48 hour	ş	4.0 - 7.0	CA 7, CA 11, CA 13, CA 14,	
PP-3         435 (Ty III) (8)         435 (Ty III) (8)         6.32 - 0.35         50 - 100         at 16 hours           PP-4         355 (9)         370 (9)         0.32 - 0.40         50 - 150         at 8 hours           PP-5         445         0.32 - 0.40         50 - 200         at 8 hours           Railroad Crossing         422         385 (1)         11)         425 (Ty III)         0.32 - 0.40         50 - 200         at 8 hours           Bridge Superstructure         503         385 (1)         138         0.32 - 0.44         50 - 100         at 48 hours           Bridge Superstructure         503         360         418         0.32 - 0.44         50 - 100         at 48 hours           Wattors Precast Concrete Items         1042         335         418         0.32 - 0.44         50 - 100         24,000 (4500)           Procast Prestressed Members         503         365 (Ty III)         426 (Ty III)         27,500         27,500           Procast Prestressed Members         504         335 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         26 e Section 1042           Procast Prestressed Members         504         335 (TY III)         0.32 - 0.44         25 - 100         24,500           Procast Prestressed Sigh		PP_2		435	485		50 - 150	at 24 hour	S	4.0-6.0	or CA 16	
PP-4         355 (9)         370 (9)         0.32         0.50         at 8 hours           PP-5         400 (9)         0.32         0.40         50         24,000 (4500)         at 4 hours           Railroad Crossing         422         385         445         0.32         0.44         50         24,000 (4500)           Railroad Crossing         422         365 (Ty III)         425 (Ty III)         425 (Ty III)         27,500         at 48 hours           Bridge Superstructure         503         360         418         0.32         0.44         50         100         27,500           Various Precast Concrete Items         1042         335 (TY III)         418         0.32         0.44         25         100         27,500           Dry Cast         504         335 (TY III)         0.32         0.44         25         100         27,500           Dry Cast         504         335 (TY III)         0.32         0.44         25         100         24,500           Precast Prestressed Members         504         335 (TY III)         0.32         0.44         25         100         24,500           Precast Prestressed Nembers         512         335 (TY III)         0.32         0.44		PP-3		435 (Ty III) (8)	435 (Ty III) (8)		50 - 100	at 16 hour	S	4.0-6.0		
PP-5         400 (9)         400 (9)         0.32 - 0.40         50 - 200         at 4 hours           Railroad Crossing         422         385         445         0.32 - 0.44         50 - 100         24,000 (4500)           Railroad Crossing         422         385 (1Y III)         425 (TY III)         425 (TY III)         24,000 (4500)         at 48 hours           Bridge Superstructure         503         360         418         0.32 - 0.44         50 - 100         24,000           Various Precast Concrete Items         1042         335 (TY III)         418         0.32 - 0.44         25 - 100         26 (50)           Various Precast Prestressed Members         504         335 (TY III)         418         0.32 - 0.44         25 - 100         See Section 1042           Dry Cast         504         335 (TY III)         418 (TY III)         0.22 - 0.44         26 - 100         24,500           Precast Prestressed Nembers         504         335 (TY III)         418 (TY III)         0.22 - 0.44         26 - 100         24,500           Precast Prestressed Nembers         512         335 (TY III)         418         0.32 - 0.44         26 - 100         24,500           Precast Prestressed Sight Screen         639         335 (TY III)         418 (TY III)		P-dd		355 (9)	370 (9)		50 - 150	at 8 hours	S	4.0 - 6.0		
Railroad Crossing         422         385 365 (Ty III)         425 (Ty III)         425 (Ty III)         24,000 (4500)           Raidge Superstructure         503         365 (Ty III)         425 (Ty III)         425 (Ty III)         24,000 (4500)           Bridge Superstructure         503         360         418         0.32 - 0.44         50 - 100         24,000 (4500)           Bridge Superstructure         503         360         418         0.32 - 0.44         50 - 100         27,500           Various Precast Concrete Items         1042         335 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         See Section 1042           Dry Cast         0.022 - 0.40         0 - 255         0 - 255         0.418         0.32 - 0.44         25 - 100         34,500           Precast Prestressed Members         504         335 (TY III)         418 (TY III)         0.22 - 0.44         25 - 100         34,500           Precast Prestressed Piles and         512         335 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         34,500           Precast Prestressed Sight Screen         639         335 (TY III)         418 (TY III)         23 - 0.44         25 - 100         24,000		PP-5		400 (9)	400 (9)	0.32 - 0.40	50 - 200	at 4 hour	s	4.0 - 6.0		- 1
Bridge Superstructure         503         360         418         0.32 - 0.44         50 - 100         27,500           Bridge Approach Slab         503         360         418         0.32 - 0.44         55 - 100         27,500           Various Precast Concrete Items         1042         335         77 III)         418         0.32 - 0.44         25 - 100         See Section 1042           Vet Cast         335 (TY III)         418         0.32 - 0.40         0 - 25         948         25 - 100         See Section 1042           Procast Prestressed Members         504         335 (TY III)         418 (TY III)         0.25 - 0.40         0 - 25         Plans           Precast Prestressed Piles and         512         335 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         34,500           Freest Prestressed Piles and         512         335 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         24,500           Factersions         639         335 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         24,000	۳ ا	Railroad Crossing	422	385 365 (Tv III)	445 425 (Ty III)	0.32 - 0.44	50 - 100	24,000 (45( at 48 hour	20) 8	4.0 - 7.0	CA 7, CA 11, or CA 14	
Various Precast Concrete Items         1042         335         418         0.32         0.44         25         100         See Section 1042           Dry Cast         Dry Cast         335 (TY III)         418 (TY III)         0.25         0.44         25         100         See Section 1042           Dry Cast         Dry Cast         504         335 (TY III)         418 (TY III)         0.25         0.44         25         100           Precast Prestnessed Members         504         335 (TY III)         418 (TY III)         0.22         0.44         25         100           Frecast Prestnessed Piles and         512         335 (TY III)         418 (TY III)         0.32         0.32         0.44         25         100           Precast Prestnessed Sight Screen         639         335 (TY III)         418 (TY III)         0.32         0.32         0.44         25         100	ŝ	Bridge Superstructure Bridge Approach Slab	503	360	418	0.32 - 0.44	50 - 100 (5)	27,500 (4650)		5.0 - 8.0 (5)	CA 7, CA 11, or CA 14 (7)	T
Ly Case         End of the state         504         335         418         12         9.32         0.44         25         7100         34,500           Precast Prestressed Piles and         512         335         (TY III)         418         0.32         0.44         25         100         34,500           Extensions         539         418         (TY III)         418         27         100         24,000           Precast Prestressed Sight Screen         639         639         24,000         24,000         24,000	0	Various Precast Concrete Items Wet Cast	1042	335 335 (TY III)	418 418 (TY III)	0.32 - 0.44 0.25 - 0.40	25 - 100 0 - 25	See Section	1042	5.0 - 8.0 N/A	CA7, CA11, CA13, CA 14, CA 16, or CA 7 & CA 16	
Precast Prestressed Piles and         512         335 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         34,500           Extensions         639         835 (TY III)         418 (TY III)         0.32 - 0.44         25 - 100         34,500           Precast Prestressed Sight Screen         639         24,000         24,000         24,000			504	005	110				Plans	5.0-8.0	CA 11 (11),	
639	õ	Precast Prestressed Piles and	512	335 (TY III)	418 (TY III)	0.32 - 0.44			34,500		or CA 16	
		Precast Prestressed Sight Screen	639						24,000			

TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA (metric)	Use Specification Cement Water / I Mix Design Air Coarse Section Factor Cement u Compressive Strength Content Aggregate Ratio m (Flexural Strength) % Gradations kg/cu m kn/kn p kPa. minimum (14)	mm Days	Min. Max (4) 3 14 28	27,500 50 - 8.0 CA 13, CA 14, 516 395 418 0.32 - 0.44 150 - 200 27,500 5.0 - 8.0 CA 13, CA 14, 512 512 734 734 (6) (4650) 5.0 - 8.0 CA 16, or a blend of these blend of these gradations.		t Superstructure) 503 424 511 512 540 540 542 542 542 542 335 (1) 418 0.32 - 0.44 50 - 100 24,000 605 605 605 734 734 734 12 10 12 100 14500) 12 100 12 100 12 100 100 100 1
TA				Drilled Shaft (12) Metal Shell Piles (12) Sign Structures Drilled Shaft (12)	Seal Coat	Structures (except Superstructure) Sidewalk Sidewalk Encasement Encasement Box Culverts End Section and Collar Curb, Gutter, Curb & Gutter, Median, and Paved Ditch Concrete Barrier Sign Structures Spread Footing Concrete Foundation Pole Foundation Pole Foundation Dirled Shart (12) Surian or Rectannular
	Class of Conc.			DS	S	<u></u>

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Central-mixed ଇତ୍ୟ

Notes:

- 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. ruck-mixed or shrink-mixed.
- Class PP-1, the maximum slump may be increased to 150 mm. For Class PS, the 175 mm maximum slump may be he maximum stump 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.
  - he 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 to Article 1020.05(b)(7), the slump shall be 50 - 100 mm. <u>(</u>2)
  - 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. E
- In addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of microsilica (silica fume) shall be used. For an air temperature greater than 30 °C, the Type III portland cement may be eplaced 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. <u>6</u>
- 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 ,500 kPa compressive or 4,650 kPa flexural. (0)
  - 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. Ē
- 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 desian. 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 lowstrength material that will produce a mixture with suitable workability, consistency, and In addition, admixture dosages shall result in the mixture meeting the plasticity. 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 ℃). 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. Corrosion 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 L 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 waterreducing 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 alkali-silica 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.

	Aggrega	te Groups			
Coarse Aggregate	Fine Aggregate Or				
or					
Coarse Aggregate					
Blend	A	1			
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.

Reduction of Risk for Deleterious Alkali-Silica Reaction						
Aggregate	Mixture Options					
Groups	Option 1	Option 2	Option 3	Option 4	Option 5	
Group I	Mixture options are not applicable. Use any cement or finely divided mineral.					
Group II	X	x	Х	Х	х	
Group III	Х	Combine Option 2 with Option 3	Combine Option 2 with Option 3	Х	X	
Group IV	X	Combine Option 2 with Option 4	Invalid Option	Combine Option 2 with Option 4	X	

"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<sub>2</sub>O +  $0.658K_2O$ ) 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<sub>2</sub>O +  $0.658K_2O$ ) exceeds 1.00 percent for the ground granulated blast-furnace slag, it may be used only per Mixture Option 5.

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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<sub>2</sub>O +  $0.658K_2O$ ) 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 shrinkmixed 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

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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 C	JRING AND PROTECTION OF	CONCRETE C	ONSTRUCTION	
			LOW AIR	
TYPE OF CONSTRUCTION	METHODS	PERIOD DAYS	PROTECTION METHODS	
Deat in Direc Operate 11/	·	DATO	THOLEGHON METHODO	
Cast-in-Place Concrete <sup>11/</sup>	·			
Shoulder	1020.13(a)(1)(2)(3)(4)(5) <sup>3/5/</sup>	3	1020.13(c)	
Base Course			·	
Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>	3	1020.13(c)	
Driveway				
Median				
Barrier Curb				
Gutter	1020.13(a)(1)(2)(3)(4)(5) 4/5/	3	1020.13(c) <sup>16/</sup>	
Curb & Gutter				
Sidewalk				
Slope Wall		•		
Paved Ditch				
Catch Basin	1000 101 111 (0) (0) (1) (7) 4/	•		
Manhole	1020.13(a)(1)(2)(3)(4)(5) 4'	3	1020.13(c)	
Inlet Valve Vault				
	1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>	3 12/	1020.13(c)	
Pavement Patching		3 or 7 <sup>12/</sup>	1020.13(c)	
Bridge Deck Patching	1020.13(a)(3)(5)		······································	
Railroad Crossing	1020.13(a)(3)(5)	<u>1</u>	1020.13(c)	
Piles and Drilled Shafts	1020.13(a)(3)(5)	7	.1020.13(d)(1)(2)(3)	
Foundations & Footings	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(d)(1)(2)(3)	
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) <sup>1/7/</sup>	7		
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) <sup>8/</sup>	/	1020.13(d)(1)(2)	
Deck		_	17/	
Bridge Approach Slab	1020.13(a)(5)	7	1020.13(d)(1)(2) <sup>17/</sup>	
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) <sup>18/</sup>	
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)	
Precast Concrete 11/				
Bridge Slabs				
Piles and Pile Caps	1020.13(a)(3)(5) <sup>9/ 10/</sup>	As <sup>13/</sup>	9/	
Other Structural Members	•	Required		
All Other Precast Items	1020.13(a)(3)(4)(5) <sup>2/9/10/</sup>	As 14/	9/	
Hequired				
Precast, Prestressed Concrete 11/				
	1020(a)(3)(5) 9/ 10/	Until Strand Tensioning is	. 9/	
All Items				

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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.

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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 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 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 °F (2 °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 % (25 %) 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 selfconsolidating 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 waterreducing 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.
    - 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 postcooling, 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  $32 \ \ensuremath{\mathbb{F}}$  (0  $\ensuremath{\mathbb{C}}$ ) to  $212 \ \ensuremath{\mathbb{C}}$  (100  $\ensuremath{\mathbb{C}}$ ), an accuracy of  $\pm 2 \ \ensuremath{\mathbb{C}}$  ( $\pm 1 \ \ensuremath{\mathbb{C}}$ ), 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  $\ensuremath{\mathbb{C}}$  (19  $\ensuremath{\mathbb{C}}$ ). The Contractor has the option to select a higher maximum temperature differential, but the proposed value shall not exceed 50  $\ensuremath{\mathbb{C}}$  (28  $\ensuremath{\mathbb{C}}$ ). 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.

# RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012 Revise: January 1, 2013

Revise Section 1031 of the Standard Specifications to read:

### "SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

**1031.01 Description.** Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
  - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
  - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

1031.02 Stockpiles. RAP and RAS stockpiles shall be according to the following.

(a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface"). Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP shall pass the sieve size specified below for the mix the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100% of FRAP
Mixture FRAP will be used in:	Shall Pass
IL-25.0	2 in. (50 mm)
IL-19.0	1 1/2 in. (40 mm)
IL-12.5	1 in. (25 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, HMA (High or Low ESAL), or "All Other" (as defined by Article 1030.04(a)(3)) mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise approved by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type and lot number shall be maintained by project contract number and kept for a minimum of three years.

1031.03 Testing. RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.
  - (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
  - (2) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Each sample shall be split to obtain two equal samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

(b) RAS Testing. RAS or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Illinois Department of Transportation Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a  $\leq$  1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction and test for unacceptable materials on the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

1031.04 Evaluation of Tests. Evaluation of tests results shall be according to the following.

(a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G<sub>mm</sub>. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous /Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		±5%
1/2 in. (12.5 mm)	±8%	± 15 %
No. 4 (4.75 mm)	±6%	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	±5%	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % <sup>1/</sup>	± 0.5 %
G <sub>mm</sub>	± 0.03	

1/ The tolerance for FRAP shall be  $\pm$  0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the

RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

(b) Evaluation of RAS and RAS Blended with Manufactured Sand Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

RAS
±5%
±5%
±4%
± 2.0 %
±1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

### 1031.05 Quality Designation of Aggregate in RAP/FRAP.

- (a) RAP. The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
  - (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
  - (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
  - (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
  - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

**1031.06 Use of RAP/FRAP and/or RAS in HMA.** The use of RAP/FRAP and/or RAS shall be a Contractor's option when constructing HMA in all contracts.

- (a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.
  - (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
  - (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
  - (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
  - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
  - (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
  - (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given N Design.

- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.
  - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

HMA Mixtures 1/, 2/	RAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10
105	10	10	10

# RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS tables listed below for the given N design.

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# Level 1 - FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

ſ	HMA Mixtures	Level 1 - FRAP/RAS Maximum ABR %		
	Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
ł	30	35	35	10

50	30	25	10
.70	25	20	10
90	20	15	10
105	10	10	10

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N30, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 20 percent.

HMA Mixtures	Level 2 – FRAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/,</sup> 4/
30	40	40	10
50	40	30	10
70	30	20	10
90	30	20	10
105	30	15	10

Level 2 – FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N30, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.

4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

**1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the above detailed requirements.

FRAP/RAS mix designs exceeding the Level 1 FRAP/RAS Maximum ABR percentages shall be tested prior to submittal for verification, according to Illinois Modified AASHTO T 324 (Hamburg Wheel) and shall meet the following requirements.

Asphalt Binder Grade	# Repetitions	Max. Rut Depth in. (mm)
	20,000	1/2 (12.5)
PG76-XX PG70-XX	15,000	1/2 (12.5)
PG64-XX	7,500	1/2 (12.5)
PG58-XX	5,000	1/2 (12.5)

- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS designs shall be submitted for volumetric verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.500 shall be used for mix design purposes.

**1031.08 HMA Production.** Mixture production where the FRAP/RAS ABR percentage exceeds the Level 1 limits, shall be sampled within the first 500 tons (450 metric tons) on the first day of production with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture conformance is demonstrated prior to start of mix production for a State contract.

(a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

(b) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within  $\pm$  0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

When producing HMA containing RAS, a positive dust control system shall be utilized.

- (c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/FRAP and/or RAS shall be capable of automatically recording and printing the following information.
  - (1) Dryer Drum Plants.
    - a. Date, month, year, and time to the nearest minute for each print.
    - b. HMA mix number assigned by the Department.
    - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
    - d. Accumulated dry weight of RAP/FRAP/RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
    - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
    - f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
    - g. Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
    - h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
  - (2) Batch Plants.
    - a. Date, month, year, and time to the nearest minute for each print.

- b. . HMA mix number assigned by the Department.
- c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- d. Mineral filler weight to the nearest pound (kilogram).
- f. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- g. Virgin asphalt binder weight to the nearest pound (kilogram).
- h. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

**1031.09 RAP in Aggregate Surface Course and Aggregate Shoulders.** The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders Type B shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

#### **REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)**

Effective: January 1, 2012 Revised: November 2, 2012

Revise Article 669.01 of the Standard Specifications to read:

"669.01 Description. This work shall consist of the transportation and proper disposal of contaminated soil and water. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their content and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities."

Revise Article 669.08 of the Standard Specifications to read:

"669.08 Contaminated Soil and/or Groundwater Monitoring. The Contractor shall hire a qualified environmental firm to monitor the area containing the regulated substances. The affected area shall be monitored with a photoionization detector (PID) utilizing a lamp of 10.6eV or greater or a flame ionization detector (FID). Any field screen reading on the PID or FID in excess of background levels indicates the potential presence of contaminated material requiring handling as a non-special waste, special waste, or hazardous waste. No excavated soils can be taken to a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation with detectable PID or FID meter readings that are above background. The PID or FID meter shall be calibrated on-site and background level readings taken and recorded daily. All testing shall be done by a qualified engineer/technician. Such testing and monitoring shall be included in the work. The Contractor shall identify the exact limits of removal of non-special waste, special waste, or hazardous waste. All limits shall be approved by the Engineer prior to excavation. The Contractor shall take all necessary precautions.

Based upon the land use history of the subject property and/or PID or FID readings indicating contamination, a soil or groundwater sample shall be taken from the same location and submitted to an approved laboratory. Soil or groundwater samples shall be analyzed for the contaminants of concern, including pH, based on the property's land use history or the parameters listed in the maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605. The analytical results shall serve to document the level of soil contamination. Soil and groundwater samples may be required at the discretion of the Engineer to verify the level of soil and groundwater contamination.

Samples shall be grab samples (not combined with other locations). The samples shall be taken with decontaminated or disposable instruments. The samples shall be placed in sealed containers and transported in an insulated container to the laboratory. The container shall maintain a temperature of 39 °F (4 °C). All samples shall be clearly labeled. The labels shall indicate the sample number, date sampled, location and elevation, and any other observations.

The laboratory shall use analytical methods which are able to meet the lowest appropriate practical quantitation limits (PQL) or estimated quantitation limit (EQL) specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846 and "Methods for the Determination of Organic Compounds in Drinking Water", EPA, EMSL, EPA-600/4-88/039. For parameters where the specified cleanup objective is below the acceptable detection limit (ADL), the ADL shall serve as the cleanup objective. For other parameters the ADL shall be equal to or below the specified cleanup objective."

Replace the first two paragraphs of Article 669.09 of the Standard Specifications with the following:

"669.09 Contaminated Soil and/or Groundwater Management and Disposal. The management and disposal of contaminated soil and/or groundwater shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in uncontaminated soil established pursuant to Subpart F of 35 Illinois Administrative Code 1100.605, the soil shall be managed as follows:
  - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but they are still considered within area background levels by the Engineer, the excavated soil can be utilized within the construction limits as fill, when suitable. Such soil excavated for storm sewers can be placed back into the excavated trench as backfill, when suitable, unless trench backfill is specified. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.
  - (2) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.

- (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an uncontaminated soil fill operation within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
- (5) When the Engineer determines soil cannot be managed according to Articles 669.09(a)(1) through (a)(4) above, the soil shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.
- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC but the pH of the soil is less than 6.25 or greater than 9.0, the excavated soil can be utilized within the construction limits or managed and disposed of off-site as "uncontaminated soil" according to Article 202.03. However the excavated soil cannot be taken to a CCDD facility or an uncontaminated soil fill operation.
- (c) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Illinois Administrative Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste.

All groundwater encountered within lateral trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench it must be removed as a special or hazardous waste. The Contractor is prohibited from managing groundwater within the trench by discharging it through any existing or new storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10<sup>-7</sup> cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer."

Revise Article 669.14 of the Standard Specifications to read:

"669.14 Final Environmental Construction Report. At the end of the project, the Contractor will prepare and submit three copies of the Environmental Construction Report on the activities conducted during the life of the project, one copy shall be submitted to the Resident Engineer, one copy shall be submitted to the District's Environmental Studies Unit, and one copy shall be submitted with an electronic copy in Adode.pdf format to the Geologic

and Waste Assessment Unit, Bureau of Design and Environment, IDOT, 2300 South Dirksen Parkway, Springfield, Illinois 62764. The technical report shall include all pertinent information regarding the project including, but not limited to:

- (a) Measures taken to identify, monitor, handle, and dispose of soil or groundwater containing regulated substances, to prevent further migration of regulated substances, and to protect workers,
- (b) Cost of identifying, monitoring, handling, and disposing of soil or groundwater containing regulated substances, the cost of preventing further migration of regulated substances, and the cost for worker protection from the regulated substances. All cost should be in the format of the contract pay items listed in the contract plans (identified by the preliminary environmental site investigation (PESA) site number),
- (c) Plan sheets showing the areas containing the regulated substances,
- (d) Field sampling and testing results used to identify the nature and extent of the regulated substances,
- (e) Waste manifests (identified by the preliminary environmental site investigation (PESA) site number) for special or hazardous waste disposal, and
- (f) Landfill tickets (identified by the preliminary environmental site investigation (PESA) site number) for non-special waste disposal."

Revise the second paragraph of Article 669.16 of the Standard Specifications to read:

"The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL."

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#### REMOVAL AND DISPOSAL OF SURPLUS MATERIALS (BDE)

Effective: November 2, 2012

Revise the first four paragraphs of Article 202.03 of the Standard Specifications to read:

"202.03 Removal and Disposal of Surplus, Unstable, Unsuitable, and Organic Materials. Suitable excavated materials shall not be wasted without permission of the Engineer. The Contractor shall dispose of all surplus, unstable, unsuitable, and organic materials, in such a manner that public or private property will not be damaged or endangered.

Suitable earth, stones and boulders naturally occurring within the right-of-way may be placed in fills or embankments in lifts and compacted according to Section 205. Broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities may be used in embankment or in fill. If used in fills or embankments, these materials shall be placed and compacted to the satisfaction of the Engineer; shall be buried under a minimum of 2 ft (600 mm) of earth cover (except when the materials include only uncontaminated dirt); and shall not create an unsightly appearance or detract from the natural topographic features of an area. Broken concrete without protruding metal bars, bricks, rock, or stone may be used as riprap as approved by the Engineer. If the materials are used for fill in locations within the right-of-way but outside project construction limits, the Contractor must specify to the Engineer, in writing, how the landscape restoration of the fill areas will be accomplished. Placement of fill in such areas shall not commence until the Contractor's landscape restoration plan is approved by the Engineer.

Aside from the materials listed above, all other construction and demolition debris or waste shall be disposed of in a licensed landfill, recycled, reused, or otherwise disposed of as allowed by State or Federal laws and regulations. When the Contractor chooses to dispose of uncontaminated soil at a clean construction and demolition debris (CCDD) facility or at an uncontaminated soil fill operation, it shall be the Contractor's responsibility to have the pH of the material tested to ensure the value is between 6.25 and 9.0, inclusive. A copy of the pH test results shall be provided to the Engineer.

A permit shall be obtained from IEPA and made available to the Engineer prior to open burning of organic materials (i.e., plant refuse resulting from pruning or removal of trees or shrubs) or other construction or demolition debris. Organic materials originating within the right-of-way limits may be chipped or shredded and placed as mulch around landscape plantings within the right-of-way when approved by the Engineer. Chipped or shredded material to be placed as mulch shall not exceed a depth of 6 in. (150 mm)."

### STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004 Revised: April 1, 2009

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in has a contract value of \$10,000 or greater.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

(a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.

(b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = MPI_M - MPI_L$ 

Where: MPI<sub>M</sub> =

The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI<sub>L</sub> = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the  $MPI_M$  will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

<u>Basis of Payment</u>. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the  $MPI_L$  and  $MPI_M$  in excess of five percent, as calculated by:

Percent Difference =  $\{(MPI_L - MPI_M) \div MPI_L\} \times 100$ 

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment	· .
Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m )	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

### **Return With Bid**

### ILLINOIS DEPARTMENT OF TRANSPORTATION

### OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment. After award, this form, when submitted shall become part of the contract.

#### Contract No.: \_\_\_\_

Com	pany	Nam	e
COIII	nally	TACTU	

### Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following items of work?

Metal Piling	Yes	
Structural Steel	Yes	
Reinforcing Steel	Yes	
Dowel Bars, Tie Bars and Mesh Reinforcement		
Guardrail	Yes	
Steel Traffic Signal and Light Poles, Towers and Mast Arms		
Metal Railings (excluding wire fence)		
Frames and Grates		

Signature:

Date:

### 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.

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."

## TEMPORARY EROSION AND SEDIMENT CONTROL (BDE)

Effective: January 1, 2012

Revise the first paragraph of Article 280.04(f) of the Standard Specifications to read:

"(f) Temporary Erosion Control Seeding. This system consists of seeding all erodible/bare areas to minimize the amount of exposed surface area. Seed bed preparation will not be required if the surface of the soil is uniformly smooth and in a loose condition. Light disking shall be done if the soil is hard packed or caked. Erosion rills greater than 1 in. (25 mm) in depth shall be filled and area blended with the surrounding soil. Fertilizer nutrients will not be required."

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Delete the last sentence of Article 280.08(e) of the Standard Specifications.

## 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:

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

**TRAINING SPECIAL PROVISIONS (BDE)** This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be  $\mathcal{I}$ . In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of The Illinois Department of Transportation and the Federal Highway Administration. Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

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### UTILITY COORDINATION AND CONFLICTS (BDE)

Effective: April 1, 2011 Revised: January 1, 2012

Revise Article 105.07 of the Standard Specifications to read:

"105.07 Cooperation with Utilities. The Department reserves the right at any time to allow work by utilities on or near the work covered by the contract. The Contractor shall conduct his/her work so as not to interfere with or hinder the progress or completion of the work being performed by utilities. The Contractor shall also arrange the work and shall place and dispose of the materials being used so as not to interfere with the operations of utility work in the area.

The Contractor shall cooperate with the owners of utilities in their removal and rearrangement operations so work may progress in a reasonable manner, duplication or rearrangement of work may be reduced to a minimum, and services rendered by those parties will not be unnecessarily interrupted.

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."

Revise the first sentence of the last paragraph of Article 107.19 of the Standard Specifications to read:

"When the Contractor encounters unexpected regulated substances due to the presence of utilities in unanticipated locations, the provisions of Article 107.40 shall apply; otherwise, if the Engineer does not direct a resumption of operations, the provisions of Article 108.07 shall apply."

Revise Article107.31 of the Standard Specification to read:

"107.31 Reserved."

Add the following four Articles to Section 107 of the Standard Specifications:

**"107.37 Locations of Utilities within the Project Limits.** All known utilities existing within the limits of construction are either indicated on the plans or visible above ground. For the purpose of this Article, the limits of proposed construction are defined as follows:

(a) Limits of Proposed Construction for Utilities Paralleling the Roadway.

(1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 2 ft (600 mm) 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 4 ft (1.2 m) 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 either 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 in a Generally Transverse Direction.
  - (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.

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 as indicated in the contract. It is further understood the actual location of the utilities may be located anywhere within the tolerances provided in 220 ILCS 50/2.8 or Administrative Code Title 92 Part 530.40(c), and the proximity of some utilities to construction may require extraordinary measures by the Contractor to protect those utilities.

No additional compensation will be allowed for any delays, inconveniences, or damages sustained by the Contractor due to the presence of or any claimed interference from known utility facilities or any adjustment of them, except as specifically provided in the contract.

**107.38** Adjustments of Utilities within the Project Limits. 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.

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 known 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 as described in Article 107.37. When

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utility adjustments must be performed in conjunction with construction, the utility adjustment work will be indicated in the contract.

The Contractor may make arrangements for adjustment of utilities indicated in the contract, but not scheduled by the Department for adjustment, provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any such adjustments shall be the responsibility of the Contractor.

**107.39** Contractor's Responsibility for Locating and Protecting Utility Property and Services. At points where the Contractor's operations are adjacent to properties or facilities of utility companies, or are adjacent to other property, damage to which might result in considerable expense, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

Within the State of Illinois, a State-Wide One Call Notice System has been established for notifying utilities. Outside the city limits of the City of Chicago, the system is known as the Joint Utility Locating Information for Excavators (JULIE) System. Within the city limits of the City of Chicago the system is known as DIGGER. All utility companies and municipalities which have buried utility facilities in the State of Illinois are a part of this system.

The Contractor shall call JULIE (800-892-0123) or DIGGER (312-744-7000), a minimum of 48 hours in advance of work being done in the area, and they will notify all member utility companies involved their respective utility should be located.

For utilities which are not members of JULIE or DIGGER, the Contractor shall contact the owners directly. The plan general notes will indicate which utilities are not members of JULIE or DIGGER.

Utility Service	Color	
Electric Power, Distribution and Transmission	Safety Red	
Municipal Electric Systems	Safety Red	
Gas Distribution and Transmission	High Visibility Safety Yellow	
Oil Distribution and Transmission	High Visibility Safety Yellow	
Telephone and Telegraph System	Safety Alert Orange	
Community Antenna Television Systems	Safety Alert Orange	
Water Systems	Safety Precaution Blue	
Sewer Systems	Safety Green	
Non-Potable Water and Slurry Lines	Safety Purple	
Temporary Survey	Safety Pink	
Proposed Excavation	Safety White (Black when snow is on the ground)	

The following table indicates the color of markings required of the State-Wide One Call Notification System.

The State-Wide One Call Notification System will provide for horizontal locations of utilities. When it is determined that the vertical location of the utility is necessary to facilitate construction, the Engineer may make the request for location from the utility after receipt of notice from the Contractor. If the utility owner does not field locate their facilities to the satisfaction of the Engineer, 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 be responsible for maintaining the excavations or markers provided by the utility owners.

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.

In the event of interruption of utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. If water service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

**107.40** Conflicts with Utilities. Except as provided hereinafter, the discovery of a utility in an unanticipated location will be evaluated according to Article 104.03. It is understood and agreed that the Contractor has considered in the bid all facilities not meeting the definition of a utility in an unanticipated location and no additional compensation will be allowed for any delays, inconveniences, or damages sustained by the Contractor due to the presence of or any claimed interference from such facilities.

When the Contractor discovers a utility in an unanticipated location, the Contractor shall not interfere with said utility, 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.

- (a) Definition. A utility in an unanticipated location is defined as an active or inactive utility, which is either:
  - (1) Located underground and (a) not shown in any way in any location on the contract documents; (b) not identified in writing by the Department to the Contractor prior to the letting; or (c) not located relative to the location shown in the contract within the tolerances provided in 220 ILCS 50/2.8 or Administrative Code Title 92 Part 530.40(c); or

(2) Located above ground or underground and not relocated as provided in the contract.

Service connections shall not be considered to be utilities in unanticipated locations.

- (b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work applicable to the utility or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows:
  - (1) Minor Delay. A minor delay occurs when the Contractor's operation is completely stopped by a utility in an unanticipated location for more than two hours, but not to exceed three weeks.
  - (2) Major Delay. A major delay occurs when the Contractor's operation is completely stopped by a utility in an unanticipated location for more than three weeks.
  - (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the contractor's rate of production decreases by more than 25 percent and lasts longer than seven days.
- (c) Payment. Payment for Minor, Major and Reduced Rate of Production Delays will be made as follows.
  - (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.
    - Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).
  - (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to three weeks plus the cost of move-out to either the Contractor's yard or another job, whichever is less. Rental equipment may be paid for longer than three weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest. (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Whether covered by (1), (2) or (3) above, additional traffic control required as a result of the operation(s) delayed will be paid for according to Article 109.04 for the total length of the delay.

If the delay is clearly shown to have caused work, which would have otherwise been completed, to be done after material or labor costs have increased, such increases may be paid. Payment for materials will be limited to increased cost substantiated by documentation furnished by the Contractor. Payment for increased labor rates will include those items in Article 109.04(b)(1) and (2), except the 35 percent and ten percent additives will not be permitted. On a working day contract, a delay occurring between November 30 and May 1, when work has not started, will not be considered as eligible for payment of measured labor and material costs.

Project overhead (not including interest) will be allowed when all progress on the contract has been delayed, and will be calculated as 15 percent of the delay claim.

(d) Other Obligations of Contractor. Upon payment of a claim under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this Provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this Provision."

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### WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: November 1, 2012

<u>Description</u>. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Materials.

Add the following to Article 1030.02 of the Standard Specifications.

"(h) Warm Mix Asphalt (WMA) Technologies (Note 3)"

Add the following note to Article 1030.02 of the Standard Specifications.

"Note 3. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, "Warm-Mix Asphalt Technologies"."

#### Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

**"1102.01 Hot-Mix Asphalt Plant.** The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing

by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

"(13) Equipment for Warm Mix Technologies.

- a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.
- b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

## Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(d) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification. Additional mixture verification requirements include Hamburg Wheel testing according to Illinois Modified AASHTO T324 and tensile strength testing according to Illinois Modified AASHTO T283 which shall meet the criteria in Tables 1 and 2 respectively herein. The Contractor shall provide the additional material as follows:
  - a. Four gyratory specimens to be prepared in the Contractor's lab according to Illinois Modified AASHTO T324.
  - b. Sufficient mixture to conduct tensile strength testing according to Illinois Modified AASHTO T283.

Table 1. Initiols Modified AASHTO 1324 Requirements			
Asphalt Binder	# Wheel	Max Rut Depth	
Grade	Passes	in. (mm)	
PG 76-XX	20,000	· 1/2 in. (12.5 mm)	
PG 70-XX	15,000	1/2 in. (12.5 mm)	

## In Modified AASHTO T324

PG 64-XX	7,500	1/2 in. (12.5 mm)
PG 58-XX	5,000	1/2 in. (12.5 mm)

1/ Loose WMA shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Table 2. Tensile Strength Requirements

Asphalt Binder	Tensile Strength psi (kPa)		
Grade	Minimum	Maximum	
PG 76-XX	80 (552)	200 (1379)	
PG 70-XX			
PG 64-XX	60 (414)	200 (1379)"	
PG 58-XX			

### Production.

Revise the second paragraph of Article 1030.06(a) of the Standard Specifications to read:

"At the start of mix production for HMA, WMA, and HMA using WMA technologies, QC/QA mixture start-up will be required for the following situations; at the beginning of production of a new mix of a new mixture design, at the beginning of each production season, and at every plant utilized to produce mixtures, regardless of the mix."

Insert the following after the sixth paragraph of Article 1030.06(a) of the Standard Specifications:

"Warm mix technologies shall be as follows.

- (1) Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 and tensile strength testing according to Illinois Modified AASHTO T283 (approximately 110 lb (50 kg) total).
- (2) Upon completion of the start-up, WMA, or HMA using WMA technologies, production shall cease. The Contractor may revert to conventional HMA production provided a start-up has been previously completed for the current construction season for the mix design. WMA, or HMA using WMA technologies, may resume once all the test results, including Hamburg Wheel results are completed and found acceptable by the Engineer."

Add the following after the first paragraph of Article 1030.05(d)(2)c. of the Standard Specifications:

"During production of each WMA mixture or HMA utilizing WMA technologies, the Engineer will request a minimum of one randomly located sample, identified by the Engineer, for Hamburg Wheel testing to determine compliance with the requirements specified in Table 1 herein."

## Quality Control/Quality Assurance Testing.

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

	Frequency of Tests	Frequency of Tests	Test Method See Manual of
Parameter	High ESAL Mixture	All Other Mixtures	Test Procedures for Materials
Aggregate			
Gradation	1 washed ignition oven test on the mix	1 washed ignition oven test on the mix	Illinois Procedure
	per half day of	per day of	FIOCEGUIE
•••	production	production	
% passing sieves:	production	progeouon	•
1/2 in. (12.5 mm),	Note 4.	Note 4.	
No. 4 (4.75 mm),			•
No. 8 (2.36 mm),			
No. 30 (600 μm)		• .	· · ·
No. 200 (75 μm)	•		
Note 1.			· .
Asphalt Binder	1 per half day of	1 per day	Illinois-Modified
Content by Ignition	production	i per uay	AASHTO T 308
Oven	production		///.0111011000
Note 2.		·	
VMA	Day's production	N/A	Illinois-Modified
	≥ 1200 tons:		AASHTO R 35
Note 3.	1 per half day of		
	production		
			1
· .	Day's production		
	< 1200 tons:		
	1 per half day of		
	production for first		
	2 days and 1 per		
	day thereafter (first		· ·
	sample of the day)	· · · · · · · · · · · · · · · · · · ·	·
Air Voids	$\ge$ 1200 tons:		
Bulk Specific	- 1200 10101	· 1 per day	Illinois-Modified
Gravity	1 per half day of		AASHTO T 312
of Gyratory Sample	production		
Nata E	Della		[·
Note 5.	Day's production < 1200 tons:		
	A		
	1 per half day of	•	
	production for first 2 days and 1 per		
	day thereafter (first		· ·
	sample of the day)		

cy of Tests Test Method
See Manual of
for Materials
er day   Illinois-Modified
AASHTO T 209
701011101200
· · ·
• *

Note 1. The No. 8 (2.36 mm) and No. 30 (600  $\mu m$ ) sieves are not required for All Other Mixtures.

Note 2. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.

Note 3. The  $G_{sb}$  used in the voids in the mineral aggregate (VMA) calculation shall be the same average  $G_{sb}$  value listed in the mix design.

Note 4. The Engineer reserves the right to require additional hot bin gradations for batch

Note 5. The WMA compaction temperature for mixture volumetric testing shall be  $270 \pm 5$  °F ( $132 \pm 3$  °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be  $270 \pm 5$  °F ( $132 \pm 3$  °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature it shall be reheated to standard HMA compaction temperatures."

#### Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

### 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.

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# WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 160 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 nonminority 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

 $\ensuremath{\text{(ii)}}$  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 federallyassisted 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 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 b. 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 from the site at 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 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 not participant who has entered into a covered transaction with a First 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 (<u>https://www.epls.gov/</u>), 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.

\* \* \* \* \*

# 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 (<u>https://www.epls.gov/</u>), 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.

\* \* \* \* \*

# 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 <u>http://www.dot.state.il.us/desenv/delett.html</u>.

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 http://www.dot.state.il.us/desenv/subsc.html.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.