### **BID PROPOSAL 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.

#### 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.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin">http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin</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 DOT.D&Econtracts@illlinois.gov

Technical questions about downloading these files may be directed to Tim Garman at (217)524-1642 or <a href="mailto:Timothy.Garman@illinois.gov">Timothy.Garman@illinois.gov</a>.

### 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. It has the item number in large bold type 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 if you are awarded the project.
- 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.

#### **BID SUBMITTAL CHECKLIST**

| Cover page (the sheet that has the item number on it) – This should be the first page of your bid proposal, followed by your bid (the Schedule of Prices/Pay Items). If you are using special software or CBID to generate your schedule of prices, do not include the blank pages of the schedule of prices that came with the proposal package.   |
|---|
| ☐ Page 4 (Item 9) — Check "YES" if you will use a subcontractor(s) with an annual value over \$50,000. Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount. If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.  |
| After page 4 – Insert the following documents: The Illinois Office Affidavit (Not applicable to federally funded projects) followed by Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.   |
| ☐ 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 name of the apprenticeship and training program sponsor holding the certificate of registration from the US Department of Labor. If no applicable program exists, please indicate the work/job category. 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 completed Form A.   |
| 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 information changes. The certification signature and date must be original 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(s) 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(s) you submitted is not correct and you will be required to submit a revised Form A. |
| ☐ <b>Page 20 (Workforce Projection)</b> – Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".   |

| ☐ <b>Proposal Bid Bond</b> – (Insert after the proposal signature page) Submit you using the current Proposal Bid Bond form provided in the proposal package. T the Proposal Bid Bond. If you are using an electronic bond, include your bid bothe Proof of Insurance printed from the Surety's Web Site. | he Power of Attorney page should be stapled to   |
|---|--|
| ☐ <b>Disadvantaged Business Utilization Plan and/or Good Faith Effort</b> – Th Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE documentation of a Good Faith Effort, it is to follow the SBE Forms.   |  |
| The Bid Letting is now available in streaming Audio/Video from the IDOT the main page of the current letting on the day of the Letting. The stream will no bids does not begin until approximately 10:30 AM.  | <b>Web Site.</b> A link to the stream will be placed on not begin until 10 AM. The actual reading of the |
| Following the Letting, the As-Read Tabulation of Bids will be posted by the end Web page for the current letting.   | d of the day. You will find the link on the main   |
| QUESTIONS: pre-letting up to execution of the contract  |  |
| Contractor pre-qualification  | 217-782-3413   |
| Small Business, Disadvantaged Business Enterprise (DBE)   |  |
| Contracts, Bids, Letting process or Internet downloads  |  |
| Estimates Unit  |  |
| Aeronautics   |  |
| IDNR (Land Reclamation, Water Resources, Natural Resources)   | 217-782-6302   |
| QUESTIONS: following contract execution   |  |
| Subcontractor documentation, payments   | 217-782-3413   |
| Railroad Insurance  | 217-785-0275   |
|   |  |

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| Proposal Submitted By |  |
|-----------------------|--|
| Name                  |  |
| Address               |  |
| City                  |  |

### Letting November 21, 2014

### 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. 66B84
KENDALL County
Section (109,110)R-1
Route FAP 326
Project ACNCII-0326(093)
District 3 Construction Funds

| PLEASE MARK THE APPROPRIATE BOX BELOW:                             |
|--|
| ☐ A <u>Bid</u> <u>Bond</u> is included.                            |
| ☐ A <u>Cashier's Check</u> or a <u>Certified Check</u> is included |
| ☐ An Annual Bid Bond is included or is on file with IDOT.          |
|  |

Prepared by

Checked by

F

(Printed by authority of the State of Illinois)

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**PROPOSAL** 

### TO THE DEPARTMENT OF TRANSPORTATION

**District 3 Construction Funds** 

| 1. Propo | sal of  |  |
|----------|---|--|
| Taxpayer | Identification Number (Mandatory)   |  |
| For th   | e improvement identified and advertised for bids in the Invitation for Bids as:               |  |
|          | Contract No. 66B84 KENDALL County Section (109,110)R-1 Project ACNCII-0326(093) Route FAP 326 |  |

- 7.02 miles of roadway reconstruction consisting of adding two lanes in each direction on IL 47, new median and outside and inside paved shoulders, also culvert work and new traffic signals, beginning at Sherrill Rd. and continuing to Caton Farm Rd. in Kendall County.
- 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 will govern performance and payments.

- 3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned bidder 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 bid proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned bidder 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, or as specified in the special provisions, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

| <u>A</u>    | mount o | of Bid      | Proposal<br><u>Guaranty</u> | <u>Am</u>    | ount c |                  | roposal<br>luaranty |
|-------------|---------|-------------|-----------------------------|--------------|--------|------------------|---------------------|
| 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\$   | 3400,000            |
| \$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\$   | 000,008             |
| \$1,000,000 | to      | \$1,500,000 | \$50,000                    | \$30,000,000 | to     | \$35,000,000\$   | 3900,000            |
| \$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 bid proposals will be made payable to the Treasurer, State of Illinois.

If a combination bid is submitted, the proposal guaranties which accompany the individual bid 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 will fail to execute a contract bond as required herein, it is hereby | y agreed that the amount of | the proposal guaranty will become the  |
| property of the State of Illinois, and shall be considered as payment of damages due      | e to delay and other causes | s suffered by the State because of the |
| failure to execute said contract and contract bond; otherwise, the bid bond will bec      | ome void or the proposal    | guaranty check will be returned to the |
| undersigned.  |                             |  |

| undersigned.   |                | sine told of the proposal guaranty officer, will be foldined to the |
|--|----------------|---|
| Attach Cashier's C   | heck or Certif | ied Check Here  |
| In the event that one proposal guaranty check is intended to cover two of the proposal guaranties which would be required for each individual proposal, state below where it may be found. |                |   |
| The proposal guaranty check will be found in the bid proposal for:   | Item           |   |
|  | Section No.    |   |
|  | County         |   |
|  |                |   |

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

| 6.  | following<br>the comb<br>proportion   | combination bid not to the total contraction to the bic contraction | OS. The undersigned bidder further agrees that if awarded the on, he/she will perform the work in accordance with the requirement specified in the schedule below, and that the combination bid is submitted for the same. If an error is found to exist in the gross a combination, the combination bid shall be corrected as provide  | ents of each individual contract comprising<br>shall be prorated against each section in<br>s sum bid for one or more of the individual  |  |  |
|-----|---|---|---|--|--|--|
|     |   |   | combination bid is submitted, the schedule below must be cong the combination.  | mpleted in each proposal   |  |  |
|     |   |   | te bids are submitted for one or more of the sections compri-<br>tion bid must be submitted for each alternate.   | sing the combination, a  |  |  |
|     |   |   | Schedule of Combination Bids  |  |  |  |
| Со  | mbination<br>No.  | l   | Sections Included in Combination  | Combination Bid<br>Dollars Cents   |  |  |
|     | 110.  |   | Geotions included in Combination  | Donais Cents   |  |  |
|     |   |   |   |  |  |  |
|     |   |   |   |  |  |  |
|     |   |   |   |  |  |  |
| 7.  | schedule<br>all extens<br>schedule<br>is an erro<br>will be man<br>The sche<br>provided   | of prices f<br>sions and<br>are approx<br>or in the ex<br>ade only for<br>eduled qual<br>elsewhere  | RICES. The undersigned bidder submits herewith, in accordant or the items of work for which bids are sought. The unit prices I summations have been made. The bidder understands that ximate and are provided for the purpose of obtaining a gross surtension of the unit prices, the unit prices will govern. Payment to ractual quantities of work performed and accepted or materials ntities of work to be done and materials to be furnished may be in the contract. | bid are in U.S. dollars and cents, and the quantities appearing in the bid in for the comparison of bids. If there is the contractor awarded the contract is furnished according to the contract. Increased, decreased or omitted as |  |  |
| 8.  | . <b>AUTHORITY TO DO BUSINESS IN ILLINOIS.</b> 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.  | 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. |   |   |  |  |  |
| 10. | The serv  | ices of a s   | subcontractor will be used.   |  |  |  |
|     |   |   | ′es □<br>lo □   |  |  |  |
|     | 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)   |   |   |  |  |  |

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State Job # - C-93-050-12

County Name - KENDALL- -

Code - 93 - - District - 3 - -

| Project Number   | Route   |
|------------------|---------|
| ACNCII-0326/093/ | FAP 326 |

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
| X0324159       | WHITEWASH CONC PAVT   | SQ YD              | 252,444.000 |   |            |   |             |
| X0325667       | WD CTRL MWNG STRP SP  | SQ YD              | 7,464.000   |   |            |   |             |
| X0326020       | UTILTY PROTECTION PAD | SQ YD              | 123.000     |   |            |   |             |
| X0327726       | MEMBR WATERPR CULVERT | SQ YD              | 2,794.000   |   |            |   |             |
| X4401198       | HMA SURF REM VAR DP   | SQ YD              | 2,072.000   |   |            |   |             |
| X4402800       | ISLAND PAVEMENT REM   | SQ YD              | 67.000      |   |            |   |             |
| X6013600       | PIPE UNDERDRAIN 4 MOD | FOOT               | 131,975.000 |   |            |   |             |
| X6028404       | TEMP INLETS TA T1F OL | EACH               | 1.000       |   |            |   |             |
| X6061902       | CONC MED TSM SPL      | SQ FT              | 8,869.000   |   |            |   |             |
| X7010216       | TRAF CONT & PROT SPL  | L SUM              | 1.000       |   |            |   |             |
| X7830068       | GRV RCSD PVT LT N SYM | SQ FT              | 1,832.000   |   |            |   |             |
| X7830070       | GRV RCSD PVT MRKG 5   | FOOT               | 161,219.000 |   |            |   |             |
| X7830074       | GRV RCSD PVT MRKG 7   | FOOT               | 17,634.000  |   |            |   |             |
| X7830076       | GRV RCSD PVT MRKG 9   | FOOT               | 14,343.000  |   |            |   |             |
| X7830078       | GRV RCSD PVT MRKG 13  | FOOT               | 5,359.000   |   |            |   |             |

State Job # - C-93-050-12

County Name - KENDALL- -

Code - 93 - - District - 3 - -

| Project Number   | <u> </u> | Route   |
|------------------|----------|---------|
| ACNCII-0326/093/ | F        | FAP 326 |

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity | х | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|----------|---|------------|---|-------------|
| X7830090       | GRV RCSD PVT MRKG 25  | FOOT               | 191.000  |   |            |   |             |
| X8410103       | REMOVE TEMP LTG SYSTM | L SUM              | 1.000    |   |            |   |             |
| X8410118       | MAINT TEMP LIGHT SYS  | L SUM              | 1.000    |   |            |   |             |
| X8570226       | FAC T4 CAB SPL        | EACH               | 1.000    |   |            |   |             |
| Z0007601       | BLDG REMOV NO 1       | L SUM              | 1.000    |   |            |   |             |
| Z0007602       | BLDG REMOV NO 2       | L SUM              | 1.000    |   |            |   |             |
| Z0007603       | BLDG REMOV NO 3       | L SUM              | 1.000    |   |            |   |             |
| Z0007604       | BLDG REMOV NO 4       | L SUM              | 1.000    |   |            |   |             |
| Z0007605       | BLDG REMOV NO 5       | L SUM              | 1.000    |   |            |   |             |
| Z0007606       | BLDG REMOV NO 6       | L SUM              | 1.000    |   |            |   |             |
| Z0007607       | BLDG REMOV NO 7       | L SUM              | 1.000    |   |            |   |             |
| Z0007608       | BLDG REMOV NO 8       | L SUM              | 1.000    |   |            |   |             |
| Z0007609       | BLDG REMOV NO 9       | L SUM              | 1.000    |   |            |   |             |
| Z0007610       | BLDG REMOV NO 10      | L SUM              | 1.000    |   |            |   |             |
| Z0007611       | BLDG REMOV NO 11      | L SUM              | 1.000    |   |            |   |             |

State Job # - C-93-050-12

County Name - KENDALL- -

Code - 93 - - District - 3 - -

| Project Number   | <u>_</u> | Route   |
|------------------|----------|---------|
| ACNCII-0326/093/ | ,        | FAP 326 |

| Item<br>Number | Pay Item Description | Unit of<br>Measure | Quantity   | x | Unit Price | = | Total Price |
|----------------|----------------------|--------------------|------------|---|------------|---|-------------|
| Z0007612       | BLDG REMOV NO 12     | L SUM              | 1.000      |   |            |   |             |
| Z0007613       | BLDG REMOV NO 13     | L SUM              | 1.000      |   |            |   |             |
| Z0013798       | CONSTRUCTION LAYOUT  | L SUM              | 1.000      |   |            |   |             |
| Z0016702       | DETOUR SIGNING       | L SUM              | 1.000      |   |            |   |             |
| Z0018700       | DRAINAGE STR REMOVED | EACH               | 12.000     |   |            |   |             |
| Z0030850       | TEMP INFO SIGNING    | SQ FT              | 140.000    |   |            |   |             |
| Z0032900       | LAND SECTION MARKERS | EACH               | 12.000     |   |            |   |             |
| Z0049807       | R&D FRIABL ASB BLD 7 | L SUM              | 1.000      |   |            |   |             |
| Z0049808       | R&D FRIABL ASB BLD 8 | L SUM              | 1.000      |   |            |   |             |
| Z0049901       | R&D NON-FR ASB BLD 1 | L SUM              | 1.000      |   |            |   |             |
| Z0049907       | R&D NON-FR ASB BLD 7 | L SUM              | 1.000      |   |            |   |             |
| Z0049908       | R&D NON-FR ASB BLD 8 | L SUM              | 1.000      |   |            |   |             |
| Z0054517       |                      | TON                | 598.000    |   |            |   |             |
| Z0062456       |                      | SQ YD              | 15,063.000 |   |            |   |             |
| 20100110       |                      | UNIT               | 1,244.000  |   |            |   |             |

State Job # - C-93-050-12

County Name - KENDALL- -

Code - 93 - - District - 3 - -

| Project Number   | Route   |  |  |
|------------------|---------|--|--|
| ACNCII-0326/093/ | FAP 326 |  |  |

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | х | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
| 20100210       | TREE REMOV OVER 15    | UNIT               | 1,664.000   |   |            |   |             |
| 20101000       | TEMPORARY FENCE       | FOOT               | 689.000     |   |            |   |             |
| 20200100       | EARTH EXCAVATION      | CU YD              | 324,862.000 |   |            |   |             |
| 20200200       | ROCK EXCAVATION       | CU YD              | 1,018.000   |   |            |   |             |
| 20201200       | REM & DISP UNS MATL   | CU YD              | 105,351.000 |   |            |   |             |
| 20400800       | FURNISHED EXCAVATION  | CU YD              | 84,196.000  |   |            |   |             |
| 20700220       | POROUS GRAN EMBANK    | CU YD              | 437.000     |   |            |   |             |
| 20800150       | TRENCH BACKFILL       | CU YD              | 3,234.000   |   |            |   |             |
| 21001000       | GEOTECH FAB F/GR STAB | SQ YD              | 35,022.000  |   |            |   |             |
| 21101505       | TOPSOIL EXC & PLAC    | CU YD              | 60,545.000  |   |            |   |             |
| 21301052       | EXPLOR TRENCH 52      | FOOT               | 53,613.000  |   |            |   |             |
| 25000210       | SEEDING CL 2A         | ACRE               | 65.500      |   |            |   |             |
| 25000310       | SEEDING CL 4          | ACRE               | 60.750      |   |            |   |             |
| 25000400       | NITROGEN FERT NUTR    | POUND              | 11,356.000  |   |            |   |             |
| 25000500       | PHOSPHORUS FERT NUTR  | POUND              | 11,356.000  |   |            |   |             |

State Job # - C-93-050-12

County Name - KENDALL- -

Code - 93 - - District - 3 - -

| Project Number   | Route   |  |
|------------------|---------|--|
| ACNCII-0326/093/ | FAP 326 |  |

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | x | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
| 25000600       | POTASSIUM FERT NUTR   | POUND              | 11,356.000  |   |            |   |             |
| 25100115       | MULCH METHOD 2        | ACRE               | 232.750     |   |            |   |             |
| 25100630       | EROSION CONTR BLANKET | SQ YD              | 213,617.000 |   |            |   |             |
| 28000250       | TEMP EROS CONTR SEED  | POUND              | 181,053.000 |   |            |   |             |
| 28000305       | TEMP DITCH CHECKS     | FOOT               | 13,612.000  |   |            |   |             |
| 28000400       | PERIMETER EROS BAR    | FOOT               | 4,597.000   |   |            |   |             |
| 28000500       | INLET & PIPE PROTECT  | EACH               | 174.000     |   |            |   |             |
| 28100107       | STONE RIPRAP CL A4    | SQ YD              | 581.000     |   |            |   |             |
| 28200200       | FILTER FABRIC         | SQ YD              | 581.000     |   |            |   |             |
| 30300112       | AGG SUBGRADE IMPR 12  | SQ YD              | 315,783.000 |   |            |   |             |
| 30300118       | AGG SUBGRADE IMPR 18  | SQ YD              | 23,243.000  |   |            |   |             |
| 30300124       | AGG SUBGRADE IMPR 24  | SQ YD              | 2,453.000   |   |            |   |             |
| 31100910       | SUB GRAN MAT A 12     | SQ YD              | 29,596.000  |   |            |   |             |
| 31101900       |                       | TON                | 40,028.000  |   |            |   |             |
| 31200500       |                       | SQ YD              | 252,444.000 |   |            |   |             |

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| Project Number   | <u>_</u> | Route   |
|------------------|----------|---------|
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| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | х | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
| 35101800       | AGG BASE CSE B 6      | SQ YD              | 2,387.000   |   |            |   |             |
| 35600702       | HMA BC WID 6 1/2      | SQ YD              | 1,009.000   |   |            |   |             |
| 35600724       | HMA BC WID 12         | SQ YD              | 4,456.000   |   |            |   |             |
| 40200800       | AGG SURF CSE B        | TON                | 2,700.000   |   |            |   |             |
| 40201000       | AGGREGATE-TEMP ACCESS | TON                | 7,729.000   |   |            |   |             |
| 40600275       | BIT MATLS PR CT       | POUND              | 110,124.000 |   |            |   |             |
| 40600627       | LB MM IL-9.5FG N50    | TON                | 165.000     |   |            |   |             |
| 40600847       | P LB MM IL-9.5FG N90  | TON                | 453.000     |   |            |   |             |
| 40600982       | HMA SURF REM BUTT JT  | SQ YD              | 670.000     |   |            |   |             |
| 40600990       | TEMPORARY RAMP        | SQ YD              | 261.000     |   |            |   |             |
| 40603087       | HMA BC IL-19.0 FG N70 | TON                | 7,224.000   |   |            |   |             |
| 40603243       | P HMA BC IL19.0FGN90  | TON                | 3,720.000   |   |            |   |             |
| 40603340       | HMA SC "D" N70        | TON                | 2,912.000   |   |            |   |             |
| 40603545       | P HMA SC "D" N90      | TON                | 1,162.000   |   |            |   |             |
|                | INCIDENTAL HMA SURF   | TON                | 267.000     |   |            |   |             |

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| Project Number   | Route   |
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| ACNCII-0326/093/ | FAP 326 |

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | x | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
|                |                       |                    |             |   | <b></b>    |   |             |
| 42000511       | PCC PVT 10 1/2 JOINTD | SQ YD              | 227,186.000 |   |            |   |             |
| 42001300       | PROTECTIVE COAT       | SQ YD              | 325,230.000 |   |            |   |             |
| 42300200       | PCC DRIVEWAY PAVT 6   | SQ YD              | 561.000     |   |            |   |             |
| 42300400       | PCC DRIVEWAY PAVT 8   | SQ YD              | 3,197.000   |   |            |   |             |
| 44000100       | PAVEMENT REM          | SQ YD              | 125,323.000 |   |            |   |             |
| 44000155       | HMA SURF REM 11/2     | SQ YD              | 2,913.000   |   |            |   |             |
| 44000200       | DRIVE PAVEMENT REM    | SQ YD              | 4,260.000   |   |            |   |             |
| 44000500       | COMB CURB GUTTER REM  | FOOT               | 1,242.000   |   |            |   |             |
| 44004250       | PAVED SHLD REMOVAL    | SQ YD              | 33,711.000  |   |            |   |             |
| 48101200       | AGGREGATE SHLDS B     | TON                | 15,330.000  |   |            |   |             |
| 48203021       | HMA SHOULDERS 6       | SQ YD              | 3,798.000   |   |            |   |             |
| 48203029       | HMA SHOULDERS 8       | SQ YD              | 2,558.000   |   |            |   |             |
| 48300300       | PCC SHOULDERS 8       | SQ YD              | 92,733.000  |   |            |   |             |
| 50100300       | REM EXIST STRUCT N1   | EACH               | 1.000       |   |            |   |             |
| 50100400       | REM EXIST STRUCT N2   | EACH               | 1.000       |   |            |   |             |

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| Item<br>Number | Pay Item Description | Unit of<br>Measure | Quantity   | х | Unit Price | = | Total Price |
|----------------|----------------------|--------------------|------------|---|------------|---|-------------|
| 50100500       | REM EXIST STRUCT N3  | EACH               | 1.000      |   |            |   |             |
| 50100600       | REM EXIST STRUCT N4  | EACH               | 1.000      |   |            |   |             |
| 50100700       | REM EXIST STRUCT N5  | EACH               | 1.000      |   |            |   |             |
| 50100800       | REM EXIST STRUCT N6  | EACH               | 1.000      |   |            |   |             |
| 50100900       | REM EXIST STRUCT N7  | EACH               | 1.000      |   |            |   |             |
| 50101000       | REM EXIST STRUCT N8  | EACH               | 1.000      |   |            |   |             |
| 50101100       | REM EXIST STRUCT N9  | EACH               | 1.000      |   |            |   |             |
| 50101200       | REM EXIST STRUCT N10 | EACH               | 1.000      |   |            |   |             |
| 50105220       | PIPE CULVERT REMOV   | FOOT               | 4,008.000  |   |            |   |             |
| 50800105       | REINFORCEMENT BARS   | POUND              | 75,910.000 |   |            |   |             |
| 51500100       | NAME PLATES          | EACH               | 7.000      |   |            |   |             |
| 54003000       | CONC BOX CUL         | CU YD              | 409.200    |   |            |   |             |
| 54010603       | PCBC 6X3             | FOOT               | 347.500    |   |            |   |             |
| 54010806       | PCBC 8X6             | FOOT               | 263.500    |   |            |   |             |
| 54010907       | PCBC 9X7             | FOOT               | 282.500    |   |            |   |             |

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|------------------|---------|--|
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| ltem<br>Number | Pay Item Description | Unit of<br>Measure | Quantity | x | Unit Price | = | Total Price |
|----------------|----------------------|--------------------|----------|---|------------|---|-------------|
| 54011003       | PCBC 10X3            | FOOT               | 129.500  |   |            |   |             |
| 54011005       | PCBC 10X5            | FOOT               | 288.000  |   |            |   |             |
| 54011108       | PCBC 11X8            | FOOT               | 254.000  |   |            |   |             |
| 54011206       | PCBC 12X6            | FOOT               | 271.000  |   |            |   |             |
| 542A0235       | P CUL CL A 1 30      | FOOT               | 288.000  |   |            |   |             |
| 542A1069       | P CUL CL A 2 24      | FOOT               | 104.000  |   |            |   |             |
| 542A1075       | P CUL CL A 2 30      | FOOT               | 125.000  |   |            |   |             |
| 542A1081       | P CUL CL A 2 36      | FOOT               | 113.000  |   |            |   |             |
| 542A5479       | P CUL CL A 1 EQRS 24 | FOOT               | 139.000  |   |            |   |             |
| 542A5485       | P CUL CL A 1 EQRS 30 | FOOT               | 256.000  |   |            |   |             |
| 542A5491       | P CUL CL A 1 EQRS 36 | FOOT               | 785.000  |   |            |   |             |
| 542D0220       | P CUL CL D 1 15      | FOOT               | 248.000  |   |            |   |             |
| 542D0223       | P CUL CL D 1 18      | FOOT               | 142.000  |   |            |   |             |
| 542D0235       | P CUL CL D 1 30      | FOOT               | 151.000  |   |            |   |             |
| 542D0265       | PCULCLD1 60          | FOOT               | 50.000   |   |            |   |             |

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|------------------|----------|---------|
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| Item<br>Number | Pay Item Description | Unit of<br>Measure | Quantity | х | Unit Price | = | Total Price |
|----------------|----------------------|--------------------|----------|---|------------|---|-------------|
| 542D1060       | P CUL CL D 2 15      | FOOT               | 55.000   |   |            |   |             |
| 542D1063       | P CUL CL D 2 18      | FOOT               | 470.000  |   |            |   |             |
| 542D1069       | P CUL CL D 2 24      | FOOT               | 676.000  |   |            |   |             |
| 542D1075       | P CUL CL D 2 30      | FOOT               | 843.000  |   |            |   |             |
| 542D5473       | P CUL CL D 1 EQRS 18 | FOOT               | 114.000  |   |            |   |             |
| 542D5479       | P CUL CL D 1 EQRS 24 | FOOT               | 98.000   |   |            |   |             |
| 542D5485       | P CUL CL D 1 EQRS 30 | FOOT               | 139.000  |   |            |   |             |
| 542D5497       | P CUL CL D 1 EQRS 42 | FOOT               | 168.000  |   |            |   |             |
| 5421A012       | P CUL CL A 1 12 TEMP | FOOT               | 142.000  |   |            |   |             |
| 5421A018       | P CUL CL A 1 18 TEMP | FOOT               | 296.000  |   |            |   |             |
| 5421A024       | P CUL CL A 1 24 TEMP | FOOT               | 64.000   |   |            |   |             |
| 5421A036       | P CUL CL A 1 36 TEMP | FOOT               | 424.000  |   |            |   |             |
| 5421A048       | PCULCLA1 48 TEMP     | FOOT               | 64.000   |   |            |   |             |
| 54213657       | PRC FLAR END SEC 12  | EACH               | 87.000   |   |            |   |             |
| 54213663       | PRC FLAR END SEC 18  | EACH               | 2.000    |   |            |   |             |

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|------------------|----------|---------|
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| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity | х | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|----------|---|------------|---|-------------|
| 54213669       | PRC FLAR END SEC 24   | EACH               | 4.000    |   |            |   |             |
| 54213675       | PRC FLAR END SEC 30   | EACH               | 6.000    |   |            |   |             |
| 54213681       | PRC FLAR END SEC 36   | EACH               | 2.000    |   |            |   |             |
| 54213693       | PRC FLAR END SEC 48   | EACH               | 2.000    |   |            |   |             |
| 54214509       | PRC FL END S EQ RS 24 | EACH               | 4.000    |   |            |   |             |
| 54215550       | MET END SEC 15        | EACH               | 14.000   |   |            |   |             |
| 54215553       | MET END SEC 18        | EACH               | 18.000   |   |            |   |             |
| 54215559       | MET END SEC 24        | EACH               | 16.000   |   |            |   |             |
| 54215565       | MET END SEC 30        | EACH               | 32.000   |   |            |   |             |
| 54215595       | MET END SEC 60        | EACH               | 2.000    |   |            |   |             |
| 54215763       | MET END SEC EQV RS 18 | EACH               | 8.000    |   |            |   |             |
| 54215769       | MET END SEC EQV RS 24 | EACH               | 4.000    |   |            |   |             |
| 54215775       |                       | EACH               | 6.000    |   |            |   |             |
| 54215787       |                       | EACH               | 8.000    |   |            |   |             |
| 54260311       |                       | FOOT               | 406.000  |   |            |   |             |

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|------------------|----------|---------|
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| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity  | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-----------|---|------------|---|-------------|
| 54261436       | CONC ES 542001 36 1:4 | EACH               | 10.000    |   |            |   |             |
| 54264630       | CONC ES 542016 30 1:6 | EACH               | 4.000     |   |            |   |             |
| 54264642       | CONC ES 542016 42 1:6 | EACH               | 6.000     |   |            |   |             |
| 550A0340       | STORM SEW CL A 2 12   | FOOT               | 5,690.000 |   |            |   |             |
| 550A0380       | STORM SEW CL A 2 18   | FOOT               | 1,009.000 |   |            |   |             |
| 550A0410       | STORM SEW CL A 2 24   | FOOT               | 759.000   |   |            |   |             |
| 550A0480       | STORM SEW CL A 2 48   | FOOT               | 157.000   |   |            |   |             |
| 550A4900       | SS CL A 2 EQRS 24     | FOOT               | 135.000   |   |            |   |             |
| 55100700       | STORM SEWER REM 15    | FOOT               | 545.000   |   |            |   |             |
| 55100900       | STORM SEWER REM 18    | FOOT               | 335.000   |   |            |   |             |
| 55101200       | STORM SEWER REM 24    | FOOT               | 117.000   |   |            |   |             |
| 59300100       | CONTR LOW-STRENG MATL | CU YD              | 6.900     |   |            |   |             |
| 60100060       | CONC HDWL FOR P DRAIN | EACH               | 261.000   |   |            |   |             |
| 60100915       | PIPE DRAINS 6         | FOOT               | 1,200.000 |   |            |   |             |
| 60100925       | PIPE DRAINS 8         | FOOT               | 1,200.000 |   |            |   |             |

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| Item<br>Number | Pay Item Description | Unit of<br>Measure | Quantity  | x | Unit Price | = | Total Price |
|----------------|----------------------|--------------------|-----------|---|------------|---|-------------|
| 60100935       | PIPE DRAINS 10       | FOOT               | 1,200.000 |   |            |   |             |
| 60100945       | PIPE DRAINS 12       | FOOT               | 1,200.000 |   |            |   |             |
| 60100955       | PIPE DRAINS 15       | FOOT               | 1,200.000 |   |            |   |             |
| 60100965       | PIPE DRAINS 18       | FOOT               | 1,200.000 |   |            |   |             |
| 60108100       | PIPE UNDERDRAIN 4 SP | FOOT               | 8,890.000 |   |            |   |             |
| 60218400       | MAN TA 4 DIA T1F CL  | EACH               | 5.000     |   |            |   |             |
| 60219000       | MAN TA 4 DIA T8G     | EACH               | 3.000     |   |            |   |             |
| 60224446       | MAN TA 7 DIA T1F CL  | EACH               | 1.000     |   |            |   |             |
| 60234200       | INLETS TA T1F OL     | EACH               | 44.000    |   |            |   |             |
| 60235800       | INLETS TA T4F&G      | EACH               | 2.000     |   |            |   |             |
| 60236200       | INLETS TA T8G        | EACH               | 35.000    |   |            |   |             |
| 60240210       | INLETS TB T1F OL     | EACH               | 3.000     |   |            |   |             |
| 60240215       | INLETS TB T1F CL     | EACH               | 2.000     |   |            |   |             |
| 60240225       | INLETS TB T4F&G      | EACH               | 1.000     |   |            |   |             |
| 60240301       | INLETS TB T8G        | EACH               | 4.000     |   |            |   |             |

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| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity  | x | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-----------|---|------------|---|-------------|
| 60600095       | CLASS SI CONC OUTLET  | CU YD              | 18.000    |   |            |   |             |
| 60602800       | CONC GUTTER TB        | FOOT               | 1,120.000 |   |            |   |             |
| 60605000       | COMB CC&G TB6.24      | FOOT               | 710.500   |   |            |   |             |
| 60624600       | CORRUGATED MED        | SQ FT              | 229.000   |   |            |   |             |
| 61100605       | MISC CONCRETE         | CU YD              | 8.000     |   |            |   |             |
| 61101007       | STORM SEW PROT A 6    | FOOT               | 1,200.000 |   |            |   |             |
| 61101009       | STORM SEW PROT A 8    | FOOT               | 1,200.000 |   |            |   |             |
| 61101011       | STORM SEW PROT A 10   | FOOT               | 1,200.000 |   |            |   |             |
| 61101013       | STORM SEW PROT A 12   | FOOT               | 1,200.000 |   |            |   |             |
| 61101017       | STORM SEW PROT A 15   | FOOT               | 1,200.000 |   |            |   |             |
| 61101020       | STORM SEW PROT A 18   | FOOT               | 1,200.000 |   |            |   |             |
| 61133100       | FLD TILE JUN VAULT 2D | EACH               | 22.000    |   |            |   |             |
| 61133200       | FLD TILE JUN VAULT 3D | EACH               | 22.000    |   |            |   |             |
| 61139900       | STORM SEWER SPEC 6    | FOOT               | 1,200.000 |   |            |   |             |
| 61140000       | STORM SEWER SPEC 8    | FOOT               | 1,200.000 |   |            |   |             |

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| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
| 61140100       | STORM SEWER SPEC 10   | FOOT               | 1,200.000   |   |            |   |             |
| 61140200       | STORM SEWER SPEC 12   | FOOT               | 1,200.000   |   |            |   |             |
| 61140400       | STORM SEWER SPEC 15   | FOOT               | 1,200.000   |   |            |   |             |
| 61140600       | STORM SEWER SPEC 18   | FOOT               | 1,200.000   |   |            |   |             |
| 63500105       | DELINEATORS           | EACH               | 237.000     |   |            |   |             |
| 64200116       | SHOULDER RUM STRIP 16 | FOOT               | 130,459.000 |   |            |   |             |
| 64401100       | HT CBL MEDIAN BARRIER | FOOT               | 15,443.000  |   |            |   |             |
| 64401200       | HT CBL MED BAR DEMO   | EACH               | 1.000       |   |            |   |             |
| 64401300       | HT CBL MED BAR TERM   | EACH               | 26.000      |   |            |   |             |
| 66600105       | FUR ERECT ROW MARKERS | EACH               | 175.000     |   |            |   |             |
| 66700205       | PERM SURV MKRS T1     | EACH               | 21.000      |   |            |   |             |
| 66700305       | PERM SURV MKRS T2     | EACH               | 25.000      |   |            |   |             |
| 66900200       | NON SPL WASTE DISPOSL | CU YD              | 500.000     |   |            |   |             |
| 66900205       | SPL WASTE DISPOSAL    | CU YD              | 100.000     |   |            |   |             |
| 66900210       | HAZARD WASTE DISPOSAL | CU YD              | 100.000     |   |            |   |             |

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| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
| 66900450       | SPL WASTE PLNS/REPORT | L SUM              | 1.000       |   |            |   |             |
| 66900530       | SOIL DISPOSAL ANALY   | EACH               | 5.000       |   |            |   |             |
| 67000400       | ENGR FIELD OFFICE A   | CAL MO             | 36.000      |   |            |   |             |
| 67100100       | MOBILIZATION          | L SUM              | 1.000       |   |            |   |             |
| 67201000       | SEAL ABAN WATER WELLS | EACH               | 6.000       |   |            |   |             |
| 70103815       | TR CONT SURVEILLANCE  | CAL DA             | 793.000     |   |            |   |             |
| 70106800       | CHANGEABLE MESSAGE SN | CAL MO             | 70.000      |   |            |   |             |
| 70300100       | SHORT TERM PAVT MKING | FOOT               | 988.000     |   |            |   |             |
| 70300210       | TEMP PVT MK LTR & SYM | SQ FT              | 2,615.000   |   |            |   |             |
| 70300220       | TEMP PVT MK LINE 4    | FOOT               | 569,877.000 |   |            |   |             |
| 70300240       | TEMP PVT MK LINE 6    | FOOT               | 17,634.000  |   |            |   |             |
| 70300250       | TEMP PVT MK LINE 8    | FOOT               | 17,848.000  |   |            |   |             |
| 70300260       | TEMP PVT MK LINE 12   | FOOT               | 6,136.000   |   |            |   |             |
| 70300280       | TEMP PVT MK LINE 24   | FOOT               | 996.000     |   |            |   |             |
| 70300900       | PAVT MARK TAPE T4 L&S | SQ FT              | 48.000      |   |            |   |             |

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| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity    | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-------------|---|------------|---|-------------|
| 70300904       | PAVT MARK TAPE T4 4   | FOOT               | 584,268.000 |   |            |   |             |
| 70300912       | PAVT MARK TAPE T4 12  | FOOT               | 630.000     |   |            |   |             |
| 70300924       | PAVT MARK TAPE T4 24  | FOOT               | 1,287.000   |   |            |   |             |
| 70301000       | WORK ZONE PAVT MK REM | SQ FT              | 198,337.000 |   |            |   |             |
| 70400100       | TEMP CONC BARRIER     | FOOT               | 637.500     |   |            |   |             |
| 70400200       | REL TEMP CONC BARRIER | FOOT               | 100.000     |   |            |   |             |
| 70600260       | IMP ATTN TEMP FRN TL3 | EACH               | 4.000       |   |            |   |             |
| 70600332       | IMP ATTN REL FRN TL3  | EACH               | 2.000       |   |            |   |             |
| 72000100       | SIGN PANEL T1         | SQ FT              | 1,317.000   |   |            |   |             |
| 72000200       | SIGN PANEL T2         | SQ FT              | 138.000     |   |            |   |             |
| 73000100       | WOOD SIN SUPPORT      | FOOT               | 2,707.000   |   |            |   |             |
| 78003130       | PREF PL PM TB LINE 6  | FOOT               | 17,634.000  |   |            |   |             |
| 78009000       | MOD URETH PM LTR-SYM  | SQ FT              | 2,518.500   |   |            |   |             |
| 78009004       | MOD URETH PM LINE 4   | FOOT               | 190,839.000 |   |            |   |             |
| 78009008       | MOD URETH PM LINE 8   | FOOT               | 17,848.000  |   |            |   |             |

State Job # - C-93-050-12

 Project Number
 Route

 County Name KENDALL 

 ACNCII-0326/093/
 FAP 326

Code - 93 - - District - 3 - -

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity  | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-----------|---|------------|---|-------------|
| 78009012       | MOD URETH PM LINE 12  | FOOT               | 5,359.000 |   |            |   |             |
| 78009024       | MOD URETH PM LINE 24  | FOOT               | 537.000   |   |            |   |             |
| 78100100       | RAISED REFL PAVT MKR  | EACH               | 2,272.000 |   |            |   |             |
| 78200300       | PRISMATIC CURB REFL   | EACH               | 84.000    |   |            |   |             |
| 78300100       | PAVT MARKING REMOVAL  | SQ FT              | 2,205.000 |   |            |   |             |
| 78300200       | RAISED REF PVT MK REM | EACH               | 67.000    |   |            |   |             |
| 80400100       | ELECT SERV INSTALL    | EACH               | 1.000     |   |            |   |             |
| 80500010       | SERV INSTALL GRND MT  | EACH               | 1.000     |   |            |   |             |
| 81028200       | UNDRGRD C GALVS 2     | FOOT               | 178.000   |   |            |   |             |
| 81028240       | UNDRGRD C GALVS 4     | FOOT               | 390.000   |   |            |   |             |
| 81028320       | UNDRGRD C PVC 1       | FOOT               | 388.000   |   |            |   |             |
| 81028350       | UNDRGRD C PVC 2       | FOOT               | 4,024.000 |   |            |   |             |
| 81028360       | UNDRGRD C PVC 2 1/2   | FOOT               | 86.000    |   |            |   |             |
| 81028390       | UNDRGRD C PVC 4       | FOOT               | 10.000    |   |            |   |             |
| 81028750       | UNDRGRD C CNC 2       | FOOT               | 145.000   |   |            |   |             |

State Job # - C-93-050-12

County Name - KENDALL- -

Code - 93 - - District - 3 - -

| Project Number   | Route   |  |
|------------------|---------|--|
| ACNCII-0326/093/ | FAP 326 |  |

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity  | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-----------|---|------------|---|-------------|
| 81028770       | UNDRGRD C CNC 3       | FOOT               | 230.000   |   |            |   |             |
| 81100600       | CON AT ST 2 GALVS     | FOOT               | 48.000    |   |            |   |             |
| 81400700       | HANDHOLE PCC          | EACH               | 15.000    |   |            |   |             |
| 81400720       | DBL HANDHOLE PCC      | EACH               | 1.000     |   |            |   |             |
| 81603040       | UD 2#6 #8G XLPUSE 1   | FOOT               | 4,545.000 |   |            |   |             |
| 81702150       | EC C XLP USE 1C 2     | FOOT               | 150.000   |   |            |   |             |
| 81702450       | EC C XLP USE 3-1C 10  | FOOT               | 4,503.000 |   |            |   |             |
| 82102400       | LUM SV HOR MT 400W    | EACH               | 20.000    |   |            |   |             |
| 82500340       | LT CONT PEDM 480V 60  | EACH               | 1.000     |   |            |   |             |
| 83010500       | LT P A 50MH 12MA      | EACH               | 16.000    |   |            |   |             |
| 83600300       | LIGHT POLE FDN 30D    | FOOT               | 112.000   |   |            |   |             |
| 83800205       | BKWY DEV TR B 15BC    | EACH               | 16.000    |   |            |   |             |
| 86200300       | UNINTER POWER SUP EXT | EACH               | 1.000     |   |            |   |             |
| 87301225       | ELCBL C SIGNAL 14 3C  | FOOT               | 4,774.000 |   |            |   |             |
| 87301245       | ELCBL C SIGNAL 14 5C  | FOOT               | 1,838.000 |   |            |   |             |

State Job # - C-93-050-12

County Name - KENDALL- - Project Number

ACNCII-0326/093/

Route FAP 326

Code - 93 - - District - 3 - -

| Item<br>Number | Pay Item Description | Unit of<br>Measure | Quantity  | X | Unit Price | = | Total Price |
|----------------|----------------------|--------------------|-----------|---|------------|---|-------------|
| 87301255       | ELCBL C SIGNAL 14 7C | FOOT               | 2,709.000 |   |            |   |             |
| 87301305       | ELCBL C LEAD 14 1PR  | FOOT               | 5,622.000 |   |            |   |             |
| 87301805       | ELCBL C SERV 6 2C    | FOOT               | 14.000    |   |            |   |             |
| 87301900       | ELCBL C EGRDC 6 1C   | FOOT               | 4,403.000 |   |            |   |             |
| 87502500       | TS POST GALVS 16     | EACH               | 4.000     |   |            |   |             |
| 87703050       | STL COMB MAA&P 64    | EACH               | 2.000     |   |            |   |             |
| 87703080       | STL COMB MAA&P 68    | EACH               | 2.000     |   |            |   |             |
| 87800100       | CONC FDN TY A        | FOOT               | 12.000    |   |            |   |             |
| 87800150       | CONC FDN TY C        | FOOT               | 3.000     |   |            |   |             |
| 87800420       | CONC FDN TY E 42D    | FOOT               | 92.000    |   |            |   |             |
| 88040030       | SH P LED 1F 1S PM    | EACH               | 4.000     |   |            |   |             |
| 88040070       | SH P LED 1F 3S BM    | EACH               | 2.000     |   |            |   |             |
| 88040090       | SH P LED 1F 3S MAM   | EACH               | 6.000     |   |            |   |             |
| 88040150       | SH P LED 1F 5S BM    | EACH               | 6.000     |   |            |   |             |
| 88040160       | SH P LED 1F 5S MAM   | EACH               | 6.000     |   |            |   |             |

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# ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 66B84

State Job # - C-93-050-12

 Project Number
 Route

 County Name KENDALL ACNCII-0326/093/
 FAP 326

Code - 93 - - District - 3 - -

| Item<br>Number | Pay Item Description  | Unit of<br>Measure | Quantity  | X | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|-----------|---|------------|---|-------------|
| 88200410       | TS BACKPLATE L F PLAS | EACH               | 20.000    |   |            |   |             |
| 88500100       | INDUCTIVE LOOP DETECT | EACH               | 18.000    |   |            |   |             |
| 88600100       | DET LOOP T1           | FOOT               | 2,090.000 |   |            |   |             |

| CONTRACT NUMBER       | 66B84 |    |
|-----------------------|-------|----|
|                       |       |    |
| THIS IS THE TOTAL BID |       | \$ |

### NOTES:

- 1. Each PAY ITEM should have a UNIT PRICE and a TOTAL PRICE.
- 2. The UNIT PRICE shall govern if no TOTAL PRICE is shown or if there is a discrepancy between the product of the UNIT PRICE multiplied by the QUANTITY.
- 3. If a UNIT PRICE is omitted, the TOTAL PRICE will be divided by the QUANTITY in order to establish a UNIT PRICE.
- 4. A bid may be declared UNACCEPTABLE if neither a unit price nor a total price is shown.

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

#### I. GENERAL

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

|  | I acknowledge, | understand and | accept these | terms and | conditions. |
|--|----------------|----------------|--------------|-----------|-------------|
|--|----------------|----------------|--------------|-----------|-------------|

#### 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

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 State 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 State 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.

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. Information concerning the exemption process is available from the Department upon request.

### B. Negotiations

Section 50-15. Negotiations.

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.

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

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.

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

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.

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

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.

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

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.

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

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.

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.

☐ I acknowledge, understand and accept these terms and conditions for the above assurances.

### **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

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 2012.
- (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.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

#### B. Felons

Section 50-10. Felons.

- (a) 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.
- (b) 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

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

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 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

Section 3 of the Educational Loan Default Act provides 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.

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

Section 33E-11 of the Criminal Code of 2012 provides:

- (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.
- (b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

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

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

Section 5 of the International Anti-Boycott Certification Act provides 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.

The bidder makes the certification set forth in Section 5 of the Act.

#### I. Drug Free Workplace

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.

The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace in compliance with the provisions of the

#### 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 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 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 appro | priate statement:   |
|-----------------|---|
| //              | Company has no business operations in Iran to disclose.                     |
| / /             | Company has business operations in Iran as disclosed the attached document. |

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

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

| NA-FEDERAL |      |      |
|------------|------|------|
|            |      |      |
|            | <br> | <br> |
|            |      |      |

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

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

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

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

The undersigned bidder 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: |
|         | l address of person:ees, compensation, reimbursements and other remuneration paid to said person:   |
|         |   |
| ☐ Lackn | owledge, understand and accept these terms and conditions for the above certifications.   |

### IV. DISCLOSURES

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

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

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

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

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

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

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

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

### C. Disclosure Form Instructions

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

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

| 1. | Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO   |
|----|--|
| 2. | Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES NO                      |
| 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    |               |                           |
| O'the Otate 7's  |               |                           |
| 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. 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 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 | FOR INDIVIDUAL (type or print information) |                                   |             |                                     |  |  |  |
|-----|--|-----------------------------------|-------------|-------------------------------------|--|--|--|
|     | NAME:                                      |                                   |             |                                     |  |  |  |
|     | ADDRESS                                    |                                   |             |                                     |  |  |  |
|     |  |                                   |             |                                     |  |  |  |
|     | Type of owner                              | ship/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 contractual employment of services. Yes No

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

| son, or daughter.  | YesNo  |
|--|--|
| (i) Compensated employment, currently or in the previous committee registered with the Secretary of State or any caction committee registered with either the Secretary of State or any or action committee registered with either the Secretary of State or any or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary of State or action committee registered with either the Secretary or action committee registered with either the secretary or action committee registered with either the secretary or action committee registered wit | county clerk of the State of Illinois, or any political  |
| (j) Relationship to anyone; spouse, father, mother, son, or clast 2 years by any registered election or re-election comcounty clerk of the State of Illinois, or any political action State or the Federal Board of Elections.   | mittee registered with the Secretary of State or any committee registered with either the Secretary of   |
|  | Yes No   |
| Communication Disclosure.  |  |
| Section 2 of this form, who is has communicated, is comemployee concerning the bid or offer. This disclosure is a  | ner agent of the bidder or offeror who is not identified in municating, or may communicate with any State officer or continuing obligation and must be promptly supplemented erm of the contract. If no person is identified, enter "None" |
| Name and address of person(s):   |  |
|  |  |
|  |  |

3.

**4. Debarment Disclosure.** For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

| Name of person(s):   |     |  |  |  |  |  |
|--|-----|--|--|--|--|--|
| Nature of disclosure:  |     |  |  |  |  |  |
| Track of displace of the second of the secon |     |  |  |  |  |  |
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|  |     |  |  |  |  |  |
| ADDU LOADUE OTATEMENT  |     |  |  |  |  |  |
| APPLICABLE STATEMENT  This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Und  | lor |  |  |  |  |  |
| penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of knowledge.  |     |  |  |  |  |  |
| Completed by:  |     |  |  |  |  |  |
| Signature of Individual or Authorized Representative Date  | _   |  |  |  |  |  |
| NOT APPLICABLE STATEMENT   |     |  |  |  |  |  |
| Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.  |     |  |  |  |  |  |
| This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.   |     |  |  |  |  |  |
|  |     |  |  |  |  |  |
| Signature of Authorized Representative Date  | _   |  |  |  |  |  |
|  |     |  |  |  |  |  |

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

## ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Financial Related Information Disclosure

| Contractor Name   |  |   |                |
|---|--|---|----------------|
| Legal Address   |  |   |                |
| City, State, Zip  |  |   |                |
| Telephone Number  | Email Address  | Fax Number (if available)                                   |                |
| Disclosure of the information contained in this information shall become part of the public excess of \$25,000, and for all open-ended DISCLOSURE OF OTHER OF | licly available contract file. This For  | m B must be completed for bi                                | ds             |
| Identifying Other Contracts & Procure has any pending contracts (including leases   | ement Related Information. The Bl<br>s), bids, proposals, or other ongoing<br>No | DDER shall identify whether i procurement relationship with | t              |
| 2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:   |  |   |                |
| THE FOL   | LOWING STATEMENT MUST BE   | CHECKED   |                |
|   | Signature of Authorized Representative   | Date  | _              |
|   |  |   |                |
|   | OWNERSHIP CERTIFICATION  | <u>ON</u>   |                |
| Please certify that the following staten 100% of ownership.   | nent is true if the individuals for all  | submitted Form A disclosures                                | s do not total |
|   | erest is held by individuals receivi<br>outive income or holding less than a     |   | the bidding    |
| ☐ Yes ☐ No ☐ N/A (F   | Form A disclosure(s) established 10  | 0% ownership)   |                |

### **SPECIAL NOTICE TO CONTRACTORS**

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

### CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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



Contract No. 66B84 KENDALL County Section (109,110)R-1 Project ACNCII-0326(093) Route FAP 326 District 3 Construction Funds

| PART I. IDENTIFIC  | ATION                |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
|--|----------------------|------------------------|------------------|--------------------|-----------|----------|--------|----------|----------|------------|--------|-----------------|-----------|----------------|-------------|-----------|---------------|
| Dept. Human Rights   | s #                  |                        |                  |                    |           |          | _ Du   | ration ( | of Proj  | ect: _     |        |                 |           |                |             |           |               |
| Name of Bidder:  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| PART II. WORKFO  A. The undersigned which this contract work projection including a project | bidder hark is to be | as analyz<br>e perform | ed mir<br>ed, an | d for th<br>d fema | ne locati | ons froi | n whic | h the b  | idder re | cruits     | employ | ees, and he     | reby subr | nits the foll  | owir<br>con | ng workfo | n<br>orce     |
|  |                      | TOTA                   | AL Wo            | rkforce            | Projec    | tion for | Contra | ct       |          |            |        |                 |           | CURRENT        |             | -         | ES            |
|  |                      |                        |                  | MIN                | ORITY I   | EMPLO    | YEES   |          |          | TRA        | AINEES | ,               |           | TO BE          |             |           |               |
| JOB<br>CATEGORIES  | EMPL                 | TAL<br>OYEES           |                  | ACK                | HISP      | ANIC     | *OTI   | OR.      | TIC      | REN-<br>ES | ON T   | HE JOB<br>INEES | EMP       | OTAL<br>LOYEES |             | EMPL      | RITY<br>DYEES |
| OFFICIALS  | М                    | F                      | М                | F                  | М         | F        | М      | F        | М        | F          | М      | F               | M         | F              |             | М         | F             |
| (MANAGERS)   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| SUPERVISORS  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| FOREMEN  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| CLERICAL   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| EQUIPMENT<br>OPERATORS   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| MECHANICS  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| TRUCK DRIVERS  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| IRONWORKERS  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| CARPENTERS   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| CEMENT MASONS  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| ELECTRICIANS   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| PIPEFITTERS,<br>PLUMBERS   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| PAINTERS   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| LABORERS,<br>SEMI-SKILLED  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| LABORERS,<br>UNSKILLED   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| TOTAL  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
|  |                      | BLE C                  |                  | , ,                |           |          |        |          | ٦        |            | Ī      | FOR I           | DEPARTI   | MENT USE       | 01          | JLY       |               |
| EMPLOYEES  | OTAL Tra             | aining Pro<br>TAL      | ojectio          | n for C            | ontract   |          | *^1    | HER      | -        |            |        |                 |           |                |             |           |               |
| IN   |                      | OYEES                  | BLA              | ACK                | HISP      | ANIC     |        | NOR.     |          |            |        |                 |           |                |             |           |               |
| TRAINING   | M                    | F                      | M                | F                  | M         | F        | М      | F        | 1        |            |        |                 |           |                |             |           |               |
| APPRENTICES  |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |
| ON THE JOB<br>TRAINEES   |                      |                        |                  |                    |           |          |        |          |          |            |        |                 |           |                |             |           |               |

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

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

Contract No. 66B84 KENDALL County Section (109,110)R-1 Project ACNCII-0326(093) Route FAP 326 District 3 Construction Funds

### PART II. WORKFORCE PROJECTION - continued

|             | B. Included in "Total Employees" under Table A is the total number of <b>new hires</b> 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.  |  |  |  |  |  |  |
|             | 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 II     | I. AFFIRMATIVE ACTION PLAN   |  |  |  |  |  |  |
|             | The undersigned bidder understands and agrees that in the event the foregoing minority and female employe utilization projection included under <b>PART II</b> is determined to be an underutilization of minority persons or wome in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior t commencement of work, develop and submit a written Affirmative Action Plan including a specific timetabl (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employe utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency an the <b>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.  |  |  |  |  |  |  |
| Compa       | ny Telephone Number  |  |  |  |  |  |  |
| Addres      | <br>S  |  |  |  |  |  |  |
|             | NOTICE REGARDING SIGNATURE   |  |  |  |  |  |  |
|             | dder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block need ompleted only if revisions are required.   |  |  |  |  |  |  |
| Signatu     | re: Title: Date:   |  |  |  |  |  |  |
| Instruction | ons: 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 employee (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 trained currently employed.  |  |  |  |  |  |  |
| Table C     | Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.   |  |  |  |  |  |  |
|             | 20 (27)  |  |  |  |  |  |  |

### **ADDITIONAL FEDERAL REQUIREMENTS**

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

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

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

Contract No. 66B84 KENDALL County Section (109,110)R-1 Project ACNCII-0326(093) Route FAP 326 District 3 Construction Funds

### PROPOSAL SIGNATURE SHEET

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

|   | Firm Name              |  |
|---|------------------------|--|
| (IF AN INDIVIDUAL)  | Signature of Owner     |  |
|   | Business Address       |  |
|   |                        |  |
|   |                        |  |
|   | Firm Name              |  |
|   | Ву                     |  |
| (IF A CO-PARTNERSHIP)   | Business Address       |  |
|   |                        |  |
|   |                        | Name and Address of All Members of the Firm:                 |
|   |                        |  |
|   |                        |  |
|   | Corporate Name         |  |
|   | Ву                     | Signature of Authorized Representative                       |
| (IF A CORPORATION)  |                        | Signature of Authorized Representative                       |
|   |                        | Typed or printed name and title of Authorized Representative |
|   |                        |  |
|   | Attest                 | Signature  |
| (IF A JOINT VENTURE, USE THIS SECTION<br>FOR THE MANAGING PARTY AND THE | Rusiness Address       |  |
| SECOND PARTY SHOULD SIGN BELOW)   | Buomeos Address        |  |
|   |                        |  |
|   | Corporate Name         |  |
|   | Ву                     |  |
| (IF A JOINT VENTURE)  |                        | Signature of Authorized Representative                       |
|   |                        | Typed or printed name and title of Authorized Representative |
|   |                        | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,                      |
|   | Attest                 | Signature  |
|   | Duningan Address       | •  |
|   | Business Address       |  |
| If more than two parties are in the joint venture, p                    | olease attach an addit | ional signature sheet.                                       |

### **Return with Bid**



### Division of Highways Annual Proposal Bid Bond

| This Annual Proposal Bid Bond shall become effective at 12:01 AM (CDST) on   | and shall be valid until 11:59 PM (CDST).  |
|--|--|
| KNOW ALL PERSONS BY THESE PRESENTS, That We  |  |
| as PRINCIPAL, and  |  |
| price, or for the amount specified in the bid proposal under "   | ne STATE OF ILLINOIS in the penal sum of 5 percent of the total bid 'Proposal Guaranty" in effect on the date of the Invitation for Bids, d STATE OF ILLINOIS, for the payment of which we bind ourselves,   |
|  | SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to tof Transportation, for various improvements published in the e.  |
| the time and as specified in the bidding and contract document into a contract in accordance with the terms of the bidding ar coverages and providing such bond as specified with good and the prompt payment of labor and material furnished in the prosenter into such contract and to give the specified bond, the P penalty hereof between the amount specified in the bid propo | d proposal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within its; and if, after award by the Department, the PRINCIPAL shall enter and contract documents including evidence of the required insurance I sufficient surety for the faithful performance of such contract and for secution thereof; or if, in the event of the failure of the PRINCIPAL to RINCIPAL pays to the Department the difference not to exceed the sal and such larger amount for which the Department may contract oposal, then this obligation shall be null and void, otherwise, it shall |
| preceding paragraph, then Surety shall pay the penal sum to t<br>Surety does not make full payment within such period of time  | PAL has failed to comply with any requirement as set forth in the he Department within fifteen (15) days of written demand therefor. If e, the Department may bring an action to collect the amount owed. If attorney's fees, incurred in any litigation in which it prevails either in  |
| In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer day of A.D.,   | In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer  day of A.D.,   |
| (Company Name)   | (Company Name)   |
| Ву   | Ву   |
| (Signature and Title)  | (Signature of Attorney-in-Fact)  |
| Notary for PRINCIPAL   | Notary for SURETY  |
| STATE OF   | STATE OF   |
| COUNTY OF  | COUNTY OF  |
| Signed and attested before me on (date)  | Signed and attested before me on (date)  |
| by   |  |
| (Name of Notary Public)  | (Name of Notary Public)  |
| (Seal) (Signature of Notary Public)  | (Seal) (Signature of Notary Public)  |
|  |  |
| (Date Commission Expires)  | (Date Commission Expires)  |

| signing the proposal(s) the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety |
|---|
| are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.                                    |
|   |

In lieu of completing the above section of the Annual Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By

| Electronic Bid Bond ID # | Company/Bidder Name | Signature and Title |
|--------------------------|---------------------|---------------------|

This bond may be terminated, at Surety's request, upon giving not less than thirty (30) days prior written notice of the cancellation/termination of the bond. Said written notice shall be issued to the Illinois Department of Transportation, Chief Contracts Official, 2300 South Dirksen Parkway, Springfield, Illinois, 62764, and shall be served in person, by receipted courier delivery or certified or registered mail, return receipt requested. Said notice period shall commence on the first calendar day following the Department's receipt of written cancellation/termination notice. Surety shall remain firmly bound to all obligations herein for proposals submitted prior to the cancellation/termination. Surety shall be released and discharged from any obligation(s) for proposals submitted for any letting or date after the effective date of cancellation/termination.

## Illinois Department of Transportation

### **Return with Bid**

### Division of Highways Proposal Bid Bond

|  |  | Item No.   |  |
|--|--|--|--|
|  |  | Letting Date   | e  |
| (NOW ALL PERSONS BY THE  | SE PRESENTS, That We   |  |  |
| as PRINCIPAL, and  |  |  |  |
| the amount specified in the bid p  | oroposal under "Proposal Guaranty" i   | in effect on the date of the Invitation for  | of 5 percent of the total bid price, or for<br>r Bids, whichever is the lesser sum, well<br>s, executors, administrators, successors   |
|  |  |  | omitted a bid proposal to the STATE OF rtation Bulletin Item Number and Letting  |
| specified in the bidding and cor<br>with the terms of the bidding and<br>with good and sufficient surety<br>prosecution thereof; or if, in the<br>pays to the Department the diffe | ntract documents; and if, after award contract documents including evide for the faithful performance of such event of the failure of the PRINCIP, rence not to exceed the penalty here ract with another party to perform the | by the Department, the PRINCIPAL sence of the required insurance coverage contract and for the prompt paymen AL to enter into such contract and to go of between the amount specified in the | RINCIPAL shall, within the time and as shall enter into a contract in accordance es and providing such bond as specified t of labor and material furnished in the give the specified bond, the PRINCIPAL bid proposal and such larger amount for nen this obligation shall be null and void, |
| hen Surety shall pay the penal within such period of time, the D   | sum to the Department within fiftee  | n (15) days of written demand therefo<br>ollect the amount owed. Surety is liable  | as set forth in the preceding paragraph, r. If Surety does not make full payment e to the Department for all its expenses,   |
| n TESTIMONY WHEREOF,<br>caused this instrument to be<br>day of   |  | In TESTIMONY WHEREOF, instrument to be signed by its day of  | the said SURETY has caused this sofficer  A.D.,  |
| (Compa   | any Name)  | (Com   | pany Name)   |
| Зу   |  | Ву   |  |
| (Signa   | ature and Title)   |  | e of Attorney-in-Fact)   |
| Notary for PRINCIPAL   |  | Notary for SURETY  |  |
| STATE OF   |  | STATE OF   |  |
| COUNTY OF  |  | COUNTY OF  |  |
| Signed and attested before n   | ne on (date)   | Signed and attested before m   | ne on (date)   |
| (Name of I   | Notary Public)   | (Name o  | f Notary Public)   |
|  |  |  |  |
| (Seal)   |  | (Seal)   |  |
| ,,   | (Signature of Notary Public)   |  | (Signature of Notary Public)   |
|  | (Date Commission Expires)  | _  | (Date Commission Expires)  |
| proposal the Principal is en   |  | oid bond has been executed and   | Electronic Bid Bond. By signing the the Principal and Surety are firmly  |
| Electronic Bid Bond ID #   | Company/Bidder Nan   | ne   | Signature and Title  |



### **DBE Utilization Plan**

### (1) Policy

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

### (2) Obligation

Date

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

| (3) Proj   | ect and Bid Identification   |  |  |  |
|------------|--|--|--|--|
| Complet    | e the following information concerning the project and bid:  |  |  |  |
| Route      |  | Total Bid  |  | _  |
| Section    |  | Contract DBE Goal  |  |  |
| Project    |  |  | (Percent)  | (Dollar Amount)  |
| County     |  |  |  |  |
| Letting D  | Date   |  |  |  |
| Contract   | No   |  |  |  |
| Letting It | tem No.  |  |  |  |
| (4) Assı   | urance   |  |  |  |
|            | in my capacity as an officer of the undersigned bidder (or bidden y company: (check one)  Meets or exceeds contract award goals and has provided door Disadvantaged Business Participation percent  Attached are the signed participation statements, forms SBE use of each business participating in this plan and assuring the work of the contract.  Failed to meet contract award goals and has included good far provided participation as follows:  Disadvantaged Business Participation percent  The contract goals should be accordingly modified or waive support of this request including good faith effort. Also at required by the Special Provision evidencing availability and to business will perform a commercially useful function in the work. | cumented participation as fort  2025, required by the Spectat each business will perfort documentation to ed. Attached is all informatached are the signed pause of each business participation. | ollows:  ial Provision evi m a commercial meet the goals a ation required by | dencing availability and ly useful function in the and that my company has the Special Provision in the ments, forms SBE 2025, |
| -          | Company  | The "as read" Low Bidder is re   | equired to comply wit  | h the Special Provision.   |
| Ву         |  | Submit only one utilization pla submitted in accordance with   |  |  |
| Title      |  | Bureau of Small Business Ent   | erprises   | Local Let Projects   |

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.

2300 South Dirksen Parkway

Springfield, Illinois 62764

Submit forms to the

Local Agency



### **DBE Participation Statement**

| Letting   Participation Statement   Letting   Item No.     Item No. |  | •  |   |  |   |   |
|---|--|--|---|--|---|---|
| (1) Instructions  | Subcontractor  | r Registration Number  |   | Le   | etting  |   |
| 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:  | Participation  | Statement  |   | Ite  | em No.  |   |
| 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.    22    Work:     Please Indicate:    JV  | (1) Instruction  | าร   |   | C  | ontract No.   |   |
| Pay Item No.  Description  Total  (3) Partial Payment Items (For any of the above items which are partial pay items) Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:  (4) Commitment  When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractor intuiting the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 litem(s) listed above and to execute a contract with the prime contractor or 1° Tier subcontractor. 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 Contractor _ 1° Tier _ 2° Tier   | accordance w   | rith the special provision and will be attached to the Utiliz  |   |  |   |   |
| Pay Item No.  Description  Quantity  Unit Price  Total  (3) Partial Payment Items (For any of the above items which are partial pay items) Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:  (4) Commitment When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 or 1 <sup>st</sup> Tier subcontractor. 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 Contractor _ 1 <sup>st</sup> Tier _ 2 <sup>st</sup> Tier  Title   | (2) Work:  |  |   |  |   |   |
| No.   Description   Quantity   Unit Price   Total   | Please indicate  | te: J/V Manufacturer Supplie   | er (60%)  | Subcon   | tractor   | Trucking  |
| (3) Partial Payment Items (For any of the above items which are partial pay items) Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:  (4) Commitment When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 excute a contract with the prime contractor or 1st Tier subcontractor. 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 Contractor1st Tier2st Tier   |  | Description  |   | Quantity   | Unit Price  | Total   |
| (3) Partial Payment Items (For any of the above items which are partial pay items) Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:  (4) Commitment When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 excute a contract with the prime contractor or 1st Tier subcontractor. 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 Contractor1st Tier2st Tier   |  |  |   |  |   |   |
| (3) Partial Payment Items (For any of the above items which are partial pay items) Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:  (4) Commitment When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 excute a contract with the prime contractor or 1st Tier subcontractor. 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 Contractor1st Tier2st Tier   |  |  |   |  |   |   |
| (3) Partial Payment Items (For any of the above items which are partial pay items) Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:  (4) Commitment When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 excute a contract with the prime contractor or 1st Tier subcontractor. 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 Contractor1st Tier2st Tier   |  |  |   |  |   |   |
| (3) Partial Payment Items (For any of the above items which are partial pay items) Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:  (4) Commitment When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 excute a contract with the prime contractor or 1st Tier subcontractor. 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 Contractor1st Tier2st Tier   | <u> </u>   |  |   |  | l<br>Total  |   |
| When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 or 1st increase in the participation of the contract item(s) listed above and to execute a contract with the prime contractor or 1st increase in the contract item in the work of the contract item is subcontractor. 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 Contractor1st Tier2st Tier2st Tier2st Tier  |  |  |   |  |   | ct dollar amount:   |
| When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.  In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.  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 or 1st increase in the participation of the contract item(s) listed above and to execute a contract with the prime contractor or 1st increase in the contract item in the work of the contract item is subcontractor. 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 Contractor1st Tier2st Tier2st Tier2st Tier  |  |  |   |  |   |   |
| Date  Contact Person  Contact Person  Phone  Firm Name  Address  Address  City/State/Zip  City/State/Zip  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 will result in the contract not being awarded. This form has been  | When a DBE subcontract, it In the event a contract, the part of the undersign perform a contractor or approval actual work performs. | is to be a second-tier subcontractor, or if the first-tier DE t must be clearly indicated on the DBE Participation Star DBE subcontractor second-tiers a portion of its subcontractor must submit a DBE Participation Statement, with the different submit a DBE Participation Statement, with the different subcontraction included herein is true an animercially useful function in the work of the contract iter 1st Tier subcontractor. The undersigned further understar from the Department's Bureau of Small Business Entererformed on this project and the payment therefore must | tement, a<br>tract to or<br>the details<br>and correct<br>an(s) listed<br>and that r<br>prises ar | and the details of the or more subcons of the transactions, and that the DBE dabove and to exemple to changes to this and that complete and the ded to the Departing | ne transaction fully tractors during the n(s) fully explained firm listed below to the cute a contract with statement may be not accurate informment. | explained.  work of a  nas agreed to h the prime made without ation regarding |
| Date  Contact Person  Contact Person  Phone  Firm Name  Address  Address  City/State/Zip  City/State/Zip  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 will result in the contract not being awarded. This form has been  | Title  |  | Title   |  |   |   |
| Contact Person  Phone Phone Firm Name Address Address City/State/Zip City/State/Zip  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   |  |  |   |  |   |   |
| Phone Phone Firm Name Firm Name Address  City/State/Zip City/State/Zip City/State/Zip  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   |  |  |   | ant Dayson   |   |   |
| Firm Name  Address  City/State/Zip  City/State/Zip  City/State/Zip  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  |  |  |   |  |   |   |
| Address  City/State/Zip  City/State/Zip  City/State/Zip  E  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  |  |  | _   |  |   |   |
| City/State/Zip  City/State/Zip  E  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 <b>REQUIRED</b> . Failure to provide any information will result in the contract not being awarded. This form has been   |  |  |   |  |   |   |
| 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 <b>REQUIRED</b> . Failure to provide any information will result in the contract not being awarded. This form has been  |  |  |   |  |   |   |
| 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 <b>REQUIRED</b> . Failure to provide any information will result in the contract not being awarded. This form has been  | City/State/Zip   |  | City/S  | State/Zip  |   |   |
| federal law. Disclosure of this information is <b>REQUIRED</b> . Failure to provide any information will result in the contract not being awarded. This form has been   |  |  |   |  |   |   |
|   | federal law. Disclosur   | re of this information is REQUIRED. Failure to provide any information will result in the o  | statutory purpo<br>contract not be  | ose as outlined under the stating awarded. This form has   | e and   |   |

### PROPOSAL ENVELOPE



### **PROPOSALS**

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

| Item No. | Item No. | Item No. |
|----------|----------|----------|
|          |          |          |
|          |          |          |
|          |          |          |
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|          |          |          |
|          |          |          |

### Submitted By:

| lame:     |  |
|-----------|--|
| address:  |  |
|           |  |
|           |  |
| Phone No. |  |

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

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

### **NOTICE**

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

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

### **NOTICE**

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

Contract No. 66B84
KENDALL County
Section (109,110)R-1
Project ACNCII-0326(093)
Route FAP 326
District 3 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

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 2012.
- (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.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

### B. Felons

Section 50-10. Felons.

- (a) 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.
- (b) 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. <u>Debt Delinquency</u>

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

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.

Name of Subcontracting Company

Authorized Officer

Date

The undersigned, on behalf of the subcontracting company, has read and

### SUBCONTRACTOR DISCLOSURES

#### I. DISCLOSURES

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

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

### B. Financial Interests and Conflicts of Interest

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### ILLINOIS DEPARTMENT OF TRANSPORTATION

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

| Subcontractor Name |               |                           |
|--------------------|---------------|---------------------------|
| Legal Address      |               |                           |
| 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.

FOR INDIVIDUAL (type or print information)

### DISCLOSURE OF FINANCIAL INFORMATION

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

| NAN           | re-  |
|---------------|--|
| NAM           |  |
| ADD           | RESS   |
|               |  |
| Туре          | of ownership/distributable income share:   |
| stock<br>% or | sole proprietorship Partnership other: (explain on separate shee   |
|               |  |
|               | sure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following onflict of interest relationships apply. If the answer to any question is "Yes", please attach additional describe.   |
| (a) State e   | mployment, currently or in the previous 3 years, including contractual employment of services.  YesNo  |
| If your a     | 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?  YesNo  |
| 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 t salary exceeds 60% of the annual salary of the Governor, are yo (i) more than 7 1/2% of the total distributable income of your corporation, or (ii) an amount in excess of 100% of the annual salary   | ou entitled to receive firm, partnership, association or  |
|-----|---------------|---|---|
|     | 4.            | If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are your minor children entitled to receive (i) more than 15% in the income of your firm, partnership, association or corporation, or the salary of the Governor?                                     | ou and your spouse aggregate of the total distributable   |
| (b) |               | employment of spouse, father, mother, son, or daughter, includir previous 2 years.  | ng contractual employment services  YesNo   |
|     | If            | your answer is yes, please answer each of the following question  |   |
|     | 1.            | Is your spouse or any minor children currently an officer or empl<br>Board or the Illinois State Toll Highway Authority?  | oyee of the Capitol Development<br>YesNo  |
|     |               | Is your spouse or any minor children currently appointed to or er of Illinois? If your spouse or minor children is/are currently agency of the State of Illinois, and his/her annual salary ex annual salary of the Governor, provide the name of your spouse of the State agency for which he/she is employed and his/her an     | appointed to or employed by any ceeds 60% of the and/or minor children, the name                  |
|     | 3.            | If your spouse or any minor children is/are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you entitled to receive (i) more than 71/2% of the total distribution, partnership, association or corporation, or (ii) an amount annual salary of the Governor?                           | nnual salary of the Governor,<br>utable income of your  |
|     | 4.            | If your spouse or any minor children are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you and your spouse or minor children entitled to receive aggregate of the total distributable income of your firm, partner (ii) an amount in excess of two times the salary of the Governor? | nual salary of the Governor,<br>(i) more than 15 % in the<br>ship, association or corporation, or |
| (-) | <b>-</b> 1    |   | YesNo   |
| (C) | unit of       | ve status; the holding of elective office of the State of Illinois, the glocal government authorized by the Constitution of the State of Illicurrently or in the previous 3 years.  |   |
| (d) |               | onship to anyone holding elective office currently or in the previour daughter.   | s 2 years; spouse, father, mother,<br>YesNo   |
| (e) | Americ of the | ntive office; the holding of any appointive government office of the ca, or any unit of local government authorized by the Constitution State of Illinois, which office entitles the holder to compensation is charge of that office currently or in the previous 3 years.  | of the State of Illinois or the statutes  |
|     |               | onship to anyone holding appointive office currently or in the previous daughter.   | ous 2 years; spouse, father, mother,<br>YesNo   |
| (g) | Emplo         | yment, currently or in the previous 3 years, as or by any registere   | d lobbyist of the State government. YesNo   |

| (h) Relationship to anyone who is or was a registered lobbyist son, or daughter.   | in the previous 2 years; spouse, father, mother, YesNo   |
|--|--|
| (i) Compensated employment, currently or in the previous 3 y committee registered with the Secretary of State or any contact action committee registered with either the Secretary of States   | ounty clerk of the State of Illinois, or any political   |
| (j) Relationship to anyone; spouse, father, mother, son, or data last 2 years by any registered election or re-election common county clerk of the State of Illinois, or any political action of State or the Federal Board of Elections.  | ttee registered with the Secretary of State or any ommittee registered with either the Secretary of    |
|  | YesNo  |
| Communication Disclosure.  |  |
| Disclose the name and address of each lobbyist and other a Section 2 of this form, who is has communicated, is communic employee concerning the bid or offer. This disclosure i supplemented for accuracy throughout the process and throidentified, enter "None" on the line below: | eating, or may communicate with any State officer or<br>s a continuing obligation and must be promptly |
| Name and address of person(s):   |  |
|  |  |
|  |  |

3

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

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

### ILLINOIS DEPARTMENT OF TRANSPORTATION

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

| Subcontractor Name   |   |  |           |
|--|---|--|-----------|
| Legal Address  |   |  |           |
| City, State, Zip   |   |  |           |
| Telephone Number   | Email Address                             | Fax Number (if available)                          |           |
| Disclosure of the information contained in information shall become part of the publicl a total value of \$50,000 or more, from subcontracts.                          | y available contract file. This Form      | B must be completed for subcontracts               | with      |
| DISCLOSURE OF OTHER CONTRA   | CTS, SUBCONTRACTS, AND PR                 | OCUREMENT RELATED INFORMATION                      | <u>NC</u> |
| 1. Identifying Other Contracts & Procure any pending contracts, subcontracts, includ any other State of Illinois agency: Ye If "No" is checked, the subcontractor only | ing leases, bids, proposals, or othe s No | r ongoing procurement relationship with            |           |
| 2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:  |   |  | )         |
| THE FOLLO  | WING STATEMENT MUST BE CH                 | ECKED  |           |
| THE FOLLS  | WING STATEMENT MOST BE CIT                | LOKED  |           |
|  |   |  |           |
| •  | Signature of Authorized Officer           | Date   |           |
|  |   |  |           |
|  | OWNERSHIP CERTIFICATION                   | Į.   |           |
| Please certify that the following statement is of ownership  | s true if the individuals for all submi   | tted Form A disclosures do not total 100           | )%        |
| Any remaining ownership interest is<br>parent entity's distributive income o   |   | han \$106,447.20 of the bidding entity's interest. | or        |
| ☐ Yes ☐ No ☐ N/A (Form   | A disclosure(s) established 100% of       | ownership)   |           |

## Illinois Department of Transportation

### **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (ics-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.mNovember 21, 2014. 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. 66B84
KENDALL County
Section (109,110)R-1
Project ACNCII-0326(093)
Route FAP 326
District 3 Construction Funds

7.02 miles of roadway reconstruction consisting of adding two lanes in each direction on IL 47, new median and outside and inside paved shoulders, also culvert work and new traffic signals, beginning at Sherrill Rd. and continuing to Caton Farm Rd. in Kendall County.

- 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

Erica J. Borggren, Acting Secretary

FAP Route 326 (IL 47) Project ACNCII-0326(093) Section (109, 110)R-1 Kendall County Contract 66B84

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

### Adopted January 1, 2014

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 1-1-14)

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FAP Route 326 (IL 47) Project ACNCII-0326(093) Section (109, 110)R-1 Kendall County Contract 66B84

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FAP Route 326 (IL 47) Project ACNCII-0326(093) Section (109, 110)R-1 Kendall County Contract 66B84

### **RECURRING SPECIAL PROVISIONS**

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

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# STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction, Adopted January 1, 2012", the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of FAP Route 326 (IL 47), Project ACNCII-0326(093), Section (109, 110)R-1, Kendall County, Contract 66B84 and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### **CONTRACT 66B84**

#### **LOCATION OF PROJECT**

This project is located four miles north of Interstate 80 along IL 47 in Kendall County. It begins approximately 200 feet north of Sherrill Road and extends northerly to approximately 50 feet south of Caton Farm Road, a distance of 7.0 miles.

#### **DESCRIPTION OF PROJECT**

The work consists of completely reconstructing IL 47 into a four lane facility with a 32 foot depressed median. A rural cross section, including eight foot paved and two foot aggregate outside shoulders and four foot paved and two foot aggregate inside shoulders with open drainage will be provided. Major work items include PCC pavement and shoulders, HMA pavement, box culvert replacement, traffic signal installation, earthwork, tree removal, pavement removal, pavement marking, and all other work to complete the project.

#### QUALITY CONTROL LABORATORY FOR CONCRETE MIXTURES

Revise Article 1020.16(c)(2) of the Special Provision for Quality Control/Quality Assurance of Concrete Mixtures (BDE) to read:

"(2) Required Plant Tests. Sampling and testing shall be performed at the plant to control production of a mixture. The required minimum Contractor plant sampling and testing is indicated in Article 1020.16(g) Schedule A."

Add to the end of the second paragraph of Article 1020.16(f)(1) of the Special Provision for Quality Control/Quality Assurance of Concrete Mixtures (BDE):

"Reporting of above documents shall be done using the Department's electronic reporting system, QC/QA Excel Package."

#### **GRANULAR MATERIALS**

(Effective: November 26, 2013)

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 $\pm$ 2."

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

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

Application

Blotter

Granular Embankment, Granular Backfill, and Bedding

CA 15

CA 6, CA 9, CA 10, CA 12, CA17, CA18, and CA 19

Porous Granular Embankment, Porous CA 7, CA 8, CA 11, CA 15, CA 16 and

Granular Backfill, and French Drains CA 18

Trench Backfill and Bedding for Pipe CA 6, CA 7<sup>1</sup>/, CA 9, CA 10, CA 11<sup>1</sup>/, CA 12,

Culverts and Storm Sewers CA17, CA18, and CA 19

1/ For gradations CA 7 or CA 11, lifts may exceed 8 in. (200mm) in depth provided the material is seated to the satisfaction of the Engineer.

# STATUS OF UTILITIES TO BE ADJUSTED:

(Effective January 1, 2007; Revised January 24, 2011)

|   |  | i '   | F () ( 1 D (  |
|---|--|---|---|
| Name & Address of Utility   | <u>Type</u>                                  | Location  | Estimated Date Relocation Complete  |
| Nicor Gas Company<br>1844 Ferry Road<br>Naperville, IL 60563<br>(Nicor Ref# SC9417-A)   | Buried gas<br>(Various Size)                 | Throughout Project Along East Side of Existing II 47                                | Conflicts throughout. Permit required.  |
| AT&T<br>1000 Commerce Drive<br>Oak Brook, IL 60523  | Buried<br>Telephone                          | Entire Project Length at Various Locations  | Conflicts throughout. Permit required.  |
| ComEd, An Exelon Company<br>Two Lincoln Centre, 8 <sup>th</sup> Floor<br>Oakbrook Terrace, IL 60181<br>(CE Ref# H12722JOL)<br>(CE WO# 7886482, 7899729,<br>7899811, 7899812, 7899814) | Overhead<br>Eelectric                        | Along west side of IL 47 from Joliet Rd to Caton Farm Rd and along all cross Roads. | Overhead conflicts at various locations. Permits pending.  Proposed underground electric in conduit to cross under IL 47 at several locations. Permit pending.  Overhead transmission Line crossing IL 47 at Sta.6426, just north of Townhall Rd. No conflicts anticipated. |
| Northern Border Pipeline Co.<br>13710 FNB Parkway<br>Omaha, NE 68154  | 36" Pipeline<br>(Heavy Wall)<br>MP IL-103.32 | Crossing IL 47 at Sta. 6284+55 Just North of Sherrill Rd.                           | No conflicts. Contractor to coordinate with pipeline company when working in area near pipeline.  |

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Section 102 and Articles 105.07, 107.20, 107.37, 107.38, 107.39, 107.40, and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The estimated utility relocation dates should be part of the progress schedule submitted by the Contractor.

\*\* Above utility relocation information reflected as of August 12, 2014, relocation complete dates are unknown at this time due to right of way acquisitions. Utility relocations are anticipated to be complete by approximately May 1, 2015. Per SB 699 (90 day utility relocation law), once the proposed right of way is clear to award the project, a notice will be sent to the utility companies instructing them to make arrangements to have their facilities relocated within 90 days.

# **DUST CONTROL--HAULING EARTH, GRANULAR MATERIALS OR WASTE MATERIAL** (Effective November 16, 1993)

In addition to the general requirements of Section 107 of the Standard Specifications, the Contractor shall be required to prepare a plan for pavement cleaning and dust control for this project. A detailed plan outlining specific wetting, tarping, and/or cleaning procedures, or similar dust control methods is to be submitted for approval at the preconstruction meeting.

As required by Chapter 95 1/2, paragraphs 15-109 and 15-109.1 of the Illinois Vehicle Code, no blowing or spillage of material will be allowed during the hauling operations. The specific preventative measures proposed by the Contractor are to be included in the dust control plan.

If, in the opinion of the Engineer, excessive dust is produced during the hauling operations, the hauling shall stop until corrective action is taken.

Approval of the dust control and pavement cleaning procedures will not relieve the Contractor of his responsibility to provide a safe work zone for the traveling public.

No additional compensation will be allowed for dust alleviation.

#### **WETLAND AREAS**

(Effective April 3, 1997; Revised April 22, 2010)

<u>Description</u>: According to Federal Executive Order 11990, dated May 24, 1977, and Articles 107.01 and 107.23 of the Standard Specifications, the Contractor shall protect the wetland areas on or adjacent to this project.

This work shall consist of constructing, maintaining, removing, and disposing of a temporary fence, perimeter erosion barrier, and signs as shown on the plans and as described herein.

<u>Materials</u>: Temporary fence shall be a minimum of 4 ft. (1.2 m) in height and shall be a high visibility orange snow fence. Fence stakes shall meet the requirements of Article 1081.15(b) of the Standard Specifications.

Perimeter erosion barrier shall meet the requirements of Section 280 of the Standard Specifications.

Signs shall meet the requirements of Article 720.02 of the Standard Specifications and shall be 9" x 12" (225 mm x 300 mm) and shall read "Federally Protected Wetlands: KEEP OUT." Sign supports shall meet the requirements of Section 1093 of the Standard Specifications.

<u>Construction Requirements</u>: The Contractor shall install fence at all wetland areas as shown on the plans. The Contractor shall also install a minimum of two signs at each wetland location. Signs shall not be spaced greater than 300' (100 m) apart.

The Contractor shall remove the temporary fence at the completion of the project.

<u>Method of Measurement</u>: The temporary fence will be measured for payment in place in feet (meters) along the top of the fence. The signs, sign supports, and fence stakes will not be measured for payment.

Perimeter erosion barrier will be measured for payment according to Article 280.07 of the Standard Specifications.

<u>Basis of Payment</u>: The temporary fence will be paid for at the contract unit price per foot (meter) for TEMPORARY FENCE, which price shall include the cost of the snow fence, fence stakes, signs, and sign supports.

Perimeter erosion barrier will be paid for according to Article 280.08 of the Standard Specifications.

# **COOPERATION BY CONTRACTOR**

(Effective February 7, 2013)

Replace the 3<sup>rd</sup> paragraph of Article 105.06 with the following:

At the preconstruction meeting, the Contractor shall identify one superintendent, who will act as his agent for the entire duration of the project. This shall be a competent, English-speaking person, who will be at the project site at all times when the Contractor or Subcontractor is present. He or she must be capable of reading and thoroughly understanding the plans and specifications and be thoroughly experienced in the type of work being performed. The superintendent, who shall receive instructions from the Engineer or authorized representatives, shall have full authority to execute orders or directions of the Engineer without delay, and to promptly supply such materials, equipment, tools, labor and incidentals as may be required.

# **BORROW AND FURNISHED EXCAVATION**

(Revised January 1, 2010)

In addition to the requirements of Section 204 of the Standard Specifications for suitable materials, the following restrictions shall apply:

- 1. The moisture content of the material as it is incorporated into the embankment shall be between 80% to 110% of AASHTO T99 optimum.
- 2. A 3 ft. (1 m) minimum cover of other suitable material shall be maintained outside of and on top of the embankment.

- 3. If the liquid limit of the material is greater than or equal to 50, the material shall not be used for capping, shall not be placed within 20 feet of any structure, and shall not be placed in locations where it may come into contact with water.
- 4. Embankment capping material (as outlined in #2) shall meet non-frost susceptibility criteria as outlined in the statewide Geotechnical Manual. Materials are considered frost susceptible when the soil contains at least 65% silt and sand content, according to AASHTO T88 and the Plasticity Index is less than 12.

#### **EMBANKMENT**

(Effective July 1, 1990; Revised January 1, 2007)

This work shall be performed in accordance with Section <u>205</u> of the Standard Specifications except that 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.

Topsoil material shall not be placed in the embankment within 12 in. (300 mm) of high type base and surface courses.

#### **MULCH METHOD 2**

(Effective August 1, 1994; Revised January 1, 2007)

Article 251.03 Method 2 Procedure 1 of the Standard Specifications shall be required for this improvement.

#### **ROCKFILL - FOUNDATION**

Effective: June 25, 2003 Revised: January 1, 2007

This work consists of constructing a layer of rockfill below culverts or spread footings having unstable or unsuitable soil conditions. This work shall be done as shown on the plans or as directed by the Engineer. When shown on the plans, the rockfill limits and thickness shall be confirmed by the Engineer prior to excavating below the theoretical top of rockfill line.

Materials shall meet the requirements of the following Articles of the Standard Specifications:

| CA-6 and CA-7     | <br>1004.04              |
|-------------------|--------------------------|
| Rockfill          | <br>1005.01              |
| Geotextile Fabric | <br>1080.02 <sup>a</sup> |

<sup>&</sup>lt;sup>a</sup> Geotextile Fabric shall be woven, with a minimum weight of 6 oz/sq yd (210 mL/sq m) for rockfill layers exceeding 1 ft thick.

All rockfill shall be well graded. The gradation of rockfill shall be selected based on layer thickness as shown below:

| Less than or equal to 1 ft | <br>Gradations with a max size of 4 inches <sup>b</sup> |
|----------------------------|---|
| (1 m)                      | (100 mm)  |
| Between 1 ft and 3 ft      | <br>Primary Crusher Run                                 |
| (300 mm and 900 mm)        |   |
| Greater than 3 ft          | <br>Primary Crusher Run or Shot Rock (18" max size)     |
| (900 mm)                   | (450 mm)  |

<sup>&</sup>lt;sup>b</sup>Gradations with a maximum size of 2 inches (50 mm) or smaller shall have less than 6% passing the No. 200 (75 micron) sieve.

Excavation shall be performed according to Section 202 of the Standard Specifications. Excavated material may be placed in fills according to Article 202.03 with the approval of the Engineer.

When shown on the plans or directed by the Engineer, geotechnical fabric shall be placed according to Article 210.03. Rockfill shall be placed on fabric according to Article 210.04. When no fabric is required, the method of rockfill placement shall be approved by the Engineer. Rockfill shall be capped according to application as shown below:

| Spread Footing             | <br>4 to 6 inches (100 to 150 mm) CA-6                |
|----------------------------|---|
| Cast-In-Place Box Culverts | <br>4 to 6 inches (100 to 150 mm) CA-7                |
| Pre-Cast Box Culverts      | <br>Porous Granular Bedding Material (Article 540.06) |

In spread footing applications, the CA-6 cap shall be compacted to the satisfaction of the Engineer. No compaction of rockfill is required for culvert applications.

This work shall be measured and paid for at the contract unit price per ton (metric ton) for ROCKFILL - FOUNDATION, and per square yard (square meter) for GEOTECHNICAL FABRIC FOR GROUND STABILIZATION. The contract price for ROCKFILL-FOUNDATION shall include excavation, aggregate materials, aggregate material placement, and placement of excavated materials within right-of-way or disposal off right-of-way. Excavation will not be measured or paid for separately or as part of EARTH EXCAVATION. For precast concrete box culverts, porous granular bedding material and the excavation required for bedding shall be paid for according to Article 540.08.

# AGGREGATE SUBGADE IMPROVEMENT (DISTRICT 3)

(Effective April 1, 2012; Revised January 1, 2013)

Add the following Section to the Standard Specifications:

# "SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

**303.01 Description.** This work shall consist of constructing an aggregate subgrade improvement.

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

| Item  | Article/Section |
|---|-----------------|
| (a) Coarse Aggregate                                      | 1004.06         |
| (b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2, and 3). | 1031            |

- Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01 or CS 02 but shall not exceed 40 percent of the total product. The top size of the RAP shall be less than 4 in. (100 mm) and well graded.
- Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01 or CS 02 are used in lower lifts. The RAP shall not be gap graded, single sized, or have a maximum size of less than 3/4 in. (19 mm).
- Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- **303.03 Equipment.** The vibratory machine shall be according to Article 1101.01 or as approved by the Engineer.
- **303.04 Soil Preparation.** The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.
- **303.05 Placing Aggregate.** The maximum nominal lift thickness of aggregate gradations CS 01 and CS 02 shall be 24 in. (600 mm).
- **303.06 Capping Aggregate.** The top surface of the aggregate subgrade shall consist of a minimum 3 inches (75 mm) of aggregate gradations CA 06 or CA 10.
- **303.07 Compaction.** All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

- **303.08 Finishing and Maintenance of Aggregate Subgrade Improvement.** The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.
- **303.09 Method of Measurement.** This work will be measured for payment according to Article 311.08.
- **303.10** Basis of Payment. This work will be paid for at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified."

Add the following to Section 1004 of the Standard Specifications:

- "1004.06 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.
  - (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.
  - (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
  - (c) Gradation.
    - (1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 inches (300 mm) shall be CS 02.

The coarse aggregate gradation for total subgrade thickness more than 12 inches (300 mm) shall be CS 01 or CS 02.

|          | COARSE AGGREGATE SUBGRADE      |        |         |         |         |
|----------|--------------------------------|--------|---------|---------|---------|
| Crad Na  | Sieve Size and Percent Passing |        |         |         |         |
| Grad No. | 8"                             | 6"     | 4"      | 2"      | #4      |
| CS 01    | 100                            | 97 ± 3 | 90 ± 10 | 45 ± 25 | 20 ± 20 |
| CS 02    |                                | 100    | 80 ± 10 | 25 ± 15 |         |

|          | COARSE AGGREGATE SUBGRADE GRADATIONS |        |         |         |         |
|----------|--------------------------------------|--------|---------|---------|---------|
| Grad No. | Sieve Size and Percent Passing       |        |         |         |         |
| Grau No. | 200 mm                               | 150 mm | 100 mm  | 50 mm   | 4.75 mm |
| CS 01    | 100                                  | 97 ± 3 | 90 ± 10 | 45 ± 25 | 20 ± 20 |
| CS 02    |                                      | 100    | 80 ± 10 | 25 ± 15 |         |

(2) The 3 inch (75 mm) capping aggregate shall be gradation CA 6 or CA 10."

# AGGREGATE SURFACE COURSE, TYPE B

(Effective January 1, 2007)

Add the following to Article 402.07 of the Standard Specifications:

The top layer shall be given a final rolling with a roller meeting the requirements of Article 1101.01.

# HOT-MIX ASPHALT SURFACE COURSE, CUT OFF DATE

(Effective January 1, 2007)

Placement of Hot-Mix Asphalt Surface Course will not be permitted after October 15 unless approved, in writing, by the Engineer.

# **HOT-MIX ASPHALT - PRIME COAT**

(Effective: January 1, 2012, Revised: August 1, 2013)

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

"Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table. When more than one type is shown for a particular application, the Engineer reserves the right to specify the type which shall be used.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application Bituminous Material Types

Prime Coat on Brick, Concrete, or SS-1, SS-1h, SS-1hP, SS-1vh, CSS-1,

HMA Bases CSS-1h, CSS-1hP, HFE-90, RC-70

Prime Coat on Aggregate Bases MC-30, PEP"

Revise Article 406.05(b) of the Standard Specifications to read:

- "(b) Prime Coat. The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C)."
  - "(1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping and vacuuming or sweeping and air blasting methods, as approved by the Engineer. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed

Residual Asphalt Rate lb/sq ft (kg/sq m) 0.05

Milled HMA, Aged Non-Milled HMA, Milled Concrete, Non-Milled Concrete & Tined Concrete Fog Coat between HMA Lifts, IL-4.75 & Brick

0.025

The bituminous material for the prime coat shall be placed one lane at a time. The primed lane shall remain closed until the prime coat is fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

(2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft  $\pm$  0.01 (1.21 kg/sq m  $\pm$  0.05).

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pick up under traffic.

The asphalt binder rate will be verified a minimum of once per application type consisting of at least 2000 tons of HMA according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time.

Prime coat shall be placed no more than five days in advance of the placement of HMA. If after five days loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

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

"Aggregate for covering prime coat will not be measured for payment."

Revise the first paragraph of Article 406.14 of the Standard Specifications to read:

"Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) or NON-TRACKING BITUMINOUS MATERIALS (PRIME COAT)."

Revise Article 1032.02 of the Standard Specifications to read:

"1032.02 Measurement. Asphalt binders, emulsified asphalts, rapid curing liquid asphalt, medium curing liquid asphalts, slow curing liquid asphalts, asphalt fillers, and road oils will be measured by weight.

A weight ticket for each truck load shall be furnished to the inspector. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

When emulsion is used, the proportions of emulsion and any water added to the emulsion shall be shown on the Bill of Lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer."

Add the following to the table in article 1032.04 of the Standard Specifications:

| "SS-1vh | 160 - 180 | 70 – 80" |
|---------|-----------|----------|
|---------|-----------|----------|

Add the following to Article 1032.06 of the Standard Specifications:

# "(g) Non Tracking Emulsified Asphalt SS-1vh:

| Requirements for SS-1vh           |           |           |                    |  |
|-----------------------------------|-----------|-----------|--------------------|--|
| Test                              |           | SPEC      | AASHTO Test Method |  |
| Saybolt Viscosity @ 25C,          | SFS       | 20-200    | T 72               |  |
| Storage Stability, 24hr.,         | %         | 1 max.    | T 59               |  |
| Residue by Evaporation,           | %         | 50 min.   | T 59               |  |
| Sieve Test,                       | %         | 0.3 max.  | T 59               |  |
| Tests on Residue from Evaporation |           |           |                    |  |
| Penetration @25°C, 100g., 5 s     | sec., dmm | 20 max.   | T 49               |  |
| Softening Point,                  | °C        | 65 min.   | T 53               |  |
| Solubility,                       | %         | 97.5 min. | T 44               |  |
| Orig. DSR @ 82°C,                 | kPa       | 1.00 min. | T 315"             |  |

Revise the last table of Article 1032.06 to read:

| "Grade                           | Use                                |
|----------------------------------|------------------------------------|
| SS-1, SS-1h, CSS-1, CSS-1h, HFE- | Prime or fog seal                  |
| 90, SS-1hP, CSS-1hP, SS-1vh      |                                    |
| PEP                              | Bituminous surface treatment prime |
| RS-2, HFE-90, HFE-150, HFE- 300, | Bituminous surface treatment       |
| CRSP, HFP, CRS-2, HFRS-2         |                                    |
| CSS-1h Latex Modified            | Microsurfacing"                    |

# STRINGLESS CONSTRUCTION OPTION

(Effective March 15, 2012)

If the Contractor desires to perform construction using stringless operations, (s)he shall request authorization from the Engineer according to the last paragraph of Article 108.06 of the Standard Specifications. The Contractor shall submit the written request one week prior to beginning stringless operations.

<u>Construction Requirements</u>. Use of a stringless machine shall not relieve the Contractor of any responsibilities stated in the Recurring Special Provision Construction Layout Stakes Except for Bridges or Construction Layout Stakes.

Any Department or Contractor layout destroyed by the Contractor's operations shall be reestablished by the Contractor as directed by the Engineer.

The Contractor shall mark the projected path of the stringless paver with paint two days prior to the beginning of the paving operations.

When a system failure occurs during paving operations the following shall apply:

HMA – For HMA pavement, the Contractor will be allowed to lay material as described for a sudden rain event in Article 406.06(c) of the Standard Specifications after which operations shall stop until the system is proven to be in working order.

PCC – For PCC pavement, the Contractor shall immediately stop operations until the system is proven to be in working order.

# PERMANENT SURVEY MARKERS, TYPE I

(Effective July 1, 1990; Revised January 1, 2007)

Survey markers shall be installed according to Highway Standard 667101, except that the tablet shall be bronze instead of aluminum.

When a survey marker is used to reference a land survey point, the lettering referring to the State of Illinois and the Division of Highways shall be omitted and the marker shall be marked as directed by the Engineer.

# UNPUBLISHED TELEPHONE NUMBERS FOR ENGINEER'S FIELD OFFICE

(Effective March 21, 2002; Revised January 1, 2012)

Add the following sentence to the end of Paragraphs 670.02(i)(2) and 670.04(f)(2):

All of the telephone lines provided shall have unpublished numbers.

# PIPE UNDERDRAINS 4" (MODIFIED)

(Effective January 1, 2010)

Description. This work consists of constructing pipe underdrains according to the applicable portions of Section 601 of the Standard Specifications and Highway Standard 601001.

Materials. The pipe underdrain material used shall meet the requirements of AASHTO M 252-96 except the pipe shall have a slot width of 0.07 in. ± 0.01 in. (1.75 mm ± 0.25 mm). The number of slots and the slot length may be modified to maintain the inlet flow specified in AASHTO M 252-96. Fabric around the pipe is not allowed.

The backfill material shall meet the requirements of Section 1003 of the Standard Specifications for a FA-4 Natural Sand or Gravel and meet the following gradation requirements:

| Sieve Size                     | Percent Passing |
|--------------------------------|-----------------|
| 3/8" (9.5 mm)<br>No. 10 (2 mm) | 100<br>10+10    |
| No. 16 (1.18 mm)               | 5±5             |
| No. 200 (75 um)                | 1±1             |

Method of Measurement. Backfill material will not be paid for separately, but shall be included in the unit cost of the underdrain.

Basis of Payment. This work will be paid at the contract unit price per foot (meter) for PIPE UNDERDRAINS 4" (MODIFIED) (PIPE UNDERDRAINS 100MM, MODIFIED).

#### **CELLULAR PHONES**

(Effective March 1, 2007; Revised January 1, 2012)

Add the following to Article 670.02 of the Standard Specifications:

Three (3) cellular phones for the exclusive use of the Engineer. (s)

Each cellular phone shall be compatible with the current Department cellular phone network and shall have the following:

- A minimum of 500 anytime minutes per month,
- Free unlimited mobile to mobile minutes,
- Free incoming calls,
- Free Nationwide long distance,
- No roaming charges for calls within the continental United States,
- Free walkie-talkie minutes,
- Free off-network walkie-talkie service,
- Voice Mail, and
- Speaker Phone

#### TRAFFIC CONTROL PLAN

(Revised July 29, 2014)

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards herein and in the plans.

Special attention is called to the following sections of the Standard Specifications, the Highway Standards, and the special provisions relating to traffic control:

#### Standard Specifications:

Section 701 - Work Zone Traffic Control and Protection

Section 703 - Work Zone Pavement Marking

Section 704 - Temporary Concrete Barrier

Section 780 - Pavement Striping

Section 781 - Raised Reflective Pavement Markers

Section 783 - Pavement Marking and Marker Removal

Section 862 - Uninterruptable Power Supply

Section 1106 – Work Zone Traffic Control Devices

# ERRATA Standard Specifications for Road and Bridge Construction

# Supplemental Specifications:

Section 701 – Work Zone Traffic Control and Protection

Section 706 – Impact Attenuators, Temporary

Section 780 - Pavement Striping

Section 1095 – Pavement Markings

Section 1106 – Work Zone Traffic Control Devices

# Highway Standards:

| 701001  | 701006  | 701011  | 701101 | 701106 | 701201 |
|---------|---------|---------|--------|--------|--------|
| 701301  | 701306  | 701311  | 701326 | 701400 | 701401 |
| 701421  | 701422  | 701602  | 701701 | 701901 | 704001 |
| RI R 17 | BI R 21 | BI R 22 |        |        |        |

In addition, the following also relate to traffic control for this project:

RECURRING SPECIAL PROVISIONS

Night Time Inspection of Roadway Lighting

**SPECIAL PROVISIONS** 

Automated Flagger Assistance Device (BDE)

Changeable Message Sign

**Contractor Access** 

Pavement Marking Removal/Work Zone Pavement Marking Removal

Pavement Marking Tape Type IV (BDE)

**Temporary Information Signing** 

Traffic Control and Protection (Special)

Suitable Access

**Local Road Closures** 

**Detour Signing** 

TRAFFIC CONTROL SURVEILLANCE: In addition to the Standard Specifications for Article 701.10 Surveillance, this item will be required when Stage 1, 2, 3, and 4 traffic control and Traffic Control Standard 701326 are in place.

# PAVEMENT MARKING REMOVAL/WORK ZONE PAVEMENT MARKING REMOVAL

(Effective August 15, 2005; Revised January 1, 2009)

All permanent and work zone pavement markings shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Sections 703 and 783 of the Standard Specifications and as described herein. Pavement marking tape type III may be peeled or burned off, however, all remnants or burn marks shall be hydro-blasted.

Add the following paragraph to Article 1101.12 of the Standard Specifications.

For the high pressure water spray, the pressure at the nozzle shall be approximately 25,000 psi (172,000 kPa) with maximum flow rate of 15 gal/min (56 L/min). The nozzle shall be in close proximity to the pavement surface.

#### CONTRACTOR ACCESS

(Revised August 15, 2005; Revised January 1, 2008)

At road closure locations where Type III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be altered, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-I101), shall be mounted on both the near right and the far left barricade(s). At the end of each work day, the barricades shall be returned to their in-line positions. This work will not be paid for separately, but shall be included in the associated traffic control pay items.

Additional barricades, drums or cones, required by the Engineer to control traffic when relocation for contractor access is used, will not be paid for separately, but shall be included in the associated traffic control pay items.

#### **TEMPORARY INFORMATION SIGNING**

(Effective: September 24, 2013)

<u>Description.</u> This work shall consist of the furnishing, installation, maintenance, and removal of temporary information signs.

<u>Materials.</u> Materials shall be according to the applicable portions of Section 701 of the Standard Specifications and as shown on the plans.

<u>Construction Requirements.</u> The temporary information signs shall be in place at least one week prior to the beginning of construction activities that impact traffic flow and shall remain in place until the completion of the project. If all lanes are open for an extended period of time during the project, such as a winter shutdown, the Contractor shall cover the signs until lane closures resume.

Signs shall be installed according to the requirements of Section 701.

<u>Method of Measurement:</u> This work will be measured for payment in square feet in place. The auxiliary sign panel will not be measured for payment.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot for TEMPORARY INFORMATION SIGNING.

# SERVICE INSTALLATION, OF THE TYPE SPECIFIED

(Effective July 1, 1990; Revised January 1, 2007)

In addition to the requirements of Section 805 of the Standard Specifications, this item shall require the Contractor to contact the utility company, prior to beginning work, to determine the utility company regulations relating to electrical service. The Contractor shall provide the utility company an estimated date that the service connection will be required, the agency which will be responsible for monthly service changes, and the connected load for flat rate billing if required. The responsible agency and connected load information is included in the plans. The customer service agreement with the utility company shall be executed by the agency responsible for monthly service charges.

All information furnished to the utility company shall be in writing with a copy provided to the Engineer.

During the interim between the service activation date and signal turn on day, all energy charges for the intersection shall be paid by the Contractor according to Article 109.05 of the Standard Specifications. Beginning the day of the traffic signal turn on, all energy charges for the intersection will be paid by the responsible agency listed in the plans. The Contractor is responsible for making arrangements with the responsible agency to transfer billing to the responsible agency.

This work shall be included in the cost of the SERVICE INSTALLATION, of the type specified.

#### **UNDERGROUND CONDUIT**

(Effective April 1, 2003; Revised January 1, 2012)

Add the following requirements to Section 810 of the Standard Specifications:

Materials: Conduit placed under pavement, stabilized shoulder, paved median, paved driveway, curb, gutter, curb and gutter, or sidewalk shall meet the requirements of Article 810.02(a) or Article 810.02(b). In addition, rigid nonmetallic conduit shall be Schedule 80.

Construction Requirements: The tunnel created by the auger shall not be significantly larger than the conduit to prevent undue settling. No tunnel shall be left for more than two hours without conduit filling it.

#### INDUCTIVE LOOP DETECTOR

(Effective January 1, 2002; Revised January 1, 2012)

Inductive loop detectors shall meet the requirements of Sections 885 and 1079 of the Standard Specifications with the following modifications:

Each inductive loop detector amplifier shall be rack mounted. Each inductive loop detector amplifier channel shall have a minimum of :

- 8 sensitivity settings
- LCD program menu
- Detector logs and displays number of loop failure incidents since last reset
- Internal function to determine the ideal sensitivity setting for every loop system
- 8 frequency settings
- 32 second call extend timer
- 32 second delay timer
- Call extend and delay timers able to operate cooperatively
- LED indication for detection

The detector supplied shall be the latest Reno model or equivalent.

The Contractor shall label each amplifier for the loop and movement where they provide input according to the chart in the plans.

Basis of Payment. This item will be paid for according to Article 885.04 of the Standard Specifications.

# FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL

(Effective January 1, 2002; Revised January 1, 2007)

Full Actuated Controller and Type IV Cabinet shall meet the requirements of Sections 857, 1073 and 1074 of the Standard Specifications with the following modifications.

This item requires that a factory representative capable of ensuring that the controller and cabinet are operating to the satisfaction of the Engineer shall be present at the turn on of the controller and shall remain until the intersection is operating to the satisfaction of the Engineer. Should a defect appear in the controller or cabinet operation, the representative shall return as often as necessary until all defects are repaired.

At the preconstruction meeting, the Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the 30 day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction nor be at the location within 2 hours of receiving the call, any available electrician capable of evaluating and correcting the malfunction may be called at the State's discretion. Any and all bills resulting from defective operation of the controller or cabinet shall be the responsibility of the Contractor.

#### CONTROLLER:

The controller shall be capable of uploading and downloading its database to a laptop computer that has been installed with the proper software. All uploaded data shall be able to be changed within the laptop and then downloaded to the controller. The necessary cables for upload/download shall be provided and upload/download software shall be provided and installed onto the District Three laptop computer if the software and cables have not already been supplied to District Three or the software presently being used by District Three requires updating.

The controller data entry fields shall have a clear distinction between data fields and information. Data fields shall be in matrix format with a minimum of eight phases wide and four date lines deep.

The active status screen shall display the following information for all operating phases in an alpha-numeric display.

A clear distinction between the following detection's for each phase: vehicle recall, vehicle detection, pedestrian recall, and pedestrian detection.

A clear distinction among the phases receiving detection.

Status displayed simultaneously whenever one or more of the following is operating: vehicle passage timer, maximum phase timer, added initial timer, time before reduction timer, time to reduce timer, existing gap timer, walk timer, don't walk timer.

When a phase ends, the controller shall report whether the exit was a max out, gap out or force out condition. The controller shall show the yellow and red timers timing and any trailing overlap timers timing.

The color of all operating overlaps.

The phase of the controller shall be as shown in the plans.

#### CONTROLLER CABINET

The police door compartment shall contain a manual control cord from which the signals may be operated manually. The inside door toggle switches shall be protected from accidental contact by vertical metal slats. The slats shall extend beyond the switches, in a manner similar to the terminals on the back panel. A plastic plans holder shall be installed on the cabinet door. The holder shall be at least 11 inches high and 17 inches wide, shall open from the side, and shall not interfere with the filter. The holder shall have a means of closing the side opening to prevent water from entering.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power panel. The cover shall completely shield the service wires, and circuit breaker wires from accidental contact.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power terminals for the thermostatically controlled exhaust fan. The thermostat shall be of the knob type capable of adjustment by hand and without tools. The thermostat and terminals shall be mounted on the left or right side of the controller cabinet.

All harness wiring of connectors A, B, C and D shall be factory installed so that an additional phase may be added to the existing phasing by the addition of a load switch and the proper conflict monitor card pinning.

A self adhering phasing diagram shall be placed on the inside of the cabinet door.

Three 0.4 meter (15 inch) Velcro straps shall be fastened to the front of each cabinet shelf to secure the detector amplifier cables.

Traffic signal controller and the cabinet assembly shall be fully tested by the equipment supplier. Five (5) copies of the complete cabinet wiring showing all connections shall be furnished to the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL.

#### CONCRETE HANDHOLE OR CONCRETE DOUBLE HANDHOLE

(Effective December 1, 1999; Revised January 1, 2007)

Concrete Handhole and Concrete Double Handhole shall meet the requirements of Sections 814 and 1088 of the Standard Specifications with the following modifications:

The lift ring for the cover shall consist of a solid closed ring of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring shall be attached to the cover by a loop of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring and loop shall be recessed in the cover.

#### **FAA COORDINATION**

Whenever any temporary construction operations or permanent improvements may affect navigable airspace, a Notice of Proposed Construction (Forms 7460-1 and 7460-2) must be filed with the FAA through their website. Determinations of No Hazard to Air Navigation must be received prior to construction. For this contract, the proximity of the Morris Municipal Airport requires filing 2 types of temporary construction activities for temporary obstruction evaluation plus filing for the permanent roadway improvement. The department will be responsible for filing Forms 7460-1 & 7460-2.

Initial Determinations of No Hazard have been obtained by the department to begin construction operations. Based on these determinations, marking and lighting are not necessary for aviation safety, however, lowering crane booms at night is required. The initial determinations for temporary operations are good for 12 month or 18 month periods after which time will need to be extended or resubmitted until the operations have been completed. The determinations all have an effective period. When the effective period ends it can be extended for one period. Extensions must be E-filed at least 15 days prior to the expiration date. Re-submittals must be E-filed at least 45 days prior to expiration. The contractor is responsible for coordinating progress schedules with the Resident Engineer to allow ample time for filing extensions and obtaining determinations of no hazard. Operations that require determinations are:

- 1 Crane activity (if required) at the structure sites. We assumed an 80' crane height for all structure sites.
- 2 Dumping activity of tandem trucks. We assumed the highest point on the dump would not exceed 30'. The activity could be anywhere within the right of way up to 3.02 miles northwest of the runway (Station 6309+00).

The Contractor shall comply with all FAA requirements and restrictions that result from FAA determinations. The Contractor is advised that he shall be responsible for all fines for non-compliance with FAA requirements.

#### **SEQUENCE OF OPERATIONS**

The contractor shall incorporate the following requirements into his Sequence of Operations.

- 1. At the preconstruction meeting, the contractor shall submit a sequence of operations for approval. Deviations from the approved sequence are not allowed without the written consent of the Engineer.
- 2. IL 47 shall remain open to two-way, two lane traffic at all times except for temporary one lane closures as approved by the Engineer.
- 3. Any temporary ramp on IL 47 between exposed pavement surfaces that remain in place longer than one week shall have a taper rate of 20' per inch unless approval is given by the Engineer.

# TRAFFIC CONTROL AND PROTECTION (SPECIAL)

<u>Description:</u> This work shall consist of providing all labor, equipment and materials necessary to provide and maintain all traffic control and protection as shown on the plans except the detour signing as described elsewhere in these Special Provisions and as directed by the Engineer.

The traffic control and protection shall be in accordance with the details in the plans and the applicable portions of Sections 701 and 703 of the Standard Specifications.

Method of Measurement: This work will be measured for payment by lump sum.

<u>Basis of Payment:</u> This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

# SUITABLE ACCESS

All commercial, private, and field entrances within the limits of improvements shall have suitable access, as determined by the Engineer, at all times during construction of this project. Estimated quantities of aggregate surface course for temporary access (AGGREGATE FOR TEMPORARY ACCESS) have been included in the plans for this purpose. The Engineer will determine the amount and when to place the aggregate. The Contractor shall begin placement of the aggregate within two hours of notice to proceed from the Engineer or the Contractor will be liable for liquidated damages in accordance with Article108.09 of the Standard Specifications.

#### **LOCAL ROAD CLOSURES**

Notifications: Prior to the closure of any side road, the Contractor shall provide a minimum of seven (7) days' notice to the following emergency service units, governmental agencies and school districts:

| County Engineer:<br>Lisbon Township<br>Kendall Township | Fran Klaas, Kendall County<br>Highway Commissioner<br>Highway Commissioner | (630) 553-7616<br>(815) 475-7834<br>(630) 553-7133 |
|---|--|--|
| Sheriff   | Kendall County Sheriff   | (630) 553-7500                                     |
| Fire & Ambulance:                                       | Bristol-Kendall Fire Protection Dist.                                      | (630) 553-6186                                     |
|   | Lisbon-Seward Fire Protection Dist.  | (815) 736-6346                                     |
| Schools:  | Lisbon Grade School  | (815) 736-6324                                     |
|   | Saratoga Comm. School Dist.  | (815) 942-5970                                     |
|   | Morris Community High  | (815) 942-1294                                     |
|   | Newark Community High School   | (815) 695-5164                                     |
|   | Newark CUSD #66  | (815) 695-51431                                    |
|   | Yorkville CUSD #115  | (630) 553-4382                                     |
| Post Office:  | Yorkville, IL  | (630) 553-7100                                     |
|   | Newark, IL   | (815) 695-5242                                     |
|   | Morris, IL   | (815) 942-0345                                     |

# Requirements:

- Closures shall be according to the Staging Plans and applicable Highway Standards.
- Stage 1
  - The local road closures involving Whitewillow Road (West Leg), Chicago Road (East Leg), Plattville Road and Helmar Road (East Leg) shall be scheduled to ensure consecutive roads are not under a closure at the same time.
  - Joliet Road, Quarry Road, Townhall Road and US 52 are to remain open and be constructed in sub-stages.
- Stage 2
  - Joliet Road, Quarry Road, Townhall Road and US 52 are to remain open and be constructed in sub-stages.
- Stage 3
  - The local road closures involving Whitewillow Road (East Leg), Chicago Road (West Leg), Lisbon Center Road, Newark Road and Helmar Road (West Leg) shall be scheduled to ensure consecutive roads are not under a closure at the same time.
  - No work will be allowed on Lisbon Center Road and Helmar Road (West) between March 15<sup>th</sup> and June 30<sup>th</sup> or September 15<sup>th</sup> thru November 30<sup>th</sup> unless access can be maintained at all times.
  - O Access to the scale on the north side of Lisbon Center Road must be maintained at all times. In order for grain trucks to access the scale, it is necessary for them to circulate counterclockwise around the building located on the south side of Lisbon Center Road. The Contractor shall stage his operations to ensure this movement is preserved at all times. Disruption of this movement will not be allowed unless authorized by the Engineer.

- Joliet Road, Quarry Road, Townhall Road and US 52 are to remain open and be constructed in sub-stages.
- Stage 4
  - Joliet Road, Quarry Road, Townhall Road and US 52 are to remain open and be constructed in sub-stages.
- Unless otherwise stated, all side road closures shall be limited to a single 30 calendar day period.
- By the end of the 30 day calendar period the side road must be open to two way traffic during non-working hours, and limited to single lane, flagger controlled closures during working hours.

<u>Failure to Complete Work on Time</u>: Should the Contractor fail to complete the individual side road reconstructions within the 30 calendar day period or within such extended time allowed by the Department, it will be considered traffic control deficiency and will be treated in accordance with Article 105.03(b) of the Standard Specifications.

#### **DETOUR SIGNING**

<u>Description:</u> This work shall consist of providing all labor, equipment and materials necessary to furnish, install, maintain, relocate, and remove all signs as shown on the "Local Road Closure and Detour Plans" included in the plans and as directed by the Engineer.

Method of Measurement: This work will be measured for payment by lump sum.

<u>Basis of Payment:</u> This work shall be paid for at the contract lump sum price for DETOUR SIGNING.

# **CHANGEABLE MESSAGE SIGN**

(Effective December 1, 1999; Revised August 7, 2008)

In addition to any changeable message signs shown in the traffic control standards, the Contractor shall furnish two Changeable Message Signs for this project. The signs shall be operational two weeks prior to any lane closure and shall be located as directed by the Engineer. Any relocation of the signs directed by the Engineer during construction will not be paid for separately, but shall be included in the cost of the Changeable Message Sign.

# **TEMPORARY EASEMENTS**

It is the intention of the Department that any Temporary Easement area be used only for the purpose of highway for which it was obtained. If the Contractor wishes to use a Temporary Easement Area for other uses such as equipment and material storage, he shall obtain written permission from the property owner and provide a copy to the Engineer prior to using the area.

#### INITIAL SITE PREPARATION AND SUBGRADE TREATMENT

In addition to the requirements of Sections 205 and 301 of the Standard Specifications, the following requirements shall apply:

# Site Preparation and Earthwork

- Topsoil within the limits of the proposed pavement and shoulders shall be removed. This
  work will be paid for as EARTH EXCAVATION, or if used for topsoil purposes, TOPSOIL
  EXCAVATION AND PLACEMENT.
- The stability of the exposed soils will be observed for the presence of any unsuitable and unstable soils. The soils shall be proof rolled to observe the amount of deflection and rutting taking place under the wheels of heavy construction equipment.

# Subgrade Treatment and Recommendations

- For embankments greater than 8 feet in height, no site preparation action required, other than what is required in the Standard Specifications.
- The existing soils may be prone to swelling upon wetting. Therefore, at locations where new
  embankment fill height is greater than 2 feet and less than 8 feet, the top 6 inches of
  subgrade soils shall be disked, dried, and re-compacted between 2 percent and 4 percent
  greater than the optimum moisture content. No additional compensation will be provided for
  disking, drying and re-compacting.
- For pavement sections to be placed directly on top of the natural ground after topsoil is stripped, removal of an additional 6 inches of soil below the bottom of the proposed 12-inch aggregate subgrade and replacement with additional aggregate subgrade is anticipated. Geotechnical fabric for ground stabilization shall be placed at the base of these subgrade excavations in accordance with Section 210 of the Standard Specifications.
- Areas anticipated to require additional disking and recompacting or removal and replacement are summarized in the table below and will be reviewed by the Engineer during proof rolling:

| Location                             | Treatment Width          | Treatment Type                                   | Treatment<br>Depth |
|--------------------------------------|--------------------------|--|--------------------|
| 6283+50 to 6311+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6313+50 to 6325+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6328+50 to 6349+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6352+50 to 6358+50                   | Full Pavement<br>Width   | Aggregate Subgrade and Fabric                    | 6 inches           |
| 6358+50 to 6376+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6379+50 to 6385+00                   | Full Pavement<br>Width   | Aggregate Subgrade and<br>Fabric                 | 6 inches           |
| 6409+50 to 6418+00                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6424+50 to 6427+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6442+50 to 6445+00                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6448+50 to 6465+00                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6465+00 to 6471+00                   | Full Pavement<br>Width   | Replacement with Compacted<br>Suitable Clay Fill | 18 inches          |
| 6499+50 to 6517+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6522+50 to 6526+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6532+50 to 6535+50                   | Full Pavement<br>Width   | Aggregate Subgrade and<br>Fabric                 | 6 inches           |
| 6544+50 to 6547+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6550+50 to 6565+50                   | Full Embankment<br>Width | Disk, Dry, and Recompact                         | 6 inches           |
| 6569+00 to 6571+50                   | Full Pavement<br>Width   | Aggregate Subgrade and<br>Fabric                 | 12 inches          |
| 6578+50 to 6580+50                   | Full Pavement<br>Width   | Aggregate Subgrade and<br>Fabric                 | 6 inches           |
| Whitewillow Road<br>606+00 to 608+50 | Full Pavement<br>Width   | Aggregate Subgrade and<br>Fabric                 | 6 inches           |
| Whitewillow Road<br>612+50 to 616+00 | Full Pavement<br>Width   | Aggregate Subgrade and<br>Fabric                 | 6 inches           |
| US 52<br>1000+00 to 1008+00          | Full Pavement<br>Width   | Aggregate Subgrade and<br>Fabric                 | 6 inches           |
| US 52<br>1011+50 to 1018+00          | Full Pavement<br>Width   | Aggregate Subgrade and Fabric                    | 6 inches           |
| Chicago Road<br>1106+50 to 1109+00   | Full Pavement<br>Width   | Aggregate Subgrade and Fabric                    | 6 inches           |
| Chicago Road<br>1109+00 to 1111+00   | Full Pavement<br>Width   | Replacement with Compacted Suitable Clay Fill    | 18 inches          |

| Lisbon Center Road<br>1201+50 to 1204+50 | Full Pavement<br>Width | Aggregate Subgrade and Fabric | 6 inches |
|--|------------------------|-------------------------------|----------|
| Newark Road<br>1403+50 to 1409+00        | Full Pavement<br>Width | Aggregate Subgrade and Fabric | 6 inches |
| Helmar Road<br>1514+50 to 1516+50        | Full Pavement<br>Width | Aggregate Subgrade and Fabric | 6 inches |

If weathered bedrock is encountered during excavation for placing the 12-inch aggregate subgrade, the rock material shall be removed to a depth that would allow at least the placement of 3 inch capping aggregate. This situation may occur between the following approximate stations:

Sta. 6319+50 to 6322+50 Sta. 6349+50 to 6352+50 Sta. 6397+50 to 6400+50

Rock shall be excavated according to Article 202.04 of the Standard Specifications.

# Roadway Drainage

- The clayey subgrade will exhibit poor drainage characteristics. The proposed subgrade and pavement should have proper surface grading to remove water accumulations and prevent the pooling of water.
- Four inch diameter longitudinal underdrains shall be installed 6 inches below the bottom of the 12 inch aggregate subgrade improvement. The underdrains shall conform with the Special Provision Pipe Underdrains 4" (Modified)
- Four inch diameter transverse underdrains shall installed at the low points of all aggregate subgrade locations at a depth 6 inches below the bottom of the undercut. The underdrains shall conform with the Special Provision Pipe Underdrains 4" (Modified)

# Filling and Backfilling

Soils excavated throughout the project area are expected to have high plasticity (LL and PI) and may be prone to swelling upon wetting, and will be tested prior to being used as embankment. Soils shall not be used as embankment fill unless they have LL less than 50 percent, PI between 12 and 20 percent, a Maximum Dry Density greater than 90 pcf, and organic content less than 10 percent.

#### AGGREGATE FOR TEMPORARY ACCESS

<u>Description.</u> This work shall consist of constructing and maintaining an aggregate surface for temporary roads, approaches, and entrances according to Article 402.07 and as directed by the Engineer.

Add the following to Article 402.10 of the Standard Specifications:

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

- (a) Private Entrance. The minimum width shall match the existing entrance width. The minimum compacted thickness shall be 6 inches. The maximum grade shall be 8 percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall match the existing entrance width. The minimum compacted thickness shall be 9 inches. The maximum grade shall be 6 percent, except as required to match the existing grade.
- (c) Field Entrance. The minimum width shall match the existing entrance width. The minimum compacted thickness shall be 6 inches. The maximum grade shall be 8 percent, except as required to match the existing grade.
- (d) Side Road. The minimum width shall match the existing entrance width minimum compacted thickness shall be 9 inches. The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface course for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it."

Method of Measurement. This work will be measured for payment by ton.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per ton for AGGREGATE FOR TEMPORARY ACCESS.

# **REMOVAL OF EXISTING STRUCTURES**

<u>Description.</u> This work shall consist of furnishing all labor, equipment and materials to remove and properly dispose of the existing structures described below and at the location shown on the plans in accordance with Section 501 of the Standard Specifications and as directed by the Engineer.

| Existing<br>Structure | Location     | Description  |
|-----------------------|--------------|--|
| No. 1                 | Sta. 6274+19 | Single barrel 1.5' x 2.5' precast concrete box culvert, 60' long |
| No. 2                 | Sta. 6367+61 | Single barrel 6' x 4' precast concrete box culvert, 68' long     |
| No. 3                 | Sta. 6416+11 | Double barrel 11' x 7' precast concrete box culverts, 60' long   |
| No. 4                 | Sta. 6446+40 | Double barrel 9' x 6' precast concrete box culvert, 85' long.    |
| No. 5                 | Sta. 6453+65 | Double barrel 4.5' x 8' precast concrete box culvert, 80' long.  |
| No. 6                 | Sta. 6465+04 | Single barrel 2' x 2' precast concrete box culvert, 52' long.    |
| No. 7                 | Sta. 6490+00 | Double barrel 6' x 7' precast concrete box culvert, 66' long     |
| No. 8                 | Sta. 6523+08 | Single barrel 2' x 2' precast concrete box culvert, 56' long     |
| No. 9                 | Sta. 6555+06 | Single barrel 2' x 2' precast concrete box culvert, 54' long     |
| No. 10                | Sta. 6573+19 | Double barrel 6' x 8' precast concrete box culvert, 72' long.    |

<u>Method of Measurement.</u> This work will be measured for payment by each. Removal of box culverts includes removal of precast and cast-in-place headwalls. Removal of existing bridges includes removal of approach slabs.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price each for REMOVAL OF EXISTING STRUCTURES at the location designated on the plans.

#### **BUILDING REMOVAL**

This work consists of furnishing all labor, equipment and materials for the removal and proper disposal of various buildings/structures as described in other special provisions herein and at the locations shown in the plans. The removal shall include the foundation or any other appurtenances that may exist from the original building as directed by the Engineer. Removal of any debris found in the building(s) or on the property within the right of way limits shall be included in the cost of building removal. The excavation shall be backfilled using suitable granular material and to the grades as directed by the Engineer. The granular backfill shall meet the gradation requirements of Article 1003.04 or Article 1004.05 of the Standard Specifications. Basement floors may be broken sufficiently into smaller pieces and left in place. See other special provisions described herein for additional building removal requirements. Asbestos removal (if any) shall be in accordance to special provisions described elsewhere.

In addition to the requirements above and in other special provisions described elsewhere, the following shall be included in the cost of the building removal:

BUILDING REMOVAL NO. 7 Existing building has waste line that drains to a septic tank. The septic tank then outlets to manhole. As part of the building removal the waste line and the septic tank are to be removed or filled. The outlet line from the septic to the manhole shall be capped.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per lump sum for BUILDING REMOVAL of the number specified at the location designated in the plans.

#### **DRIVEWAY PAVEMENT REMOVAL**

<u>Description</u>. This work shall consist of furnishing all labor, equipment and materials to remove driveway pavements at the locations shown in the plans, in accordance with the applicable portions of Section 440 of the Standard Specifications and as directed by the ENGINEER. The driveway pavement thicknesses are variable.

Method of Measurement. This work will be measured for payment by square yard.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square yard for DRIVEWAY PAVEMENT REMOVAL.

# PIPE CULVERT REMOVAL

<u>Description</u>. This work shall consist of removing existing pipe culverts at locations shown in the plans and disposing of the pipe culverts outside the right-of-way in accordance with Section 501 of the Standard Specifications. The existing end sections associated with the pipe culverts shall be removed and disposed in conjunction with the pipe culverts.

Method of Measurement. Removal of existing pipe culverts will be measured for payment in place, in feet along the invert of the culvert. The measured length will not include the end section.

<u>Basis of Payment.</u> Removal of existing pipe culverts will be paid for at the contract unit price per foot for PIPE CULVERT REMOVAL. The removal of existing end sections will not be paid for separately, but shall be considered included in the cost of PIPE CULVERT REMOVAL.

#### STORM SEWER REMOVAL

This work will be in accordance with section 551 of the Standard Specifications except removal and disposal of end sections and/or headwalls abutting or connecting to the storm sewer will not be paid for separately, but will be included in the cost of STORM REMOVAL, of the diameter specified.

# TREATMENT OF EXISTING FIELD TILE SYSTEMS:

<u>Description</u>. This work shall be in accordance with Section 611 of the Standard Specifications.

The following items have been included in the plans in order to establish unit bid prices. The Engineer shall be the sole judge as to the quantity and location for the use of:

PIPE DRAINS, 6", 8", 10", 12", 15" & 18" STORM SEWER PROTECTED, CLASS A, , 6", 8", 10", 12", 15" & 18" STORM SEWER (SPECIAL), 6", 8", 10", 12", 15" & 18" MISCELLANEOUS CONCRETE FIELD TILE JUNCTION VAULT, 2' DIA. FIELD TILE JUNCTION VAULT, 3' DIA.

# PRESERVING PROPERTY MARKERS

The Contractor shall protect the existing property corner markers. Any such monuments disturbed or destroyed by the Contractor's operations shall be replaced by a Professional Land Surveyor at the Contractor's expense.

# LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT

400 watt luminaires shall be according to section 821 of the standard specifications and as follows:

# ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE (IL. Rte. 47)

# **GIVEN CONDITIONS**

| ROADWAY DATA:    | Pavement Width Number of Lanes Median Width IES Surface Classification Q-Zero Value | 24 FT<br>2<br>32 FT<br>R3<br>.07 |
|------------------|---|----------------------------------|
| LIGHT POLE DATA: | Mounting Height<br>Mast Arm Length  | 50 FT<br>12 FT                   |
|                  | Pole Set-Back From Edge of Pavement   | 15 FT                            |
| LUMINAIRE DATA:  | Lamp Type   | HPS                              |
|                  | Lamp Lumens   | 50000                            |
|                  | IES Vertical Distribution   | Medium                           |
|                  | IES Control of Distribution   | Cuoff                            |
|                  | IES Lateral Distribution  | Type III                         |
|                  | Total Light Loss Factor   | 0.684                            |
| LAYOUT DATA:     | Spacing   | 250 FT                           |
|                  | Configuration   | Opposite                         |
|                  | Luminaire Overhang Over Edge Of Pavement Lane                                       | -3 FT                            |

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

# **PERFORMANCE REQUIREMENTS**

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

| ILLUMINATION: | Average Horizontal Illumination, (E <sub>AVE</sub> )    | 9.0 Lux   |
|---------------|---|-----------|
|               | Uniformity Ratio, (E <sub>AVE</sub> /E <sub>MIN</sub> ) | 3.0       |
| LUMINANCE:    | Average Luminance: (L <sub>AVE</sub> )                  | 0.6 Cd/m2 |
|               | Uniformity Ratios (L <sub>AVE</sub> /L <sub>MIN</sub> ) | 3.5       |
|               | $(L_{MAX}/L_{MIN})$                                     | 6.0       |
|               | Maximum Veiling Luminance Ratio:                        |           |
|               | $(L_V/L_{AVE})$   | 0.3       |

#### UNINTERRUPTIBLE POWER SUPPLY, EXTENDED

Add the following to Article 862.01 of the Standard Specifications:

The UPS shall have the power capacity to provide normal operation of a signalized intersection that utilizes all LED type signal head optics, for a minimum of six hours.

Add the following to Article 862.02 of the Standard Specifications:

Materials shall be according to Article 1074.04 as modified in UNINTERRUPTIBLE POWER SUPPLY in Division 1000 of these specifications.

Add the following to Article 862.03 of the Standard Specifications:

The UPS shall provide reliable emergency power to the traffic signals in the event of a power failure or interruption.

The UPS shall be provided with a minimum five (5) year warranty.

Revise Article 862.04 of the Standard Specifications to read:

<u>Installation:</u> When a UPS is installed at an existing traffic signal cabinet, the UPS cabinet shall partially rest on the lip of the existing controller cabinet foundation and be secured to the existing controller cabinet by means of at least four (4) stainless steel bolts. The UPS cabinet shall be completely enclosed with the bottom and back constructed of the same material as the cabinet.

When a UPS is installed at a new signal cabinet and foundation, it shall be mounted as shown on the plans.

At locations where UPS is installed and Emergency Vehicle Priority System is in use, any existing incandescent confirmation beacons shall be replaced with LED lamps in accordance with the District Three Emergency Vehicle Priority System specification at no additional cost to the contract.

Revise Article 862.05 of the Standard Specifications to read:

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per each for UNINTERRUPTABLE POWER SUPPLY, EXTENDED. Replacement of Emergency Vehicle Priority System confirmation beacons shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY, EXTENDED item.

#### DRILLED SHAFT FOUNDATIONS

(Effective April 1, 2008)

For light pole (Section 836) and traffic signal (Section 878) drilled shaft foundations, Class SI concrete may be used in lieu of the Class DS concrete specified in Article 1020.04 of the Standard Specifications. If Class SI concrete is used, the entire length of the drilled shaft shall be vibrated.

# LIGHT EMITTING DIODE (LED) SIGNAL HEAD (BDE)

This work shall be in accordance with Sections 880 and 1078 of the Standard Specifications except as modified herein.

The traffic signal heads shall consist of 300mm (12") poly carbonate sections and shall be equipped with LED assemblies for all red bulb, yellow bulb, green bulb, red arrow, yellow arrow and green arrow indications.

The LED signal faces shall be equipped with spade connectors and connected to the traffic signal head terminal block.

The LED assemblies for the red, yellow, and green solid and arrow conditions shall meet or exceed the following minimum specifications:

#### RED LED ASSEMBLY

Currently, only the following models approved by the Department for use provided that they meet the minimum specifications listed below:

GELcore Model DR6-RTFB-17A

Dialight Model DURALED 433-1210-003XL

The LED assembly must conform to the following minimum specifications:

Lens: 300mm (12") Diameter, red, hard coated for abrasion resistance, UV stabilized dome, designed to evenly distribute light across the entire face of the lens to provide a uniform illuminance across the face of the LED, provide a wide angle for viewing, and eliminate any "Dotty" or grainy appearance.

LEDs: Interconnected to minimize the effect of single LED failures, nominal wattage: 6-10W or less, nominal wavelength: 625-626nm

Minimum luminous intensity (cd): 365

Product warranty: Five year replacement (materials, workmanship and intensity).

The assembly shall be capable of operating from 80 to 135 VAC with less than 10 percent variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH – STD PART 2.

## YELLOW LED ASSEMBLY

Currently, only the following models approved by the department for use provided that they meet the minimum specifications listed below:

GELcore Model DR6-YTFB-17A

Dialight Model DURALED 433-3230-001XL

The LED assembly must conform to the following minimum specifications:

Lens: 300mm (12") Diameter, clear or yellow, hard coated for abrasion resistance, UV stabilized dome, designed to evenly distribute light across the entire face of the lens to provide a uniform illuminance across the face of the LED, provide a wide angle for viewing, and eliminate any "Dotty" or grainy appearance.

LEDs: Interconnected to minimize the effect of single LED failures, nominal wattage: 19W or less, nominal wavelength: 589-590nm

Minimum luminous intensity (cd): 910

Product warranty: Five year replacement (materials, workmanship and intensity).

The assembly shall be capable of operating from 80 to 135 VAC with less than 10 percent variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C, except for when its terms are in conflict with the terms contained in this special provision. In such cases, this special provision shall supersede the contrary ITE specification.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH – STD PART 2.

## **GREEN LED ASSEMBLY**

Currently, only the following models approved by the department for use provided that they meet the minimum specifications listed below:

GELcore Model DR6-GCFB-17A (Clear)

Dialight Model 433-2220-001XL (Tinted Lens)

The LED assembly must conform to the following minimum specifications:

Lens: 300mm (12") Diameter, hard coated for abrasion resistance, UV stabilized dome, designed to evenly distribute light across the entire face of the lens to provide a uniform illuminance across the face of the LED, provide a wide angle for viewing, and eliminate any "Dotty" or grainy appearance.

LEDs: Interconnected to minimize the effect of single LED failures, nominal wattage: 9-13W or less, nominal wavelength: 500nm

Minimum luminous intensity (cd): 475

Product warranty: Five year replacement (materials, workmanship and intensity)

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH – STD PART 2.

## **GREEN ARROW LED ASSEMBLY**

Currently, only the following models approved by the department for use provided that they meet the minimum specifications listed below:

GELcore Model DR6-GCAAN-17A
Dialight Model 433-2374-001XOD

The LED assembly must conform to the following minimum specifications:

Lens: 300mm (12") Diameter, hard coated for abrasion resistance, UV stabilized dome, designed to evenly distribute light across the entire face of the lens to provide a uniform illuminance across the face of the LED, provide a wide angle for viewing, and eliminate any "Dotty" or grainy appearance.

LEDs: Interconnected to minimize the effect of single LED failures, nominal wattage: 5-6W or less, nominal wavelength: 500nm, shall have a full profile arrow indication (no outlined or two row indications).

Minimum luminous intensity (cd): 176.

Product warranty: Five year replacement (materials, workmanship and intensity).

The assembly shall be capable of operating from 80 to 135 VAC with less than 10 percent variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH – STD PART 2.

#### YELLOW ARROW LED ASSEMBLY

Currently, only the following models approved by the department for use provided that they meet the minimum specifications listed below:

GELcore Model DR6-YTAAN-17A
Dialight Model 431-3334-001XOD

The LED assembly must conform to the following minimum specifications:

Lens: 300mm (12") Diameter, clear or yellow, hard coated for abrasion resistance, UV stabilized dome, designed to evenly distribute light across the entire face of the lens to provide a uniform illuminance across the face of the LED, provide a wide angle for viewing, and eliminate any "Dotty" or grainy appearance.

LEDs: Interconnected to minimize the effect of single LED failures, nominal wattage: 12W or less, nominal wavelength: 590-592nm, shall have a full profile arrow indication (no outlined or two row indications).

Minimum luminous intensity (cd): 141.6-146

Product warranty: Five year replacement (materials, workmanship and intensity)

The assembly shall be capable of operating from 80 to 135 VAC with less than 10 percent variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C, except for when its terms are in conflict with the terms contained in this special provision. In such cases, this special provision shall supersede the contrary ITE specification.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH – STD PART 2.

#### **GROUNDING OF TRAFFIC SIGNAL SYSTEMS**

Revise Section 806 of the Standard Specifications to read:

<u>General</u>: All traffic signal systems, equipment and appurtenances shall be properly grounded in strict conformance with the NEC. See applicable Highway Standards for additional information.

The grounding electrode system shall include a ground rod installed with each traffic signal controller concrete foundation and all mast arm and post concrete foundations. An additional ground rod will be required at locations were measured resistance exceeds 25 ohms. Ground rods are included in the applicable concrete foundation or service installation pay item and will not be paid for separately.

Testing shall be according to Article 801.13 (a) (4) and (5).

- (a) The grounded conductor (neutral conductor) shall be white color coded. This conductor shall be bonded to the equipment grounding conductor only at the Electric Service Installation. All power cables shall include one neutral conductor of the same size.
- (b) The equipment grounding conductor shall be green color coded. The following is in addition to Article 801.04 of the Standard Specifications.
  - Equipment grounding conductors shall be bonded to the grounded conductor (neutral conductor) only at the Electric Service Installation. The equipment grounding conductor is paid for separately and shall be continuous. The earth shall not be used as the equipment grounding conductor.

- 2. Equipment grounding conductors shall be bonded, using a Listed grounding connector, to all traffic signal mast arm poles, traffic signal posts, pedestrian posts, pull boxes, handhole frames and covers, conduits, and other metallic enclosures throughout the traffic signal wiring system, except where noted herein. Bonding shall be made with a splice and pigtail connection, using a sized compression type copper sleeve, sealant tape, and heat-shrinkable cap. A listed electrical joint compound shall be applied to all conductors' terminations, connector threads and contact points. Conduit grounding bushings shall be installed at all conduit terminations.
- All metallic and non-metallic raceways containing traffic signal circuit runs shall have a
  continuous equipment grounding conductor, except raceways containing only detector loop
  lead-in circuits, circuits under 50 volts and/or fiber optic cable will not be required to include
  an equipment grounding conductor.
- 4. Individual conductor splices in handholes shall be soldered and sealed with heat shrink. When necessary to maintain effective equipment grounding, a full cable heat shrink shall be provided over individual conductor heat shrinks.
- (c) The grounding electrode conductor shall be similar to the equipment grounding conductor in color coding (green) and size. The grounding electrode conductor is used to connect the ground rod to the equipment grounding conductor and is bonded to ground rods via exothermic welding, listed pressure connectors, listed clamps or other approved listed means.

#### STEEL COMBINATION MAST ARM ASSEMBLY AND POLE

Revise Article 877.01 of the Standard Specifications to read:

<u>Description:</u> This work shall consist of furnishing and installing a steel mast arm and assembly or steel combination mast arm assembly and a galvanized steel or extruded aluminum shroud for protection of the base plate.

Revise Article 877.03 of the Standard Specifications:

Mast arm assembly and pole shall be as follows.

(a) Steel Mast Arm Assembly and Pole and Steel Combination Mast Arm Assembly and Pole. The steel mast arm assembly and pole and steel combination mast arm assembly and pole shall consist of a traffic signal mast arm, a luminaire mast arm or davit (for combination pole only), a pole, and a base, together with anchor rods and other appurtenances. The configuration of the mast arm assembly, pole, and base shall be according to the details shown on the plans.

- (1) Loading. The mast arm assembly and pole, and combination mast arm assembly and pole shall be designed for the loading shown on the Highway Standards or elsewhere on the plans, whichever is greater. The design shall be according to AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 1994 Edition for 80 mph (130 km/hr) wind velocity. However, the arm-to-pole connection for tapered signal and luminaire arms shall be according to the "ring plate" detail as shown in Figure 11-1(f) of the 2002 Interim, to the AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 2001 4th Edition.
- (2) Structural Steel Grade. The mast arm and pole shall be fabricated according to ASTM A 595, Grade A or B, ASTM A 572 Grade 55, or ASTM A 1011 Grade 55 HSLAS Class 2. The base and flange plates shall be of structural steel according to AASHTO M 270 Grade 50 (M 270M Grade 345). Luminaire arms and trussed arms 15 ft (4.5 m) or less shall be fabricated from one steel pipe or tube size according to ASTM A 53 Grade B or ASTM A 500 Grade B or C. All mast arm assemblies, poles, and bases shall be galvanized according to AASHTO M 111.
- (3) Fabrication. The design and fabrication of the mast arm assembly, pole, and base shall be according to the requirements of the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals published by AASHTO. The mast arm and pole may be of single length or sectional design. If section design is used, the overlap shall be at least 150 percent of the maximum diameter of the overlapping section and shall be assembled in the factory.
  - The manufacturer will be allowed to slot the base plate in which other bolt circles may fit, providing that these slots do not offset the integrity of the pole. Circumferential welds of tapered arms and poles to base plates shall be full penetration welds.
- (4) Shop Drawing Approval. The Contractor shall submit detailed drawings showing design materials, thickness of sections, weld sizes, and anchor rods to the Engineer for approval prior to fabrication. These drawings shall be at least 11 x 17 in. (275 x 425 mm) in size and of adequate quality for microfilming.
- (b) Anchor Rods. The anchor rods shall be ASTM F 1554 Grade 105, coated by the hot-dip galvanizing process according to AASHTO M 232, and shall be threaded a minimum of 7 1/2 in. (185 mm) at one end and have a bend at the other end. The first 12 in. (300 mm) at the threaded end shall be galvanized. Two nuts, one lock washer, and one flat washer shall be furnished with each anchor rod. All nuts and washers shall be galvanized.

### WHITEWASHING FOR CONCRETE PAVEMENT

<u>Description</u>. This work shall consist of whitewashing the bituminous concrete or bituminous stabilized subbase for concrete pavement.

<u>Materials</u>. Materials shall meet the requirements of the following Articles of the Standard Specifications:

| Item                           | Article/Section |
|--------------------------------|-----------------|
| (a) Water                      | 1002            |
| (b) Hydrated Lime              | 1012.01         |
| (c) Calcium Carbonate Pigments | (Note 1)        |

Note 1: ASTM D-1199, Type GC or PC, Grade II or finer. Other materials or grades may be used with the approval of the Engineer provided the resulting coating is bright white and uniform in nature. By-product lime will not be allowed.

<u>Equipment</u>. Equipment shall be capable of mixing, continuously agitating, and applying the prepared solution in a uniform manner.

<u>Construction Requirements</u>. When the pavement will be placed between May 15 and October 15, the surface of the bituminous concrete base or bituminous stabilized subbase shall be whitewashed. Whitewashing shall be completed prior to placing the reinforcing steel or load transfer devices. Whitewashing shall not be applied when rain is imminent.

The whitewash shall be prepared by combining two parts water to one part pigment by weight. The ingredients shall be mixed until smooth in consistency and free of lumps. If sufficient coating can be demonstrated, the ratio may be increased up to three parts water to one part pigment by weight with the approval of the Engineer. After mixing, the whitewash shall be continually agitated until applied.

The whitewash shall be uniformly applied to the entire bituminous concrete base or bituminous stabilized subbase at a rate of 0.35 L/sq m (0.075 gal/sq yd). The method of application shall be approved by the Engineer. Thick films from spills or over application shall be removed by means that does not damage the base or subbase.

<u>Method of Measurement</u>. White washing for concrete pavement will be measured for payment in square yards (square meters).

<u>Basis of Payment</u>. White washing for concrete pavement will be paid for at the contract unit price per square yard (square meter) for WHITEWASHING FOR CONCRETE PAVEMENT.

# HOT-MIX SURFACE REMOVAL, VARIABLE DEPTH

<u>Description.</u> This work shall consist of variable depth removal of hot-mix asphalt surface to provide the depth required to place the final surface course according to plan details, and applicable portions of Section 440 of the Standard Specifications.

<u>Method of Measurement.</u> Hot-Mix Asphalt Surface Removal will be measured in place and the area computed in square yards.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square yard for HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH.

#### ISLAND PAVEMENT REMOVAL

<u>Description</u>: This work shall consist of the complete removal and disposal of island pavement as shown on the plans and as directed by the Engineer. This work shall be done in accordance with applicable portions of Section 440 of the Standard Specifications and shall include the removal of the concrete island surface, concrete curb and gutter, and excavation below the concrete to a depth of the bottom of the adjacent asphalt pavement.

Basis of Payment: This work will be paid for at the contract unit price per square yard for ISLAND PAVEMENT REMOVAL.

# **CONCRETE MEDIAN, TYPE SB & TYPE SM (SPECIAL)**

<u>Description.</u> This work shall consist of providing all labor, equipment and materials necessary for the installation of Concrete Median, Type SB (Special) and Concrete Median, Type SM (Special) in accordance with Section 606 of the Standard Specifications, Highway Standard 606301, and plans details.

Method of Measurement. This work will be measured for payment by square foot.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN, TYPE SB (SPECIAL) and CONCRETE MEDIAN, TYPE SM (SPECIAL).

## DRAINAGE STRUCTURE TO BE REMOVED

<u>Description:</u> This work shall consist of the removal and disposal of all drainage structures, manholes, field tile junction vaults, catch basins, or inlets as shown on the plans unless otherwise specified and as directed by the Engineer. This work shall be done in accordance with the applicable portions of Section 605 of the Standard Specifications.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per Each for DRAINAGE STRUCTURE TO BE REMOVED.

### **TEMPORARY PAVEMENT**

<u>Description.</u> This work shall consist of furnishing all labor, equipment and materials to install <u>and remove</u> temporary pavement including hot-mix asphalt, prime coat and sub-base granular material in accordance with applicable portions of Sections 311, 406 and 440 of the Standard Specifications and at the locations shown in the plans.

Where the temporary pavement width is less than 6 feet, the Contractor will be allowed to construct lifts below the surface according to Section 356.

Method of Measurement. This work will be measured for payment by square yards.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square yard for TEMPORARY PAVEMENT.

#### MAINTENANCE OF TEMPORARY LIGHTING SYSTEM

<u>Description.</u> This work shall consist of servicing and repairing all temporary lighting equipment so that all lights are lit each night for the duration of the contract. The energy charges for the operation of the highway lighting will be paid for by the Contractor under the pay item TEMPORARY LIGHTING SYSTEM.

All work shall be performed in accordance with the Standard Specifications and as directed by the Engineer.

The contractor shall be responsible for all maintenance of the existing temporary lighting at the cross-over location at the south end of the project upon execution of the contract and shall end upon removal of the system. No lighting circuit or portion thereof shall be removed from the nighttime operation without the approval of the Engineer.

The contractor shall supply all materials and labor to perform all maintenance required. The contractor shall make every effort to ensure that each light is functioning before he leaves the job site. The contractor shall replace all burnouts on a next day basis and initiate circuit outage repairs one hour after discovery or notification. When temporary repairs are made during night hours, permanent repairs shall be made starting the following work day and continuing until completed. The contractor shall maintain in stock a sufficient amount of material and equipment to provide temporary and permanent repairs. The contractor shall be required to install temporary wiring as necessary to keep all lights functioning every night. All temporary wiring and splicing shall be included in this pay item.

The contractor shall be reimbursed for repair of accident damage according to Article 109.04.

The contractor shall provide the resident engineer with the names and telephone numbers of two persons who will be available 24 hours a day, seven days a week to perform any necessary work on the highway lighting.

If at any time the contractor fails to perform any work deemed necessary by the Engineer to keep the highway lighting in proper operating condition or if the Engineer is unable to contact the designated persons to perform the work, the department reserves the right to have other electrical contractors perform the needed work. The cost of such work will be deducted from the amount due to the contractor.

Basis of payment. This work shall be paid for at the contract lump sum price for MAINTENANCE OF TEMPORARY LIGHTING SYSTEM, which price shall be payment in full for all materials, equipment, and labor necessary to inspect and maintain the temporary highway lighting equipment and circuits. Fifty percent of the bid price will be paid for upon beginning the maintenance of the lighting. Twenty-five percent will be paid upon completion of Stage 2 Construction. Twenty-five percent will be paid upon release of the contractor from maintenance responsibility.

#### REMOVE TEMPORARY LIGHTING SYSTEM

This work shall consist of the removal and disposal of the temporary lighting systems at the location specified in the plans. When all other work shown in the contract is complete, the temporary lighting system shall become the property of the contractor and be removed from the right of way.

This work shall be paid for at the contract lump sum price for REMOVE TEMPORARY LIGHTING SYSTEM which includes guys and anchors, poles, luminaires, electrical cable, control installations and all associated hardware and appurtenances, plus any disconnection work or costs.

## SPECIAL PROVISION FOR DOWEL BAR INSERTER (BMPR)

Effective: April 1, 2012

Revise Article 420.05(c) to read:

(c) Transverse Contraction Joints. Transverse contraction joints shall consist of planes of weakness created by sawing grooves in the surface of the pavement and shall include load transfer devices consisting of dowel bars. Transverse contraction joints shall be according to the following.

Revise Article 420.05(c)(2) to read:

(2) Dowel Bars. Dowel bars shall be installed parallel to the centerline of the pavement and parallel to the proposed pavement surface. Installation shall be according to one of the following methods.

a. Dowel Bar Assemblies. The assembly shall act as a rigid unit with each component securely held in position relative to the other members of the assembly. The entire assembly shall be held securely in place by means of nails which shall penetrate the stabilized subbase. At least ten nails shall be used for each 10, 11, or 12 ft (3, 3.3, or 3.6 m) section of assembly. Bearing plates shall be punched to receive the nails. When bearing plates are omitted on stabilized subbase, other methods for securing the assembly with nails shall be provided.

Metal stakes shall be used instead of nails, with soil or granular subbase. The stakes shall loop over or attach to the top parallel spacer bar of the assembly and penetrate the subgrade or subbase at least 12 in. (300 mm).

At the location of each dowel bar assembly, the subgrade or subbase shall be reshaped and re-tamped when necessary.

Prior to placing concrete, any deviation of the dowel bars from the correct horizontal or vertical alignment (horizontal skew or vertical tilt) greater than 3/8 in. in 12 in. (9 mm in 300 mm) shall be corrected and a light coating of oil shall be uniformly applied to the dowel bars.

Care shall be exercised in depositing the concrete at the dowel bar assemblies so that the horizontal and vertical alignment will be retained.

b. Inserted Dowel Bars. The dowel bars shall be placed in the pavement slab with a mechanical dowel bar inserter (DBI) attached to a formless paver.

The DBI shall be self-contained and supported on the formless paver with the ability to move separately from the paver. The DBI shall be equipped with insertion forks along with a tamping bar, finishing pan, and any other devices necessary for finishing the concrete the full width of the pavement. The insertion forks shall have the ability to vibrate at a minimum frequency of 3000 vpm.

The DBI shall insert the bars with vibration into the plastic concrete after the concrete has been struck off and consolidated without deformation of the slab. After the bars have been inserted, the concrete shall be refinished and no voids shall exist around the dowel bars. The forward movement of the finishing screed shall not be interrupted by the inserting of the dowel bars.

The exact location of each row of dowels shall be marked on the subbase as indicated by the plans. The location of each row of dowels inserted by the DBI shall be prominently marked on both sides of the pavement to facilitate sawing of the transverse joint.

- 1. Placement Tolerances. The mechanical dowel bar inserter shall place the dowel bars in the concrete pavement within the following tolerances:
  - (a.) Longitudinal translation (side shift) is defined as the position of the center of the dowel bar along the longitudinal axis, in relation to the sawed joint. The maximum allowable longitudinal translation is 2 in. (50 mm).

- (b.) Horizontal translation is defined as difference in the actual dowel bar location parallel to the transverse axis of the joint from its theoretical position as detailed in the standard details. The maximum allowable horizontal translation is 2 in. (50 mm).
- (c.) Vertical translation (depth) is the difference in the actual dowel bar location from the theoretical midpoint of the slab. The maximum allowable vertical translation is 1/2 in. (12.5 mm) above the theoretical midpoint and 1 in. (25 mm) below the theoretical midpoint.
- (d.) Dowel bar misalignment, either vertical tilt or horizontal skew is defined as the difference in position of the dowel bar ends with respect to each other. Vertical tilt is measured in the vertical axis whereas horizontal skew is measured in the horizontal axis. The maximum allowable misalignment shall be 3/8 in. in 12 in. (9 mm in 300 mm).
- 2. Evaluation of Dowel Bar Placement by Magnetic Tomography. The location and alignment of the dowel bars shall be tested with a calibrated magnetic imaging device. The testing device shall be approved by the Engineer prior to the start of testing and shall include the following items:
  - (a.) the sensor unit;
  - (b.) an onboard computer that runs the test, collects and stores the data and performs preliminary evaluation;
  - (c.) a rail system to guide the sensor unit parallel to the joint and the pavement surface at a constant elevation for the full width of the pavement that is placed; and
  - (d.) associated PC software recommended by the manufacturer of the device for installation on a Department laptop computer. The program shall be compatible with Windows NT.

A trained operator shall perform the scans with the device and provide the printed results. All testing shall be performed in the presence of the Engineer. The test results for each joint shall be printed directly from the onboard computer immediately after the scan is performed and given to the Engineer. The results shall also be stored on a flash memory card used in the onboard computer that shall be given to the Engineer at the end of each day.

The device shall be calibrated to the type and size dowel bar used in the work according to the manufacturer's instructions. The Contractor may utilize this device as a process control and make necessary adjustments to ensure the dowels are placed in the correct location.

Test sections consisting of the first 20 joints of concrete pavement on the first day of paving shall be tested for dowel location and alignment as soon as the concrete has hardened sufficiently to prevent damage to the surface of the pavement. Additional trial sections will be established when the slipform paving equipment is modified to accommodate a change in paving width or when the slipform paving equipment has been disassembled and/or replaced by another slip form paver.

For all remaining joints, a minimum of 1 out of every 10 shall be tested as soon as the concrete has hardened sufficiently to prevent damage to the surface of the pavement. If the position and alignment of any dowel bar(s) is found to be rejectable, then scanning of adjacent joints on both sides of the joint containing the rejectable dowel bar(s) shall be performed until joints on each side are found with no rejectable dowel bars.

If consistency of the proper dowel bar alignment cannot be established within the first 300 ft (90 m), the Engineer will suspend the paving operation. The Contractor shall determine a course of action approved by the Engineer to correct dowel bars found out of tolerance. Use of the DBI shall cease if satisfactory results, as determined by the Engineer, are not being achieved.

#### REQUIREMENTS WHEN WORKING NEAR EXISTING PIPELINES

<u>Description:</u> This project involves work above and in close proximity to several existing underground pipelines. The following conditions shall apply to this contract:

- 1. Illinois one-call (JULIE) and pipeline representatives must be contacted a minimum of 72 hours in advance of any construction activities within 100 feet of their respective facility so that pipeline companies may be present to ensure that there are no conflicts with their pipeline.
- 2. The contractor is responsible for taking all necessary safety precautions and will be held responsible for any damages caused to the pipeline or property as a result of their work. Exposing the existing pipelines may be required prior to working near pipelines to determine the exact alignment and depth.
- 3. There shall be no excavation or backfilling within 25 feet of pipelines for any reason without permission from an on-site representative of the pipeline company.
- 4. All excavation within 10 feet of the pipeline will be performed by hand until the pipeline has been located. Then, if approved by the company on-site representative, mechanical excavation equipment may be used within 5 feet of the pipeline. All excavation or construction activities within 5 feet of the pipeline shall be performed by hand, or as directed by the on-site pipeline company representative.

- 5. Heavy equipment will not be allowed to operate directly over pipeline except at areas with protective concrete slabs in place or at discretion of pipeline representative. See schedule for Utility Protection Pad. At locations where Utility Protection Pad is not required, the contractor shall place approved crane mats over the pipeline during construction for temporary crossing protection. The contractor may also be required to place crane mats in addition to Utility Protection Pad. A complete listing of anticipated construction vehicular traffic with anticipated maximum loads shall be provided to the pipeline representative at the pre-construction meeting.
- 6. Heavy equipment shall only be allowed to cross pipelines at locations designated by the pipeline company. Crossing of pipelines shall be made as close as possible to 90 degrees. The contractor shall not be permitted to transport construction materials or equipment longitudinally over the pipelines. No track type construction equipment shall be permitted to pivot or turn directly over the top of the pipeline. When inclement weather exists, provisions must be made to compensate for soil displacement due to subsidence of tires.
- 7. Vibratory rollers for compacting shall be turned off at pipeline crossings.
- 8. Unimpeded access to pipelines will be required at all times. Natural drainage will not be impaired. All rock, debris, tree trimmings and unused excavated material will be promptly removed from the site and the site will be left in clean and orderly condition to the satisfaction of the pipeline company on-site representative. Erosion due to excavating or grading activities shall be immediately restored to provide protection to the pipeline facility.
- 9. No blasting shall occur on or within 100 feet of pipeline facilities unless approved in writing by the pipeline company. If blasting of bedrock is to occur near the pipeline, the pipeline company may require a review of the soil and site conditions. Seismometers may be required to be installed for purposes of measuring peak particle velocities during blasting. Allowance would need to be made in the schedule for time to review the results and make any necessary adjustments.
- 10. For Pipeline Company contacts, see the Special Provision for "Status of Utilities to be Adjusted".

#### UTILITY PROTECTION PAD

<u>Description:</u> This work shall consist of the construction of a reinforced concrete protective slab over existing gas pipelines at the locations and details shown on the plans and as directed by the Engineer. The work shall conform to the applicable portion of Sections 208, 503, 508, and 550 of the Standard Specifications.

<u>Method of Measurement:</u> This work will be measured for payment in square yards, calculated to the exact dimensions of placement of the reinforced concrete slab.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per square yard for UTILITY PROTECTION PAD, which price shall be payment in full for all labor, equipment and materials required to complete the work as specified herein, including but not limited to the cost of earth and rock excavation, Portland cement concrete, reinforcement bars, protective board, cardboard grade beam forms, underground warning tape and trench backfill.

# WEED CONTROL MOWING STRIP (SPECIAL)

<u>Description.</u> This work consists furnishing labor, equipment, and materials to construct a Portland Cement Concrete weed control mowing strip as detailed in the plans.

It shall be constructed according to applicable portions of Section 606 and Article 606.10, except anchor walls will not be required.

The finished weed control mowing strip shall be flush with the final earth grades and consistent with the cross slopes as detailed in the plans.

<u>Method of Measurement.</u> This work will be measured for payment in place and the area computed in square yards (square meters). Earthwork for the construction of the mow strip will not be measured separately for payment.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square yard (square meter) for WEED CONTROL MOWING STRIP (SPECIAL).

## STORM SEWER OR CULVERT TO BE FILLED

(Effective June 13, 1997; Revised January 1, 2007)

Description: This work shall consist of cleaning and then filling storm sewer or culvert pipes to be abandoned.

Materials. The material to fill the pipes shall be Controlled Low Strength Material (CLSM) meeting the requirements of Section 1019 of the Standard Specifications.

Construction Requirements: The inside of the pipe shall be cleaned of all unsuitable material and debris before placing the CLSM. The pipe shall be completely filled. The method used for filling the pipe and containing the CLSM at the pipe ends shall be at the Contractor's option.

The weather and temperature placement requirements of Section 593 of the Standard Specifications shall apply.

Method of Measurement. The volume for payment of CLSM shall be the measured volume in cubic yards (cubic meters) of the culvert to be filled. Cleaning the culvert will not be measured for payment.

Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for CONTROLLED LOW-STRENGTH MATERIAL

## TEMPORARY INLETS, TYPE A, TYPE 1 FRAME, OPEN LID

<u>Description:</u> This work shall installing and removing a Temporary Inlet, Type A with a Type 1 Frame, Open Lid in accordance with plan details, IDOT Highway Standards, and applicable portions of Sections 602, 604 and 605 of the Standard Specifications.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per each for TEMPORARY INLETS, TYPE A, TYPE 1 FRAME, OPEN LID.

## MEMBRANE WATERPROOFING FOR CULVERTS

Effective: November 27, 2013

<u>Description.</u> This work shall consist of furnishing and applying a self adhesive membrane waterproofing system to the top slab and sidewalls of the box culvert as detailed on the contract plans.

<u>Materials.</u> The material used in the waterproofing system shall consist of a cold-applied, self-adhering membrane incorporating a woven or non-woven polypropylene mesh or fiberglass reinforcement with release film on one side.

The sheet membrane shall have the following physical properties:

| Physical Properties  |                          |
|--|--------------------------|
| Thickness ASTM D 1777  | 60 mils (1.500 mm) min.  |
| Width  | 36 inches (914 mm) min.  |
| Pliability [180° bend over 1/4 inch (6 mm) mandrel @ -25 °F (-32 °C)] ASTM D 146 | No Effect                |
| Elongation ASTM D 412 (Die C)  | 300% min                 |
| Puncture Resistance-Membrane ASTM E 154  | 40 lb (18 kg) min.       |
| Permeance (Grains/ft²/hr/in Hg) ASTM E 96, Method B                              | 0.1 max.                 |
| Water Absorption (% by Weight) ASTM D 570  | 0.2 max.                 |
| Adhesion to concrete ASTM D 903  | 5.0 lb/in (89 g/mm) min. |

<u>Certification</u>: Prior to approval and use of the material the Contractor shall submit, to the Engineer, a notarized certification by an independent test laboratory stating that the materials conform to the requirements of these specifications. The certification shall include or have attached specific results of tests performed on the material supplied. The Engineer may at his option require samples of any material for testing. Materials may be accepted on certification but are subject to control and/or approval by subsequent testing.

<u>Construction.</u> The areas requiring waterproofing shall be prepared and the waterproofing installed in accordance with the manufacturer's instructions. Surfaces to be waterproofed shall be smooth and free from projections which might damage the waterproofing membrane. Projections or depressions on the surface on which the membrane is to be applied that may cause damage to the membrane shall be removed or filled as directed by the Engineer. The surface shall be power washed and cleaned of dust, dirt, grease, and loose particles, and shall be dry before the waterproofing is applied.

The installation of the sheet membrane shall commence at the highest elevation of the culvert top slab and progress toward the lowest elevation. The membrane strips shall be overlapped a minimum of 2 ½ inches (64 mm). The membrane shall be smooth and free of wrinkles and there shall be no depressions in horizontal surfaces of the finished waterproofing.

Sealing bands at joints in precast box culverts shall be installed prior to the sheet membrane being applied. Where the waterproofing membrane and sealing band overlap, the installation shall be planned such that water will not be trapped or directed underneath the membrane or sealing band.

Care shall be taken to protect and to prevent damage to the membrane surface prior to and during backfilling operations. The sheet membrane shall be removed as required for the installation of slab mounted guardrails and other appurtenances. After the installation is complete, the sheet membrane shall be repaired and sealed against water intrusion according to the manufacturer's instructions and to the satisfaction of the Engineer.

Replace the last paragraph of Article 540.06 Precast Concrete Box Culverts and replace with:

Handling holes shall be filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation nor project above the outside surface to the extent that may cause damage to the membrane. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar compatible with the membrane.

<u>Method of Measurement</u>. The waterproofing system will be measured in place, in square yards (square meters) of the concrete surface to be waterproofed.

<u>Basis of Payment.</u> This will work will be paid for at the contract unit price, per square yard (square meter) for MEMBRANE WATERPROOFING FOR CULVERTS.

### **HOT-MIX ASPHALT MIXTURE IL-9.5FG (BMPR)**

Effective: July 1, 2005

Revised: December 28, 2010

<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.

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, or FA 21. For mixture IL-9.5FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 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) of the Standard Specifications:

| "High ESAL, MIXTURE<br>COMPOSITION (% PASSING) 1/ |                  |                  |
|---|------------------|------------------|
| Sieve   | IL-9.            | 5FG              |
| 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)                                      | 60 <sup>4/</sup> | 75 <sup>4/</sup> |
| #8 (2.36 mm)                                      | 45 <sup>4/</sup> | 60 <sup>4/</sup> |
| #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<br>Dust/Asphalt Binder                      |                  | 1.0              |

4/ When used as level binder placed less than 1 in. (25 mm) thick, the min. and max. percent passing shall each be increased 5%."

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

| "VOLUMETRIC REQUIREMENTS<br>High ESAL |       |   |      | S                |                           |
|---------------------------------------|-------|---|------|------------------|---------------------------|
|                                       | Voids | Voids in the Mineral Aggregate (VMA), % minimum |      |                  | Voids Filled with Asphalt |
| N <sub>design</sub>                   | IL-   | IL-   | IL-  | IL-9.5           | Binder                    |
|                                       | 25.0  | 19.0  | 12.5 |                  | (VFA),%                   |
| 50                                    |       |   |      |                  | 65 - 78                   |
| 70                                    | 12.0  | 13.0  | 14.0 | 15 <sup>1/</sup> |                           |
| 90                                    | 12.0  | 13.0  | 14.0 | 10               | 65 - 75 <sup>2/</sup>     |
| 105                                   |       |   |      |                  |                           |

<sup>1/</sup> The VMA for IL-9.5FG shall be a minimum of 15.0 percent.

<sup>2/</sup> The VFA range for IL-9.5FG shall be 65 - 78 percent."

Quality Control/Quality Assurance (QC/QA). Revise the second table in Article 1030.05(d)(4) of the Standard Specifications to read:

|                            | "DENSITY CONTROL LIMITS  |                              |                               |
|----------------------------|--------------------------|------------------------------|-------------------------------|
| Mixture Co                 | mposition                | Parameter                    | Individual Test <sup>3/</sup> |
|                            | Lifts < 1.25 in. (32 mm) | N <sub>design</sub> 50 - 105 | 91.0 – 97.0% 2/               |
| IL-9.5FG                   | Lifts ≥ 1.25 in. (32 mm) | N <sub>design</sub> 50 - 105 | 93.0 – 97.0%                  |
| 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-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 <sup>1/</sup> - 97.4 %   |

- 1/ 92.0 % when placed as first lift on an unimproved subgrade.
- 2/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 3/ Bulk Specific Gravity and Density that are determined using coated samples must be in accordance with ASTM 1188-96."

## **CONSTRUCTION REQUIREMENTS**

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

| "Leveling   | g Binder                                  |
|---|---|
| Nominal, Compacted, Leveling Binder Thickness, in. (mm) | Mixture Composition                       |
| ≤ 1 1/4 (32)  | 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-<br>12.5 |

The density requirements of Article 1030.05(d)(4) shall apply for leveling binder, machine method, when the nominal, compacted thickness is: 3/4 in. (19 mm) or greater for IL-9.5FG 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 ROLLER REQUIREMENTS FOR HMA                                     |   |                        |   |  |
|--|---|------------------------|---|--|
|  | Breakdown<br>Roller (one of<br>the following) | Intermediate<br>Roller | Final Roller<br>(one or more of<br>the following) | Density Requirement  |
| Level Binder: (When the density requirements of Article 406.05(c) do not apply.)   | P 3/  |                        | VS, P <sup>3/</sup> , TB,<br>TF, 3W               | To the satisfaction of the Engineer.                         |
| Level Binder: (When placed at ≤ 1 1/4 in. (32 mm) and density requirements apply.) | ,   | P 3/                   | VS, TB, TF  | As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7). |
| Binder and Surface 1/  |   |                        |   | As appointed in Articles:                                    |

| Binder and Surface <sup>1/</sup> (When the density requirements of Article 406.05(c) apply.) | 0147 | P <sup>3/</sup> | VS, TB, TF | As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7). |
|--|------|-----------------|------------|--|
| Bridge Decks <sup>2/</sup>   | ТВ   |                 | TF         | 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 TB 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 (VD) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder.

<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."

## **HOT-MIX ASPHALT MIXTURE IL-19.0FG (BMPR)**

Effective: December 1, 2009 Revised: December 6, 2010

<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.

<u>Materials</u>. 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, or FA 21. For mixture IL-19.0FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 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) of the Standard Specifications:

| "High ESAL, MIXTURE<br>COMPOSITION (% PASSING) <sup>1/</sup> |       |      |
|--|-------|------|
| Sieve  | IL-19 | .0FG |
| 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<br>Dust/Asphalt Binder                                 |       | 1.0  |

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

|             | "VOLUMETRIC REQUIREMENTS<br>High ESAL           |         |               |         |                           |                    |
|-------------|---|---------|---------------|---------|---------------------------|--------------------|
|             | Voids in the Mineral Aggregate (VMA), % minimum |         |               |         | Voids Filled with Asphalt |                    |
| Ndesig<br>n | IL-25.0   | IL-19.0 | IL-<br>19.0FG | IL-12.5 | IL-9.5                    | Binder (VFA),<br>% |
| 50          |   |         |               |         |                           | 65 - 78            |
| 70          | 12.0  | 13.0    | 13.5          | 14.0    | 15                        |                    |
| 90          | 12.0  | 13.0    | 13.5          | 14.0    | 15                        | 65 - 75            |
| 105         |   |         |               |         |                           |                    |

Quality Control/Quality Assurance (QC/QA). Revise the second table in Article 1030.05(d)(4) of the Standard Specifications to read:

| "DENSITY CONTROL LIMITS                   |                          |                             |  |
|---|--------------------------|-----------------------------|--|
| Mixture Composition                       | Parameter                | Individual Test             |  |
| 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-<br>25.0 | N <sub>design</sub> < 90 | 93.0 – 97.4 %               |  |
| All Other                                 | N <sub>design</sub> = 30 | 93.0 <sup>1/</sup> - 97.4 % |  |

<sup>1/ 92.0 %</sup> when placed as first lift on an unimproved subgrade."

<u>Basis of Payment</u>. 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."

# WEEP HOLE DRAINS FOR ABUTMENTS, WINGWALLS, RETAINING WALLS AND CULVERTS

Effective: April 19, 2012 Revised: October 22, 2013

Delete the last paragraphs of Articles 205.05 and 502.10 and replace with the following.

"If a geocomposite wall drain according to Section 591 is not specified, a prefabricated geocomposite strip drain according to Section 1040.07 shall be placed at the back of each drain hole. The strip drain shall be 24 inches (600 mm) wide and 48 inches (1.220 m) tall. The strip drain shall be centered over the drain hole with the bottom located 12 inches (300 mm) below the bottom of the drain hole. All form boards or other obstructions shall be removed from the drain holes before placing any geocomposite strip drain."

Revise the last sentence of the first paragraph of Article 503.11 to read as follows.

"Drain holes shall be covered to prevent the leakage of backfill material according to Article 502.10."

Revise the title of Article 1040.07 to Geocomposite Wall Drains and Strip Drains.

# **AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)**

Effective: January 1, 2008

<u>Description</u>. This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement. Use of these devices shall be at the option of the Contractor.

Equipment. AFADs shall be according to the FHWA memorandum, "MUTCD - Revised Interim Approval for the use of Automated Flagger Assistance Devices in Temporary Traffic Control Zones (IA-4R)", dated January 28, 2005. The devices shall be mounted on a trailer or a moveable cart and shall meet the requirements of NCHRP 350, Category 4.

The AFAD shall be the Stop/Slow type. This device uses remotely controlled "STOP" and "SLOW" signs to alternately control right-of-way.

Signs for the AFAD shall be according to Article 701.03 of the Standard Specifications and the MUTCD. The signs shall be  $24 \times 24$  in. ( $600 \times 600$  mm) having an octagon shaped "STOP" sign on one side and a diamond shaped "SLOW" sign on the opposite side. The letters on the signs shall be 8 in. (200 mm) high. If the "STOP" sign has louvers, the full sign face shall be visible at a distance of 50 ft (15 m) and greater.

The signs shall be supplemented with one of the following types of lights.

- (a) Flashing Lights. When flashing lights are used, white or red flashing lights shall be mounted within the "STOP" sign face and white or yellow flashing lights within the "SLOW" sign face.
- (b) Stop and Warning Beacons. When beacons are used, a stop beacon shall be mounted 24 in. (600 mm) or less above the "STOP" sign face and a warning beacon mounted 24 in. (600 mm) or less above, below, or to the side of the "SLOW" sign face. As an option, a Type B warning light may be used in lieu of the warning beacon.

A "WAIT ON STOP" sign shall be placed on the right hand side of the roadway at a point where drivers are expected to stop. The sign shall be 24 x 30 in. (600 x 750 mm) with a black legend and border on a white background. The letters shall be at least 6 in. (150 mm) high.

This device may include a gate arm or mast arm that descends to a horizontal position when the "STOP" sign is displayed and rises to a vertical position when the "SLOW" sign is displayed. When included, the end of the arm shall reach at least to the center of the lane being controlled. The arm shall have alternating red and white retroreflective stripes, on both sides, sloping downward at 45 degrees toward the side on which traffic will pass. The stripes shall be 6 in. (150 mm) in width and at least 2 in. (50 mm) in height.

<u>Flagging Requirements</u>. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The flaggers shall be able to view the face of the AFAD and approaching traffic during operation.

To stop traffic, the "STOP" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall descend to a horizontal position. To permit traffic to move, the "SLOW" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall rise to a vertical position.

If used at night, the AFAD location shall be illuminated according to Section 701 of the Standard Specifications.

When not in use, AFADs will be considered nonoperating equipment and shall be stored according to Article 701.11 of the Standard Specifications.

<u>Basis of Payment</u>. This work will not be paid for separately but shall be considered as included in the cost of the various traffic control items included in the contract.

## COATED GALVANIZED STEEL CONDUIT (BDE)

Effective: January 1, 2013 Revised: August 1, 2014

Revise Article 811.03(b) of the Standard Specifications to read:

"(b) Coated Galvanized Steel Conduit. In addition to the methods described in Article 810.05(a) the following methods shall be observed when installing coated conduit.

Coated conduit pipe vise jaw adapters shall be used when the conduit is being clamped to avoid damaging the coating.

Coated conduit shall be cut with a roller cutter or by other means approved by the conduit manufacturer.

After any cutting or threading operations are completed, the bare steel shall be touched up with the conduit manufacturer's touch up compound."

Revise Article 1088.01(a)(3) of the Standard Specifications to read:

"(3) Coated Galvanized Steel Conduit. The conduit prior to coating shall meet the requirements for rigid metal conduit and be manufactured according to NEMA Standard No. RN1.

The coating shall have the following characteristics.

| Hardness                | 85+ Shore A Durometer                             |
|-------------------------|---|
| Dielectric Strength     | 400 V/mil @ 60 Hz                                 |
| Aging                   | 1,000 Hours Atlas Weatherometer                   |
| Brittleness Temperature | 0 °F (-18 °C) when tested according to ASTM D 746 |
| Elongation              | 200 percent                                       |

The exterior galvanized surfaces shall be coated with a primer before the coating to ensure a bond between the zinc substrate and the coating. The bond strength created shall be greater than the tensile strength of the plastic coating. The nominal thickness of the coating shall be 40 mils (1 mm). The coating shall pass the following bonding test.

Two parallel cuts 1/2 in. (13 mm) apart and 1 1/2 in. (38 mm) in length shall be made with a sharp knife along the longitudinal axis. A third cut shall be made perpendicular to and crossing the longitudinal cuts at one end. The knife shall then be worked under the coating for 1/2 in. (13 mm) to free the coating from the metal.

Using pliers, the freed tab shall be pulled with a force applied vertically and away from the conduit. The tab shall tear rather than cause any additional coating to separate from the substrate.

A two part urethane coating shall be applied to the interior of the conduit. The internal coating shall have a nominal thickness of 2 mils (50  $\mu$ m). The interior coating shall be applied in a manner so there are no runs, drips, or pinholes at any point. The coating shall not peel, flake, or chip off after a cut is made in the conduit or a scratch is made in the coating. The urethane interior coating applied shall afford sufficient flexibility to permit field bending without cracking or flaking of the interior coating.

All conduit fittings and couplings shall be as specified and recommended by the conduit manufacturer. All conduit fitting covers shall be furnished with stainless steel screws which have been encapsulated with a polyester material on the head to ensure maximum corrosion protection."

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

Effective: April 1, 2012 Revised: April 1, 2014

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."

## CONCRETE END SECTIONS FOR PIPE CULVERTS (BDE)

Effective: January 1, 2013

<u>Description</u>. This work shall consist of constructing cast-in-place concrete and precast concrete end sections for pipe culverts. These end sections are shown on the plans as Highway Standard 542001, 542006, 542011, or 542016. This work shall be according to Section 542 of the Standard Specifications except as modified herein.

<u>Materials</u>. Materials shall be according to the following Articles of Division 1000 – Materials of the Standard Specifications.

| Item                                       | Article/Section |
|--|-----------------|
| (a) Portland Cement Concrete (Note 1)      | 1020            |
| (b) Precast Concrete End Sections (Note 2) |                 |
| (c) Coarse Aggregate (Note 3)              | 1004.05         |
| (d) Structural Steel (Note 4)              | 1006.04         |
| (e) Anchor Bolts and Rods (Note 5)         | 1006.09         |
| (f) Reinforcement Bars                     | 1006.10(a)      |
| (g) Nonshrink Grout                        | 1024.02         |
| (h) Chemical Adhesive Resin System         |                 |
| (i) Mastic Joint Sealer for Pipe           | 1055            |
| (j) Hand Hole Plugs                        | 1042.16         |

- Note 1. Cast-in-place concrete end sections shall be Class SI, except the 14 day mix design shall have a compressive strength of 5000 psi (34,500 kPa) or a flexural strength of (800 psi) 5500 kPa and a minimum cement factor of 6.65 cwt/cu yd (395 kg/cu m).
- Note 2. Precast concrete end sections shall be according to Articles 1042.02 and 1042.03(b)(c)(d)(e) of the Standard Specifications. The concrete shall be Class PC according to Section 1020, and shall have a minimum compressive strength of 5000 psi (34,000 kPa) at 28 days.

Joints between precast sections shall be produced with reinforced tongue and groove ends according to the requirements of ASTM C 1577.

- Note 3. The granular bedding placed below a precast concrete end section shall be gradation CA 6, CA 9, CA 10, CA 12, CA 17, CA 18, or CA 19.
- Note 4. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.
- Note 5. The anchor rods for the culvert ties shall be according to the requirements of ASTM F 1554, Grade 105 (Grade 725).

## **CONSTRUCTION REQUIREMENTS**

The concrete end sections may be precast or cast-in-place construction. Toe walls shall be either precast or cast-in-place, and shall be in proper position and backfilled according to the applicable paragraphs of Article 502.10 of the Standard Specifications prior to the installation of the concrete end sections. If soil conditions permit, cast-in-place toe walls may be poured directly against the soil. When poured directly against the soil, the clear cover of the sides and bottom of the toe wall shall be increased to 3 in. (75 mm) by increasing the thickness of the toe wall.

- (a) Cast-In-Place Concrete End Sections. Cast-in-place concrete end sections shall be constructed according to the requirements of Section 503 of the Standard Specifications and as shown on the plans.
- (b) Precast Concrete End Sections. When the concrete end sections will be precast, shop drawings detailing the slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval.

The excavation and backfilling for precast concrete end sections shall be according to the requirements of Section 502 of the Standard Specifications, except a layer of granular bedding at least 6 in. (150 mm) in thickness shall be placed below the elevation of the bottom of the end section. The granular bedding shall extend a minimum of 2 ft (600 mm) beyond each side of the end section.

Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 2/3 turn on one of the nuts. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut.

<u>Method of Measurement</u>. This work will be measured for payment as each, with each end of each culvert being one each.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for CONCRETE END SECTION, STANDARD 542001; CONCRETE END SECTION, STANDARD 542006; CONCRETE END SECTION, 542011; or CONCRETE END SECTION, 542016, of the pipe diameter and slope specified.

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

Effective: April 1, 2014 Revised: August 1, 2014

Add the following to Article 606.02 of the Standard Specifications:

Revise the fifth paragraph of Article 606.07 of the Standard Specifications to read:

"Transverse contraction and longitudinal construction joints shall be sealed according to Article 420.12, except transverse joints in concrete curb and gutter shall be sealed with polysulfide or polyurethane joint sealant."

Add the following to Section 1050 of the Standard Specifications:

"1050.04 Polyurethane Joint Sealant. The joint sealant shall be a polyurethane sealant, Type S, Grade NS, Class 25 or better, Use T ( $T_1$  or  $T_2$ ), according to ASTM C 920."

# **CONTRACT CLAIMS (BDE)**

Effective: April 1, 2014

Revise the first paragraph of Article 109.09(a) of the Standard Specifications to read:

"(a) Submission of Claim. All claims filed by the Contractor shall be in writing and in sufficient detail to enable the Department to ascertain the basis and amount of the claim. As a minimum, the following information must accompany each claim submitted."

Revise Article 109.09(e) of the Standard Specifications to read:

"(e) Procedure. The Department provides two administrative levels for claims review.

Level I Engineer of Construction

Level II Chief Engineer/Director of Highways or Designee

- (1) Level I. All claims shall first be submitted at Level I. Two copies each of the claim and supporting documentation shall be submitted simultaneously to the District and the Engineer of Construction. The Engineer of Construction, in consultation with the District, will consider all information submitted with the claim and render a decision on the claim within 90 days after receipt by the Engineer of Construction. Claims not conforming to this Article will be returned without consideration. The Engineer of Construction may schedule a claim presentation meeting if in the Engineer of Construction's judgment such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. If a Level I decision is not rendered within 90 days of receipt of the claim, or if the Contractor disputes the decision, an appeal to Level II may be made by the Contractor.
- (2) Level II. An appeal to Level II shall be made in writing to the Engineer of Construction within 45 days after the date of the Level I decision. Review of the claim at Level II shall be conducted as a full evaluation of the claim. A claim presentation meeting may be scheduled if the Chief Engineer/Director of Highways determines that such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. A Level II final decision will be rendered within 90 days of receipt of the written request for appeal.

Full compliance by the Contractor with the provisions specified in this Article is a contractual condition precedent to the Contractor's right to seek relief in the Court of Claims. The Director's written decision shall be the final administrative action of the Department. Unless the Contractor files a claim for adjudication by the Court of Claims within 60 days after the date of the written decision, the failure to file shall constitute a release and waiver of the claim."

## **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)**

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

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

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

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 6.00% 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 <a href="https://www.dot.il.gov">www.dot.il.gov</a>.

<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.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owneroperator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

- (a) <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) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor. but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the BDE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

## FRICTION AGGREGATE (BDE)

Effective: January 1, 2011 Revised: November 1, 2014

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.
  - a. 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).

b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including 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.

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

| Use                          | Mixture  | Aggregates Allowed  |
|------------------------------|--|---|
| Class A                      | Seal or Cover  | Allowed Alone or in Combination <sup>5/</sup> :  Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete                                    |
| HMA<br>Low ESAL              | Stabilized Subbase or Shoulders  | Allowed Alone or in Combination <sup>5/</sup> :  Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete                      |
| HMA<br>High ESAL<br>Low ESAL | Binder<br>IL-19.0<br>or IL-19.0L<br>SMA Binder                                     | Allowed Alone or in Combination <sup>5/</sup> :  Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete <sup>3/</sup>                                  |
| HMA<br>High ESAL<br>Low ESAL | C Surface and<br>Leveling Binder<br>IL-9.5 or IL-9.5L<br>SMA<br>Ndesign 50 Surface | Allowed Alone or in Combination <sup>5/</sup> :  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> |

| Use              | Mixture  | Aggregates Allowed   |  |
|------------------|--|--|--|
|                  |  |  |  |
| HMA<br>High ESAL | D Surface and<br>Leveling Binder<br>IL-9.5<br>SMA<br>Ndesign 50<br>Surface | Allowed Alone or in Come Crushed Gravel Carbonate Crushed Limestone) <sup>2/</sup> Crystalline Crushed Store Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup> | Stone (other than  |
|                  |  | Other Combinations Allo  | wed:   |
|                  |  | Up to  | With   |
|                  |  | 25% Limestone  | Dolomite   |
|                  |  | 50% Limestone  | Any Mixture D aggregate other than Dolomite  |
|                  |  | 75% Limestone  | Crushed Slag (ACBF) or Crushed Sandstone   |
| HMA<br>High ESAL |  |  | nbination <sup>5/</sup> :  |
|                  |  | Other Combinations Allowed:  |  |
|                  |  | Up to  | With   |
|                  |  | 50% Dolomite <sup>2/</sup>   | Any Mixture E aggregate  |
|                  |  | 75% Dolomite <sup>2/</sup>   | Crushed Sandstone,<br>Crushed Slag (ACBF),<br>Crushed Steel Slag, or<br>Crystalline Crushed<br>Stone |
|                  |  | 75% Crushed Gravel or Crushed Concrete <sup>3/</sup>   | Crushed Sandstone,<br>Crystalline Crushed<br>Stone, Crushed Slag<br>(ACBF), or Crushed<br>Steel Slag |

| Use              | Mixture   | Aggregates Allowed  |  |
|------------------|---|---|--|
| HMA<br>High ESAL | F Surface<br>IL-9.5<br>SMA<br>Ndesign 80<br>Surface | Allowed Alone or in Combination <sup>5/</sup> :  Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone. |  |
|                  |   | Other Combinations Allowed:  Up to  With  |  |
|                  |   | 50% Crushed Gravel,<br>Crushed Concrete <sup>3/</sup> , or<br>Dolomite <sup>2/</sup>  | Crushed Sandstone,<br>Crushed Slag (ACBF),<br>Crushed Steel Slag, or<br>Crystalline Crushed<br>Stone |

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ 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.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."

## **GROOVING FOR RECESSED PAVEMENT MARKINGS (BDE)**

Effective: November 1, 2012 Revised: August 1, 2014

<u>Description</u>. This work shall consist of grooving the pavement surface in preparation for the application of recessed pavement markings.

Equipment. Equipment shall be according to the following.

- (a) Pavement Marking Tape Installations: The grooving equipment shall have a free-floating saw blade cutting head equipped with gang-stacked diamond saw blades. The diamond saw blades shall be of uniform wear and shall produce a smooth textured surface. Any ridges in the groove shall have a maximum height of 15 mils (0.38 mm).
- (b) Liquid and Thermoplastic Pavement Marking Installations: The grooving equipment shall be equipped with either a free-floating saw blade cutting head or a free-floating grinder cutting head configuration with diamond or carbide tipped cutters and shall produce an irregular textured surface.

## **CONSTRUCTION REQUIREMENTS**

<u>General</u>. The Contractor shall supply the Engineer with a copy of the pavement marking material manufacturer's recommendations for constructing a groove.

<u>Pavement Grooving Methods</u>. The grooves for recessed pavement markings shall be constructed using the following methods.

- (a) Wet Cutting Head Operation. When water is required or used to cool the cutting head, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.
- (b) Dry Cutting Head Operation. When used on HMA pavements, the groove shall be vacuumed or cleaned by blasting with high-pressure air to remove loose aggregate, debris, and dust generated during the cutting operation. When used on PCC pavements, the groove shall be flushed with high pressure water or shot blasted to remove any PCC particles that may have become destabilized during the grooving process. If high pressure water is used, the pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

Pavement Grooving. Grooving shall not cause ravels, aggregate fractures, spalling or disturbance of the joints to the underlying surface of the pavement. Grooves shall be cut into the pavement prior to the application of the pavement marking material. Grooves shall be cut such that the width is 1 in. (25 mm) greater than the width of the pavement marking line as specified on the plans. Grooves for letters and symbols shall be cut in a square or rectangular shape so that the entire marking will fit within the limits of the grooved area. The position of the edge of the grooves shall be a minimum of 4 in. (100 mm) from the edge of all longitudinal joints. The depth of the groove shall not be less than the manufacturer's recommendations for the pavement marking material specified, but shall be installed to a minimum depth of 110 mils (2.79 mm) and a maximum depth of 200 mils (5.08 mm) for pavement marking tapes thermoplastic markings and a minimum depth of 40 mils (1.02 mm) and a maximum depth of 80 mils (2.03 mm) for liquid markings. The cutting head shall be operated at the appropriate speed in order to prevent undulation of the cutting head and grooving at an inconsistent depth.

At the start of grooving operations, a 50 ft (16.7 m) test section shall be installed and depth measurements shall be made at 10 ft (3.3 m) intervals within the test section. The individual depth measurements shall be within the allowable ranges according to this Article. If it is determined the test section has not been grooved at the appropriate depth or texture, adjustments shall be made to the cutting head and another 50 ft (16.7 m) test section shall be installed and checked. This process shall continue until the test section meets the requirements of this Article.

For new HMA pavements, grooves shall not be installed within 14 days of the placement of the final course of pavement.

<u>Final Cleaning</u>. Immediately prior to the application of the pavement marking material or primer sealer, the groove shall be cleaned with high-pressure air blast.

<u>Method of Measurement</u>. This work will be measured for payment in place, in feet (meter) for the groove width specified.

Grooving for letter, numbers and symbols will be measured in square feet (square meters).

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS.

The following shall only apply when preformed plastic pavement markings are to be recessed:

Add the following paragraph after the first paragraph of Article 780.07 of the Standard Specifications.

"The markings shall be capable of being applied in a grooved slot on new and existing portland cement concrete and HMA surfaces, by means of a pressure-sensitive, precoated adhesive, or liquid contact cement which shall be applied at the time of installation. A primer sealer shall be applied with a roller and shall cover and seal the entire bottom of the groove. The primer sealer shall be recommended by the manufacturer of the pavement marking material and shall be compatible with the material being used. The Contractor shall install the markings in the groove as soon as possible after the primer sealer cures according to the manufacturer's recommendations. The markings placed in the groove shall be rolled and tamped into the groove with a roller or tamper cart cut to fit the groove and loaded with or weighing at least 200 lb (90kg). Vehicle tires shall not be used for tamping. The Contractor shall roll and tamp the material with a minimum of 6 passes to prevent easy removal or peeling."

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

Effective: November 1, 2013 Revised: November 1, 2014

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

<u>Mix Design Testing.</u> Add the following below the referenced AASHTO standards in Article 1030.04 of the Standard Specifications:

AASHTO T 324 Hamburg Wheel Test

AASHTO T 283 Tensile Strength Test

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 (Illinois Modified AASHTO T 324) and the Tensile Strength Test (Illinois Modified 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.

| Illinois Modified AASHTO T 324 Requirements <sup>1/</sup> |
|---|
|---|

| 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           |

- 1/ When produced at temperatures of 275  $\pm$  5 °F (135  $\pm$  3 °C) or less, loose Warm Mix Asphalt shall be oven aged at 270  $\pm$  5 °F (132  $\pm$  3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.
- (2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) 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 200 psi (1380 kPa)."

<u>Production Testing</u>. Revise Article 1030.06(a) of the Standard Specifications to read:

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures".

Before start-up, target values shall be determined by applying gradation correction factors to the JMF when applicable. These correction factors shall be determined from previous experience. The target values, when approved by the Engineer, shall be used to control HMA production. Plant settings and control charts shall be set according to target values.

Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows.

| Parameter         |        | Adjustment |
|-------------------|--------|------------|
| 1/2 in. (12.5 mm) |        | ± 5.0 %    |
| No. 4 (4.75 mm)   |        | ± 4.0 %    |
| No. 8 (2.36 mm)   |        | ± 3.0 %    |
| No. 30 (600 µm)   |        | *          |
| No. 200 (75 µm)   |        | *          |
| Asphalt E         | Binder | ± 0.3 %    |
| Content           |        |            |

<sup>\*</sup> In no case shall the target for the amount passing be greater than the JMF.

Any adjustments outside the above limitations will require a new mix design.

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 (approximately 60 lb (27 kg) total).

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria is being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

The Department may conduct additional Hamburg Wheel tests on production material as determined by the Engineer."

Revise the title of Article 1030.06(b) of the Standard Specifications to read:

"(b) Low ESAL Mixtures."

<u>System for Hydrated Lime Addition</u>. Revise the fourth 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)."

Replace 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 dryer-drum plant, the lime shall be added in such a manner that the lime will not become entrained into the air stream of the dryer-drum and that thorough dry mixing shall 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>. Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

"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."

## HOT MIX ASPHALT - PAY FOR PERFORMANCE USING PERCENT WITHIN LIMITS - JOBSITE SAMPLING (BDE)

Effective: November 1, 2014

<u>Description</u>. This special provision describes the procedures used for production, placement and payment for hot-mix asphalt (HMA). This special provision shall apply to all pay items as specified in the plans. This work shall be according to the Standard Specifications except as specified herein.

406.06(b)(1), 2<sup>nd</sup> paragraph (Temperature requirements) Delete Articles:

1030.05(d)(5)

406.06(e), 3<sup>rd</sup> paragraph (Paver speed requirements)

406.07 (Compaction)

1030.04, last two sentences of first paragraph (Mix design verification)

1030.05(a)(4, 5, 7, 8, 9, & 10)(QC/QA Documents)

(Plant Tests) 1030.05(d)(2)a.

1030.05(d)(2)b. (Dust-to-Asphalt and Moisture Content)

1030.05(d)(2)d. (Small Tonnage) (HMA Sampling) 1030.05(d)(2)f. 1030.05(d)(3) (Required Field Tests) 1030.05(d)(4) (Control Limits) (Control Charts)

(Corrective Action for Required Plant Tests) 1030.05(d)(6) (Corrective Action for Field Tests (Density)) 1030.05(d)(7)

1030.05(e) (Quality Assurance by the Engineer)

(Acceptance by the Engineer) 1030.05(f)

1030.06(a), 3<sup>rd</sup> paragraph (Before start-up...) 1030.06(a), 7<sup>th</sup> paragraph 1030.06(a), 8<sup>th</sup> paragraph (After an acceptable...)

(If a mixture...) 1030.06(a), 9<sup>th</sup> paragraph (A nuclear/core...)

## Definitions.

- (a) Quality Control (QC): All production and construction activities by the Contractor required to achieve the required level of quality.
- (b) Quality Assurance (QA): All monitoring and testing activities by the Engineer required to assess product quality, level of payment, and acceptability of the product.
- (c) Percent Within Limits (PWL): The percentage of material within the quality limits for a given quality characteristic.
- (d) Quality Characteristic: The characteristics that are evaluated by the Department for payment using PWL. The quality characteristics for this project are field Voids in the Mineral Aggregate (VMA), voids, and density. Field VMA will be calculated using the combined Aggregates Bulk Specific Gravity (G<sub>sh</sub>) from the mix design.
- (e) Quality Level Analysis (QLA): QLA is a statistical procedure for estimating the amount of product within specification limits.
- (f) Sublot: A sublot for field VMA, and voids, will be 1000 tons (910 metric tons). If the quantity is less than 8000 tons (7260 metric tons), the sublot size will be adjusted to achieve a minimum of 8 tests. If the last sublot consists of less than 200 tons (180 metric tons), it will be combined with the previous sublot.

- (g) Density Testing Interval: The interval for density testing will be 0.2 mile (320 m) for lift thickness equal to or less than 3 in. (75 mm) and 0.1 mile (160 m) for lift thickness greater than 3 in. (75 mm). If a density testing interval is less than 200 ft (60 m), it will be combined with the previous test interval.
- (h) Lot: A lot consists of 8 sublots or 30 density intervals. If seven or less sublots or 19 or less density intervals remain at the end of production of a mixture, the test results for these sublots will be combined with the previous lot for evaluation of percent within limits and pay factors. Lots for mixture testing are independent of lots for density testing.
- (i) Density Test: A density test consists of a core taken at a random longitudinal and transverse offset within each density testing interval. The HMA maximum theoretical gravity ( $G_{mm}$ ) will be based on the running average of four including the current day of production. Initial  $G_{mm}$  will be based on the average of the first four test results. The random transverse offset excludes the outer 1.0 ft (300 mm) from an unconfined edge. For confined edges, the random transverse offset excludes a distance from the outer edge equal to the lift thickness or a minimum of 4 in. (100 mm).
- (j) Unconfined Edge Density: The outer 1.0 ft (300 mm) of an unconfined edge will be excluded from the effective pavement width used for calculating random transverse density location. The unconfined edge density will be randomly selected within each 1/2 mile (800 m) section for each unconfined edge. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4.0 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the core barrel shall be within 5.0 in. (125 mm) from the edge of pavement.)

<u>Pre-production Meeting</u>. The Engineer will schedule a pre-production meeting a minimum of seven calendar days prior to the start of production. The HMA QC Plan, test frequencies, random test locations, and responsibilities of all parties involved in testing and determining the PWL will be addressed. Personnel attending the meetings will include the following:

- (a) Resident Engineer
- (b) District Mixture Control Representative
- (c) QC Manager
- (d) Contractor Paving Superintendent
- (e) Any consultant involved in any part of the HMA sampling or testing on this project

<u>Quality Control (QC) by the Contractor</u>. The Contractor's quality control plan shall include the schedule of testing for both quality characteristics and non-quality characteristics required to control the product such as asphalt binder content and mixture gradation. The schedule shall include sample location. The minimum test frequency shall not be less than outlined in the Minimum Quality Control Sampling and Testing Requirements table below.

Table 1
Minimum Quality Control Sampling and Testing Requirements

| Quality Characteristic | Minimum Test<br>Frequency | Sampling Location |
|------------------------|---------------------------|-------------------|
| Mixture Gradation      |                           |                   |
| Binder Content         | 1/day                     | nor OC Plan       |
| $G_{mm}$               | 1/day                     | per QC Plan       |
| G <sub>mb</sub>        |                           |                   |
| Density                | per QC plan               | per QC Plan       |

The Contractor shall submit QC test results to the Engineer within 48 hours of the time of sampling.

<u>Initial Production Testing.</u> The Contractor shall split and test the first two samples with the Department for comparison purposes. The Contractor shall complete all tests and report all results to the Engineer within two working days of sampling. The Engineer will make Department test results of the initial production testing available to the Contractor within two working days from the receipt of the samples.

Quality Assurance (QA) by the Engineer. The Engineer will test each sublot for field VMA, voids, and dust/AC ratio; and each density interval for density to determine payment for each lot. A sublot shall begin once an acceptable test-strip has been completed and the AJMF has been determined. All Department testing will be performed in a qualified laboratory by personnel who have successfully completed the Department HMA Level I training.

<u>Voids, field VMA, and Dust/AC ratio</u>. For each sublot, the Engineer will determine the random tonnage for the sample and the Contractor shall be responsible for obtaining the sample according to the "PFP and QCP Hot-Mix Asphalt Random Jobsite Sampling" procedure. The Engineer will not disclose the random location of the sample until after the truck containing the random tonnage has been loaded and en-route to the project.

<u>Density</u>. The Engineer will identify the random locations for each density testing interval. The Contractor shall be responsible for obtaining the 4 in. (100 mm) diameter cores within the same day and prior to opening to traffic unless otherwise approved by the Engineer according to the "PFP and QCP Random Density Procedure". The locations will not be disclosed to the Contractor until after final rolling. The cores shall be obtained under the supervision of the Engineer. All core holes shall be filled immediately upon completion of coring. All water shall be removed from the core holes prior to filling. All core holes shall be filled with a rapid hardening mortar or concrete which shall be mixed in a separate container prior to placement in the hole. Any depressions in the surface of the filled core holes greater than 1/4 in. (6 mm) at the time of final inspection will require removal of the fill material to the depth of the lift thickness and replacement.

<u>Test Results</u>. The Department's test results for the first sublot, or density testing interval, of every lot will be available to the Contractor within three working days from the time the secured sample was delivered, by the Contractor, to the Department's testing facility or a location designated by the Engineer. Test results for a completed lot will be available to the Contractor within ten working days from the time the secured sample from the last sublot or density testing interval was delivered to the Department's testing facility or a location designated by the Engineer.

The Engineer will maintain a complete record of all Department test results. Copies will be furnished upon request. The records will contain, at a minimum, the originals of all Department test results and raw data, random numbers used and resulting calculations for sampling locations, and quality level analysis calculations.

<u>Dispute Resolution</u>. Dispute resolution testing will only be permitted when the Contractor submits their split sample test results prior to receiving Department split sample test results and: 1) the difference between the Contractor and Department split test results exceed the precision limits shown in Table 2 below; or 2) the Department's test results are outside the acceptable limits shown in Table 4. For density disputes, the Contractor shall use the Department's running average for  $G_{mm}$  when determining compliance with the Limits of Precision.

Table 2

| Test Parameter                | Limits of Precision |
|-------------------------------|---------------------|
| Voids                         | 1.0 %               |
| VMA                           | 1.0 %               |
| Ratio - Dust / Asphalt Binder | 0.2                 |
| Core Density                  | 1.0 %               |

If dispute resolution is necessary, the Contractor shall submit a request in writing within four working days of receipt of the results of the quality index analysis for the lot. The Engineer will document receipt of the request. The Bureau of Materials and Physical Research (BMPR) laboratory will be used for dispute resolution testing.

Density cores for dispute resolution testing shall be taken at the same time as the random density core. The density core for dispute resolution testing shall be taken within 1 ft (300 mm) longitudinally of the random density core and at the same transverse offset. Density dispute resolution will replace original density test results.

If three or more consecutive mix sublots are contested, corresponding density results will be recalculated with the new  $G_{\text{mm}}$ .

Test results from the dispute resolution testing will replace voids, VMA and Dust/AC results from the original quality assurance testing. The lot pay factor for the lot under dispute resolution will be recalculated. If the recalculated lot pay factor is less than or equal to the original lot pay factor, laboratory costs listed below will be borne by the Contractor.

Table 3

| Test         | Cost               |
|--------------|--------------------|
| Mix Testing  | \$1000.00 / sublot |
| Core Density | \$300.00 / core    |

<u>Acceptance by the Engineer</u>. All of the Department's tests shall be within the acceptable limits listed below:

Table 4

| 1 0110 1 0 1   |                                |  |
|--|--------------------------------|--|
| Acceptable Limits                                    |                                |  |
| Parameter  | Acceptable Range               |  |
| Field VMA  | -1.0 - +3.0 % <sup>1/</sup>    |  |
| Voids  | 2.0 – 6.0 %                    |  |
| Density:<br>IL-19.0, IL-25.0, IL-9.5<br>IL-4.75, SMA | 90.0 – 98.0 %<br>92.0 – 98.0 % |  |
| Dust / AC Ratio                                      | $0.4 - 1.6^{2/}$               |  |

- 1/ Based on minimum required VMA from mix design
- 2/ Does not apply to SMA

In addition, the PWL for any quality characteristic shall be 50 percent or above for any lot. No visible pavement distress shall be present such as, but not limited to, segregation, excessive coarse aggregate fracturing or flushing.

<u>Basis of Payment</u>. Payment will be based on the calculation of the Composite Pay Factor for each mix according to the "PFP Quality Level Analysis" document. Payment for full depth pavement will be based on the calculation of the Full Depth Pay Factor according to the "PFP Quality Level Analysis" document.

<u>Additional Pay Adjustments</u>. In addition to the Composite Pay Factor for each mix, monetary deductions will be made for dust/AC ratios and unconfined edge densities as shown in Tables 5 and 6 as follows.

Table 5

| Dust / AC Pay Adjustment Table 1/      |                               |  |
|--|-------------------------------|--|
| Range Deduct / sublot                  |                               |  |
| 0.6 ≤ X ≤ 1.2                          | \$0                           |  |
| $0.5 \le X < 0.6$ or $1.2 < X \le 1.4$ | \$1000                        |  |
| $0.4 \le X < 0.5$ or $1.4 < X \le 1.6$ | \$3000                        |  |
| X < 0.4  or  X > 1.6                   | Shall be removed and replaced |  |

## 1/ Does not apply to SMA.

Table 6

| Unconfined Edge Density Adjustment Table |                                    |  |
|--|------------------------------------|--|
| Density Deduct / 0.5 mile (800 m)        |                                    |  |
| ≥ 90%                                    | \$0                                |  |
| 89.0% to 89.9%                           | \$1000                             |  |
| 88.0% to 88.9% \$3000                    |                                    |  |
|  | Outer 1.0 ft (300 mm) will require |  |
| < 88.0%                                  | remedial action acceptable to      |  |
|  | the Engineer                       |  |

## LRFD PIPE CULVERT BURIAL TABLES (BDE)

Effective: November 1, 2013 Revised: November 1, 2014

Revise Article 542.02 of the Standard Specifications to read as follows:

| "Item   | Article/Section |
|---|-----------------|
| (a) Galvanized Corrugated Steel Pipe                                    | 1006.01         |
| (b) Galvanized Corrugated Steel Pipe Arch                               | 1006.01         |
| (c) Bituminous Coated Corrugated Steel Pipe                             | 1006.01         |
| (d) Bituminous Coated Corrugated Steel Pipe Arch                        | 1006.01         |
| (e) Reserved  |                 |
| (f) Aluminized Steel Type 2 Corrugated Pipe                             | 1006.01         |
| (g) Aluminized Steel Type 2 Corrugated Pipe Arch                        |                 |
| (h) Precoated Galvanized Corrugated Steel Pipe                          |                 |
| (i) Precoated Galvanized Corrugated Steel Pipe Arch                     |                 |
| (j) Corrugated Aluminum Alloy Pipe                                      | 1006.03         |
| (k) Corrugated Aluminum Alloy Pipe Arch                                 |                 |
| (I) Extra Strength Clay Pipe  | 1040.02         |
| (m) Concrete Sewer, Storm Drain, and Culvert Pipe                       |                 |
| (n) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe            |                 |
| (o) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe |                 |
| (p) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe       |                 |
| (q) Polyvinyl Chloride (PVC) Pipe                                       |                 |
| (r) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior     |                 |
| (s) Corrugated Polypropylene (CPP) pipe with smooth Interior            |                 |
| (t) Corrugated Polyethylene (PE) Pipe with a Smooth Interior            |                 |
| (u) Polyethylene (PE) Pipe with a Smooth Interior                       |                 |
| (v) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete P | -               |
| (w) Mastic Joint Sealer for Pipe  |                 |
| (x) External Sealing Band   |                 |
| (y) Fine Aggregate (Note 1)   |                 |
| (z) Coarse Aggregate (Note 2)   |                 |
| (aa) Packaged Rapid Hardening Mortar or Concrete                        |                 |
| (bb) Nonshrink Grout  |                 |
| (cc) Reinforcement Bars and Welded Wire Fabric                          |                 |
| (dd) Handling Hole Plugs  | 1042.16         |

Note 1. The fine aggregate shall be moist.

Note 2. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 542.03 of the Standard Specifications as follows:

| "Class | Materials  |
|--------|--|
| Α      | Rigid Pipes:   |
|        | Extra Strength Clay Pipe   |
|        | Concrete Sewer Storm Drain and Culvert Pipe, Class 3                                 |
|        | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe                             |
|        | Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe                  |
|        | Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe                        |
| С      | Rigid Pipes:   |
|        | Extra Strength Clay Pipe   |
|        | Concrete Sewer Storm Drain and Culvert Pipe, Class 3                                 |
|        | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe                             |
|        | Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe                  |
|        | Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe                        |
|        | Flexible Pipes:  |
|        | Aluminized Steel Type 2 Corrugated Pipe Aluminized Steel Type 2 Corrugated Pipe Arch |
|        | Precoated Galvanized Corrugated Steel Pipe   |
|        | Precoated Galvanized Corrugated Steel Pipe Arch                                      |
|        | Corrugated Aluminum Alloy Pipe   |
|        | Corrugated Aluminum Alloy Pipe Arch  |
|        | Polyvinyl Chloride (PVC) Pipe  |
|        | Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior                      |
|        | Polyethylene (PE) Pipe with a Smooth Interior  |
|        | Corrugated Polypropylene (CPP) Pipe with Smooth Interior                             |
| D      | Rigid Pipes:   |
|        | Extra Strength Clay Pipe   |
|        | Concrete Sewer Storm Drain and Culvert Pipe, Class 3                                 |
|        | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe                             |
|        | Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe                  |
|        | Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe                        |
|        | Flexible Pipes: Galvanized Corrugated Steel Pipe                                     |
|        | Galvanized Corrugated Steel Pipe Galvanized Corrugated Steel Pipe Arch               |
|        | Bituminous Coated Corrugated Steel Pipe  |
|        | Bituminous Coated Corrugated Steel Pipe Arch   |
|        | Aluminized Steel Type 2 Corrugated Pipe  |
|        | Aluminized Steel Type 2 Corrugated Pipe Arch   |
|        | Precoated Galvanized Corrugated Steel Pipe   |
|        | Precoated Galvanized Corrugated Steel Pipe Arch                                      |
|        | Corrugated Aluminum Alloy Pipe   |
|        | Corrugated Aluminum Alloy Pipe Arch  |
|        | Polyvinyl Chloride (PVC) Pipe  |
|        | Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior                      |
|        | Corrugated Polyethylene (PE) Pipe with a Smooth Interior                             |
|        | Polyethylene (PE) Pipe with a Smooth Interior"                                       |
|        | Corrugated Polypropylene (CPP) Pipe with Smooth Interior                             |

Revise Articles 542.03(b) and (c) of the Standard Specifications to read:

- "(b) Extra strength clay pipe will only be permitted for pipe culverts Type 1, for 10 in., 12 in., 42 in. and 48 in. (250 mm, 300 mm, 1050 mm and 1200 mm), Types 2, up to and including 48 in. (1200 mm), Type 3, up to and including 18 in. (450 mm), Type 4 up to and including 10 in. (250 mm), for all pipe classes.
- (c) Concrete sewer, storm drain, and culvert pipe Class 3 will only be permitted for pipe culverts Type 1, up to and including 10 in (250 mm), Type 2, up to and including 30 in. (750 mm), Type 3, up to and including 15 in. (375 mm); Type 4, up to and including 10 in. (250 mm), for all pipe classes."

Replace the pipe tables in Article 542.03 of the Standard Specifications with the following:

|              |                             | for the Resp                      |  | es of Reinforced Co<br>Pipe and Fill Heigh | ncrete Pipe<br>ts over the Top of the    | e Pipe                                |                                    |
|--------------|-----------------------------|-----------------------------------|--|--|--|---------------------------------------|------------------------------------|
|              | Type 1                      | Type 2                            | Type 3                                   | Type 4                                     | Type 5                                   | Type 6                                | Type 7                             |
| Nominal      | Fill Height:                | Fill Height:                      | Fill Height:                             | Fill Height:                               | Fill Height:                             | Fill Height:                          | Fill Height:                       |
| Diameter in. | 3' and less<br>1' min cover | Greater than 3' not exceeding 10' | Greater than 10'<br>not exceeding<br>15' | Greater than 15'<br>not exceeding<br>20'   | Greater than 20'<br>not exceeding<br>25' | Greater than 25'<br>not exceeding 30' | Greater than 30' not exceeding 35' |
| 12           | IV                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 15           | IV                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 18           | IV                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 21           | III                         | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 24           | III                         | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 30           | IV                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 36           | III                         | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 42           | II                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 48           | II                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 54           | II                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 60           | II                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 66           | II                          | II                                | III                                      | IV   | IV                                       | V                                     | V                                  |
| 72           | II                          | II                                | III                                      | IV   | V  | V                                     | V                                  |
| 78           | II                          | II                                | III                                      | IV   | 2020                                     | 2370                                  | 2730                               |
| 84           | II                          | II                                | III                                      | IV   | 2020                                     | 2380                                  | 2740                               |
| 90           | II                          | II                                | III                                      | 1680                                       | 2030                                     | 2390                                  | 2750                               |
| 96           | II                          | III                               | III                                      | 1690                                       | 2040                                     | 2400                                  | 2750                               |
| 102          | II                          | III                               | III                                      | 1700                                       | 2050                                     | 2410                                  | 2760                               |
| 108          | II                          | III                               | 1360                                     | 1710                                       | 2060                                     | 2410                                  | 2770                               |

## Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

# Table IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe (Metric)

|                           | Type 1             | Type 2               | Type 3               | Type 4                 | Type 5               | Type 6                 | Type 7               |
|---------------------------|--------------------|----------------------|----------------------|------------------------|----------------------|------------------------|----------------------|
| Nominal<br>Diameter<br>mm | Fill Height:       | Fill Height:         | Fill Height:         | Fill Height:           | Fill Height:         | Fill Height:           | Fill Height:         |
|                           | 1 m and less 0.3 m | Greater than 1 m not | Greater than 3 m not | Greater than 4.5 m not | Greater than 6 m not | Greater than 7.5 m not | Greater than 9 m not |
|                           | min cover          | exceeding 3 m        | exceeding 4.5 m      | exceeding 6 m          | exceeding 7.5 m      | exceeding 9 m          | exceeding 10.5 m     |
| 300                       | IV                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 375                       | IV                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 450                       | IV                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 525                       | III                | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 600                       | III                | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 750                       | IV                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 900                       | III                | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 1050                      | II                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 1200                      | II                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 1350                      | II                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 1500                      | II                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 1650                      | II                 | II                   | III                  | IV                     | IV                   | V                      | V                    |
| 1800                      | II                 | II                   | III                  | IV                     | V                    | V                      | V                    |
| 1950                      | II                 | II                   | III                  | IV                     | 100                  | 110                    | 130                  |
| 2100                      | II                 | II                   | III                  | IV                     | 100                  | 110                    | 130                  |
| 2250                      | II                 | II                   | III                  | 80                     | 100                  | 110                    | 130                  |
| 2400                      | II                 | III                  | III                  | 80                     | 100                  | 110                    | 130                  |
| 2550                      | II                 | III                  | III                  | 80                     | 100                  | 120                    | 130                  |
| 2700                      | II                 | III                  | 70                   | 80                     | 100                  | 120                    | 130                  |

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required.

Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

## TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2", 3"x1" AND 5"x1" CORRUGATIONS

|                          | -                | Туре 1                |         |                  | Type 2                  |                |                  | Type 3                 |                |                  | Type 4                 |                    |                  | Type 5                  |                  |                    | Type 6               |                  |                    | Type 7               |                      |
|--------------------------|------------------|-----------------------|---------|------------------|-------------------------|----------------|------------------|------------------------|----------------|------------------|------------------------|--------------------|------------------|-------------------------|------------------|--------------------|----------------------|------------------|--------------------|----------------------|----------------------|
| neter                    | Fil              | l Height:             |         | F                | ill Heigh               | t:             | F                | ill Height             | t:             | F                | ill Height             | t:                 |                  | Fill Heigh              | t:               |                    | Fill Height:         |                  |                    | Fill Height:         | :                    |
| Diar<br>.*               |                  |                       |         |                  |                         |                |                  |                        |                |                  |                        |                    |                  |                         |                  |                    |                      |                  |                    |                      |                      |
| Nominal Diameter<br>in.* | _                | and less<br>nin. cove |         |                  | eater than<br>exceeding |                |                  | ater than<br>exceeding | -              |                  | ater than<br>exceeding |                    | _                | eater than<br>exceeding |                  |                    | eater than exceeding |                  |                    | eater than exceeding |                      |
| ž                        | 2 2/3" x<br>1/2" | 3"x1"                 | 5"x1"   | 2 2/3" x<br>1/2" | 3"x1"                   | 5"x1"          | 2 2/3" x<br>1/2" | 3"x1"                  | 5"x1"          | 2 2/3" x<br>1/2" | 3"x1"                  | 5"x1"              | 2 2/3" x<br>1/2" | 3"x1"                   | 5"x1"            | 2 2/3" x<br>1/2"   | 3"x1"                | 5"x1"            | 2 2/3" x<br>1/2"   | 3"x1"                | 5"x1"                |
| 12                       | 0.064            |                       |         | 0.064            |                         |                | 0.064            |                        |                | 0.064            |                        |                    | 0.064            |                         |                  | 0.064              |                      |                  | 0.064              |                      |                      |
| 15                       | 0.064            |                       |         | 0.064            |                         |                | 0.064            |                        |                | 0.064            |                        |                    | 0.064            |                         |                  | 0.064              |                      |                  | (0.079)            |                      |                      |
| 18                       | (0.079)          |                       |         | 0.064            |                         |                | 0.064            |                        |                | 0.064            |                        |                    | 0.064            |                         |                  | (0.079)            |                      |                  | (0.079)            |                      |                      |
| 21                       | (0.079)          |                       |         | 0.064            |                         |                | 0.064            |                        |                | 0.064            |                        |                    | (0.079)          |                         |                  | (0.079)            |                      |                  | (0.079)            |                      |                      |
| 24                       | (0.079)          |                       |         | 0.064            |                         |                | 0.064            |                        |                | 0.064            |                        |                    | (0.079)          |                         |                  | (0.079)            |                      |                  | (0.109)            |                      |                      |
| 30                       | (0.109E)         |                       |         | 0.064            |                         |                | 0.064            |                        |                | (0.079)          |                        |                    | (0.079)          |                         |                  | (0.109)            |                      |                  | 0.109              |                      |                      |
| 36                       | (0.109E)         |                       |         | 0.064            |                         |                | (0.079)          |                        |                | (0.079)          |                        |                    | (0.109)          |                         |                  | 0.109              |                      |                  | (0.138E)           |                      |                      |
| 42                       | 0.079            |                       |         | 0.064            |                         |                | (0.079)          |                        |                | (0.079)          |                        |                    | (0.109)          |                         |                  | (0.109E)           |                      |                  | (0.109E)           |                      |                      |
| 48                       |                  | (0.109)               |         | (0.109)          | 0.079                   | 0.079          | (0.109)          | 0.079                  | (0.109)        | 0.109            | (0.109)                | 0.109              | (0.138)          | (0.109)                 | 0.109            | (0.138E)           | 0.109                | 0.109            | (0.138E)           | 0.109                | (0.138)              |
| 54                       |                  | (0.109)               | 0.109   | (0.109)          | 0.079                   | 0.079          | 0.109            | (0.109)                | 0.109          | 0.109            | (0.109)                | 0.109              | (0.138)          | 0.109                   | 0.109            | (0.138E)           | 0.109                | (0.138)          | (0.138E)           | 0.138                | 0.138                |
| 60                       | 0.109            | 0.109                 | 0.109   | 0.109            | 0.079                   | (0.109)        | 0.109            | (0.109)                | 0.109          | 0.109            | (0.109)                | 0.109              | (0.138)          | 0.109                   | 0.109            | (0.138E)           | (0.138)              | (0.138)          | 0.138E             | (0.138E)             | (0.138E)             |
| 66                       | (0.138)          | 0.109                 | 0.109   | 0.109            | 0.079                   | (0.109)        | 0.109            | (0.109)                | 0.109          | 0.109            | 0.109                  | 0.109              | (0.138)          | 0.109                   | (0.138)          | (0.138E)           | 0.138                | 0.138            | 0.138E             | (0.138E)             | 0.138E               |
| 72                       | 0.138            | 0.109                 | (0.138) | 0.138            | (0.109)                 | (0.109)        | 0.138            | (0.109)                | 0.109          | 0.138            | 0.109                  | 0.109              | 0.138            | (0.138)                 | (0.138)          | (0.168E)           | (0.138E)             | 0.138E           | (0.168E)           | (0.138E)             | 0.138E               |
| 78<br>84                 | 0.168            | 0.109<br>(0.138)      | (0.138) | 0.168<br>0.168   | (0.109)<br>(0.109)      | 0.109<br>0.109 | 0.168<br>0.168   | 0.109<br>0.109         | 0.109<br>0.109 | 0.168<br>0.168   | 0.109<br>0.109         | (0.138)<br>(0.138) | 0.168<br>0.168   | (0.138)<br>(0.138)      | (0.138)<br>0.138 | H0.168E<br>H0.168E | (0.138E)<br>(0.138E) | 0.138E<br>0.138E | H0.168E<br>H0.168E | 0.138E<br>(0.168E)   | (0.168E)             |
| 90                       |                  | (0.138)               | (0.138) | 0.100            | (0.109)                 | 0.109          | 0.100            | 0.109                  | 0.109          | 0.100            | (0.138)                | (0.138)            | 0.100            | (0.138)                 | 0.138            | ПU. 100E           | 0.138E               | (0.168E)         | ⊓0.100E            | (0.168E)             | (0.168E)<br>(0.168E) |
| 96                       |                  | (0.138)               | ( /     |                  | (0.109)                 | 0.109          |                  | 0.109                  | 0.109          |                  | ` ,                    | (0.138)            |                  | (0.138)                 | 0.138            |                    | (0.168E)             | (0.168E)         |                    | ` ,                  | (0.168E)             |
| 102                      |                  | 0.109Z                | ( /     |                  | (0.109)                 | 0.109          |                  | 0.109                  | (0.138)        |                  | (0.138)                | (0.138)            |                  | (0.138)                 | 0.138            |                    | (0.168E)             | (0.168E)         |                    | H0.138E              | ( /                  |
| 108                      |                  | 0.109Z                |         |                  | 0.109                   | 0.109          |                  | 0.109                  | (0.138)        |                  | (0.138)                | 0.138              |                  | 0.138                   | (0.168)          |                    | (0.168E)             | (0.168E)         |                    | H0.138E              |                      |
| 114                      |                  | 0.109Z                |         |                  | 0.109                   | 0.109          |                  | 0.109                  | (0.138)        |                  | (0.138)                | 0.138              |                  | (0.168)                 | (0.168)          |                    | (0.168E)             | 0.168E           |                    | H0.138E              |                      |
| 120                      |                  | 0.109Z                | ( /     |                  | 0.109                   | 0.109          |                  | (0.138)                | (0.138)        |                  | (0.138)                | 0.138              |                  | (0.168)                 | (0.168)          |                    | H0.138E              | H0.168E          |                    |                      | H0.168E              |
| 126                      |                  | 0.138Z                | ` ,     |                  | 0.138                   | 0.138          |                  | 0.138                  | 0.138          |                  | 0.138                  | (0.168)            |                  | (0.168)                 | (0.168)          |                    | H0.138E              | H0.168E          |                    |                      |                      |
| 132                      |                  | 0.138Z                |         |                  | 0.138                   | 0.138          |                  | 0.138                  | 0.138          |                  | (0.168)                | (0.168)            |                  | 0.168                   | 0.168            |                    | H0.138E              | H0.168E          |                    | H0.168E              |                      |
| 138                      |                  | 0.138Z                | 0.138Z  |                  | 0.138                   | 0.138          |                  | 0.138                  | 0.138          |                  | (0.168)                | (0.168)            |                  | (0.168E)                | H0.168E          |                    | H0.168E              | H0.168E          |                    | H0.168E              |                      |
| 144                      |                  | 0.168Z                | 0.168Z  |                  | 0.168                   | 0.168          |                  | 0.168                  | 0.168          |                  | 0.168                  | 0.168              |                  | H0.168E                 | H0.168E          |                    | H0.168E              | H0.168E          |                    | H0.168E              |                      |

Notes

A thickness preceded by "H" indicates only helical seam fabrication is allowed.E

Elongation according to Article 542.04(e)Z 1'-6" Minimum fill

<sup>\*</sup> Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 42" according to Article 1006.01, 1 1/2" x 1/4" corrugations shall be used for diameters less than 12". Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

# TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm, 75 mm x 25 mm AND 125 mm x 25 mm CORRUGATIONS (Metric)

| ē                        |               | Type 1                 |                  |               | Type 2                |                |               | Type 3         |                |               | Type 4                |                |               | Type 5                  |                  |               | Type 6                |                  |               | Type 7                |                    |
|--------------------------|---------------|------------------------|------------------|---------------|-----------------------|----------------|---------------|----------------|----------------|---------------|-----------------------|----------------|---------------|-------------------------|------------------|---------------|-----------------------|------------------|---------------|-----------------------|--------------------|
| met                      | F             | ill Height             | t:               | F             | ill Height            | t:             |               | Fill Heigh     | nt:            |               | Fill Heigh            | nt:            |               | Fill Heigh              | nt:              |               | Fill Heigh            | nt:              |               | Fill Heigh            | nt:                |
| Nominal Diameter<br>mm * |               | m and les<br>m min. co |                  |               | ater than<br>xceeding |                |               | ater than      |                |               | ater than<br>exceedin |                |               | eater thar<br>exceeding |                  |               | ater than<br>exceedin |                  |               | eater thar<br>ceeding |                    |
| Nom                      | 68 x 13<br>mm | 75 x 25<br>mm          | 125 x 25<br>mm   | 68 x 13<br>mm | 75 x 25<br>mm         | 125 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm  | 125 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm         | 125 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm           | 125 x 25<br>mm   | 68 x 13<br>mm | 75 x 25<br>mm         | 125 x 25<br>mm   | 68 x 13<br>mm | 75 x 25<br>mm         | 125 x 25<br>mm     |
| 300                      | 1.63          |                        |                  | 1.63          |                       |                | 1.63          |                |                | 1.63          |                       |                | 1.63          |                         |                  | 1.63          |                       |                  | 1.63          |                       |                    |
| 375                      | 1.63          |                        |                  | 1.63          |                       |                | 1.63          |                |                | 1.63          |                       |                | 1.63          |                         |                  | 1.63          |                       |                  | (2.01)        |                       | 1                  |
| 450                      | (2.01)        |                        |                  | 1.63          |                       |                | 1.63          |                |                | 1.63          |                       |                | 1.63          |                         |                  | (2.01)        |                       |                  | (2.01)        |                       |                    |
| 525                      | (2.01)        |                        |                  | 1.63          |                       |                | 1.63          |                |                | 1.63          |                       |                | (2.01)        |                         |                  | (2.01)        |                       |                  | (2.01)        |                       |                    |
| 600                      | (2.01)        |                        |                  | 1.63          |                       |                | 1.63          |                |                | 1.63          |                       |                | (2.01)        |                         |                  | (2.01)        |                       |                  | (2.77)        |                       |                    |
| 750                      | (2.77E)       |                        |                  | 1.63          |                       |                | 1.63          |                |                | (2.01)        |                       |                | (2.01)        |                         |                  | (2.77)        |                       |                  | 2.77          |                       |                    |
| 900                      | (2.77E)       |                        |                  | 1.63          |                       |                | (2.01)        |                |                | (2.01)        |                       |                | (2.77)        |                         |                  | 2.77          |                       |                  | (3.51E)       |                       |                    |
| 1050                     | 2.01          |                        |                  | 1.63          |                       |                | (2.01)        |                |                | (2.01)        |                       |                | (2.77)        |                         |                  | (2.77E)       |                       |                  | (2.77E)       |                       |                    |
| 1200                     | 2.77          | (2.77)                 | 2.77             | (2.77)        | 2.01                  | 2.01           | (2.77)        | 2.01           | (2.77)         | 2.77          | (2.77)                | 2.77           | (3.51)        | (2.77)                  | 2.77             | (3.51E)       |                       | 2.77             | (3.51E)       | 2.77                  | (3.51)             |
| 1350                     | 2.77          | (2.77)                 | 2.77             | (2.77)        | 2.01                  | 2.01           | 2.77          | (2.77)         | 2.77           | 2.77          | (2.77)                | 2.77           | (3.51)        | 2.77                    | 2.77             | (3.51E)       | 2.77                  | (3.51)           | (3.51E)       | 3.51                  | 3.51               |
| 1500                     | 2.77          | 2.77                   | 2.77             | 2.77          | 2.01                  | (2.77)         | 2.77          | (2.77)         | 2.77           | 2.77          | (2.77)                | 2.77           | (3.51)        | 2.77                    | 2.77             | (3.51E)       | ( /                   | (3.51)           | 3.51E         | (3.51E)               | (3.51E)            |
| 1650                     | (3.51)        | 2.77                   | 2.77             | 2.77          | 2.01                  | (2.77)         | 2.77          | (2.77)         | 2.77           | 2.77          | 2.77                  | 2.77           | (3.51)        | 2.77                    | (3.51)           | (3.51E)       |                       | 3.51             |               | (3.51E)               | 3.51E              |
| 1800                     | 3.51          | 2.77                   | (3.51)           | 3.51          | (2.77)                | (2.77)         | 3.51          | (2.77)         | 2.77           | 3.51          | 2.77                  | 2.77           | 3.51          | (3.51)                  | (3.51)           | (4.27E)       | ,                     | 3.51E            | (4.27E)       | ,                     | 3.51E              |
| 1950                     | 4.27          | 2.77                   | (3.51)           | 4.27          | (2.77)                | 2.77           | 4.27          | 2.77           | 2.77           | 4.27          | 2.77                  | (3.51)         | 4.27          | (3.51)                  | (3.51)           | H 4.27E       | ,                     | 3.51E            | H 4.27E       |                       | (4.27E)            |
| 2100                     | 4.27          | (3.51)                 | (3.51)           | 4.27          | (2.77)                | 2.77           | 4.27          | 2.77           | 2.77           | 4.27          | 2.77                  | (3.51)         | 4.27          | (3.51)                  |                  | H 4.27E       |                       |                  | H 4.27E       |                       | ` '                |
| 2250                     |               | (3.51)                 | (3.51)           |               | (2.77)                | 2.77           |               | 2.77           | 2.77           |               | (3.51)                | (3.51)         |               | (3.51)                  | 3.51             |               | 3.51E                 | (4.27E)          |               | (4.27E)               | (4.27E)            |
| 2400                     |               | (3.51)                 | (3.51)           |               | (2.77)                | 2.77           |               | 2.77           | 2.77           |               | (3.51)                | (3.51)         |               | (3.51)                  | 3.51             |               | (4.27E)               | ` ,              |               | (4.27E)               | ,                  |
| 2550                     |               | 2.77Z                  | 2.77Z            |               | (2.77)                | 2.77           |               | 2.77           | (3.51)         |               | (3.51)                | (3.51)         |               | (3.51)                  | 3.51             |               | (4.27E)               | (4.27E)          |               |                       | H 4.27E            |
| 2700                     |               | 2.77Z                  | (3.51Z)          |               | 2.77                  | 2.77           |               | 2.77           | (3.51)         |               | (3.51)                | 3.51           |               | 3.51                    | (4.27)           |               | (4.27E)               | (4.27E)          |               |                       | H 4.27E            |
| 2850<br>3000             |               | 2.77Z<br>2.77Z         | (3.51Z)          |               | 2.77<br>2.77          | 2.77<br>2.77   |               | 2.77           | (3.51)         |               | (3.51)                | 3.51<br>3.51   |               | (4.27)                  | (4.27)           |               | (4.27E)               | 4.27E<br>H 4.27E |               |                       | H 4.27E<br>H 4.27E |
| 3000                     |               | 3.51Z                  | (3.51Z)<br>3.51Z |               | 3.51                  | 3.51           |               | (3.51)<br>3.51 | (3.51)<br>3.51 |               | (3.51)<br>3.51        | (4.27)         |               | (4.27)<br>(4.27)        | (4.27)<br>(4.27) |               |                       | H 4.27E          |               |                       | H 4.27E            |
| 3300                     |               | 3.51Z                  | 3.51Z            |               | 3.51                  | 3.51           |               | 3.51           | 3.51           |               | (4.27)                | (4.27)         |               | 4.27                    | 4.27             |               |                       | H 4.27E          |               |                       | H 4.27E            |
| 3450                     |               | 3.51Z                  | 3.51Z            |               | 3.51                  | 3.51           |               | 3.51           | 3.51           |               | (4.27)                | (4.27)         |               |                         | H 4.27E          |               |                       | H 4.27E          |               | H 4.27E               |                    |
| 3600                     |               | 4.27Z                  | 4.27Z            |               | 4.27                  | 4.27           |               | 4.27           | 4.27           |               | 4.27                  | 4.27           |               | ` ,                     | H 4.27E          |               |                       | H 4.27E          |               | H 4.27E               |                    |
| 3000                     |               | 7.414                  | 7.414            |               | 7.41                  | 7.∠1           |               | 7.41           | 7.∠1           |               | 7.∠1                  | 7.41           | I             | 1 7.4 / L               | 11 T.21 L        | l .           | 1 7.4/L               | 117.41L          |               | 11 7.41 L             |                    |

#### Notes

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

<sup>\*</sup> Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 1050 mm according to Article 1006.01, 38 mm x 6.5 mm corrugations shall be used for diameters less than 300 mm.

E Elongation according to Article 542.04(e)Z 450 mm Minimum Fill

(0.164E)

(0.164E)

(0.164E)

H 0.135E

H 0.135E

H 0.164E

H 0.164E

(0.135E)

(0.164E)

(0.164E) (0.164E)

(0.164E)

(0.164E)

H 0.164E

H 0.164E

#### TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS l Diameter in. Type 1 Type 2 Type 3 Type 4 Type 5 Type 6 Type 7 Fill Height: Nominal I Greater than 15' Greater than 25' Greater than 30' 3' and less Greater than 3' Greater than 10' Greater than 20' not exceeding 10' not exceeding 15' not exceeding 20' not exceeding 25' not exceeding 35' 1' min. cover not exceeding 30' 2 2/3"x1/2" 3"x1" 2 2/3"x1/2" 2 2/3"x1/2" 3"x1" 3"x1" 12 0.060 (0.075)0.060 0.060 0.060 0.060 0.060 15 (0.075)0.060 0.060 0.060 0.060 0.060 (0.075)18 (0.075)0.060 0.060 0.060 0.060 (0.075)H 0.060 21 H 0.060E 0.060 0.060 H 0.060 H 0.060E 0.060 (0.075)24 (0.105E)0.060 0.060 (0.075)(0.105)(0.105)(0.105E)30 H 0.075E H 0.060 0.075 H 0.060 0.075 H 0.060 (0.105)H 0.060 H 0.060 H 0.075E H 0.060 H 0.075E H 0.060 (0.105)H 0.060E H 0.060 H 0.060 H 0.060 H 0.060 H 0.075E H 0.060 H 0.075E H 0.060E 36 (0.135E)0.075 (0.105)(0.105)(0.135)42 0.105E (0.075)0.105 0.060 0.105 0.060 0.105 0.060 0.105 (0.075)0.105E 0.105 0.105E (0.105E)48 0.105E (0.075)0.105 0.060 0.105 0.060 0.105 (0.075)0.105 (0.105)0.105E (0.105E)0.105E (0.135E)54 (0.135E) 0.105E (0.105)0.105 0.060 0.105 0.060 0.105 (0.075)0.105 (0.105)0.105E (0.105E)(0.135E) 60 0.135E 0.060 (0.075)0.135 0.135E (0.135E)(0.164E) (0.135E)(0.105)0.135 0.135 0.135 (0.105)(0.105)66 0.164E (0.105)0.164 0.060 0.164 (0.075)0.164 (0.105)0.164 (0.135)0.164E (0.135E)H 0.164E (0.135E)(0.105)72 0.164E 0.164 0.060 0.164 (0.075)0.164 (0.105)0.164 (0.135)H 0.164E (0.135E)H 0.164E (0.164E)

(0.105)

(0.135)

(0.135)

(0.135)

0.135

0.135

0.164

0.164

(0.135)

(0.135)

(0.135)

(0.135)

(0.164)

(0.164)

0.164

0.164

### 120 Notes:

78

84

90

96

102

108

114

(0.135)

(0.135)

(0.135)

(0.135)

0.135Z

0.135Z

0.164Z

0.164Z

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

(0.105)

0.105

0.105

0.105

0.135

0.135

0.164

0.164

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'-6"

0.075

0.105

0.105

0.105

0.135

0.135

0.164

0.164

Z 1"-6" Minimum fill

### TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm AND 75 mm x 25 mm CORRUGATIONS (Metric)

|                        | Тур               | ne 1                 | Тур               | ne 2                  | Тур           | e 3           | Тур           | e 4                    | Тур           | e 5           | Туре          | e 6           | Тур           | e 7           |
|------------------------|-------------------|----------------------|-------------------|-----------------------|---------------|---------------|---------------|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| mete                   | Fill H            | eight:               | Fill H            | eight:                | Fill He       | eight:        | Fill H        | eight:                 | Fill He       | eight:        | Fill He       | eight:        | Fill He       | eight:        |
| Nominal Diameter<br>mm | 1 m ar<br>0.3 m m | nd less<br>in. cover | Greater not excee | than 1 m<br>eding 3 m | Greater to    |               | Greater to    | nan 4.5 m<br>eding 6 m | Greater t     |               | Greater th    |               | Greater to    |               |
| Nom                    | 68 x 13<br>mm     | 75 x 25<br>mm        | 68 x 13<br>mm     | 75 x 25<br>mm         | 68 x 13<br>mm | 75 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm          | 68 x 13<br>mm | 75 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm |
| 300                    | (1.91)            |                      | 1.52              |                       | 1.52          |               | 1.52          |                        | 1.52          |               | 1.52          |               | 1.52          |               |
| 375                    | (1.91)            |                      | 1.52              |                       | 1.52          |               | 1.52          |                        | 1.52          |               | 1.52          |               | (1.91)        |               |
| 450                    | (1.91)            |                      | 1.52              |                       | 1.52          |               | 1.52          |                        | 1.52          |               | (1.91)        |               | H 1.52        |               |
| 525                    | H 1.52E           |                      | 1.52              |                       | 1.52          |               | 1.52          |                        | (1.91)        |               | H 1.52        |               | H 1.52E       |               |
| 600                    | (2.67E)           |                      | 1.52              |                       | 1.52          |               | (1.91)        |                        | (2.67)        |               | (2.67)        |               | (2.67E)       |               |
| 750                    | H 1.91E           | H 1.52               | 1.91              | H 1.52                | 1.91          | H 1.52        | (2.67)        | H 1.52                 | (2.67)        | H 1.52        | H 1.91E       | H 1.52        | H 1.91E       | H 1.52        |
| 900                    | (3.43E)           | H 1.52E              | 1.91              | H 1.52                | (2.67)        | H 1.52        | (2.67)        | H 1.52                 | (3.43)        | H 1.52        | H 1.91E       | H 1.52        | H 1.91E       | H 1.52E       |
| 1050                   | 2.67E             | (1.91)               | 2.67              | 1.52                  | 2.67          | 1.52          | 2.67          | 1.52                   | 2.67          | (1.91)        | 2.67E         | 2.67          | 2.67E         | (2.67E)       |
| 1200                   | 2.67E             | (1.91)               | 2.67              | 1.52                  | 2.67          | 1.52          | 2.67          | (1.91)                 | 2.67          | (2.67)        | 2.67E         | (2.67E)       | 2.67E         | (3.43E)       |
| 1350                   | 2.67E             | (2.67)               | 2.67              | 1.52                  | 2.67          | 1.52          | 2.67          | (1.91)                 | 2.67          | (2.67)        | 2.67E         | (2.67E)       | (3.43E)       | (3.43E)       |
| 1500                   | 3.43E             | (2.67)               | 3.43              | 1.52                  | 3.43          | (1.91)        | 3.43          | (2.67)                 | 3.43          | (2.67)        | 3.43E         | (3.43E)       | (4.17E)       | (3.43E)       |
| 1650                   | 4.17E             | (2.67)               | 4.17              | 1.52                  | 4.17          | (1.91)        | 4.17          | (2.67)                 | 4.17          | (3.43)        | 4.17E         | (3.43E)       | H 4.17E       | (3.43E)       |
| 1800                   | 4.17E             | (2.67)               | 4.17              | 1.52                  | 4.17          | (1.91)        | 4.17          | (2.67)                 | 4.17          | (3.43)        | H 4.17E       | (3.43E)       | H 4.17E       | (4.17E)       |
| 1950                   |                   | (3.43)               |                   | 1.91                  |               | (2.67)        |               | (2.67)                 |               | (3.43)        |               | (3.43E)       |               | (4.17E)       |
| 2100                   |                   | (3.43)               |                   | 2.67                  |               | 2.67          |               | (3.43)                 |               | (3.43)        |               | (4.17E)       |               | (4.17E)       |
| 2250                   |                   | (3.43)               |                   | 2.67                  |               | 2.67          |               | (3.43)                 |               | (3.43)        |               | (4.17E)       |               | (4.17E)       |
| 2400                   |                   | (3.43)               |                   | 2.67                  |               | 2.67          |               | (3.43)                 |               | (3.43)        |               | (4.17E)       |               | H 3.43E       |
| 2550                   |                   | 3.43Z                |                   | 3.43                  |               | 3.43          |               | 3.43                   |               | (4.17)        |               | (4.17E)       |               | H 3.43E       |
| 2700                   |                   | 3.43Z                |                   | 3.43                  |               | 3.43          |               | 3.43                   |               | (4.17)        |               | (4.17E)       |               | H 4.17E       |
| 2850                   |                   | 4.17Z                |                   | 4.17                  |               | 4.17          |               | 4.17                   |               | 4.17          |               | H 4.17E       |               | H 4.17E       |
| 3000                   |                   | 4.17Z                |                   | 4.17                  |               | 4.17          |               | 4.17                   |               | 4.17          |               | H 4.17E       |               |               |

Notes:

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm.

Z 450 mm Minimum fill

|                            |                        |       |                      | Т        |              |              | KNESS FO       |                  |                |                |                  |                    |                  |                    |                |                  |                |                  | ES             |                |                  |                |
|----------------------------|------------------------|-------|----------------------|----------|--------------|--------------|----------------|------------------|----------------|----------------|------------------|--------------------|------------------|--------------------|----------------|------------------|----------------|------------------|----------------|----------------|------------------|----------------|
|                            | Corru                  | gated | Corru                | gatod    |              |              |                |                  |                | Type 1         |                  |                    |                  |                    | Гуре 2         |                  |                |                  |                | Type 3         |                  |                |
| Round<br>n.                | Ste                    | el &  | Stee                 | el &     | Corru<br>Ste | gated<br>eel | Min.           |                  | F              | ill Height:    |                  |                    |                  | Fil                | l Height:      |                  |                |                  |                | Fill Heigh     | nt:              |                |
| Equivalent Ror<br>Size in. | Alum<br>Pipe<br>2 2/3" | Arch  | Alum<br>Pipe<br>3" > | Arch     | Pipe<br>5">  |              | Cover          |                  | 3'             | and less       | 3                |                    | Grea             | ter than           | 3' not exc     | ceeding 1        | 10'            | Gre              | eater than     | n 10' not      | exceeding        | g 15'          |
| qui                        | Span                   | Rise  | Span                 | Rise     | Span         | Rise         | Steel &        |                  | Steel          |                | Alum             | inum               |                  | Steel              |                | Alumi            | num            |                  | Steel          |                | Alum             | inum           |
| Ш                          | (in.)*                 | (in.) | (in.)                | (in.)    | (in.)        | (in.)        | Aluminum       | 2 2/3" x<br>1/2" | 3"x1"          | 5" x 1"        | 2 2/3" x<br>1/2" | 3"x1"              | 2 2/3" x<br>1/2" | 3"x1"              | 5" x 1"        | 2 2/3" x<br>1/2" | 3"x1"          | 2 2/3" x<br>1/2" | 3"x1"          | 5" x 1"        | 2 2/3" x<br>1/2" | 3"x1"          |
| 15                         | 17                     | 13    |                      |          |              |              | 1'-6"          | 0.064            |                |                | 0.060            |                    | 0.064            |                    |                | 0.060            |                | 0.064            |                |                | 0.060            |                |
| 18                         | 21                     | 15    |                      |          |              |              | 1'-6"          | 0.064            |                |                | 0.060            |                    | 0.064            |                    |                | 0.060            |                | 0.064            |                |                | 0.060            |                |
| 21                         | 24                     | 18    |                      |          |              |              | 1'-6"          | 0.064            |                |                | (0.075)          |                    | 0.064            |                    |                | 0.060            |                | 0.064            |                |                | 0.060            |                |
| 24                         | 28                     | 20    |                      |          |              |              | 1'-6"          | (0.079)          |                |                | (0.105)          |                    | 0.064            |                    |                | 0.075            |                | 0.064            |                |                | 0.075            |                |
| 30                         | 35                     | 24    |                      |          |              |              | 1'-6"          | (0.079)          |                |                | (0.105)          |                    | 0.064            |                    |                | 0.075            |                | (0.079)          |                |                | (0.105)          |                |
| 36                         | 42                     | 29    |                      |          |              |              | 1'-6"          | (0.079)          |                |                | 0.105            |                    | 0.064            |                    |                | 0.105            |                | 0.064            |                |                | 0.105            |                |
| 42                         | 49                     | 33    |                      |          |              |              | 1'-6"          | 0.109            |                |                | 0.105            |                    | (0.109)          |                    |                | 0.105            |                | (0.109)          |                |                | 0.105            |                |
| 48                         | 57                     | 38    | 53                   | 41       | 53           | 41           | 1'-6"          | 0.109            | (0.109)        | (0.109)        | 0.135            | 0.060              | 0.109            | 0.079              | 0.079          | 0.135            | 0.060          | 0.109            | 0.079          | (0.109)        | 0.135            | 0.060          |
| 54                         | 64                     | 43    | 60                   | 46       | 60           | 46           | 1'-6"          | 0.109            | (0.109)        | 0.109          | 0.164            | (0.075)            | 0.109            | 0.079              | 0.079          | 0.164            | 0.060          | 0.109            | (0.109)        | 0.109          | 0.164            | (0.075)        |
| 60                         | 71                     | 47    | 66                   | 51       | 66           | 51           | 1'-6"          | 0.138            | (0.109)        | 0.109          | 0.164            | (0.075)            | 0.138            | 0.079              | (0.109)        | 0.164            | 0.060          | 0.138            | (0.109)        | 0.109          | 0.164            | (0.075)        |
| 66                         | 77                     | 52    | 73                   | 55       | 73           | 55           | 1'-6"          | 0.168            | (0.109)        | 0.109          |                  | 0.075              | 0.168            | 0.079              | (0.109)        |                  | 0.075          | 0.168            | (0.109)        | 0.109          |                  | 0.075          |
| 72                         | 83                     | 57    | 81                   | 59       | 81           | 59           | 1'-6"<br>1'-6" | 0.168            | (0.109)        | 0.109          |                  | 0.105              | 0.168            | 0.079              | (0.109)        |                  | 0.105          | 0.168            | (0.109)        | 0.109          |                  | 0.105          |
| 78<br>84                   |                        |       | 87<br>95             | 63<br>67 | 87<br>95     | 63<br>67     | 1'-6"<br>1'-6" |                  | 0.109          | 0.109          |                  | 0.105              |                  | (0.109)            | 0.109          |                  | 0.105          |                  | 0.109          | 0.109          |                  | 0.105          |
| 90                         |                        |       | 103                  | 71       | 103          | 71           | 1'-6"          |                  | 0.109<br>0.109 | 0.109<br>0.109 |                  | 0.105<br>0.135     |                  | (0.109)<br>(0.109) | 0.109<br>0.109 |                  | 0.105<br>0.135 |                  | 0.109<br>0.109 | 0.109<br>0.109 |                  | 0.105<br>0.135 |
| 96                         |                        |       | 112                  | 75       | 112          | 75           | 1'-6"          |                  | 0.109          | (0.138)        |                  | 0.135              |                  | 0.109)             | 0.109          |                  | 0.135          |                  | 0.109          | (0.138)        |                  | 0.135          |
| 102                        |                        |       | 117                  | 79       | 117          | 79           | 1'-6"          |                  | 0.109          | (0.138)        |                  | 0.164              |                  | 0.109              | 0.109          |                  | 0.164          |                  | 0.109          | (0.138)        |                  | 0.164          |
| 108                        |                        |       | 128                  | 83       | 128          | 83           | 1'-6"          |                  | 0.109          | 0.138          |                  | J. 10 <del>1</del> |                  | 0.109              | 0.109          |                  | 0.104          |                  | 0.109          | 0.138          |                  | J. 104         |
| 114                        |                        |       | 137                  | 87       | 137          | 87           | 1'-6"          |                  | 0.138          | 0.138          |                  |                    |                  | 0.138              | 0.138          |                  |                |                  | 0.138          | 0.138          |                  |                |
| 120                        |                        |       | 142                  | 91       | 142          | 91           | 1'-6"          |                  | 0.168          | 0.168          |                  |                    |                  | 0.168              | 0.168          |                  |                |                  | 0.168          | 0.168          |                  |                |

### Notes:

<sup>\*</sup> Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 3 tons per square foot. The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 2 tons per square foot. This minimum bearing capacity will be determined by the Engineer in the field.

| Table IIA: THICH | (NESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES |
|------------------|--|
| FOR THI          | ERESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE  |
|                  | (Metric)   |

| υ                     | Corrug            | hated | Corru          | haten        |              |               |                |               |               | Type 1         |               |               |               |               | Type 2         |               |               |               |               | Type 3         |               |               |
|-----------------------|-------------------|-------|----------------|--------------|--------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|
| d Size                | Ste<br>& Alum     | el    | Ste<br>& Alur  | eel          |              | igated<br>eel | Min.           |               | 1             | Fill Heigh     | nt:           |               |               | F             | ill Heigh      | t:            |               |               |               | Fill Height    | :             |               |
| Equivalent Round (mm) | Pipe A<br>68 x 13 | Arch  | Pipe<br>75 x 2 | Arch         |              | Arch<br>25 mm | Cover          |               | 1             | m and le       | ess           |               | Grea          | ter than      | 1 m not e      | exceeding     | g 3 m         | Grea          | ter than 3    | 3 m not ex     | ceeding 4     | 4.5 m         |
| uivale                | Span              | Rise  | Span           | Rise         | Span         | Rise          | Steel &        |               | Steel         |                | Alumi         | num           |               | Steel         |                | Alum          | inum          |               | Steel         |                | Alum          | inum          |
| Eq                    |                   | (mm)  | (mm)           | (mm)         | (mm)         | (mm)          | Aluminum       | 68 x 13<br>mm | 75 x 25<br>mm | 125 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm | 125 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm | 125 x 25<br>mm | 68 x 13<br>mm | 75 x 25<br>mm |
| 375                   | 430               | 330   |                |              |              |               | 0.5 m          | 1.63          |               |                | 1.52          |               | 1.63          |               |                | 1.52          |               | 1.63          |               |                | 1.52          |               |
| 450                   | 530               | 380   |                |              |              |               | 0.5 m          | 1.63          |               |                | 1.52          |               | 1.63          |               |                | 1.52          |               | 1.63          |               |                | 1.52          |               |
| 525                   | 610               | 460   |                |              |              |               | 0.5 m          | 1.63          |               |                | (1.91)        |               | 1.63          |               |                | 1.52          |               | 1.63          |               |                | 1.52          |               |
| 600                   | 710               | 510   |                |              |              |               | 0.5 m          | (2.01)        |               |                | (2.67)        |               | 1.63          |               |                | 1.91          |               | 1.63          |               |                | 1.91          |               |
| 750                   | 870               | 630   |                |              |              |               | 0.5 m          | (2.01)        |               |                | (2.67)        |               | 1.63          |               |                | 1.91          |               | (2.01)        |               |                | (2.67)        |               |
| 900                   | 1060              | 740   |                |              |              |               | 0.5 m          | (2.01)        |               |                | 2.67          |               | 1.63          |               |                | 2.67          |               | 1.63          |               |                | 2.67          |               |
| 1050                  | 1240              | 840   |                |              |              |               | 0.5 m          | 2.77          |               |                | 2.67          |               | (2.77)        |               |                | 2.67          |               | (2.77)        |               |                | 2.67          |               |
| 1200                  | 1440              | 970   | 1340           | 1050         | 1340         | 1050          | 0.5 m          | 2.77          | (2.77)        | (2.77)         | 3.43          | 1.52          | 2.77          | 2.01          | 2.01           | 3.43          | 1.52          | 2.77          | 2.01          | (2.77)         | 3.43          | 1.52          |
| 1350                  |                   | 1100  | 1520           | 1170         | 1520         | 1170          | 0.5 m          | 2.77          | (2.77)        | 2.77           | 4.17          | (1.91)        | 2.77          | 2.01          | 2.01           | 4.17          | 1.52          | 2.77          | (2.77)        | 2.77           | 4.17          | (1.91)        |
| 1500                  |                   | 1200  | 1670           | 1300         | 1670         | 1300          | 0.5 m          | 3.51          | (2.77)        | 2.77           | 4.17          | (1.91)        | 3.51          | 2.01          | (2.77)         | 4.17          | 1.52          | 3.51          | (2.77)        | 2.77           | 4.17          | (1.91)        |
| 1650                  |                   | 1320  | 1850           | 1400         | 1850         | 1400          | 0.5 m          | 4.27          | (2.77)        | 2.77           |               | 1.91          | 4.27          | 2.01          | (2.77)         |               | 1.91          | 4.27          | (2.77)        | 2.77           |               | 1.91          |
| 1800                  |                   | 1450  | 2050           | 1500         | 2050         | 1500          | 0.5 m          | 4.27          | (2.77)        | 2.77           |               | 2.67          | 4.27          | 2.01          | (2.77)         |               | 2.67          | 4.27          | (2.77)        | 2.77           |               | 2.67          |
| 1950                  |                   |       | 2200           | 1620         | 2200         | 1620          | 0.5 m          |               | 2.77          | 2.77           |               | 2.67          |               | (2.77)        | 2.77           |               | 2.67          |               | 2.77          | 2.77           |               | 2.67          |
| 2100                  |                   |       | 2400           | 1720         | 2400         | 1720          | 0.5 m          |               | 2.77          | 2.77           |               | 2.67          |               | (2.77)        | 2.77           |               | 2.67          |               | 2.77          | 2.77           |               | 2.67          |
| 2250                  |                   |       | 2600           | 1820         | 2600         | 1820          | 0.5 m          |               | 2.77          | 2.77           |               | 3.43          |               | (2.77)        | 2.77           |               | 3.43          |               | 2.77          | 2.77           |               | 3.43          |
| 2400<br>2550          |                   |       | 2840<br>2970   | 1920<br>2020 | 2840<br>2970 | 1920<br>2020  | 0.5 m<br>0.5 m |               | 2.77<br>2.77  | (3.51)         |               | 4.17<br>4.17  |               | 2.77<br>2.77  | 2.77<br>2.77   |               | 4.17<br>4.17  |               | 2.77<br>2.77  | (3.51)         |               | 4.17<br>4.17  |
| 2700                  |                   |       | 3240           | 2120         | 3240         | 2120          | 0.5 m          |               | 3.51          | (3.51)         |               | 4.17          |               | 3.51          | 3.51           |               | 4.17          |               | 3.51          | 3.51           |               | 4.17          |
| 2850                  |                   |       | 3470           | 2220         | 3470         | 2220          | 0.5 m          |               | 3.51          | 3.51           |               |               |               | 3.51          | 3.51           |               |               |               | 3.51          | 3.51           |               |               |
| 3000                  |                   |       | 3600           | 2320         | 3600         | 2320          | 0.5 m          |               | 4.27          | 4.27           |               |               |               | 4.27          | 4.27           |               |               |               | 4.27          | 4.27           |               |               |
| Noto                  |                   |       | 5000           | 2020         | 5000         | 2020          | 0.5 111        |               | 7.41          | 7.41           |               |               |               | 7.41          | 7.41           |               |               |               | 7.41          | 7.41           |               |               |

#### Notes

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 290 kN per square meter.

The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 192 kN per square meter.

This minimum bearing capacity will be determined by the Engineer in the field.

<sup>\*</sup> Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.

|                                   |                  |                                  |        |                            | CONCRETE ELLI<br>ROUND SIZE OI | _      | _                 |            | _                                | _     |                                  |
|-----------------------------------|------------------|----------------------------------|--------|----------------------------|--------------------------------|--------|-------------------|------------|----------------------------------|-------|----------------------------------|
|                                   | Daint            |                                  |        |                            |                                | Тур    | e 1               | Тур        | e 2                              | Тур   | e 3                              |
| Equivalent<br>Round Size<br>(in.) | Cond<br>Elliptic | orced<br>crete<br>al pipe<br>1.) | Con    | orced<br>crete<br>pe (in.) | Minimum<br>Cover               |        | eight:<br>nd less | Greater th | eight:<br>nan 3' not<br>ling 10' |       | eight:<br>an 10' not<br>ling 15' |
|                                   | Span             | Rise                             | Span   | Rise                       | RCCP HE & A                    | HE     | Arch              | HE         | Arch                             | HE    | Arch                             |
| 15                                | 23               | 14                               | 18     | 11                         | 1' -0"                         | HE-III | A-III             | HE-III     | A-III                            | HE-IV | A-IV                             |
| 18                                | 23               | 14                               | 22     | 13 1/2                     | 1' -0"                         | HE-III | A-III             | HE-III     | A-III                            | HE-IV | A-IV                             |
| 21                                | 30               | 19                               | 26     | 15 1/2                     | 1' -0"                         | HE-III | A-III             | HE-III     | A-III                            | HE-IV | A-IV                             |
| 24                                | 30               | 19                               | 28 1/2 | 18                         | 1' -0"                         | HE-III | A-III             | HE-III     | A-III                            | HE-IV | A-IV                             |
| 27                                | 34               | 22                               | 36 1/4 | 22 1/2                     | 1' -0"                         | HE-III | A-III             | HE-III     | A-III                            | HE-IV | A-IV                             |
| 30                                | 38               | 24                               | 36 1/4 | 22 1/2                     | 1' -0"                         | HE-III | A-III             | HE-III     | A-III                            | HE-IV | A-IV                             |
| 36                                | 45               | 29                               | 43 3/4 | 26 5/8                     | 1' -0"                         | HE-II  | A-II              | HE-III     | A-III                            | HE-IV | A-IV                             |
| 42                                | 53               | 34                               | 51 1/8 | 31 5/16                    | 1' -0"                         | HE-I   | A-II              | HE-III     | A-III                            | HE-IV | A-IV                             |
| 48                                | 60               | 38                               | 58 1/2 | 36                         | 1' -0"                         | HE-I   | A-II              | HE-III     | A-III                            | 1460  | 1450                             |
| 54                                | 68               | 43                               | 65     | 40                         | 1' -0"                         | HE-I   | A-II              | HE-III     | A-III                            | 1460  | 1460                             |
| 60                                | 76               | 48                               | 73     | 45                         | 1' -0"                         | HE-I   | A-II              | HE-III     | A-III                            | 1460  | 1470                             |
| 66                                | 83               | 53                               | 88     | 54                         | 1' -0"                         | HE-I   | A-II              | HE-III     | A-III                            | 1470  | 1480                             |
| 72                                | 91               | 58                               | 88     | 54                         | 1' -0"                         | HE-I   | A-II              | HE-III     | A-III                            | 1470  | 1480                             |

## Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required.

Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

# Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)

|                                  |      |                                |      |                           |                  | Тур    | e 1               | Тур                               | e 2       | Тур   | e 3                              |
|----------------------------------|------|--------------------------------|------|---------------------------|------------------|--------|-------------------|-----------------------------------|-----------|-------|----------------------------------|
| Equivalent<br>Round Size<br>(mm) | Cor  | nforced<br>ncrete<br>pipe (mm) | Con  | orced<br>crete<br>pe (mm) | Minimum<br>Cover |        | eight:<br>nd less | Fill He<br>Greater tha<br>exceedi | n 1 m not |       | eight:<br>an 3 m not<br>ng 4.5 m |
|                                  | Span | Rise                           | Span | Rise                      | RCCP HE & A      | HE     | Arch              | HE                                | Arch      | HE    | Arch                             |
| 375                              | 584  | 356                            | 457  | 279                       | 0.3 m            | HE-III | A-III             | HE-III                            | A-III     | HE-IV | A-IV                             |
| 450                              | 584  | 356                            | 559  | 343                       | 0.3 m            | HE-III | A-III             | HE-III                            | A-III     | HE-IV | A-IV                             |
| 525                              | 762  | 483                            | 660  | 394                       | 0.3 m            | HE-III | A-III             | HE-III                            | A-III     | HE-IV | A-IV                             |
| 600                              | 762  | 483                            | 724  | 457                       | 0.3 m            | HE-III | A-III             | HE-III                            | A-III     | HE-IV | A-IV                             |
| 686                              | 864  | 559                            | 921  | 572                       | 0.3 m            | HE-III | A-III             | HE-III                            | A-III     | HE-IV | A-IV                             |
| 750                              | 965  | 610                            | 921  | 572                       | 0.3 m            | HE-III | A-III             | HE-III                            | A-III     | HE-IV | A-IV                             |
| 900                              | 1143 | 737                            | 1111 | 676                       | 0.3 m            | HE-II  | A-II              | HE-III                            | A-III     | HE-IV | A-IV                             |
| 1050                             | 1346 | 864                            | 1299 | 795                       | 0.3 m            | HE-I   | A-II              | HE-III                            | A-III     | HE-IV | A-IV                             |
| 1200                             | 1524 | 965                            | 1486 | 914                       | 0.3 m            | HE-I   | A-II              | HE-III                            | A-III     | 70    | 70                               |
| 1350                             | 1727 | 1092                           | 1651 | 1016                      | 0.3 m            | HE-I   | A-II              | HE-III                            | A-III     | 70    | 70                               |
| 1500                             | 1930 | 1219                           | 1854 | 1143                      | 0.3 m            | HE-I   | A-II              | HE-III                            | A-III     | 70    | 70                               |
| 1676                             | 2108 | 1346                           | 2235 | 1372                      | 0.3 m            | HE-I   | A-II              | HE-III                            | A-III     | 70    | 70                               |
| 1800                             | 2311 | 1473                           | 2235 | 1372                      | 0.3 m            | HE-I   | A-II              | HE-III                            | A-III     | 70    | 70                               |

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

## TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE

| <b></b>                      |                           |      |    |     |                   |                               |      |    |                   |                                |     |      |                   |                                |     |     |      |    |     |
|------------------------------|---------------------------|------|----|-----|-------------------|-------------------------------|------|----|-------------------|--------------------------------|-----|------|-------------------|--------------------------------|-----|-----|------|----|-----|
| Nominal<br>Diameter<br>(in.) | Type 1                    |      |    |     |                   | Type 2                        |      |    |                   | Type 3                         |     |      |                   | Type 4                         |     |     |      |    |     |
|                              | Fill Height: 3' and less, |      |    |     |                   | Fill Height: Greater than 3', |      |    |                   | Fill Height: Greater than 10', |     |      |                   | Fill Height: Greater than 15', |     |     |      |    |     |
|                              | with 1' min               |      |    |     | not exceeding 10' |                               |      |    | not exceeding 15' |                                |     |      | not exceeding 20' |                                |     |     |      |    |     |
|                              | PVC                       | CPVC | PE | CPE | CPP               | PVC                           | CPVC | PE | CPE               | CPP                            | PVC | CPVC | PE                | CPE                            | CPP | PVC | CPVC | PE | CPP |
| 10                           | Χ                         | Х    | Χ  | Х   | NA                | Х                             | Х    | Х  | Х                 | NA                             | Х   | Х    | Х                 | Х                              | NA  | Х   | Х    | Χ  | NA  |
| 12                           | Χ                         | Χ    | Χ  | Х   | Х                 | Х                             | X    | Х  | Х                 | X                              | Х   | Х    | X                 | NA                             | Х   | Х   | Х    | X  | NA  |
| 15                           | Χ                         | Χ    | NA | Х   | Х                 | Х                             | Х    | NA | Х                 | Χ                              | Х   | Х    | NA                | NA                             | Х   | Х   | Х    | NA | X   |
| 18                           | Χ                         | X    | X  | X   | Х                 | Х                             | Х    | X  | Х                 | X                              | Х   | Х    | Χ                 | NA                             | Х   | Х   | X    | Х  | NA  |
| 21                           | Χ                         | Χ    | NA | NA  | NA                | Х                             | Х    | NA | NA                | NA                             | Х   | Х    | NA                | NA                             | NA  | Х   | Х    | NA | NA  |
| 24                           | Χ                         | Χ    | Х  | Х   | Х                 | Х                             | Х    | Х  | Х                 | Χ                              | Х   | Х    | NA                | NA                             | NA  | Х   | Х    | Х  | NA  |
| 30                           | Χ                         | Х    | X  | Х   | Х                 | Х                             | X    | Х  | Х                 | Χ                              | Х   | Х    | Χ                 | NA                             | Х   | Х   | X    | Х  | NA  |
| 36                           | Χ                         | Χ    | Χ  | Х   | Χ                 | Х                             | Х    | Х  | Х                 | Χ                              | Х   | X    | Χ                 | NA                             | NA  | Х   | Х    | Х  | NA  |
| 42                           | Х                         | NA   | Χ  | Х   | NA                | Х                             | NA   | Х  | NA                | NA                             | Х   | NA   | Х                 | NA                             | NA  | Х   | NA   | Х  | NA  |
| 48                           | Χ                         | NA   | Χ  | X   | X                 | X                             | NA   | X  | NA                | NA                             | Х   | NA   | Χ                 | NA                             | NA  | Х   | NA   | X  | NA  |

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior

PE Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height

NA Not Available

#### TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (Metric) Type 2 Type 1 Type 3 Type 4 Fill Height: 1 m and less, Fill Height: Greater than 1 m, Fill Height: Greater than 3 m, Fill Height: Greater than 4.5 Nominal not exceeding 3 m not exceeding 4.5 m with 0.3 m min. cover m, not exceeding 6 m Diameter (mm) PVC CPVC PΕ CPE CPP PVC CPVC PΕ CPE CPP PVC CPVC PΕ CPE CPP PVC CPVC PΕ CPP Х Х Χ Χ NA Χ Χ Χ Χ NA Χ Χ Χ Х NA Χ Х Χ NA 250 Χ Х Χ Х Χ Χ Χ Χ Х Χ Χ Х Χ NA Х Χ Χ Х NA 300 Χ Х Χ Χ Χ Χ NA Χ Χ Χ Χ NA NA Χ Χ Χ NA Χ 375 NA Х Х Χ Х Х Χ Χ Х Х Χ Χ Х Χ Χ Х Х Χ NA NA 450 Χ Х NA Х Х Χ NA NA Χ NA NA NA NA NA NA Χ Х NA NA 525 Χ Х Χ Χ Χ Χ Χ Χ Χ NA NA NA Χ Χ Χ NA 600 Χ Χ Χ

1200 Notes:

750

900

1000

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior

Χ

Χ

Χ

CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior

Χ

Χ

Χ

Χ

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PE Polyethylene (PE) pipe with a smooth interior

CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
This material may be used for the given pipe diameter and fill height

NA Not Available

Χ

Χ

Χ

Χ

Χ

Х

NA

NA

| TABLE IIIB: PLASTIC PIPE PERMITTED                                 |              |              |                        |                |                |                     |  |  |  |  |  |
|--|--------------|--------------|------------------------|----------------|----------------|---------------------|--|--|--|--|--|
| FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE |              |              |                        |                |                |                     |  |  |  |  |  |
|  |              | Туре         | 5                      |                | Type 6         |                     | Type 7   |  |  |  |  |
| Nominal<br>Diameter  | Fill Height: | Greater than | 20', not exceeding 25' | Fill Height: G | reater than 25 | , not exceeding 30' | Fill Height: Greater than 30', not exceeding 35' |  |  |  |  |
| (in.)  | PVC          | CPVC         |                        | PVC            | CPVC           |                     | CPVC   |  |  |  |  |
| 10   | X            | X            |                        | X              | X              |                     | X  |  |  |  |  |
| 12   | X            | X            |                        | X              | X              |                     | X  |  |  |  |  |
| 15   | X            | X            |                        | X              | X              |                     | X  |  |  |  |  |
| 18   | X            | X            |                        | X              | X              |                     | X  |  |  |  |  |
| 21   | X            | X            |                        | X              | Х              |                     | X  |  |  |  |  |
| 24   | Х            | X            |                        | X              | X              |                     | X  |  |  |  |  |
| 30   | X            | X            |                        | X              | X              |                     | X  |  |  |  |  |
| 36   | X            | X            |                        | X              | X              |                     | X  |  |  |  |  |
| 42   | Х            | NA           |                        | Χ              | NA             |                     | NA   |  |  |  |  |
| 48   | Χ            | NA           |                        | Χ              | NA             |                     | NA   |  |  |  |  |

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior X This material may be used for the given pipe diameter and fill height

NA Not Available

| TABLE IIIB: PLASTIC PIPE PERMITTED  FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE  (metric) |                 |                |                        |                 |                |                      |   |  |  |
|--|-----------------|----------------|------------------------|-----------------|----------------|----------------------|---|--|--|
|  |                 | Type 5         | ,                      |                 | Type 6         | <b>;</b>             | Type 7  |  |  |
| Nominal  | Fill Height: Gr | eater than 6 m | n, not exceeding 7.5 m | Fill Height: Gr | eater than 7.5 | m, not exceeding 9 m | Fill Height: Greater than 9 m, not exceeding 10.5 m |  |  |
| Diameter<br>(mm)   | PVC             | CPVC           |                        | PVC             | CPVC           |                      | CPVC  |  |  |
| 250  | X               | Х              |                        | X               | Х              |                      | X   |  |  |
| 300  | X               | X              |                        | X               | X              |                      | X   |  |  |
| 375  | X               | X              |                        | X               | X              |                      | X   |  |  |
| 450  | X               | X              |                        | X               | X              |                      | X   |  |  |
| 525  | X               | X              |                        | X               | X              |                      | X   |  |  |
| 600  | Х               | Х              |                        | Х               | Х              |                      | Х   |  |  |
| 750  | X               | Х              |                        | Χ               | Х              |                      | Х   |  |  |
| 900  | X               | X              |                        | X               | X              |                      | X   |  |  |
| 1000   | X               | NA             |                        | X               | NA             |                      | NA  |  |  |
| 1200   | Χ               | NA             |                        | X               | NA             |                      | NA  |  |  |

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height

NA Not Available"

Revise the first sentence of the first paragraph of Article 542.04(c) of the Standard Specifications to read:

"Compacted aggregate, at least 4 in. (100 mm) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except compacted impervious material shall be used for the outer 3 ft (1 m) at each end of the pipe culvert."

Revise the seventh paragraph of Article 542.04(d) of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Replace the third sentence of the first paragraph of Article 542.04(h) of the Standard Specifications with the following:

"The total cover required for various construction loadings shall be the responsibility of the Contractor."

Delete "Table IV : Wheel Loads and Total Cover" in Article 542.04(h) of the Standard Specifications.

Revise the first and second paragraphs of Article 542.04(i) of the Standard Specifications to read:

"(i) Deflection Testing for Pipe Culverts. All PE, PVC and CPP pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP pipe culverts with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP pipe culverts with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise Articles 542.04(i)(1) and (2) of the Standard Specifications to read:

- "(1) For all PVC pipe: as defined using ASTM D 3034 methodology.
- (2) For all PE and CPP pipe: the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the second sentence of the second paragraph of Article 542.07 of the Standard Specifications to read:

"When a prefabricated end section is used, it shall be of the same material as the pipe culvert, except for polyethylene (PE), polyvinylchloride (PVC), and polypropylene (PP) pipes which shall have metal end sections."

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

- "(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.
- (d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

- (a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.
- (b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

## LRFD STORM SEWER BURIAL TABLES (BDE)

Effective: November 1, 2013 Revised: November 1, 2014

Revise Article 550.02 of the Standard Specifications to read as follows:

| "Item   | Article Section |
|---|-----------------|
| (a) Clay Sewer Pipe   | 1040.02         |
| (b) Extra Strength Clay Pipe  |                 |
| (c) Concrete Sewer, Storm Drain, and Culvert Pipe                             | 1042            |
| (d) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe                  | 1042            |
| (e) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Note | 1)1042          |
| (f) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Note 1)    | 1042            |
| (g) Polyvinyl Chloride (PVC) Pipe   | 1040.03         |
| (h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior           | 1040.03         |
| (i) Corrugated Polypropylene (CPP) Pipe with Smooth Interior                  | 1040.07         |
| (j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe    |                 |
| (k) Mastic Joint Sealer for Pipe(l) External Sealing Band                     | 1055            |
| (I) External Sealing Band   | 1057            |
| (m) Fine Aggregate (Note 2)   | 1003.04         |
| (n) Coarse Aggregate (Note 3)   | 1004.05         |
| (o) Reinforcement Bars and Welded Wire Fabric                                 |                 |
| (p) Handling Hole Plugs   | 1042.16         |
| (q) Polyethylene (PE) Pipe with a Smooth Interior                             | 1040.04         |
| (r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior                  | 1040.04         |

- Note 1. The class of elliptical and arch pipe used for various storm sewer sizes and heights of fill shall conform to the requirements for circular pipe.
- Note 2. The fine aggregate shall be moist.
- Note 3. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 550.03 of the Standard Specifications as follows:

| "Class | Materials   |
|--------|---|
| Α      | Rigid Pipes:  |
|        | Clay Sewer Pipe   |
|        | Extra Strength Clay Pipe  |
|        | Concrete Sewer, Storm Drain, and Culvert Pipe                       |
|        | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe            |
|        | Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe |
|        | Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe       |
| В      | Rigid Pipes:  |
|        | Clay Sewer Pipe   |
|        | Extra Strength Clay Pipe  |
|        | Concrete Sewer, Storm Drain, and Culvert Pipe                       |
|        | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe            |
|        | Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe |
|        | Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe       |
|        | Flexible Pipes:   |
|        | Polyvinyl Chloride (PVC) Pipe                                       |
|        | Corrugated Polyvinyl Chloride Pipe (PVC) with a Smooth Interior     |
|        | Polyethylene (PE) Pipe with a Smooth Interior                       |
|        | Corrugated Polyethylene (PE) Pipe with a Smooth Interior            |
|        | Corrugated Polypropylene (CPP) Pipe with a Smooth Interior"         |

Replace the storm sewers tables in Article 550.03 of the Standard Specifications with the following:

|  | STORM SEWERS<br>KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED<br>FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |    |    |    |    |    |      |        |       |     |      |            |     |     |    |    |
|--|--|----|----|----|----|----|------|--------|-------|-----|------|------------|-----|-----|----|----|
| FOR A GIVEN PIPE DIAMETERS AND FILL HEIG  Type 1 |  |    |    |    |    |    |      | Type 2 |       |     |      |            |     |     |    |    |
| Nominal<br>Diameter                              | Fill Height: 3' and less With 1' minimum cover   |    |    |    |    |    |      |        |       |     |      | eater than | 3'  |     |    |    |
| in.  | RCCP CSP ESCP PVC CPVC PE CPE CPP  |    |    |    |    |    | RCCP | CSP    | ESCP  | PVC | CPVC | PE         | CPE | CPP |    |    |
| 10   | NA   | 3  | Х  | Х  | Х  | Х  | Х    | NA     | NA    | 1   | *X   | Х          | Х   | Х   | Х  | NA |
| 12   | IV   | NA | Х  | X  | Х  | Х  | Х    | Х      | II    | 1   | *X   | Х          | Х   | X   | Х  | Х  |
| 15   | IV   | NA | NA | Х  | Х  | NA | Х    | Х      | II    | 1   | *X   | Х          | Χ   | NA  | Х  | Х  |
| 18   | IV   | NA | NA | Х  | Х  | Х  | Х    | Х      | II    | 2   | Х    | Х          | Χ   | X   | Х  | Х  |
| 21   | III  | NA | NA | Х  | Х  | NA | NA   | NA     | II    | 2   | Х    | Х          | Х   | NA  | NA | NA |
| 24   | Ш  | NA | NA | Х  | Х  | Х  | Х    | Х      | II    | 2   | Х    | Х          | Х   | X   | Х  | Х  |
| 27   | III  | NA | NA | NA | NA | NA | NA   | NA     | II    | 3   | Х    | NA         | NA  | NA  | NA | NA |
| 30   | IV   | NA | NA | Х  | Х  | Х  | Х    | Х      | II    | 3   | Х    | Х          | Х   | Х   | Х  | Х  |
| 33   | III  | NA | NA | NA | NA | NA | NA   | NA     | II    | NA  | Х    | NA         | NA  | NA  | NA | NA |
| 36   | III  | NA | NA | Х  | Х  | Х  | X    | Х      | II    | NA  | Х    | Х          | Х   | Х   | X  | Х  |
| 42   | II   | NA | Х  | Х  | NA | Х  | Х    | NA     | II    | NA  | Х    | Х          | NA  | X   | NA | NA |
| 48   | II   | NA | Х  | Х  | NA | Х  | Х    | Х      | II    | NA  | Х    | Х          | NA  | Χ   | NA | NA |
| 54   | II   | NA | NA | NA | NA | NA | NA   | NA     | II    | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 60   | II   | NA | NA | NA | NA | NA | NA   | Х      | II    | NA  | NA   | NA         | NA  | NA  | NA | Х  |
| 66   | II   | NA | NA | NA | NA | NA | NA   | NA     | II    | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 72   | II   | NA | NA | NA | NA | NA | NA   | NA     | II    | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 78   | II.  | NA | NA | NA | NA | NA | NA   | NA     | II    | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 84   | II   | NA | NA | NA | NA | NA | NA   | NA     | II    | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 90   | II   | NA | NA | NA | NA | NA | NA   | NA     | II    | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 96   | II   | NA | NA | NA | NA | NA | NA   | NA     | III   | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 102  | l II   | NA | NA | NA | NA | NA | NA   | NA     | III   | NA  | NA   | NA         | NA  | NA  | NA | NA |
| 108  | 1  | NA | NA | NA | NA | NA | NA   | NA     | l III | NA  | NA   | NA         | NA  | NA  | NA | NA |

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

PE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior CPP Corrugated Polypropylene pipe with a Smooth Interior

X This material may be used for the given pipe diameter and fill height.

NA This material is Not Acceptable for the given pipe diameter and fill height.

\* May also use Standard Strength Clay Pipe

|                            |  |                                   | 50       |          |          | ATERIAL  |          | D STREN  | -          |          | IE DIDE                  |                         |          |          |          |          |
|----------------------------|--|-----------------------------------|----------|----------|----------|----------|----------|----------|------------|----------|--------------------------|-------------------------|----------|----------|----------|----------|
|                            | FOR A GIVEN PIPE DIAMETERS AND FILL HEIG |                                   |          |          |          |          |          |          |            | Type 2   |                          |                         |          |          |          |          |
|                            |  |                                   |          | Туре     | : 1      |          |          |          |            |          |                          | тур                     | e z      |          |          |          |
| Nominal<br>Diameter<br>in. | meter With 300 mm minimum cover          |                                   |          |          |          |          |          |          |            | Fill H   | leight: Gre<br>not excee | eater than<br>eding 3 m | 1 m      |          |          |          |
|                            | RCCP                                     | RCCP CSP ESCP PVC CPVC PE CPE CPP |          |          |          |          |          | RCCP     | CSP        | ESCP     | PVC                      | CPVC                    | PE       | CPE      | CPP      |          |
| 250                        | NA                                       | 3                                 | Х        | Х        | Х        | Х        | Х        | NA       | NA         | 1        | *X                       | Х                       | Х        | Х        | Х        | NA       |
| 300                        | IV                                       | NA                                | Х        | Х        | Х        | Х        | Х        | Х        | II         | 1        | *X                       | Х                       | Х        | X        | Х        | Х        |
| 375                        | IV                                       | NA                                | NA       | X        | Х        | NA       | X        | Х        | II         | 1        | *X                       | Х                       | Х        | NA       | Х        | Χ        |
| 450                        | IV                                       | NA                                | NA       | Х        | Х        | Х        | Х        | Х        | II         | 2        | Х                        | Х                       | Х        | Х        | Х        | Х        |
| 525                        | III                                      | NA                                | NA       | Х        | Х        | NA       | NA       | NA       | II         | 2        | Х                        | Х                       | Х        | NA       | NA       | NA       |
| 600                        | III                                      | NA                                | NA       | Х        | Χ        | Х        | Х        | Х        | II         | 2        | Х                        | Х                       | Х        | Х        | Х        | Х        |
| 675                        | III                                      | NA                                | NA       | NA       | NA       | NA       | NA       | NA       | II         | 3        | Х                        | NA                      | NA       | NA       | NA       | NA       |
| 750                        | IV                                       | NA                                | NA       | Х        | Х        | Х        | Х        | Х        | II         | 3        | Х                        | Х                       | Х        | Х        | Х        | Х        |
| 825                        | III                                      | NA                                | NA       | NA       | NA       | NA       | NA       | NA       | ll l       | NA       | X                        | NA                      | NA       | NA       | NA       | NA       |
| 900                        | Ш  | NA                                | NA       | X        | X        | X        | X        | Х        | II         | NA       | X                        | X                       | Х        | X        | Х        | X        |
| 1050                       | II                                       | NA                                | X        | X        | NA       | X        | X        | NA       | II.        | NA       | X                        | X                       | NA       | X        | NA       | NA       |
| 1200                       | ll                                       | NA                                | X        | X        | NA       | X        | X        | X        | II.        | NA       | X                        | X                       | NA       | X        | NA       | NA       |
| 1350                       | II<br>                                   | NA                                | NA       | NA       | NA       | NA       | NA       | NA       | !!         | NA       | NA                       | NA                      | NA       | NA       | NA       | NA       |
| 1500                       | l II                                     | NA                                | NA       | NA       | NA       | NA       | NA       | X        | II<br>     | NA       | NA                       | NA                      | NA       | NA       | NA       | X        |
| 1650                       | II                                       | NA                                | NA       | NA       | NA       | NA       | NA       | NA       | II<br>     | NA       | NA                       | NA                      | NA       | NA       | NA       | NA       |
| 1800                       | !!                                       | NA                                | NA       | NA       | NA       | NA       | NA       | NA       | II<br>     | NA       | NA                       | NA                      | NA       | NA       | NA       | NA       |
| 1950                       | l II                                     | NA<br>NA                          | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA |            | NA<br>NA | NA<br>NA                 | NA<br>NA                | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA |
| 2100                       | "  |                                   |          |          |          |          |          |          |            |          |                          |                         |          |          |          |          |
| 2250                       | l ¦                                      | NA                                | NA<br>NA | NA<br>NA | NA       | NA<br>NA | NA       | NA       | II<br>III  | NA       | NA<br>NA                 | NA<br>NA                | NA<br>NA | NA       | NA<br>NA | NA<br>NA |
| 2400<br>2550               | "  | NA<br>NA                          | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | III<br>III | NA<br>NA | NA<br>NA                 | NA<br>NA                | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA |
| 2700                       | l ¦i                                     | NA<br>NA                          | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA | "          | NA<br>NA | NA<br>NA                 | NA<br>NA                | NA<br>NA | NA<br>NA | NA<br>NA | NA<br>NA |
| 2700                       | l II                                     | INA                               | INA      | INA      | INA      | INA      | INA      | INA      | III        | INA      | INA                      | INA                     | INA      | INA      | INA      | INA      |

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

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PE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior CPP Corrugated Polypropylene pipe with a Smooth Interior

X This material may be used for the given pipe diameter and fill height.

NA This material is Not Acceptable for the given pipe diameter and fill height.

\* May also use Standard Strength Clay Pipe

|                            | STORM SEWERS  KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED  FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |   |      |     |      |    |     |     |      |        |                   |     |      |    |     |
|----------------------------|--|---|------|-----|------|----|-----|-----|------|--------|-------------------|-----|------|----|-----|
|                            | Type 3   |   |      |     |      |    |     |     |      | Type 4 |                   |     |      |    |     |
| Nominal<br>Diameter<br>in. |  | Fill Height: Greater than 10' not exceeding 15' |      |     |      |    |     |     |      |        | Fill Height not e |     |      |    |     |
| 111.                       | RCCP   | CSP   | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP | CSP    | ESCP              | PVC | CPVC | PE | CPP |
| 10                         | NA   | 2   | Х    | Х   | Х    | Х  | Х   | NA  | NA   | 3      | Х                 | Х   | Х    | Х  | NA  |
| 12                         | III  | 2   | Х    | Х   | Х    | Х  | NA  | Х   | IV   | NA     | NA                | Х   | Х    | Х  | NA  |
| 15                         | III  | 3   | Х    | Χ   | Х    | NA | NA  | Х   | IV   | NA     | NA                | Х   | Х    | NA | X   |
| 18                         | III  | NA  | Х    | Х   | Х    | Х  | NA  | Х   | IV   | NA     | NA                | Х   | Х    | Х  | NA  |
| 21                         | III  | NA  | NA   | Х   | Х    | NA | NA  | NA  | IV   | NA     | NA                | Х   | Х    | NA | NA  |
| 24                         | III  | NA  | NA   | X   | Х    | Х  | NA  | NA  | IV   | NA     | NA                | Х   | Х    | Х  | NA  |
| 27                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 30                         | III  | NA  | NA   | Х   | Х    | Х  | NA  | Х   | IV   | NA     | NA                | Х   | Х    | Х  | NA  |
| 33                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 36                         | III  | NA  | NA   | Х   | Х    | Х  | NA  | NA  | IV   | NA     | NA                | Х   | Х    | Х  | NA  |
| 42                         | III  | NA  | NA   | X   | NA   | Х  | NA  | NA  | IV   | NA     | NA                | Х   | NA   | Х  | NA  |
| 48                         | III  | NA  | NA   | Х   | NA   | Х  | NA  | NA  | IV   | NA     | NA                | Х   | NA   | Х  | NA  |
| 54                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 60                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 66                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 72                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 78                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 84                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | IV   | NA     | NA                | NA  | NA   | NA | NA  |
| 90                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | 1680 | NA     | NA                | NA  | NA   | NA | NA  |
| 96                         | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | 1690 | NA     | NA                | NA  | NA   | NA | NA  |
| 102                        | III  | NA  | NA   | NA  | NA   | NA | NA  | NA  | 1700 | NA     | NA                | NA  | NA   | NA | NA  |
| 108                        | 1360   | NA  | NA   | NA  | NA   | NA | NA  | NA  | 1710 | NA     | NA                | NA  | NA   | NA | NA  |

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

PE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior CPP Corrugated Polypropylene pipe with a Smooth linterior

X This material may be used for the given pipe diameter and fill height.

NA This material is Not Acceptable for the given pipe diameter and fill height.

\* May also use Standard Strength Clay Pipe

Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a

0.01 in crack.

|                            | STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |   |          |     |      |    |     |     |      |     |      |                  |                   |    |     |
|----------------------------|---|---|----------|-----|------|----|-----|-----|------|-----|------|------------------|-------------------|----|-----|
|                            | OVER THE  | TOP OF  | THE PIPE |     |      |    |     |     |      |     |      |                  |                   |    |     |
|                            |   | Type 3  |          |     |      |    |     |     |      |     |      | Type 4           |                   |    |     |
| Nominal<br>Diameter<br>in. |   | Fill Height: Greater than 3 m not exceeding 4.5 m |          |     |      |    |     |     |      | F   | -    | Greater xceeding | than 4.5 m<br>6 m |    |     |
| 111.                       | RCCP  | CSP   | ESCP     | PVC | CPVC | PE | CPE | CPP | RCCP | CSP | ESCP | PVC              | CPVC              | PE | CPP |
| 250                        | NA  | 2   | Х        | Х   | Х    | Х  | Х   | NA  | NA   | 3   | Х    | Х                | Х                 | Х  | NA  |
| 300                        | III   | 2   | Χ        | Χ   | Χ    | Χ  | NA  | Х   | IV   | NA  | NA   | Х                | Х                 | Χ  | NA  |
| 375                        | III   | 3   | Х        | Χ   | Х    | NA | NA  | Х   | IV   | NA  | NA   | Х                | X                 | NA | X   |
| 450                        | III   | NA  | Х        | Χ   | Х    | Χ  | NA  | Х   | IV   | NA  | NA   | Х                | Х                 | Χ  | NA  |
| 525                        | III   | NA  | NA       | Χ   | Χ    | NA | NA  | NA  | IV   | NA  | NA   | Х                | X                 | NA | NA  |
| 600                        | III   | NA  | NA       | Χ   | X    | X  | NA  | NA  | IV   | NA  | NA   | Х                | X                 | Χ  | NA  |
| 675                        | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 750                        | III   | NA  | NA       | Χ   | Χ    | Χ  | NA  | Х   | IV   | NA  | NA   | Х                | X                 | Χ  | NA  |
| 825                        | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 900                        | III   | NA  | NA       | Х   | Х    | Х  | NA  | NA  | IV   | NA  | NA   | Х                | Х                 | Χ  | NA  |
| 1050                       | III   | NA  | NA       | Χ   | NA   | X  | NA  | NA  | IV   | NA  | NA   | Х                | NA                | Χ  | NA  |
| 1200                       | III   | NA  | NA       | Χ   | NA   | X  | NA  | NA  | IV   | NA  | NA   | Х                | NA                | Χ  | NA  |
| 1350                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 1500                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 1650                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 1800                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 1950                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 2100                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | IV   | NA  | NA   | NA               | NA                | NA | NA  |
| 2250                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | 80   | NA  | NA   | NA               | NA                | NA | NA  |
| 2400                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | 80   | NA  | NA   | NA               | NA                | NA | NA  |
| 2550                       | III   | NA  | NA       | NA  | NA   | NA | NA  | NA  | 80   | NA  | NA   | NA               | NA                | NA | NA  |
| 2700                       | 70  | NA  | NA       | NA  | NA   | NA | NA  | NA  | 80   | NA  | NA   | NA               | NA                | NA | NA  |

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe RCCP

CSP Concrete Sewer, Storm drain, and Culvert Pipe

Polyvinyl Chloride Pipe PVC

CPVC Corrugated Polyvinyl Chloride Pipe

Extra Strength Clay Pipe **ESCP** 

PΕ Polyethylene Pipe with a Smooth Interior

Corrugated Polyethylene Pipe with a Smooth Interior CPE Corrugated Polypropylene pipe with a Smooth Interior This material may be used for the given pipe diameter and fill height. CPP

Χ This material is Not Acceptable for the given pipe diameter and fill height. NA

May also use Standard Strength Clay Pipe

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to produce Note

a 25.4 micro-meter crack.

| STORM SEWERS  KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED  FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |                      |           |      |      |             |      |   |      |  |  |
|--|----------------------|-----------|------|------|-------------|------|---|------|--|--|
|  |                      | Type 5    |      |      | Type 6      |      | Type 7  |      |  |  |
| Nominal<br>Diameter<br>in.   | Fill Height<br>not e | : Greater |      |      | nt: Greater |      | Fill Height: Greater than 30' not exceeding 35' |      |  |  |
|  | RCCP                 | PVC       | CPVC | RCCP | PVC         | CPVC | RCCP  | CPVC |  |  |
| 10   | NA                   | Х         | Х    | NA   | Х           | Х    | NA  | Х    |  |  |
| 12   | IV                   | Х         | Х    | V    | Χ           | X    | V   | X    |  |  |
| 15   | IV                   | Х         | Х    | V    | Χ           | Χ    | V   | X    |  |  |
| 18   | IV                   | Х         | Х    | V    | Χ           | Х    | V   | Х    |  |  |
| 21   | IV                   | Х         | Х    | V    | Χ           | X    | V   | X    |  |  |
| 24   | IV                   | Χ         | Χ    | V    | Χ           | X    | V   | X    |  |  |
| 27   | IV                   | NA        | NA   | V    | NA          | NA   | V   | NA   |  |  |
| 30   | IV                   | Χ         | Χ    | V    | Χ           | X    | V   | X    |  |  |
| 33   | IV                   | NA        | NA   | V    | NA          | NA   | V   | NA   |  |  |
| 36   | IV                   | Х         | Х    | V    | Х           | Х    | V   | Х    |  |  |
| 42   | IV                   | Х         | NA   | V    | Χ           | NA   | V   | NA   |  |  |
| 48   | IV                   | Х         | NA   | V    | Χ           | NA   | V   | NA   |  |  |
| 54   | IV                   | NA        | NA   | V    | NA          | NA   | V   | NA   |  |  |
| 60   | IV                   | NA        | NA   | V    | NA          | NA   | V   | NA   |  |  |
| 66   | IV                   | NA        | NA   | V    | NA          | NA   | V   | NA   |  |  |
| 72   | V                    | NA        | NA   | V    | NA          | NA   | V   | NA   |  |  |
| 78   | 2020                 | NA        | NA   | 2370 | NA          | NA   | 2730  | NA   |  |  |
| 84   | 2020                 | NA        | NA   | 2380 | NA          | NA   | 2740  | NA   |  |  |
| 90   | 2030                 | NA        | NA   | 2390 | NA          | NA   | 2750  | NA   |  |  |
| 96   | 2040                 | NA        | NA   | 2400 | NA          | NA   | 2750  | NA   |  |  |
| 102  | 2050                 | NA        | NA   | 2410 | NA          | NA   | 2760  | NA   |  |  |
| 108  | 2060                 | NA        | NA   | 2410 | NA          | NA   | 2770  | NA   |  |  |

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

X This material may be used for the given pipe diameter and fill height.

NA This material is Not Acceptable for the given pipe diameter and fill height.

Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.

|                     | 1215.11   | D 05 1447 |              | RM SEWERS    |             | 0711 0501 | <b></b>         |      |  |  |  |
|---------------------|---|-----------|--------------|--------------|-------------|-----------|-----------------|------|--|--|--|
| EC                  | KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE |           |              |              |             |           |                 |      |  |  |  |
| 10                  | I   |           | VIL I LING / | AND FILL FIL |             |           |                 |      |  |  |  |
|                     | Type 5  |           |              |              | Type 6      |           | Тур             | e 7  |  |  |  |
| Nominal<br>Diameter | Fill Height<br>not e  | : Greater |              | 0            | nt: Greater |           | Fill Height: Gr |      |  |  |  |
| in.                 |   |           |              |              | I           | <u> </u>  |                 | I    |  |  |  |
|                     | RCCP  | PVC       | CPVC         | RCCP         | PVC         | CPVC      | RCCP            | CPVC |  |  |  |
| 250                 | NA  | Х         | Х            | NA           | Х           | Х         | NA              | Х    |  |  |  |
| 300                 | IV  | X         | Х            | V            | X           | Х         | V               | X    |  |  |  |
| 375                 | IV  | Х         | Χ            | V            | X           | X         | V               | X    |  |  |  |
| 450                 | IV  | Х         | Х            | V            | X           | Х         | V               | Х    |  |  |  |
| 525                 | IV  | X         | Х            | V            | X           | X         | V               | X    |  |  |  |
| 600                 | IV  | Χ         | Χ            | V            | X           | X         | V               | X    |  |  |  |
| 675                 | IV  | NA        | NA           | V            | NA          | NA        | V               | NA   |  |  |  |
| 750                 | IV  | X         | Х            | V            | X           | X         | V               | X    |  |  |  |
| 825                 | IV  | NA        | NA           | V            | NA          | NA        | V               | NA   |  |  |  |
| 900                 | IV  | Х         | Х            | V            | X           | X         | V               | X    |  |  |  |
| 1050                | IV  | X         | NA           | V            | X           | NA        | V               | NA   |  |  |  |
| 1200                | IV  | Χ         | NA           | V            | X           | NA        | V               | NA   |  |  |  |
| 1350                | IV  | NA        | NA           | V            | NA          | NA        | V               | NA   |  |  |  |
| 1500                | IV  | NA        | NA           | V            | NA          | NA        | V               | NA   |  |  |  |
| 1650                | IV  | NA        | NA           | V            | NA          | NA        | V               | NA   |  |  |  |
| 1800                | V   | NA        | NA           | V            | NA          | NA        | V               | NA   |  |  |  |
| 1950                | 100   | NA        | NA           | 110          | NA          | NA        | 130             | NA   |  |  |  |
| 2100                | 100   | NA        | NA           | 110          | NA          | NA        | 130             | NA   |  |  |  |
| 2250                | 100   | NA        | NA           | 110          | NA          | NA        | 130             | NA   |  |  |  |
| 2400                | 100   | NA        | NA           | 120          | NA          | NA        | 130             | NA   |  |  |  |
| 2550                | 100   | NA        | NA           | 120          | NA          | NA        | 130             | NA   |  |  |  |
| 2700                | 100   | NA        | NA           | 120          | NA          | NA        | 130             | NA   |  |  |  |

2700 100 NA NA 120 NA RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

PVC Polyvinyl Chloride Pipe CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

This material may be used for the given pipe diameter and fill height.

NA

This material is Not Acceptable for the given pipe diameter and fill height.

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to

produce a 25.4 micro-meter crack.

Revise the sixth paragraph of Article 550.06 of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Revise the first and second paragraphs of Article 550.08 of the Standard Specifications to read:

"550.08 Deflection Testing for Storm Sewers. All PVC, PE, and CPP storm sewers shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP storm sewers with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP storm sewers with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise the fifth paragraph of Article 550.08 to read as follows.

"The outside diameter of the mandrel shall be 95 percent of the base inside diameter. For all PVC pipe the base inside diameter shall be defined using ASTM D 3034 methodology. For all PE and CPP pipe, the base inside diameter shall be defined as the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

- "(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.
- (d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

- (a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.
- (b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

# MECHANICAL SIDE TIE BAR INSERTER (BDE)

Effective: August 1, 2014

Add the following to Article 420.03 of the Standard Specifications:

Revise Article 420.05(b) of the Standard Specifications to read:

- "(b) Longitudinal Construction Joint. The tie bars shall be installed using one of the following methods.
  - (1) Preformed or Drilled Holes. The tie bars shall be installed with an approved nonshrink grout or chemical adhesive providing a minimum pull-out strength as follows.

| Bar Size       | Minimum Pull-Out Strength |
|----------------|---------------------------|
| No. 6 (No. 19) | 11,000 lb (49 kN)         |
| No. 8 (No. 25) | 19,750 lb (88 kN)         |

Holes shall be blown clean and dry prior to placing the grout or adhesive. If compressed air is used, the pneumatic tool lubricator shall be bypassed and a filter installed on the discharge valve to keep water and oil out of the lines. The installation shall be with methods and tools conforming to the grout or adhesive manufacturer's recommendations.

The Contractor shall load test five percent of the first 500 tie bars installed. No further installation will be allowed until the initial five percent testing has been completed and approval to continue installation has been given by the Engineer. Testing will be required for 0.5 percent of the bars installed after the initial 500. For each bar that fails to pass the minimum requirements, two more bars selected by the Engineer shall be tested. Each bar that fails to meet the minimum load requirement shall be reinstalled and retested. The equipment and method used for testing shall meet the requirements of ASTM E 488. All tests shall be performed within 72 hours of installation. The tie bars shall be installed and approved before concrete is placed in the adjacent lane."

(2) Inserted. The tie bars shall be installed with the use of a mechanical side tie bar inserter. The tie bars shall be No. 6 (No. 19) bars, 30 inches (750 mm) long, placed mid-depth on 24 in. (600 mm) centers along the joint edge. The inserter shall insert the tie bars with vibration after the concrete has been struck off and consolidated without deformation of the slab. The inserter shall remain stationary relative to the pavement when inserting tie bars, while the formless paver continues to move in the direction of paving.

A void greater than 1/8 in. (3 mm) at any location around the tie bar shall require immediate adjustment of the paving operation. A void greater than 1/2 in.(13 mm) shall be repaired with a nonshrink grout or chemical adhesive after the concrete has hardened. If at the end of the day of paving more than 20 percent of the tie bars show a void larger than 1/8 in. (3 mm) at any point around the bar, the use of the side tie bar inserter shall be discontinued.

(3) Formed in Place. The tie bar shall be formed in place as shown on the plans.

The sealant reservoir shall be formed either by sawing after the concrete has set according to Article 420.05(a) or by hand tools when the concrete is in a plastic state."

Add the following to Section 1103 of the Standard Specifications:

"1103.18 Mechanical Side Bar Inserters. The mechanical side tie bar inserter shall be self-contained and supported on the formless paver with the ability to move independently from the formless paver. The insertion apparatus shall vibrate within a frequency of 2000 to 6000 vpm. A vibrating reed tachometer, hand type, shall be provided according to Article 1103.12."

#### PAVED SHOULDER REMOVAL (BDE)

Effective: April 1, 2014

Revise the first paragraph of Article 440.07(b) of the Standard Specifications to read:

"(b) Measured Quantities. Pavement removal, driveway pavement removal, and paved shoulder removal will be measured for payment in place and the area computed in square yards (square meters)."

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

"(c) Adjustment of Quantities. The quantity of pavement removal and paved shoulder removal will be adjusted if their respective thickness 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 or shoulder 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."

# PAVEMENT MARKING TAPE TYPE IV (BDE)

Effective: April 1, 2012

Revise Article 703.02 of the Standard Specifications to read:

**"703.02 Materials.** Materials shall be according to the following.

| (a) Pavement Marking Tape, Type I a | and Type III1095.06   |
|-------------------------------------|-----------------------|
| (b) Paint Pavement Markings         | 1095.02               |
| (c) Pavement Marking Tape, Type IV  | <sup>7</sup> 1095.11" |

Revise the second paragraph of Article 703.05 of the Standard Specifications to read:

"Type I marking tape or paint shall be used at the option of the Contractor, except paint shall not be applied to the final wearing surface unless authorized by the Engineer for late season applications where tape adhesion would be a problem. Type III or Type IV marking tape shall be used on the final wearing surface when the temporary pavement marking will conflict with the permanent pavement marking such as on tapers, crossovers and lane shifts."

Revise the third paragraph of Article 703.07 of the Standard Specifications to read:

"When Pavement Marking Tape, Type III or Pavement Marking Tape, Type IV is specified in the contract other than on a Standard, the work will be paid for at the contract unit price per foot (meter) for PAVEMENT MARKING TAPE, TYPE III or PAVEMENT MARKING TAPE, TYPE IV of the line width specified and at the contract unit price per square feet (square meter) for PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS or PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS."

Add the following to Section 1095 of the Standard Specifications:

"1095.11 Pavement Marking Tape, Type IV. The temporary, preformed, patterned markings shall consist of a white or yellow tape with wet retroreflective media incorporated to provide immediate and continuing retroreflection during both wet and dry conditions. The tape shall be manufactured without the use of heavy metals including lead chromate pigments or other similar, lead-containing chemicals.

The white and yellow Type IV marking tape shall meet the Type III requirements of Article 1095.06 and the following.

- (a) Composition. The retroreflective pliant polymer pavement markings shall consist of a mixture of high-quality polymeric materials, pigments and glass beads distributed throughout its base cross-sectional area, with a layer of wet retroreflective media bonded to a durable polyurethane topcoat surface. The patterned surface shall have approximately 40% ± 10% of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed beads or particles.
- (b) Retroreflectance. The white and yellow markings shall meet the following for initial dry and wet retroreflectance.
  - (1) Dry Retroreflectance. Dry retroreflectance shall be measured under dry conditions according to ASTM D4061 and meet the values described in Article 1095.06 for Type III tape.
  - (2) Wet Retroreflectance. Wet retroreflectance shall be measured under wet conditions according to ASTM E2177 and meet the values shown in the following table.

| Wet Retroreflectance, Initial R <sub>∟</sub> |                           |  |  |  |  |  |  |
|--|---------------------------|--|--|--|--|--|--|
| Color  | R <sub>L</sub> 1.05/88.76 |  |  |  |  |  |  |
| White  | 300                       |  |  |  |  |  |  |
| Yellow                                       | 200                       |  |  |  |  |  |  |

(c) Color. The material shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degrees circumferential/zero degree geometry, illuminant D65, and a two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

| Color   | Daylight Reflectance %Y |
|---------|-------------------------|
| White   | 65 minimum              |
| *Yellow | 36-59                   |

<sup>\*</sup>Shall match Federal 595 Color No. 33538 and the chromaticity limits as follows.

| Х | 0.490 | 0.475 | 0.485 | 0.530 |
|---|-------|-------|-------|-------|
| y | 0.470 | 0.438 | 0.425 | 0.456 |

- (d) Skid Resistance. The surface of the markings shall provide an average minimum skid resistance of 50 BPN when tested according to ASTM E303.
- (e) Sampling, Testing, Acceptance, and Certification. Prior to approval and use of the wet reflective, temporary, removable pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, and date of manufacture.

After approval by the Department, samples and certification by the manufacturer shall be submitted for each batch used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, manufacturer's name, and date of manufacture.

All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer."

#### PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: January 1, 2014

<u>FEDERAL AID CONTRACTS</u>. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

#### "STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, the worker's address, the worker's telephone number when available, the worker's social security number, the worker's classification or classifications, the worker's gross and net wages paid in each pay period, the worker's number of hours worked each day, the worker's starting and ending times of work each day. However, any Contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organization must additionally submit the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable.

The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted to the Engineer. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form."

<u>STATE CONTRACTS</u>. Revise Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

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

- 1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.
- 2. Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of five years from the later of the date of final payment under the contract or completion of the contract, records of the wages paid to his/her workers. The payroll records shall include the worker's name, the worker's address, the worker's telephone number when available, the worker's social security number, the worker's classification or classifications, the worker's gross and net wages paid in each pay period, the worker's number of hours worked each day, the worker's starting and ending times of work each day. However, any contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organization must additionally submit the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable. Upon seven business days' notice, these records shall be available at a location within the State, during reasonable hours, for inspection by the Department or the Department of Labor; and Federal, State, or local law enforcement agencies and prosecutors.

3. Submission of Payroll Records. The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted to the Engineer. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form.

Each submittal shall be accompanied by a statement signed by the Contractor or subcontractor, or an officer, employee, or officer thereof, which avers that: (i) he or she has examined the records and such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Act; and (iii) the Contractor or subcontractor is aware that filing a payroll record that he/she knows to be false is a Class A misdemeanor.

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

# PORTLAND CEMENT CONCRETE EQUIPMENT (BDE)

Effective: November 1, 2013

Add the following to the first paragraph of Article 1103.03(a)(5) of the Standard Specifications to read:

"As an alternative to a locking key, the start and finish time for mixing may be automatically printed on the batch ticket. The start and finish time shall be reported to the nearest second."

#### PRECAST CONCRETE HANDHOLE (BDE)

Effective: August 1, 2014

Revise the third paragraph of Article 814.03 of the Standard Specifications to read:

"Handholes shall be constructed as shown on the plans and shall be cast-in-place, composite concrete, or precast units. Heavy duty handholes shall be either cast-in-place or precast units."

Add the following to Article 814.03 of the Standard Specifications:

"(c) Precast Concrete. Precast concrete handholes shall be fabricated according to Article 1042.17. Where a handhole is contiguous to a sidewalk, preformed joint filler of 1/2 inch (13 mm) thickness shall be placed between the handhole and the sidewalk."

Add the following to Section1042 of the Standard Specifications:

"1042.17 Precast Concrete Handholes. Precast concrete handholes shall be according to Articles 1042.03(a)(c)(d)(e)."

# PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

"(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

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

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

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

# QUALITY CONTROL/QUALITY ASSURANCE OF CONCRETE MIXTURES (BDE)

Effective: January 1, 2012 Revised: January 1, 2014

Revise Note 7/ of Schedule B of Recurring Special Provision Check Sheet #31 of the Standard Specifications to read:

7/ The test of record for strength shall be the day indicated in Article 1020.04. For cement aggregate mixture II, a strength requirement is not specified and testing is not required. Additional strength testing to determine early falsework and form removal, early pavement or bridge opening to traffic, or to monitor strengths is at the discretion of the Contractor. Strength shall be defined as the average of two 6 x 12 in. (150 x 300 mm) cylinder breaks, three 4 x 8 in. (100 x 200 mm) cylinder breaks, or two beam breaks for field tests. Per Illinois Modified AASHTO T 23, cylinders shall be 6 x 12 in. (150 x 300 mm) when the nominal maximum size of the coarse aggregate exceeds 1 in. (25 mm).

# RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revise: April 1, 2014

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 into which the FRAP will be incorporated.

| Mixture FRAP will be used in: | Sieve Size that 100% of FRAP |
|-------------------------------|------------------------------|
|                               | 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 specified 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 ≤ 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  $G_{mm}$ . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

| Parameter         | FRAP/Homogeneous<br>/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 %                           | $\pm4.0~\%$               |
| Asphalt Binder    | $\pm$ 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.

| Parameter              | RAS     |
|------------------------|---------|
| No. 8 (2.36 mm)        | ± 5 %   |
| No. 16 (1.18 mm)       | ± 5 %   |
| No. 30 (600 µm)        | ± 4 %   |
| No. 200 (75 μm)        | ± 2.0 % |
| Asphalt Binder Content | ± 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.

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

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

- 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 table listed below for the given N design.

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

| HMA Mixtures | FRAP/RAS Maximum ABR %    |         |                         |  |  |  |
|--------------|---------------------------|---------|-------------------------|--|--|--|
| Ndesign      | Binder/Leveling<br>Binder | Surface | Polymer Modified 3/, 4/ |  |  |  |
| 30           | 50                        | 40      | 10                      |  |  |  |
| 50           | 40                        | 35      | 10                      |  |  |  |
| 70           | 40                        | 30      | 10                      |  |  |  |
| 90           | 40                        | 30      | 10                      |  |  |  |
| 105          | 40                        | 30      | 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 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 detailed requirements specified herein.

- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for 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.** HMA production utilizing RAP/FRAP and/or RAS shall be as follows.

(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 ± 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.
- (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).
- e. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. 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."

#### RETROREFLECTIVE SHEETING FOR HIGHWAY SIGNS (BDE)

Effective: November 1, 2014

Revise the first sentence of the first paragraph of Article 1091.03(a)(3) of the Standard Specifications to read:

"When tested according to ASTM E 810, with averaging, the sheeting shall have a minimum coefficient of retroreflection as show in the following tables."

Replace the Tables for Type AA sheeting, Type AP sheeting, Type AZ sheeting and Type ZZ sheeting in Article 1091.03(a)(3) with the following.

# Type AA Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AA (Average of 0 and 90 degree rotation)

|                                | Type rate (recording or a unit or ungles retained) |       |        |     |       |      |     |  |  |  |
|--------------------------------|--|-------|--------|-----|-------|------|-----|--|--|--|
| Observation<br>Angle<br>(deg.) | Entrance<br>Angle<br>(deg.)                        | White | Yellow | Red | Green | Blue | FO  |  |  |  |
| 0.2                            | -4   | 800   | 600    | 120 | 80    | 40   | 200 |  |  |  |
| 0.2                            | +30  | 400   | 300    | 60  | 35    | 20   | 100 |  |  |  |
| 0.5                            | -4   | 200   | 150    | 30  | 20    | 10   | 75  |  |  |  |
| 0.5                            | +30  | 100   | 75     | 15  | 10    | 5    | 35  |  |  |  |

Type AA (45 degree rotation)

| Турс        | Type AA (+3 degree Totation) |        |     |  |  |  |  |  |  |
|-------------|------------------------------|--------|-----|--|--|--|--|--|--|
| Observation | Entrance                     |        |     |  |  |  |  |  |  |
| Angle       | Angle                        | Yellow | FO  |  |  |  |  |  |  |
| (deg.)      | (deg.)                       |        |     |  |  |  |  |  |  |
| 0.2         | -4                           | 500    | 165 |  |  |  |  |  |  |
| 0.2         | +30                          | 115    | 40  |  |  |  |  |  |  |
| 0.5         | -4                           | 140    | 65  |  |  |  |  |  |  |
| 0.5         | +30                          | 60     | 30  |  |  |  |  |  |  |

# Type AP Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AP (Average of 0 and 90 degree rotation)

|             |          | <i>J</i> 1 |        |     |       |      |       |     |
|-------------|----------|------------|--------|-----|-------|------|-------|-----|
| Observation | Entrance |            |        |     |       |      |       |     |
| Angle       | Angle    | White      | Yellow | Red | Green | Blue | Brown | FO  |
| (deg.)      | (deg.)   |            |        |     |       |      |       |     |
| 0.2         | -4       | 500        | 380    | 75  | 55    | 35   | 25    | 150 |
| 0.2         | +30      | 180        | 135    | 30  | 20    | 15   | 10    | 55  |
| 0.5         | -4       | 300        | 225    | 50  | 30    | 20   | 15    | 90  |
| 0.5         | +30      | 90         | 70     | 15  | 10    | 7.5  | 5     | 30  |

# Type AZ Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (Average of 0 and 90 degree rotation)

| Observation<br>Angle<br>(deg.) | Entrance<br>Angle<br>(deg.) | White | Yellow | Red | Green | Blue | FYG | FY   |
|--------------------------------|-----------------------------|-------|--------|-----|-------|------|-----|------|
| 0.2                            | -4                          | 375   | 280    | 75  | 45    | 25   | 300 | 230  |
| 0.2                            | +30                         | 235   | 170    | 40  | 25    | 15   | 190 | 150  |
| 0.5                            | -4                          | 245   | 180    | 50  | 30    | 20   | 200 | 155  |
| 0.5                            | +30                         | 135   | 100    | 25  | 15    | 10   | 100 | 75   |
| 1.0                            | -4                          | 50    | 37.5   | 8.5 | 5     | 2    | 45  | 25   |
| 1.0                            | +30                         | 22.5  | 20     | 5   | 3     | 1    | 25  | 12.5 |

# Type ZZ Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type ZZ (Average of 0 and 90 degree rotation)

|                                |                             | ·     | ( <i>i</i> 110.490 | 0: 0 0:::0: | 00 0.09.00 |      |     |     |     |
|--------------------------------|-----------------------------|-------|--------------------|-------------|------------|------|-----|-----|-----|
| Observation<br>Angle<br>(deg.) | Entrance<br>Angle<br>(deg.) | White | Yellow             | Red         | Green      | Blue | FYG | FY  | FO  |
| 0.2                            | -4                          | 570   | 425                | 90          | 60         | 30   | 460 | 340 | 170 |
| 0.2                            | +30                         | 190   | 140                | 35          | 20         | 10   | 150 | 110 | 65  |
| 0.5                            | -4                          | 400   | 300                | 60          | 40         | 20   | 320 | 240 | 120 |
| 0.5                            | +30                         | 130   | 95                 | 20          | 15         | 7    | 100 | 80  | 45  |
| 1.0                            | -4                          | 115   | 90                 | 17          | 12         | 5    | 95  | 70  | 35  |
| 1.0                            | +30                         | 45    | 35                 | 7           | 5          | 2    | 35  | 25  | 15  |

### REINFORCEMENT BARS (BDE)

Effective: November 1, 2013

Revise the first and second paragraphs of Article 508.05 of the Standard Specifications to read:

"508.05 Placing and Securing. All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Manual welding of reinforcement may only be permitted or precast concrete products as indicated in the current Bureau of Materials and Physical Research Policy Memorandum "Quality Control / Quality Assurance Program for Precast Concrete Products", and for precast prestressed concrete products as indicated in the Department's current "Manual for Fabrication of Precast Prestressed Concrete Products". Reinforcement bars shall not be placed by sticking or floating into place or immediately after placement of the concrete.

Bars shall be tied at all intersections, except where the center to center dimension is less than 1 ft (300 mm) in each direction, in which case alternate intersections shall be tied. Molded plastic clips may be used in lieu of wire to secure bar intersections, but shall not be permitted in horizontal bar mats subject to construction foot traffic or to secure longitudinal bar laps. Plastic clips shall adequately secure the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. Plastic clips may be recycled plastic, and shall meet the approval of the Engineer. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge decks when traffic is allowed on the first completed stage during the pouring of the second stage."

Revise the fifth paragraph of Article 508.05 of the Standard Specifications to read:

"Supports for reinforcement in bridge decks shall be metal. For all other concrete construction the supports shall be metal or plastic. Metal bar supports shall be made of cold-drawn wire, or other approved material and shall be either epoxy coated, galvanized or plastic tipped. When the reinforcement bars are epoxy coated, the metal supports shall be epoxy coated. Plastic supports may be recycled plastic. Supports shall be provided in sufficient number and spaced to provide the required clearances. Supports shall adequately support the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. The legs of supports shall be spaced to allow an opening that is a minimum 1.33 times the nominal maximum aggregate size used in the concrete. Nominal maximum aggregate size is defined as the largest sieve which retains any of the aggregate sample particles. All supports shall meet the approval of the Engineer."

Revise the first sentence of the eighth paragraph of Article 508.05 of the Standard Specifications to read:

"Epoxy coated reinforcement bars shall be tied with plastic coated wire, epoxy coated wire, or molded plastic clips where allowed."

Add the following sentence to the end of the first paragraph of Article 508.06(c) of the Standard Specifications:

"In addition, the total slip of the bars within the splice sleeve of the connector after loading in tension to 30 ksi (207 MPa) and relaxing to 3 ksi (20.7 MPa) shall not exceed 0.01 in. (254 microns)."

Revise Article 1042.03(d) of the Standard Specifications to read:

"(d) Reinforcement and Accessories: The concrete cover over all reinforcement shall be within ±1/4 in. (±6 mm) of the specified cover.

Welded wire fabric shall be accurately bent and tied in place.

Miscellaneous accessories to be cast into the concrete or for forming holes and recesses shall be carefully located and rigidly held in place by bolts, clamps, or other effective means. If paper tubes are used for vertical dowel holes, or other vertical holes which require grouting, they shall be removed before transportation to the construction site."

# 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 offsite 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, OR HAZARDOUS WASTE DISPOSAL."

### 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)."

#### STABILIZED SUBBASE (BDE)

Effective: April 1, 2014

Revise Article 312.06 of the Standard Specifications to read:

"312.06 Finishing. The compacted subbase shall meet the lines and grades shown on the plans."

#### TRACKING THE USE OF PESTICIDES (BDE)

Effective: August 1, 2012

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

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

#### TRAVERSABLE PIPE GRATE (BDE)

Effective: January 1, 2013 Revised: April 1, 2014

<u>Description</u>. This work shall consist of constructing a traversable pipe grate on a concrete end section.

<u>Materials</u>. Materials shall be according to the following Articles of Division 1000 – Materials of the Standard Specifications.

Item Article/Section

- (a) Traversable Pipe Grate Components (Note 1)
- (b) Chemical Adhesive Resin System ......1027
- (c) High Strength Steel Bolts, Nuts, and Washers (Note 2).......1006.08

Note 1. All steel pipe shall be according to ASTM A 53 (Type E or S), Grade B, or ASTM A 500 Grade B, standard weight (SCH. 40). Structural steel shapes and plates shall be according to AASHTO M270 Grade 50 (M 270M Grade 345) and the requirements of Article 1006.04 of the Standard Specifications. All steel components of the grating system shall be galvanized according to AASHTO M 111 or M 232 as applicable.

Anchor rods shall be according to ASTM F 1554, Grade 36 (Grade 250).

Note 2. Threaded rods conforming to the requirements of ASTM F 1554, Grade 105 (Grade 725) may be used for the thru bolts.

#### **CONSTRUCTION REQUIREMENTS**

Fabrication of the traversable pipe grate shall be according to the requirements of Section 505 of the Standard Specifications and as shown on the plans.

Anchor rods shall be set according to Article 509.06 of the Standard Specifications. Bolts and anchor rods shall be snug tightened by a few impacts of an impact wrench or the full force of a worker using an ordinary spud wrench. Thru bolts shall be snug tightened and shall be brought to a snug tight condition followed by an additional 2/3 turn on one of the nuts. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut.

Splicing of pipes shall be made by utilizing full penetration butt welds according to Article 505.04(q) of the Standard Specifications. In lieu of welding, bolted or sleeve type splices may be utilized, provided the splices are located over intermediate supports with no more than one splice per pipe run with the exception that no splice may occur in pipe runs under 30 ft (9 m) in length.

<u>Method of Measurement</u>. This work will be measured for payment in place in feet (meters). The length measured shall be along the pipe grate elements from end to end for both longitudinal and intermediate support pipes.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for TRAVERSABLE PIPE GRATE.

# WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: November 1, 2014

<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.

#### 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.

- "(e) 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."

### 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.

## **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within **350** working days.

## BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006 Revised: August 1, 2013

<u>Description</u>. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

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 fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

 $CA = (BPI_P - BPI_L) x (%AC_V / 100) x Q$ 

Where: CA = Cost Adjustment, \$.

BPI<sub>P</sub> = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI<sub>L</sub> = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).

 $^{\circ}$ AC $_{\vee}$  = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the  $^{\circ}$ AC $_{\vee}$  will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC $_{\vee}$  and undiluted emulsified asphalt will be considered to be 65% AC $_{\vee}$ .

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x ( $G_{mb}$  x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x ( $G_{mb}$  x 1) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different  $G_{mb}$  and %  $AC_{V}$ .

For bituminous materials measured in gallons: Q, tons =  $V \times 8.33$  lb/gal x SG / 2000 For bituminous materials measured in liters: Q, metric tons =  $V \times 1.0$  kg/L x SG / 1000

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

 $G_{mb}$  = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

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

Percent Difference =  $\{(BPI_L - BPI_P) \div BPI_L\} \times 100$ 

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

## Return With Bid

# ILLINOIS DEPARTMENT OF TRANSPORTATION

## OPTION FOR BITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

| Contract No.:             |                  | _                                |          |
|---------------------------|------------------|----------------------------------|----------|
| Company Name:             |                  |                                  |          |
| Contractor's Option:      |                  |                                  |          |
| Is your company opting to | include this spe | cial provision as part of the co | ontract? |
| Yes 🗌                     | No               |                                  |          |
| Signatura:                |                  | Da                               | to:      |

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

Effective: April 1, 2009 Revised: July 1, 2009

<u>Description</u>. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel 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 fuel cost adjustments for all categories of work. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

General. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and work added by adjusted unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Added work paid for by time and materials will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

## (a) Categories of Work.

- (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
- (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

## (b) Fuel Usage Factors.

| English Units                          |        |                     |
|--|--------|---------------------|
| Category                               | Factor | Units               |
| A - Earthwork                          | 0.34   | gal / cu yd         |
| B – Subbase and Aggregate Base courses | 0.62   | gal / ton           |
| C – HMA Bases, Pavements and Shoulders | 1.05   | gal / ton           |
| D – PCC Bases, Pavements and Shoulders | 2.53   | gal / cu yd         |
| E – Structures                         | 8.00   | gal / \$1000        |
|  |        |                     |
| Metric Units                           |        |                     |
| Category                               | Factor | Units               |
| A - Earthwork                          | 1.68   | liters / cu m       |
| B – Subbase and Aggregate Base courses | 2.58   | liters / metric ton |
| C – HMA Bases, Pavements and Shoulders | 4.37   | liters / metric ton |
| D – PCC Bases, Pavements and Shoulders | 12.52  | liters / cu m       |
| E – Structures                         | 30.28  | liters / \$1000     |

## (c) Quantity Conversion Factors.

| Category | Conversion                         | Factor   |
|----------|------------------------------------|--|
| В        | sq yd to ton<br>sq m to metric ton | 0.057 ton / sq yd / in depth<br>0.00243 metric ton / sq m / mm depth |
| С        | sq yd to ton<br>sq m to metric ton | 0.056 ton / sq yd / in depth<br>0.00239 m ton / sq m / mm depth      |
| D        | sq yd to cu yd<br>sq m to cu m     | 0.028 cu yd / sq yd / in depth<br>0.001 cu m / sq m / mm depth       |

Method of Adjustment. Fuel cost adjustments will be computed as follows.

 $CA = (FPI_P - FPI_L) \times FUF \times Q$ 

Where: CA = Cost Adjustment, \$

FPI<sub>P</sub> = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)

FPI<sub>L</sub> = Fuel Price Index, as published by the Department for the month prior to the letting, \$/gal (\$/liter)

FUF = Fuel Usage Factor in the pay item(s) being adjusted

Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

Progress Payments. Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Final Quantities. Upon completion of the work and determination of final pay quantities, an adjustment will be prepared to reconcile any differences between estimated quantities previously paid and the final quantities. The value for the balancing adjustment will be based on a weighted average of FPI<sub>P</sub> and Q only for those months requiring the cost adjustment. The cost adjustment will be applicable to the final measured quantities of all applicable pay items.

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

Percent Difference =  $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$ 

## Return With Bid

# ILLINOIS DEPARTMENT OF TRANSPORTATION

## OPTION FOR FUEL 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 fuel cost adjustments in all categories. Failure to indicate "Yes" for any category of work at the time of bid will make that category of work exempt from fuel cost adjustment. After award, this form, when submitted shall become part of the contract.

| Contract No.:  |          |                           |         |
|--|----------|---------------------------|---------|
| Company Name:  |          |                           |         |
| Contractor's Option:   |          |                           |         |
| Is your company opting to include this special provision following categories of work? | on as pa | art of the contract plans | for the |
| Category A Earthwork.  | Yes      |                           |         |
| Category B Subbases and Aggregate Base Courses   | Yes      |                           |         |
| Category C HMA Bases, Pavements and Shoulders  | Yes      |                           |         |
| Category D PCC Bases, Pavements and Shoulders  | Yes      |                           |         |
| Category E Structures  | Yes      |                           |         |
| Signature:   |          | Date:                     |         |

## 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.

<u>Types of Steel Products</u>. 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:  $MPI_M =$  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).

 $MPI_L$  = 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  $\mathsf{MPI}_\mathsf{M}$  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.

Basis of Payment. 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.:   |               |                     |        |
|---|---------------|---------------------|--------|
| Company Name:   |               |                     |        |
| Contractor's Option:  |               |                     |        |
| Is your company opting to include this special provision a following items of work? | as part of th | ne contract plans f | or the |
| Metal Piling  | Yes           |                     |        |
| Structural Steel  | Yes           |                     |        |
| Reinforcing Steel   | Yes           |                     |        |
| Dowel Bars, Tie Bars and Mesh Reinforcement   | Yes           |                     |        |
| Guardrail   | Yes           |                     |        |
| Steel Traffic Signal and Light Poles, Towers and Mast Arms                          | Yes           |                     |        |
| Metal Railings (excluding wire fence)   | Yes           |                     |        |
| Frames and Grates   | Yes           |                     |        |
| Signature:  | Date:         |                     |        |

## TEMPORARY CONSTRUCTION/WATERWAY PERMITS (CORPS OF ENGINEERS)

(Effective January 1, 2001; Revised January 1, 2002)

Temporary in-stream work for proposed construction activities has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. <u>CEMVR-OD-P-2014-1129B</u> for Structure Number: **047-2008(exist.)047-2032/(prop.)**.

Temporary causeway / workpads:

- Area: + 124 sq. yd.
- Location: Upstream side and Downstream side of structure, which may be adjusted depending on actual project needs.
- Material Type: Clean coarse aggregates.
- Additional Restrictions: Maintain normal low flows during construction by placing drainage culverts under the causeway or by other applicable and appropriate dewatering methods.
   Stream channel should be cleaned, reshaped and protected with riprap within the ROW limits upon completion of the project.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District. Clock Tower Building-P.O. Box 2004, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor, therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

## TEMPORARY CONSTRUCTION/WATERWAY PERMITS (CORPS OF ENGINEERS)

(Effective January 1, 2001; Revised January 1, 2002)

Temporary in-stream work for proposed construction activities has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. <u>CEMVR-OD-P-2014-1129A</u> for Structure Number: <u>047-2009(exist.)047-2564/(prop.)</u>.

Temporary causeway / workpads:

- Area: <u>+</u> 124 sq. yd.
- Location: Upstream side and Downstream side of structure, which may be adjusted depending on actual project needs.
- Material Type: Clean coarse aggregates.
- Additional Restrictions: Maintain normal low flows during construction by placing drainage culverts under the causeway or by other applicable and appropriate dewatering methods.
   Stream channel should be cleaned, reshaped and protected with riprap within the ROW limits upon completion of the project.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District. Clock Tower Building-P.O. Box 2004, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor, therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

## TEMPORARY CONSTRUCTION/WATERWAY PERMITS (CORPS OF ENGINEERS) (Effective January 1, 2001; Revised January 1, 2002)

Temporary in-stream work for proposed construction activities has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. <u>CEMVR-OD-P-2014-1129D</u> for Structure Number: <u>047-2015(exist.)/047-2022(prop.)</u>.

Temporary causeway / workpads:

- Area: + 124 sq. yd.
- Location: Upstream side and Downstream side of structure, which may be adjusted depending on actual project needs.
- Material Type: Clean coarse aggregates.
- Additional Restrictions: Maintain normal low flows during construction by placing drainage culverts under the causeway or by other applicable and appropriate dewatering methods.
   Stream channel should be cleaned, reshaped and protected with riprap within the ROW limits upon completion of the project.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District. Clock Tower Building-P.O. Box 2004, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor, therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

## TEMPORARY CONSTRUCTION/WATERWAY PERMITS (CORPS OF ENGINEERS)

(Effective January 1, 2001; Revised January 1, 2002)

Temporary in-stream work for proposed construction activities has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. <u>CEMVR-OD-P-2014-1129E</u> for Structure Number: **047-2016(exist.)/047-2033(prop.)**.

Temporary causeway / workpads:

- Area: + 124 sq. yd.
- Location: Upstream side and Downstream side of structure, which may be adjusted depending on actual project needs.
- Material Type: Clean coarse aggregates.
- Additional Restrictions: Maintain normal low flows during construction by placing drainage culverts under the causeway or by other applicable and appropriate dewatering methods.
   Stream channel should be cleaned, reshaped and protected with riprap within the ROW limits upon completion of the project.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District. Clock Tower Building-P.O. Box 2004, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor, therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

## TEMPORARY CONSTRUCTION/WATERWAY PERMITS (CORPS OF ENGINEERS)

(Effective January 1, 2001; Revised January 1, 2002)

Temporary in-stream work for proposed construction activities has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. <u>CEMVR-OD-P-2014-1129E</u> for Structure Number: **047-2016(exist.)/047-2033(prop.)**.

Temporary causeway / workpads:

- Area: + 124 sq. yd.
- Location: Upstream side and Downstream side of structure, which may be adjusted depending on actual project needs.
- Material Type: Clean coarse aggregates.
- Additional Restrictions: Maintain normal low flows during construction by placing drainage culverts under the causeway or by other applicable and appropriate dewatering methods.
   Stream channel should be cleaned, reshaped and protected with riprap within the ROW limits upon completion of the project.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District. Clock Tower Building-P.O. Box 2004, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor, therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

## **SWPPP**



### Storm Water Pollution Prevention Plan

BDE 2342 (Rev. 1/28/2011)

| Rout                          | e                                 | FAP 326  | Marked Rte.  | IL Route 47   |
|-------------------------------|-----------------------------------|--|--|---|
| Secti                         | ion                               | (109, 110)R-1  | Project No.  |   |
| Cour                          | nty                               | Kendall  | Contract No.   | 66B84   |
| Perm                          | cons                              | ILR10 (Permit ILR10), issued by the Illi truction site activities.   | nois Environmental Protection  | ant Discharge Elimination System (NPDES)<br>Agency (IEPA) for storm water discharges  |
| acco<br>subn<br>gathe<br>am a | rdand<br>nitted<br>ering<br>aware | e with a system designed to assure the Based on my inquiry of the person or per the information, the information submitted | at qualified personnel proper<br>ersons who manage the syste<br>is, to the best of my knowledg | pared under my direction or supervision in<br>ly gathered and evaluated the information<br>m, or those persons directly responsible for<br>le and belief, true, accurate and complete. I<br>ding the possibility of fine and imprisonment |
|                               |                                   | Paul Loete   | Pa   | ul loete 0.8  |
|                               | Don                               | Print Name   | 1.   | Signature 15/2014   |
|                               | Depu                              | ty Director of Highways, Region Two Engi<br>Title  | 7-7C   | Date  |
|                               |                                   | Illinois Department of Transportation Agency   |  |   |
|                               |                                   | Agency   |  |   |
| I.                            | Site                              | Description:   |  |   |
|                               | A.                                | Provide a description of the project location  | on (include latitude and longitu   | ide):   |
|                               |                                   | This project begins approximately 750<br>Road in Kendall County. The project be<br>approximately N 41°33'39", W 88°26'0    | egins at approximately N 41  | extends northerly 7 miles to Caton Farm<br>°27'39", W 88°25'25" and ends at   |
|                               | B.                                | Provide a description of the construction  | activity which is the subject of   | this plan:  |
|                               |                                   | 32' median and 8' outside shoulder   | s. The work includes earth   | o 12' lanes in each direction along with a<br>work, storm sewers, pipe culverts, box<br>econstructing or resurfacing side roads   |
|                               | C.                                | Provide the estimated duration of this pro-  | oject:   |   |
|                               |                                   | 30 months  |  |   |
|                               | D.                                | The total area of the construction site is   | estimated to be 232.0 acres.   |   |
|                               |                                   | The total area of the site estimated to be   | disturbed by excavation, gradi   | ing or other activities is 215.4 acres.   |
|                               | E.                                | The following is a weighted average completed:   | of the runoff coefficient for the  | his project after construction activities are   |
|                               |                                   | C(existing)=0.48, C(prop)=0.60   |  |   |
|                               | F.                                | List all soils found within project boundar  | ies. Include map unit name, sl   | ope information, and erosivity:   |
|                               |                                   | Martinton silt loam (189A) – Somewh<br>slopes. K(whole)=0.24   | at poorly drained with mod   | erately high permeability, 0 to 2 percent   |
| Printe                        | d 8/4/2                           | 014  | Page 1 of 10   | BDE 2342 (Rev. 1/28/2011)   |

Page 1 of 10

Pella silty clay loam (44A) – Poorly drained with low to moderately high permeability, 0 to 2 percent slopes. K(whole)=0.24

Lisbon silt loam (59A) – Somewhat poorly drained with moderately low to moderately high permeability, 0 to 2 percent slopes. K(whole)=0.28

La Rose clay loam (60C3) – Moderately well drained with moderately low to moderately high permeability, 5 to 10 percent slopes. K(whole)=0.32

Harpster silty clay loam (67A) – Poorly drained with moderately high to high permeability, 0 to 2 percent slopes. K(whole)=0.24

Milford silty clay loam (69A) – Poorly drained with moderately high permeability, 0 to 2 percent slopes. K(whole)=0.24

Brenton silt loam (101A) – Somewhat poorly drained with low to moderately high permeability, 0 to 2 percent slopes. K(whole)=0.28

Clare silt loam (137A) – Moderately well drained with low to moderately high permeability, 0 to 2 percent slopes. K(whole)=0.28

Clare silt loam (137B) – Moderately well drained with very low to moderately low permeability, 2 to 5 percent slopes. K(whole)=0.28

Saybrook silt loam (145A) – Moderately well drained with moderately low to moderately high permeability, 0 to 2 percent slopes. K(whole)=0.28

Saybrook silt loam (145B) – Moderately well drained with moderately low to moderately high permeability, 2 to 5 percent slopes. K(whole)=0.28

Saybrook silt loam (145B2) – Moderately well drained with moderately low to moderately high permeability, 2 to 5 percent slopes. K(whole)=0.37

Saybrook silt loam (145C2) – Moderately well drained with moderately low to moderately high permeability, 5 to 10 percent slopes. K(whole)=0.37

Proctor silt loam (148A) – Well drained with moderately high to high permeability, 0 to 2 percent slopes. K(whole)=0.28

Proctor silt loam (148B) – Well drained with moderately high to high permeability, 2 to 5 percent slopes. K(whole)=0.28

Brenton silt loam (149A) – Somewhat poorly drained with moderately high to high permeability, 0 to 2 percent slopes. K(whole)=0.28

Drummer silty clay loam (152A) – Poorly drained with moderately high to high permeability, 0 to 2 percent slopes. K(whole)=0.24

Martinton silt loam (189A) – Somewhat poorly drained with moderately high permeability, 0 to 2 percent slopes. K(whole)=0.24

Elburn silt loam (198A) – Somewhat poorly drained with moderately high to high permeability, 0 to 2 percent slopes. K(whole)=0.28

Ripon silt loam (324B) – Well drained with low to moderately high permeability, 2 to 5 percent slopes. K(whole)=0.28

Mundelein silt loam (442A) – Somewhat poorly drained with moderately high to high permeability, 0 to 2 percent slopes. K(whole)=0.28

Pits, quarry (864)

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Sawmill silty clay loam (3107A) – Poorly drained with moderately high to high permeability, 0 to 2 percent slopes. K(whole)=0.28

G. Provide an aerial extent of wetland acreage at the site:

See attached wetland maps.

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

The potential erosive areas for this project are roadway ditches/swales and the addition of closed drainage systems to IL 47. Storm sewers shall be constructed to convey stormwater collected in median swales and ditches to adjacent road side ditches resulting in locations of concentrated point discharge. In addition, this project includes waterway crossings and box culverts. Particular attention should be paid to slopes in the vicinity of West Aux Sable Creek and Lisbon Creek and stormwater runoff discharging to the creeks.

 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):

Stage 1 – Construction of portions of the IL 47 south and northbound lanes and associated drainage items will take place throughout the project limits including the construction of eastern portions of box culvert crossings. In addition, the west leg of White Willow Road, the east leg of Chicago Road, Plattville Road, and the east leg of Helmar Road will be removed and reconstructed. Temporary pavement and aggregate will be placed at locations along Joliet Road, Townhall Road, and US Route 52. Portions of the south side of US 52 will be removed and reconstructed with associated drainage items. Drainage will be maintained throughout the project length through use of proposed, existing, and temporary ditch grading. Erosive factors include bare earth and steep slopes.

Stage 2 – Construction will continue along IL 47 from Helmar Road to Caton Farm Road. Ditch grades on the east side of IL 47 between these limits will be established. Pavement on the north portion of US 52 will be removed and reconstructed. The north portion of the triple pipe culvert on US 52 will be placed. Erosive factors include bare earth and steep slopes.

Stage 3 – Southbound lanes on IL 47 will be constructed in addition to portions of northbound lanes near Caton Farm Road. West portions of box culverts will be placed and west side ditch slopes will be established. In addition, the west leg of Chicago Road, Lisbon Center Road, Plattville Road, Newark Road, and the west leg of Helmar Road will be closed for reconstruction at various intervals. Staged construction will continue on Joliet Road, Townhall Road, and US Route 52. Portions of previously place temporary pavement will be removed. Drainage will be maintained throughout the project length through the use of proposed, existing, and temporary ditch grading. Erosive factors include bare earth and steep slopes.

Stage 4 – Portions of permanent northbound IL 47 lanes and Joliet road will be constructed. The east leg of Whitewillow Road will be closed and reconstructed with associated drainage items. Erosive factors include bare earth and steep slopes.

- 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:

Various private land owners and the Illinois Department of Transportation.

L. 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:

Receiving Waters: West Aux Sable Creek and Lisbon Creek Ultimate Receiving Water: Illinois River

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| M           |          | highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.  |   |   |  |  |
|-------------|----------|---|---|---|--|--|
|             |          | No areas outside the limits of construction shall be disturbed without prior approval. West Aux Sable Creek and Lisbon Creek shall be protected from pollutants throughout the duration of the project. |   |   |  |  |
| N           |          |   |   | g sensitive environmental resources are associated with this project, and may have the potential to be the proposed development:  |  |  |
|             |          |   | Threa<br>Histor<br>303(d<br>Rece<br>siltation | ind Riparian itened and Endangered Species ric Preservation ) Listed receiving waters for suspended solids, turbidity, or siltation lying waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or load to be sediment, total suspended solids, turbidity or load to be sediment. |  |  |
|             | 1        | . 3   | 303(d   | ) Listed receiving waters (fill out this section if checked above):   |  |  |
|             |          |   | N/A   |   |  |  |
|             |          | j   | a. '  | The name(s) of the listed water body, and identification of all pollutants causing impairment:  |  |  |
|             |          |   | 1   | 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. I  | Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:  |  |  |
|             |          |   | d. I  | Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:   |  |  |
|             | 2        | TMDL (fill out this section if checked  |   | (fill out this section if checked above)  |  |  |
|             |          | )   | а.  | The name(s) of the listed water body:   |  |  |
|             |          | Ì   |   | 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:   |  |  |
|             |          |   |   | f 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:   |  |  |
|             |          |   |   |   |  |  |
|             |          |   |   |   |  |  |
| 0           | т        | he foll   | owing   | pollutants of concern will be associated with this construction project:  |  |  |
| 0           | . ,<br>D |   |   | rediment Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)   |  |  |
| Printed 6/4 | _        |   |   | Page 4 of 10 BDE 2342 (Rev. 1/28/2011)  |  |  |

|         |                                   |  | Concrete Concrete Truck Waste Concrete Curing Compounds Solid Waste Debris Paints Solvents Fertilizers / Pesticides  | Waste Other Other Other Other   | reeze / Coolants te water from cleaning construction equipment er (specify) er (specify) er (specify) er (specify) er (specify)   |
|---------|-----------------------------------|--|--|---|---|
| II.     | Cont                              | rols:                                    |  |   |   |
|         | desci<br>will b<br>imple<br>propo | ribed in<br>e respo<br>mentat<br>osed ch | I.C. above and for all use areas, borrow site:<br>nsible for its implementation as indicated. The<br>on of the measures indicated. The Contrac<br>anges, maintenance, or modifications to kee  | s, and wast<br>e Contracto<br>tor, and sul<br>p construct                                     | emented for each of the major construction activities<br>the sites. For each measure discussed, the Contractor shall provide to the Resident Engineer a plan for the<br>abcontractors, will notify the Resident Engineer of any<br>stion activities compliant with the Permit ILR10. Each<br>are attached to, and are a part of, this plan:   |
|         | A.                                | Erosio                                   | n and Sediment Controls  |   |   |
|         |                                   | 1.                                       | including site specific scheduling of the impregetation is preserved where attainable a practices may include but are not limited to sodding, vegetative buffer strips, protection measures. Except as provided below in II( soon as practicable in portions of the site ceased, but in no case more than seven (7) temporarily or permanently ceases on all disperiod of fourteen (14) or more calendar day. Where the initiation of stabilization measur permanently ceases is precluded by snow | lementation disturbe temporary of trees, pre A)(1)(a) an where cor days after sturbed portys. | tion of interim and permanent stabilization practices in of the practices. Site plans will ensure that existing ed portions of the site will be stabilized. Stabilization by seeding, permanent seeding, mulching, geotextiles reservation of mature vegetation, and other appropriate and II(A)(3), stabilization measures shall be initiated as instruction activities have temporarily or permanently or the construction activity in that portion of the site has retions of the site where construction will not occur for a seventh day after construction activity temporarily of stabilization measures shall be initiated as soon as |
|         |                                   |  | practicable thereafter.  The following stabilization practices will be used.   | sed for this  | s project:  |
|         |                                   |  | Preservation of Mature Vegetation Vegetated Buffer Strips Protection of Trees Temporary Erosion Control Seeding Temporary Turf (Seeding, Class 7) Temporary Mulching Permanent Seeding   |   | Erosion Control Blanket / Mulching<br>Sodding<br>Geotextiles<br>Other (specify)<br>Other (specify)<br>Other (specify)<br>Other (specify)  |
|         |                                   |  | Describe how the stabilization practices lists   | d above wi  | vill be utilized during construction:   |
|         |                                   |  |  | nket / mulc   | anent erosion control measures including seeding<br>ching as soon as possible. Temporary seeding and<br>controls can be installed.  |
|         |                                   |  | Describe how the stabilization practices list completed:   | ed above v  | will be utilized after construction activities have beer  |
|         |                                   |  | Seeding, Class 2A & 4 shall be applied to shall be stabilized with erosion control b   |   | permanent vegetation. Slopes and disturbed areas<br>d mulching.   |
|         |                                   | 2.                                       | the degree attainable, to divert flows from edischarge of pollutants from exposed areas perimeter erosion barrier, earth dikes, drains slope drains, level spreaders, storm drain  | sposed soils<br>of the site<br>age swales,<br>inlet protect<br>nent sediment                  | n of structural practices that will be implemented, to ls, store flows or otherwise limit runoff and the e. Such practices may include but are not limited to sediment traps, ditch checks, subsurface drains, pipe oction, rock outlet protection, reinforced soil retainingment basins. The installation of these devices may be  |
| Printed | 6/4/20                            | 14                                       | Page 5 of 1  | 0   | BDE 2342 (Rev. 1/28/2011)   |

Perimeter Erosion Barrier Rock Outlet Protection Temporary Ditch Check Riprap Storm Drain Inlet Protection Gabions Slope Mattress Sediment Trap Temporary Pipe Slope Drain Retaining Walls Temporary Sediment Basin Slope Walls Temporary Stream Crossing Concrete Revetment Mats Level Spreaders Stabilized Construction Exits Turf Reinforcement Mats Other (specify) Permanent Check Dams Other (specify)

The following structural practices will be used for this project:

Permanent Sediment Basin

Aggregate Ditch Paved Ditch

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

Areas that are protected with perimeter erosion control barrier shall remain undisturbed throughout the duration of the project. The contractor shall install perimeter erosion barrier prior to construction activities or stripping of vegetation. During construction, temporary ditch checks, perimeter erosion barrier, and inlet & pipe protection will be used to prevent the discharge of sediment.

Other (specify) Other (specify)

Other (specify)

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

Stone riprap will be placed at storm sewer and culvert outlets prone to erosion as well as at the West Aux Sable Creek and Lisbon Creek streambeds.

- 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.
  - 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:

Riprap shall be placed at locations of high runoff velocities or concentrated flow points. In general, where closed drainage systems are implemented, drainage is ultimately conveyed to roadside ditches for water quality. Widened ditches have been provided for increased water quality/detention.

4. 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.

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

All management practices, control and other provisions provided in this plan are in accordance with "IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION."

- 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:

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 identified in Printed 6/4/2014

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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.

- (a) Perimeter Erosion Barrier –Barrier should be installed prior to any earth-disturbing activities. It is to have no tears or gaps and must not be leaning. Any stakes which are missing or broken must be replaced immediately. If the sediment reaches 1/3 the height of the barrier, maintenance or replacement is required. Repair the barrier if undermining occurs anywhere along its entire length. Remove the barrier once final stabilization is established.
- (b) Temporary Ditch Checks Sediment is to be removed from the upstream side of the ditch check when the sediment has reached 50% of the height of the structure. Ditch checks are to be replaced or repaired whenever tears, splits, unraveling, or compressed excelsior is apparent. Replace torn fabric mat that allow water to undermine ditch check. Remove debris when observed on the check. If water or sediment is going around the ditch check, maintenance may be required or installation may be flawed. If the ditch checks are floating, stakes may be installed incorrectly.
- (c) Inlet Protection Clean sediment or replace silt fence and straw bale inlet protection when sediment accumulates to one-third the height of the fabric. Remove trash accumulated around or on top of practice.
- (d) Temporary Seeding A visual inspection of this item is necessary to determine whether or not it has germinated. If the seed has failed to germinate, another application of seed may be necessary. If seed has been washed away or found to be concentrated in ditch bottoms, temporary mulch may have to be used to hold seed in place. Restore rills, greater than 4 inches deep, as quickly as possible on slopes steeper than 1V:4H to prevent sheet-flow from becoming concentrated flow patterns. If excessive weed development occurs, moving may be necessary.
- (e) Temporary Mulching If straw is blown or washed away, or hydraulic mulch washes away, maintenance of this item will be required. Place tackifier or an erosion control blanket if mulch does not control erosion.
- (f) Permanent Seeding A visual inspection of this item is necessary to determine whether or not it has germinated. If the seed has failed to germinate, another application of seed may be necessary.
- (g) Erosion Control Blanket Repair when erosion control blanket curls or slides down a slope or is damaged due to water running beneath the blanket and restore blanket when displacement occurs. Reseeding may be necessary. Replace all displaced blankets and re-staple.

#### 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: <a href="mailto:epa.swnoncomp@illinois.gov">epa.swnoncomp@illinois.gov</a>, 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

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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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#### **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  | FAP 326   | Marked Rte.   | IL Route 47  |
|--|---|---|--|
| Section  | (109, 110)R-1   | Project No.   |  |
| County   | Kendall   | Contract No.  | 66B84  |
| Permit No<br>I certify uses<br>associated<br>In addition | ification statement is a part of the SWPPP for the o. ILR10 issued by the Illinois Environmental Protein and the penalty of law that I understand the terms of ed with industrial activity from the construction site on, I have read and understand all of the inford project; I have received copies of all appropriate to be in compliance with the Permit ILR10 and ry. | ection Agency.  If the Permit No. IL  Identified as part or  Inmation and requese maintenance pro | R 10 that authorizes the storm water discharges of this certification.  irements stated in the SWPPP for the above cedures; and, I have provided all documentation |
|  | tractor<br>-Contractor  |   |  |
| <u> </u>   | Print Name  |   | Signature  |
|  | Title   | a   | Date   |
|  | Name of Firm  | · ·   | Telephone  |
|  | Street Address  | -   | City/State/ZIP   |
| tems wh  | ich this Contractor/subcontractor will be responsib   | ole for as required i   | n Section II.5. of the SWPPP:  |
|  |   |   |  |
|  |   |   |  |
|  |   |   |  |
|  |   |   |  |
|  |   |   |  |

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### **404 PERMIT**



# DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, ROCK ISLAND DISTRICT PO BOX 2004 CLOCK TOWER BUILDING ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO ATTENTION OF

September 18, 2014

Operations Division

SUBJECT: CEMVR-OD-P-2014-1129A-E

Paul Loete, P.E. – Region 2 Engineer Illinois Department of Transportation Division of Highways – District 3 700 East Norris Drive Ottawa, Illinois 61350 Contract 66884

| S&P ENG     | Ba | 4   |
|-------------|----|-----|
| ENVIRONMENT | -  | 1   |
| ESTIMATOR   |    | 1   |
| GEOMETRICS  |    | T   |
| HYDRAULICS  |    | 15% |
| LOCATIONS   |    |     |
| PLANS ENG   |    | 1   |
| SEE ME      |    | T   |
| SEC         |    |     |
| CO-ORD      | -  | 1   |

RECEIVED

STUDIES & PLANS

Dear Mr. Loete:

Our office reviewed all materials in the applications received, July 21, 2014, concerning the proposed culvert replacements on IL 47 in Kendall County, Illinois. These projects will permanently impact 0.005 acres of emergent wetland.

2014-1129A: Proposed culvert replacement (SN 047-2009) on IL 47 over West Aux Sable Creek Tributary, near Yorkville, IL in Section 4, Township 35 North, Range 7 East, Kendall County in Illinois.

2014-1129B: Proposed culvert replacement (SN 047-2008) on IL 47 over Tributary to Lisbon Creek and West Aux Sable Creek, near Yorkville, IL in Section 9, Township 35 North, Range 7 East, Kendall County in Illinois.

2014-1129C: Proposed culvert replacement (SN 047-2017) on IL 47 over Lisbon Creek Tributary, near Yorkville, IL in Section 16, Township 35 North, Range 7 East, Kendall County in Illinois.

2014-1129D: Proposed culvert replacement (SN 047-2015) on IL 47 over Lisbon Creek, near Yorkville, IL in Section 16, Township 35 North, Range 7 East, Kendall County in Illinois.

2014-1129E: Proposed culvert replacement (SN 047-2016) on IL 47 over West Aux Sable Creek, near Yorkville, IL in Section 21, Township 35 North, Range 7 East, Kendall County in Illinois.

Your projects are covered under Nationwide Permit No. 14, as published in the enclosed Fact Sheet No. 7 (IL), provided you meet the permit conditions for the nationwide permits, which are also included in the Fact Sheet. The Illinois Department of Transportation is responsible for the NEPA process for this project which includes compliance with the Endangered Species Act and the National Historic Preservation Act. The Illinois Environmental Protection Agency (IEPA) also issued Section 401 Water Quality Certification with conditions for this nationwide permit. Please note these additional conditions included in the Fact Sheet. The decision regarding this action is based on information found in the administrative record, which documents the District's decision-making process, the basis for the decision, and the final decision.

-2-

These verifications are valid until March 18, 2017, unless the nationwide permit is modified, reissued or revoked. It is your responsibility to remain informed of changes to the nationwide permit program. We will issue a public notice announcing any changes if and when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permit is modified or revoked, you will have twelve months from this date to complete your activity under the present terms and conditions of this nationwide permit. If your project plans change, you should contact our office for another determination.

Our office has completed a Preliminary Jurisdictional Determination concerning your project area. A Preliminary Jurisdictional Determination is not appealable, and it is applicable only to the permit program administered by the Corps of Engineers.

This authorization does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits. If you have not already coordinated your project with the Illinois Department of Natural Resources – Office of Water Resources, please contact them at 217/782-3863 to determine if a floodplain development permit is required for your project. You may contact the IEPA Facility Evaluation Unit at 217/782-3362 to determine whether additional authorizations are required from the IEPA. Please send any electronic correspondence to EPA.401.bow@illinois.gov.

You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project, in accordance with General Condition No. 30 of the nationwide permits.

The Rock Island District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete the attached postcard and return it or go to our Customer Service Survey found on our web site at <a href="http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey">http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey</a>. (Be sure to select "Rock Island District" under the area entitled: Which Corps office did you deal with?)

Should you have any questions, please contact our Regulatory Branch by letter, telephone or email Mrs. Kirsten Brown at 309/794-5104 or <u>Kirsten.L.Brown@usace.army.mil</u>.

Sincerely

Donna M. Jones, P.E.

Chief, Illinois/Missouri Section

Regulatory Branch

-3-

When the structure(s) or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s), of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Transferee Date

Enclosures

Copies Furnished: (w/o enclosures)

Mr. Mike Diedrichsen, P.E. Office of Water Resources IL Department of Natural Resources One Natural Resources Way Springfield, Illinois 62701-1271

Mr. Dan Heacock Illinois Environmental Protection Agency Watershed Mgmt Section, Permit Sec. 15 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 Epa.401.bow@illinois.gov (email copy)

U.S. Army Corps of Engineers Illinois Waterway Project Office 257 Grant Street Peoria, Illinois 61603

## BUILDING REMOVAL - CASE I (NON-FRIABLE AND FRIABLE ASBESTOS ABATEMENT) (BDE)

Effective: September 1, 1990

Revised: April 1, 2010

BUILDING REMOVAL: This work shall consist of the removal and disposal of  $\underline{2}$  building(s), together with all foundations, retaining walls, and piers, down to a plane 1 ft (300 mm) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the building(s) in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The building(s) are identified as follows:

| Bldg. No. | Parcel<br><u>No.</u> | Location   | <u>Description</u>  |
|-----------|----------------------|------------|---|
| 7         | 3VC0058              | 6452+23 RT | 2-story wood/masonry commercial/residential               |
|           |                      | р          | property ±5000sf  |
| 8         | 3VC0059              | 6495+30 RT | 2-story wood/masonry w/basement single family home 2800sf |

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services and the removal of the metering devices that serve the building(s) according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR
HIGHWAY CONSTRUCTION
TO BE DEMOLISHED BY THE
ILLINOIS DEPARTMENT OF
TRANSPORTATION
VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

All friable asbestos shall be removed from the building(s) prior to demolition. The Contractor has the option of removing the non-friable asbestos prior to demolition or demolishing the building(s) with the non-friable asbestos in place. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)", "Removal and Disposal of Friable Asbestos Building No. 7 & 8", and "Removal and Disposal of Non-Friable Asbestos Building No. 7 & 8" contained herein.

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit price(s) for this work shall represent the cost of demolition and disposal assuming all asbestos, friable and non-friable, is removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

EXPLANATION OF BIDDING TERMS: Three separate contract unit price items have been established for the removal of each building. They are:

- 1. BUILDING REMOVAL NO. 7
- 2. BUILDING REMOVAL NO. 8
- 3. REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 7
- 4. REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 8
- 5. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 7
- 6. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 8

The Contractor shall have two options available for the removal and disposal of the non-friable asbestos.

The pay item for removal and disposal of non-friable asbestos will not be deleted regardless of the option chosen by the Contractor.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of friable and non-friable asbestos from the building(s) to be demolished. All work shall be done according to the requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), the Occupational Safety and Health Administration (OSHA), the Special Provisions for "Removal and Disposal of Friable Asbestos, Building No.7 and 8" and "Removal and Disposal of Non-Friable Asbestos, Building No. 7 & 8:, and as outlined herein.

Sketches indicating the location of Asbestos Containing Material (ACM) are included in <u>Appendix A</u>. Also refer to the Materials Description Table in <u>Appendix B</u> for a brief description and location of the various materials. Also included is a Materials Quantities Table in Appendix <u>C</u>. This table states whether the ACM is friable or non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

The work involved in the removal and disposal of friable asbestos, and non-friable asbestos if done prior to demolition, shall be performed by a Contractor or Sub-Contractor prequalified with the Illinois Capital Development Board.

The Contractor shall provide a shipping manifest, similar to the one shown in <u>Appendix D</u>, to the Engineer for the disposal of all ACM wastes.

Permits: The Contractor shall apply for permit(s) in compliance with applicable regulations of the Illinois Environmental Protection Agency. Any and all other permits required by other federal, state, or local agencies for carrying on the work shall be the responsibility of the Contractor. Copies of these permits shall be sent to the district office and the Engineer.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least ten days prior to commencement of any asbestos removal or demolition activity. Separate notices shall be sent for the asbestos removal work and the building demolition if they are done as separate operations.

Asbestos Demolition/Renovation Coordinator Illinois Environmental Protection Agency Division of Air Pollution Control P. O. Box 19276
Springfield, Illinois 62794-9276
(217)785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

### Submittals:

- A. All submittals and notices shall be made to the Engineer, except where otherwise specified herein.
- B. Submittals that shall be made prior to start of work:
  - 1. Submittals required under <u>Asbestos Abatement Experience</u>.

- Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in <u>Worker</u> Protection Procedures.
- 3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.
- 4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.
- 5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).
- 6. Submit a list of penalties, including liquidated damages, incurred through non-compliance with asbestos abatement project specifications.
- 7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.
- 8. Submit proof of written notification and compliance with Paragraph "Notifications".
- C. Submittals that shall be made upon completion of abatement work:
  - 1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;
  - 2. Submit daily copies of work site entry logbooks with information on worker and visitor access;
  - 3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and
  - 4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

### Certificate of Insurance:

- A. The Contractor shall document general liability insurance for personal injury, occupational disease and sickness or death, and property damage.
- B. The Contractor shall document current Workmen's Compensation Insurance coverage.
- C. The Contractor shall supply insurance certificates as specified by the Department.

## Asbestos Abatement Experience:

A. Company Experience: Prior to starting work, the Contractor shall supply evidence that he/she has been prequalified with the Illinois Capital Development Board and that he/she has been included on the Illinois Department of Public Health's list of approved Contractors.

## B. Personnel Experience:

- 1. For Superintendent, the Contractor shall supply:
  - a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.
  - b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.
- 2. For workers involved in the removal of friable and non-friable asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

## ABATEMENT AIR MONITORING: The Contractor shall comply with the following:

A. Personal Monitoring: All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the Contractor. Additional personal samples may be required by the Engineer at any time during the project.

- B. Contained Work Areas for Removal of Friable Asbestos: Area samples shall be collected for the department within the work area daily. A minimum of one sample shall be taken outside of the abatement area removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- C. Interior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all nonfriable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- D. Exterior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all nonfriable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

The Contractor shall conduct down wind area sampling to monitor airborne fiber levels at a frequency of no less than three per day.

## E. Air Monitoring Professional

- 1. All air sampling shall be conducted by a qualified Air Sampling Professional supplied by the Contractor. The Air Sampling Professional shall submit documentation of successful completion of the National Institute for Occupational Safety and Health (NIOSH) course #582 "Sampling and Evaluating Airborne Asbestos Dust".
- Air sampling shall be conducted according to NIOSH Method 7400. The results of these tests shall be provided to the Engineer within 24 hours of the collection of air samples.

REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO.7 AND 8: This work consists of the removal and disposal of all friable asbestos from the building(s) prior to demolition. The work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)" and as outlined herein.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. <u>7 & 8</u>, as shown, which price shall include furnishing all labor, materials, equipment and services required to remove and dispose of the friable asbestos.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 7 & 8: The Contractor has the option of removing and disposing of the non-friable asbestos prior to demolition of the building(s) or demolishing the building(s) with the non-friable asbestos in place.

Option #1 - If the Contractor chooses to remove all non-friable asbestos prior to demolition, the work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)".

Option #2 - If the Contractor chooses to demolish the building(s) with the non-friable asbestos in place, the following provisions shall apply:

- 1. Continuously wet all non-friable ACM and other building debris with water during demolition.
- 2. Dispose of all demolition debris as asbestos containing material by placing it in lined, covered transport haulers and placing it in an approved landfill.

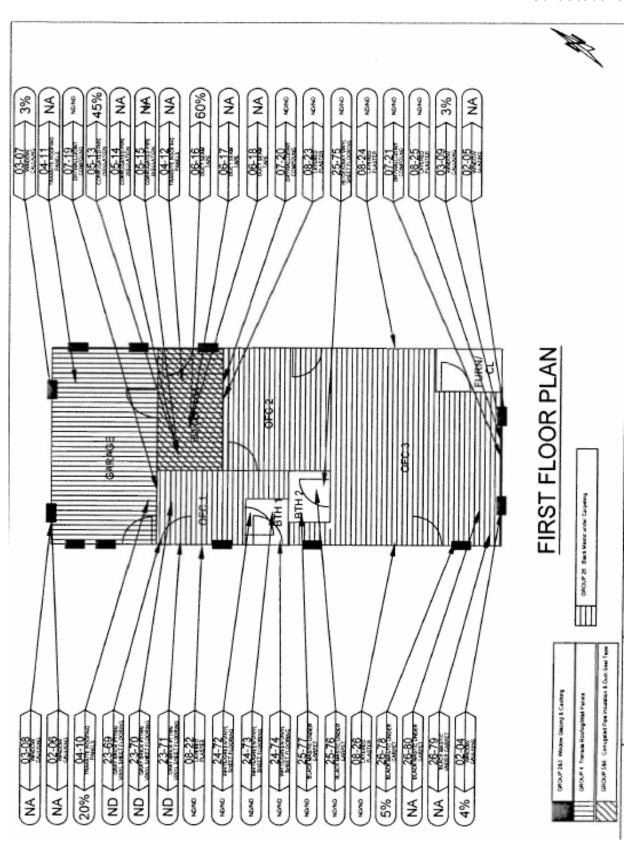
This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 7 & 8, as shown.

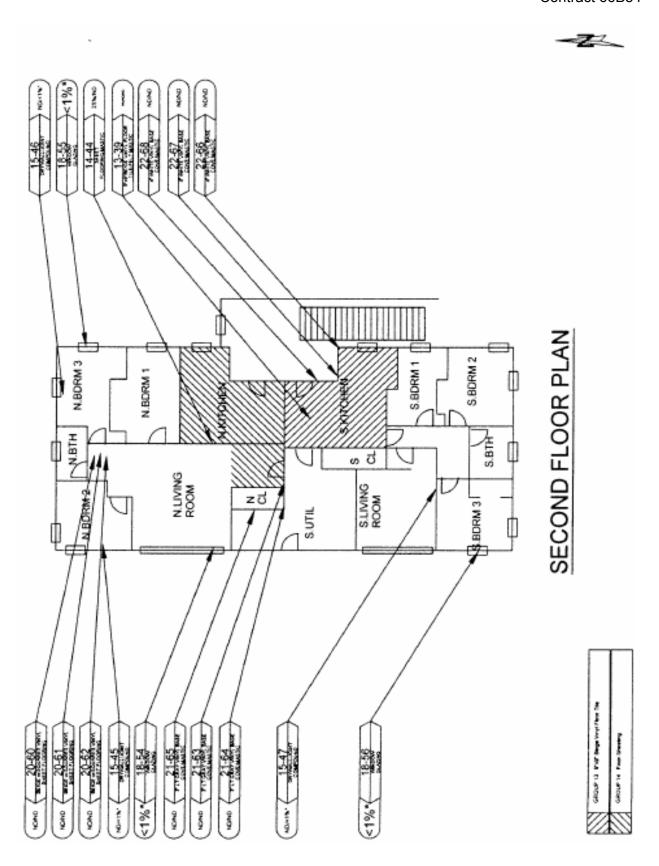
The cost for this work shall be determined as follows:

- Option #1 Actual cost of removal and disposal of non-friable asbestos.
- Option #2 The difference in cost between removing and disposing of the building if all non-friable asbestos is left in place and removing and disposing of the building assuming all non-friable asbestos is removed prior to demolition.

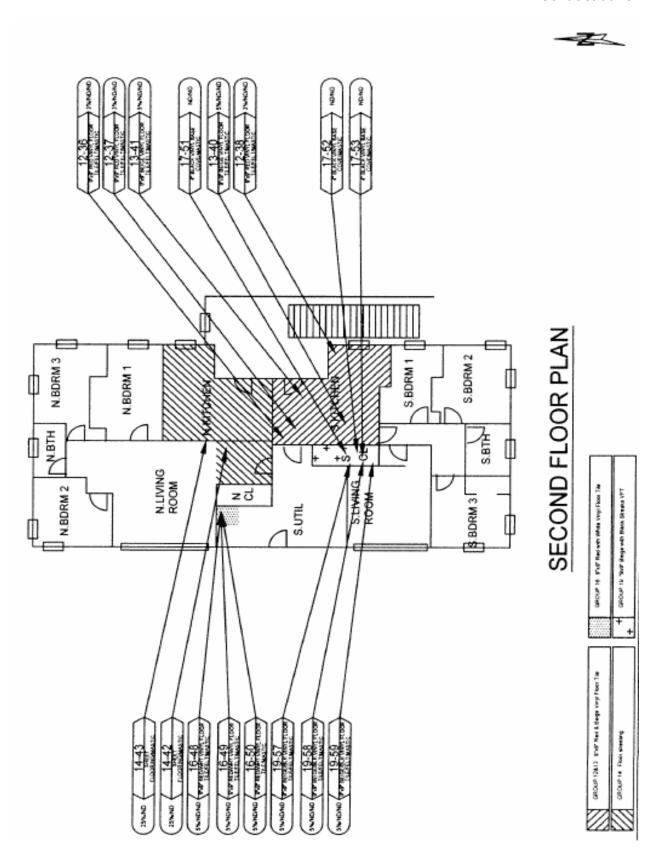
The cost of removing and disposing of the building(s), assuming all asbestos, friable and non-friable is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. 7 & 8".

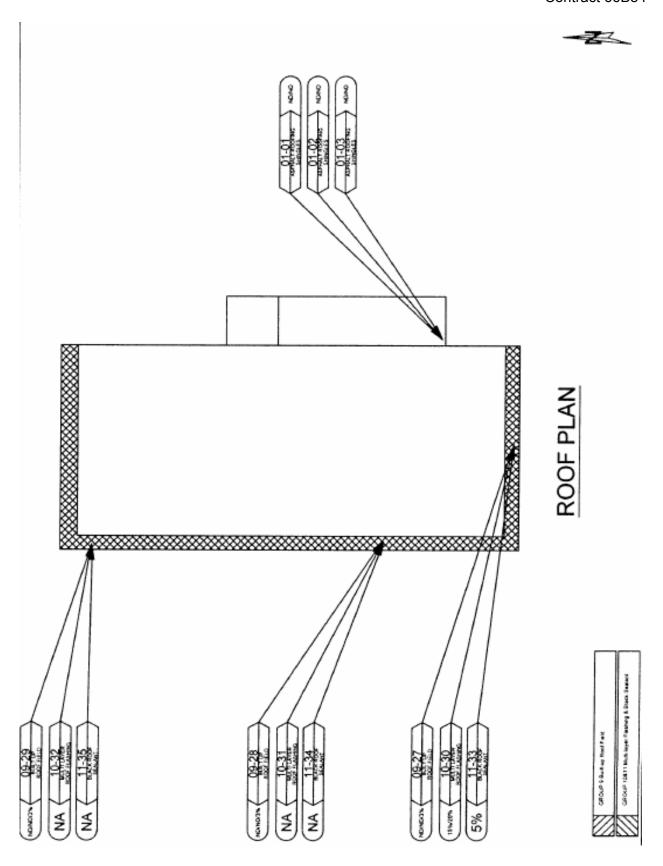
Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO. 7 & 8 be deleted.

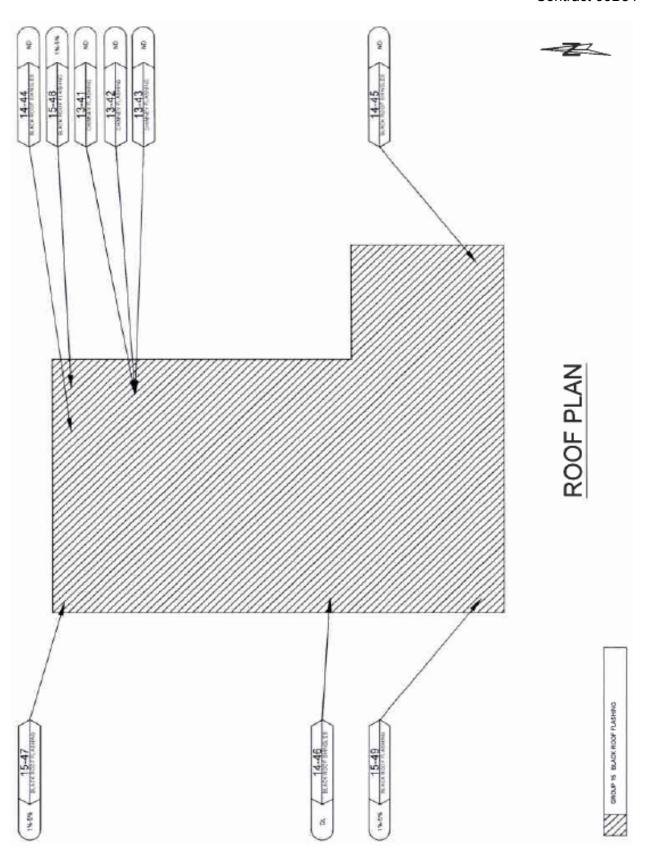


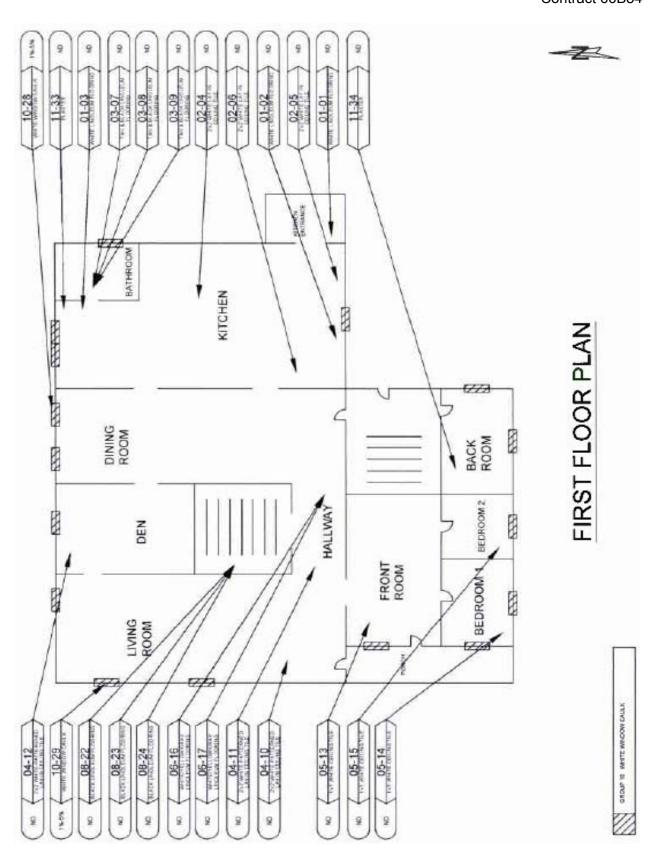


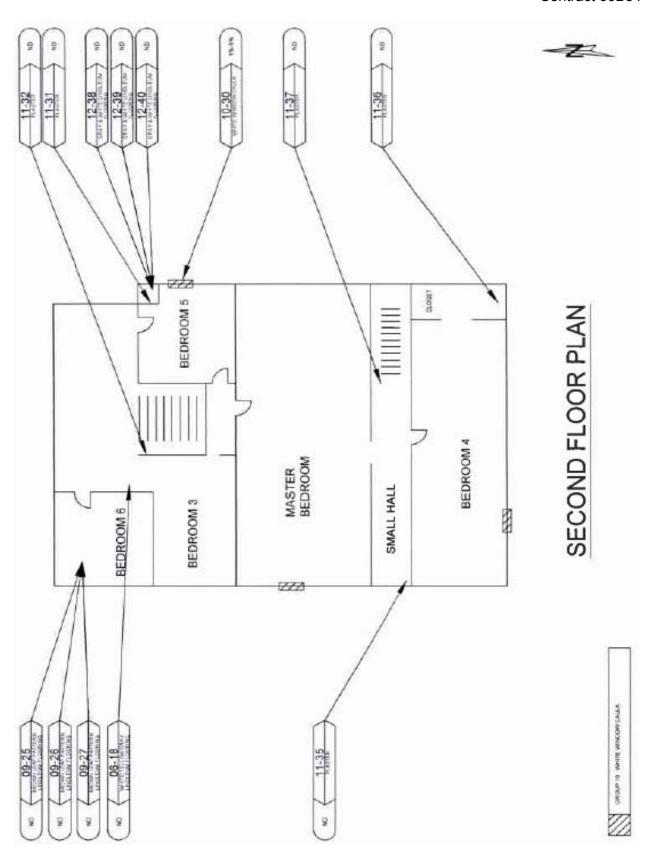
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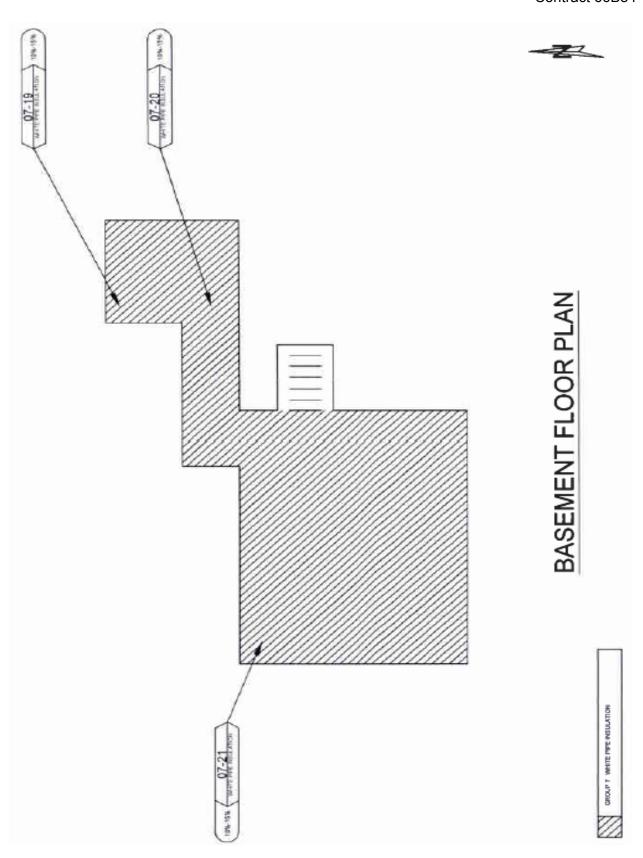












# APPENDIX B

## MATERIAL DESCRIPTION TABLE

| Material<br>Description                            | % And Type<br>Of Asbestos     | Location, Description, Sample<br>Number (If Applicable)  |
|--|-------------------------------|--|
| I. <u>9483 Rte 52, Cor</u>                         | mmercial/Residential property | , Sta. 6452+23 RT  |
| Window<br>Glazing                                  | 4% chrysotile                 | First floor windows. Good condition. Sample 02-04 (004A).  |
| Window<br>Caulking                                 | 3% chrysotile                 | First floor windows. Fair condition. Sample 03-07 (007A).  |
| Transite<br>Roofing<br>Panels                      | 20% chrysotile                | Garage area, boiler room, first floor attic. Good condition. Sample 04-10 (010A)                                       |
| Corrugate Pipe Insulation                          | 45% chrysotile                | Boiler room, above boiler room ceiling.<br>Good condition. Sample 05-13 (013A)   |
| Duct Seam<br>Tape                                  | 60% chrysotile                | Above boiler room ceiling. Good condition. 06-16 (016A).   |
| Multi-layer<br>Built-up<br>Roofing                 | 3% chrysotile                 | Roof. Good condition.<br>Samples 09-27 (027A), 09-28 (028A),<br>09-29 (029A).  |
| Multi-layer<br>Flashing                            | 20% chrysotile                | 1 <sup>st</sup> floor periphery parapet. Good condition. Sample 10-30 (030A).  |
| Black<br>Sealant                                   | 5% chrysotile                 | 1 <sup>st</sup> floor roof parapet caps. Good condition. Sample 11-33 (033A)   |
| 9"x9" red vinyl<br>floor tile/mastic/<br>backing   | 3% chrysotile                 | Southern apartment kitchen. Good condition. Samples 12-36 (036A), 12-37 (037A), 12-38 (038A)                           |
| 9"x9" beige vinyl<br>floor tile/mastic/<br>backing | 5% chrysotile                 | Southern apartment kitchen. Good condition. Samples 13-39 (039A), 13-40 (040A), 13-41 (041A).                          |
| Gray vinyl sheet flooring/mastic                   | 25% chrysotile                | Northern apartment, kitchen & at living room closet. Good condition. Samples 14-42 (0042A), 14-43 (043A), 14-44 (044A) |

| 9"x9" red w/white<br>streaks vinyl floor<br>tile/mastic/backing | 5% chrysotile | Southern apartment utility room. Good condition. Samples 16-48 (048A), 16-49 (049A), 16-50 (050A)    |
|---|---------------|--|
| 9"x9" beige/black<br>streaks vinyl floor<br>tile/mastic/backing | 5% chrysotile | Southern apartment utility closet. Good condition. Samples 19-57 (057A), 19-58 (058A), 19-59 (059A). |
| Black mastic below carpet                                       | 5% chrysotile | 1 <sup>st</sup> floor offices, rooms 1-3. Good condition. Sample 26-78 (078A).                       |

## II. <u>13670 N. State Route 47 – Sta. 6495+30 RT</u>

| White pipe<br>Insulation | 10-15%<br>chrysotile | Basement area. Poor condition. Sample 07-19.                                       |
|--------------------------|----------------------|--|
| White window<br>Caulking | 1-5% chrysotile      | Windows on 1 <sup>st</sup> & 2 <sup>nd</sup> floors. Poor condition. Sample 10-28. |
| Black Roof<br>Flashing   | 1-5% chrysotile      | Roof. Good condition.<br>Sample 15-47.   |

#### **APPENDIX C**

## MATERIAL QUANTITIES TABLE

The following are approximate quantities of ACM to be removed from the building indicated. These material quantities do not indicate the cleaning required to remove asbestos debris and resulting contamination from the work areas.

## I. 9483 Rte 52, Commercial/Residential property, Sta. 6452+23 RT

| <u>Material</u>                  | <u>Floor</u>                                | Quantity Present | <u>Friable</u> |
|----------------------------------|---|------------------|----------------|
| Window Glazing                   | 1 <sup>st</sup> Floor Windows               | 624 L.F.         | No             |
| Window Caulking                  | 1 <sup>st</sup> Floor Windows               | 108 L.F.         | No             |
| Transite Roof Panels             | Garage, Boiler Room                         | 1306 S.F.        | No             |
| Corr. Pipe<br>Insulation         | Boiler Room, Above<br>Ceiling               | 20 L.F.          | Yes            |
| Duct Seam<br>Tape                | Above Boiler Room<br>Ceiling                | 24 S.F.          | No             |
| Multi-layer<br>Roofing           | Roof  | 2500 S.F         | No             |
| Multi-layer<br>Flashing          | 1 <sup>st</sup> Floor Periphery<br>Parapet  | 190 L.F.         | No             |
| Black Sealant                    | 1 <sup>st</sup> Floor Roof<br>Parapet Caps  | 35 L.F           | No             |
| Red Vinyl Floor<br>Tile/Mastic   | Southern Apartment<br>Kitchen               | 47 S.F.          | No             |
| Beige Vinyl Floor<br>Tile/Mastic | Southern Apartment<br>Kitchen               | 70 S.F.          | No             |
| Gray Vinyl Sheet Flooring        | Northern Apartment<br>Kitchen/Living Room C | 160 S.F.         | No             |
| Red/White Floor<br>Tile          | Southern Apartment<br>Utility Room          | 5 S.F.           | No             |

Beige w/black Southern Apartment 8 S.F. No Streaks Tile Utility Closet

Black Carpet 1st Floor Offices Rooms 1-3 740 S.F. No

## II. <u>13670 N. State Route 47 – Sta. 6495+30 RT</u>

| <u>Material</u> | <u>Floor</u>                             | <b>Quantity Present</b> | <u>Friable</u> |
|-----------------|--|-------------------------|----------------|
| Pipe Insulation | Basement                                 | 550 L.F.                | Yes            |
| Window Caulking | 1 <sup>st</sup> & 2 <sup>nd</sup> Floors | 800 L.F.                | No             |
| Roof Flashing   | Roof                                     | 650 L.F.                | No             |

## APPENDIX D SHIPPING MANIFEST Generator

|          | Work Site Name and Mailing Address   | Owner'   | s Name   | Owner's<br>Telephone No.  |
|----------|--|--|--|---|
| 2.       | Operator's Name and Address  |  |  | Operator's.   |
|          | 2. Operator e Marile ana Maarese   |  |  | Telephone No  |
| 3.       | Waste Disposal Site (WDS) Name   |  |  | WDS   |
|          | Mailing Address, and Physical  |  |  | Telephone No.   |
|          | Site Location  |  |  |   |
| 4.       | Name and Address of Responsible Agend  | ;y   |  |   |
| 5.       | Description of Materials   |  |  |   |
| 6.       | Containers   | No.  | Туре   |   |
| 7.       | Total Quantity   | $M^3$  | (Yd <sup>3</sup> )                               |   |
| 8.       | Special Handling Instructions and Addition   | nal Inform   | ation  |   |
| 9.       | OPERATOR'S CERTIFICATION: I hereb  | y declare  | that the conte                                   | nts of this   |
|          | consignment are fully and accurately desc  |  |  |   |
|          | name and are classified, packed, marked, and labeled, and are in all respects  |  |  |   |
|          |  |  |  |   |
|          | in proper condition for transport by highwa  |  |  |   |
| Dri      | in proper condition for transport by highwa and government regulations.  | y accordi  | ng to applicab                                   | le international  |
| Pri      | in proper condition for transport by highwa<br>and government regulations.<br>nted/Typed Name & Title  | ay accordi<br>Sigr   | ng to applicab<br>nature                         |   |
|          | in proper condition for transport by highwa<br>and government regulations.<br>nted/Typed Name & Title  | ay accordi<br>Sigr<br>ransporter   | ng to applicab                                   | le international  |
|          | in proper condition for transport by highwa<br>and government regulations.<br>nted/Typed Name & Title  Ti Transporter 1 (Acknowledgement of Rec  | Sigransporter  | ng to applicab<br>nature<br>naterials)           | le international  Month Day Year  |
|          | in proper condition for transport by highwa<br>and government regulations.<br>nted/Typed Name & Title  | Sigransporter  | ng to applicab                                   | le international  |
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| 10       | in proper condition for transport by highward government regulations.  nted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.   | Sigr<br>ransporter<br>reipt of Ma<br>Sigr  | ng to applicab<br>nature<br>naterials)<br>nature | le international  Month Day Year  |
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| 10       | in proper condition for transport by highward government regulations.  nted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name No.  | Sign<br>ransporter<br>eipt of Ma<br>Sign   | ng to applicab                                   | Month Day Year  Month Day Year  Month Day Year  |
| 10       | in proper condition for transport by highward and government regulations.  nted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.   | Sign<br>ransporter<br>eipt of Ma<br>Sign   | ng to applicab                                   | Month Day Year  Month Day Year  Month Day Year  |
| 11       | in proper condition for transport by highward and government regulations.  nted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Discrepancy Indication Space   | Signansporter eipt of Ma Signansporter eipt of Ma Signansporter Signansporter  | ng to applicab                                   | Month Day Year  Month Day Year  Month Day Year  Month Day Year  |
| 11       | in proper condition for transport by highward and government regulations.  nted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Discrepance of Printed/Typed Name & Title  Address and Telephone No. | Signansporter reipt of Ma Signansporter reipt of Ma Signansporter reipt of Ma Signansporter reipt of Ma Certifica  | ng to applicab                                   | Month Day Year  Month Day Year  Month Day Year  Month Day Year  |
| 11       | in proper condition for transport by highward and government regulations.  nted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Discrepancy Indication Space   | Signansporter eipt of Ma Signansporter eipt of Ma Signansporter eipt of Ma Signansporter eipt of Ma Certifica Materials  | ng to applicab                                   | Month Day Year  t of Asbestos This Manifest |
| 11 12 13 | in proper condition for transport by highward and government regulations.  nted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Discrepancy Indication Space   | Signal Si | ng to applicab                                   | Month Day Year  t of Asbestos This Manifest |

#### APPENDIX D

#### **INSTRUCTIONS**

Waste Generator Section (Items 1-9)

- Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
- 2. If a demolition or renovation, enter the name and address of the Company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.
- 3. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
- 4. Provide the name and address of the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program.
- 5. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is
  - Friable asbestos material
  - Nonfriable asbestos material
- 6. Enter the number of containers used to transport the asbestos materials listed in Item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):
  - DM Metal drums, barrels
  - DP Plastic drums, barrels
  - BA 6 mil plastic bags or wrapping
- 7. Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).
- 8. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.
- 9. The authorized agent of the waste generator shall read and then sign and date this certification. The date is the date of receipt by transporter.

NOTE: The waste generator shall retain a copy of this form.

#### APPENDIX D

#### **INSTRUCTIONS**

### <u>Transporter Section</u> (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport.

NOTE: The transporter shall retain a copy of this form.

### <u>Disposal Site Section</u> (Items 12 & 13)

- 12. The authorized representative of the WDS shall note in this space any discrepancy between waste described on this mainfest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
- 13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in Item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS shall retain a completed copy of this form. The WDS shall also send a completed copy to the operator listed in Item 2.

### BUILDING REMOVAL - CASE II (NON-FRIABLE ASBESTOS ABATEMENT) (BDE)

Effective: September 1, 1990

Revised: April 1, 2010

BUILDING REMOVAL: This work shall consist of the removal and disposal of  $\underline{1}$  building(s), together with all foundations, retaining walls, and piers, down to a plane 1 ft (300 mm) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the building(s) in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The building(s) are identified as follows:

| Bldg. No. | Parcel<br><u>No.</u> | <u>Location</u> | <u>Description</u>  |
|-----------|----------------------|-----------------|---|
| 1         | 3VC0049              | STA. 6383+18 RT | 2-story wood frame residence with full basement and crawl space & asphalt-shingled roof |

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services and the removal of the metering devices that serve the building(s) according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR
HIGHWAY CONSTRUCTION
TO BE DEMOLISHED BY THE
IILLINOIS DEPARTMENT OF
TRANSPORTATION
VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

The Contractor has the option of removing the non-friable asbestos prior to demolition or demolishing the building(s) with the non-friable asbestos in place. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)" and "Removal and Disposal of Non-Friable Asbestos Building No. 1" contained herein.

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit price(s) for this work shall represent the cost of demolition and disposal assuming all non-friable asbestos is removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

<u>EXPLANATION OF BIDDING TERMS</u>: Two separate contract unit price items have been established for the removal of each building. They are:

- 1. BUILDING REMOVAL NO. 1
- 2. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1

The Contractor shall have two options available for the removal and disposal of the non-friable asbestos.

The pay item for removal and disposal of non-friable asbestos will not be deleted regardless of the option chosen by the Contractor.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of non-friable asbestos from the building(s) to be demolished. All work shall be done according to the requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), the Occupational Safety and Health Administration (OSHA), the Special Provision for "Removal and Disposal of Non-Friable Asbestos, Building No. 1," and as outlined herein.

Refer to the Materials Description Table in <u>Appendix A</u> for a brief description and location of the various materials. Also included is a Materials Quantities Table in <u>Appendix B</u>. This table states the ACM is non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

The work involved in the removal and disposal of non-friable asbestos if done prior to demolition, shall be performed by a Contractor or Sub-Contractor prequalified with the Illinois Capital Development Board.

The Contractor shall provide a shipping manifest, similar to the one shown in <u>Appendix C</u>, to the Engineer for the disposal of all ACM wastes.

Permits: The Contractor shall apply for permit(s) in compliance with applicable regulations of the Illinois Environmental Protection Agency. Any and all other permits required by other federal, state, or local agencies for carrying on the work shall be the responsibility of the Contractor. Copies of the permit(s) shall be sent to the district office and the Engineer.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least ten days prior to commencement of any asbestos removal or demolition activity. Separate notices shall be sent for the asbestos removal work and the building demolition if they are done as separate operations.

Asbestos Demolition/Renovation Coordinator Illinois Environmental Protection Agency Division of Air Pollution Control P. O. Box 19276 Springfield, Illinois 62794-9276 (217) 785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

#### Submittals:

- A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.
- B. Submittals that shall be made prior to start of work:
  - 1. Submittals required under Asbestos Abatement Experience.
  - Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in Worker Protection Procedures.
  - 3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.
  - 4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.
  - 5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).
  - 6. Submit a list of penalties, including liquidated damages, incurred through non-compliance with asbestos abatement project specifications.

- 7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.
- 8. Submit proof of written notification and compliance with the "Notifications" paragraph.
- C. Submittals that shall be made upon completion of abatement work:
  - 1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;
  - 2. Submit daily copies of work site entry logbooks with information on worker and visitor access;
  - 3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and
  - 4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

#### Certificate of Insurance:

- A. The Contractor shall document general liability insurance for personal injury, occupational disease and sickness or death, and property damage.
- B. The Contractor shall document current Workmen's Compensation Insurance coverage.
- C. The Contractor shall supply insurance certificates as specified by the Department.

#### Asbestos Abatement Experience:

- A. Company Experience. Prior to starting work, the Contractor shall supply evidence that he/she has been prequalified with the Illinois Capital Development Board and that he/she has been included on the Illinois Department of Public Health's list of approved Contractors.
- B. Personnel Experience:
  - 1. For Superintendent, the Contractor shall supply:

- a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.
- b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.
- 2. For workers involved in the removal of asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

#### ABATEMENT AIR MONITORING: The Contractor shall comply with the following:

- A. Personal Monitoring. All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the Contractor. Additional personal samples may be required by the Engineer at any time during the project.
- B. Interior Non-Friable Asbestos-Containing Materials. The Contractor shall perform personal air monitoring during removal of all non-friable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- C. Exterior Non-Friable Asbestos-Containing Materials. The Contractor shall perform personal air monitoring during removal of all non-friable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

The Contractor shall conduct downwind area sampling to monitor airborne fiber levels at a frequency of no less than three per day.

#### D. Air Monitoring Professional

1. All air sampling shall be conducted by a qualified Air Sampling Professional supplied by the Contractor. The Air Sampling Professional shall submit documentation of successful completion of the National Institute for Occupational Safety and Health (NIOSH) course #582 - "Sampling and Evaluating Airborne Asbestos Dust".

2. Air sampling shall be conducted according to NIOSH Method 7400. The results of these tests shall be provided to the Engineer within 24 hours of the collection of air samples.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1: The Contractor has the option of removing and disposing of the non-friable asbestos prior to demolition of the building(s) or demolishing the building(s) with the non-friable asbestos in place.

Option #1 - If the Contractor chooses to remove all non-friable asbestos prior to demolition, the work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)".

Option #2 - If the Contractor chooses to demolish the building(s) with the non-friable asbestos in place, the following provisions shall apply:

- 1. Continuously wet all non-friable ACM and other building debris with water during demolition.
- 2. Dispose of all demolition debris as asbestos containing material by placing it in lined, covered transport haulers and placing it in an approved landfill.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1, as shown.

The cost for this work shall be determined as follows:

- Option #1 Actual cost of removal and disposal of non-friable asbestos.
- Option #2 The difference in cost between removing and disposing of the building if all non-friable asbestos is left in place and removing and disposing of the building assuming all non-friable asbestos is removed prior to demolition.

The cost of removing and disposing of the building(s), assuming all non-friable asbestos is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. 1".

Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO. 1 be deleted.

## **APPENDIX A**

## MATERIAL DESCRIPTION TABLE

| Material    | % And Type  | Location, Description, Sample |
|-------------|-------------|-------------------------------|
| Description | Of Asbestos | Number (If Applicable)        |

## 1. 15762 IL Rte 47, Newark, IL (Sta. 6383+18 RT)

| Window   | 3% Chrysotile | 1 <sup>st</sup> and 2 <sup>nd</sup> floor windows. | Non-friable. Samples |
|----------|---------------|--|----------------------|
| Caulking |               | 05-13, 05-14, 05-15                                |                      |

## **APPENDIX B**

## MATERIAL QUANTITIES TABLE

The following are approximate quantities of ACM to be removed from the building indicated. These material quantities do not indicate the cleaning required to remove asbestos debris and resulting contamination from the work areas.

## 1. 15762 IL Rte 47, Newark, IL (Sta. 6383+18 RT)

| <u>Material</u>    | <u>Floor</u>                                 | Quantity Present | <u>Friable</u> |
|--------------------|--|------------------|----------------|
| Window<br>caulking | 1 <sup>st</sup> & 2 <sup>nd</sup><br>windows | floor 345 L.F.   | No             |

# **APPENDIX C**

## SHIPPING MANIFEST Generator

| Work Site Name and Mailing Address   | Owner's        | Name              | Owner's Telephone<br>No.    |
|--|----------------|-------------------|-----------------------------|
| Operator's Name and Address  |                |                   | Operator's.<br>Telephone No |
| <ol> <li>Waste Disposal Site (WDS) Name Mailing Ad<br/>Site Location</li> </ol>  | ddress, and F  | Physical          | WDS<br>Telephone No.        |
| Name and Address of Responsible Agency   |                |                   |                             |
| 5. Description of Materials  |                |                   |                             |
| 6. Containers  | No.            | Туре              |                             |
| 7. Total Quantity  | M3             | (Yd3)             |                             |
| Special Handling Instructions and Additional   | Information    | J                 |                             |
| fully and accurately described above by proper and labeled, and are in all respects in proper condition for transport by highway accregulations. | cording to ap  | pplicable interna | tional and government       |
| Printed/Typed Name & Title   | Signatur       | е                 | Month Day Year              |
| I<br>10. Transporter 1 (Acknowledgement of Receip  | ransporter     | 2)                |                             |
| Printed/Typed Name & Title Address Telephone No.   | and Signatur   |                   | Month Day Year              |
| 11. Transporter 2 (Acknowledgement of Receip   | t of Materials | s)                |                             |
| Printed/Typed Name & Title   | Signatur       | re                | Month Day Year              |
| Address and Telephone No.  |                |                   |                             |
|  | isposal Site   |                   |                             |
| 12. Discrepancy Indication Space   |                |                   |                             |
| <ol> <li>Waste Disposal Site Owner or Operator: Ce<br/>Covered By This Manifest Except As Noted in</li> </ol>                                    |                | Receipt of Asbe   | estos Materiais             |
| Printed/Typed Name & Title   | Signatur       | re .              | Month Day Year              |
|  |                |                   | <u> </u>                    |

#### **INSTRUCTIONS**

Waste Generator Section (Items 1-9)

- 1. Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
- 2. If a demolition or renovation, enter the name and address of the Company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.
- 3. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
- 4. Provide the name and address of the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program.
- 5. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is
  - Friable asbestos material
  - Nonfriable asbestos material
- 6. Enter the number of containers used to transport the asbestos materials listed in Item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):

DM - Metal drums, barrels

DP - Plastic drums, barrels

BA - 6 mil plastic bags or wrapping

- 7. Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).
- 8. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.

9. The authorized agent of the waste generator shall read and then sign and date this certification. The date is the date of receipt by transporter.

NOTE: The waste generator shall retain a copy of this form.

#### **INSTRUCTIONS**

<u>Transporter Section</u> (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport.

NOTE: The transporter shall retain a copy of this form. <u>Disposal Site Section</u> (Items 12 & 13) 12. The authorized representative of the WDS shall note in this space any discrepancy between waste described on this manifest and waste actually received as well as any

between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste

material to nonasbestos material is considered a WDS.

13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in Item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS shall retain a completed copy of this form. The WDS shall also send a completed copy to the operator listed in Item 2.

### **BUILDING REMOVAL - CASE IV (NO ASBESTOS) (BDE)**

Effective: September 1, 1990

Revised: April 1, 2010

BUILDING REMOVAL: This work shall consist of the removal and disposal of \_\_\_\_\_ building(s), together with all foundations, retaining walls, and piers, down to a plane 1 ft (300 mm) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the building(s) in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The building(s) are identified as follows:

| Bldg. No. | Parcel<br><u>No.</u> | <u>Location</u>                        | <u>Description</u>                       |
|-----------|----------------------|--|--|
| 2         | 3VC0049              | Sta. 6384+57, RT                       | Wood frame barn building with dirt floor |
| 3         | 3VC0057              | Sta. 6447+90, RT                       |  |
| 4         | 3VC0057              | Sta. 6449+05, RT                       |  |
| 5         | 3VC0057              | Sta. 6449+56, RT                       |  |
| 6         | 3VC0057              | Sta. 6450+12, RT                       |  |
| 9         | 3VC0061              | Sta. 6503+37, RT                       |  |
| 10        | 3VC0070              | Sta. 6569+67, RT                       |  |
| 11        | 3VC0070              | Sta. 6571+86, RT                       |  |
| 12        | 3VC0070              | Sta. 6572+80, RT                       |  |
| 13        | 3VC0065              | Lisbon Center Road<br>Sta. 1205+81, LT |  |

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services and the removal of the metering devices that serve the building(s) according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR
HIGHWAY CONSTRUCTION
TO BE DEMOLISHED BY THE
ILLINOIS DEPARTMENT OF
TRANSPORTATION
VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit price(s) for this work shall represent the cost of demolition. Any salvage value shall be reflected in the contract unit price for this item.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least ten days prior to commencement of any demolition activity.

Asbestos Demolition/Renovation Coordinator Illinois Environmental Protection Agency Division of Air Pollution Control P. O. Box 19276 Springfield, Illinois 62794-9276 (217)785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

#### Submittals:

- A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.
- B. Prior to starting work, the Contractor shall submit proof of written notification and compliance with the "Notifications" paragraph.

### PROJECT LABOR AGREEMENT - QUARTERLY EMPLOYMENT REPORT

Public Act 97-0199 requires the Department to submit quarterly reports regarding the number of minorities and females employed under Project Labor Agreements. To assist in this reporting effort, the Contractor shall provide a quarterly workforce participation report for all minority and female employees working under the project labor agreement of this contract. The data shall be reported on Construction Form BC 820, Project Labor Agreement (PLA) Workforce Participation Quarterly Reporting Form available on the Department's website <a href="http://www.dot.il.gov/const/conforms.html">http://www.dot.il.gov/const/conforms.html</a>.

The report shall be submitted no later than the 15<sup>th</sup> of the month following the end of each quarter (i.e. April 15 for the January – March reporting period). The form shall be emailed to <a href="mailto:DOT.PLA.Reporting@illinois.gov">DOT.PLA.Reporting@illinois.gov</a> or faxed to (217) 524-4922.

Any costs associated with complying with this provision 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.

# Illinois Department of Transportation PROJECT LABOR AGREEMENT

This Project Labor Agreement ("PLA" or "Agreement") is entered into this \_\_\_\_\_\_ day of \_\_\_\_\_, 2014, by and between the Illinois Department of Transportation ("IDOT" or "Department") in its proprietary capacity, and each relevant Illinois AFL-CIO Building Trades signatory hereto as determined by the Illinois AFL-CIO Statewide Project Labor Agreement Committee on behalf of each of its affiliated members (individually and collectively, the "Unions"). This PLA shall apply to Construction Work (as defined herein) to be performed by IDOT's Prime Contractor and each of its subcontractors of whatever tier ("Subcontractor" or "Subcontractors") on Contract No. 66B84 (hereinafter, the "Project").

## **ARTICLE 1 - INTENT AND PURPOSES**

- 1.1 This PLA is entered into in accordance with the Project Labor Agreement Act ("Act", 30 ILCS 571). It is mutually understood and agreed that the terms and conditions of this PLA are intended to promote the public interest in obtaining timely and economical completion of the Project by encouraging productive and efficient construction operations; by establishing a spirit of harmony and cooperation among the parties; and by providing for peaceful and prompt settlement of any and all labor grievances or jurisdictional disputes of any kind without strikes, lockouts, slowdowns, delays, or other disruptions to the prosecution of the work. The parties acknowledge the obligations of the Contractors and Subcontractors to comply with the provisions of the Act. The parties will work with the Contractors and Subcontractors within the parameters of other statutory and regulatory requirements to implement the Act's goals and objectives.
- 1.2 As a condition of the award of the contract for performance of work on the Project, IDOT's Prime Contractor and each of its Subcontractors shall execute a "Contractor Letter of Assent", in the form attached hereto as Exhibit A, prior to commencing Construction Work on the Project. The Contractor shall submit a Subcontractor's Contractor Letter of Assent to the Department prior to the Subcontractor's performance of Construction Work on the Project. Upon request copies of the applicable collective bargaining agreements will be provided by the appropriate signatory labor organization consistent with this Agreement and at the pre-job conference referenced in Article III, Section 3.1.
- 1.3 Each Union affiliate and separate local representing workers engaged in Construction Work on the Project in accordance with this PLA are bound to this agreement by the Illinois AFL-CIO Statewide Project Labor Agreement Committee which is the central committee established with full authority to negotiate and sign PLAs with the State on behalf of all respective crafts. Upon their signing the Contractor Letter of Assent, the Prime Contractor, each Subcontractor, and the individual Unions shall thereafter be deemed a party to this PLA. No party signatory to this PLA shall, contract or subcontract, nor permit any other person, firm, company, or entity to contract or subcontract for the performance of Construction Work for the Project to any person, firm, company, or entity that does not agree in writing to become bound for the term of this Project by the terms of this PLA prior to commencing such work and to the applicable area-wide collective bargaining agreement(s) with the Union(s) signatory hereto.

- 1.4 It is understood that the Prime Contractor(s) and each Subcontractor will be considered and accepted by the Unions as separate employers for the purposes of collective bargaining, and it is further agreed that the employees working under this PLA shall constitute a bargaining unit separate and distinct from all others. The parties hereto also agree that this PLA shall be applicable solely with respect to this Project, and shall have no bearing on the interpretation of any other collective bargaining agreement or as to the recognition of any bargaining unit other than for the specific purposes of this Project.
- In the event of a variance or conflict, whether explicit or implicit, between the terms and conditions of this PLA and the provisions of any other applicable national, area, or local collective bargaining agreement, the terms and conditions of this PLA shall supersede and control. For any work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the National Agreement of the International Union of Elevator Constructors, and for any instrument calibration work and loop checking performed under the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, the preceding sentence shall apply only with respect to Articles I, II, V, VI, and VII.
- 1.6 Subject to the provisions of paragraph 1.5 of this Article, it is the parties' intent to respect the provisions of any other collective bargaining agreements that may now or hereafter pertain, whether between the Prime Contractor and one or more of the Unions or between a Subcontractor and one or more of the Unions. Accordingly, except and to the extent of any contrary provision set forth in this PLA, the Prime Contractor and each of its Subcontractors agrees to be bound and abide by the terms of the following in order of precedence: (a) the applicable collective bargaining agreement between the Prime Contractor and one or more of the Unions made signatory hereto; (b) the applicable collective bargaining agreement between a Subcontractor and one or more of the Unions made signatory hereto; or (c) the current applicable area collective bargaining agreement for the relevant Union that is the agreement certified by the Illinois Department of Labor for purposes of establishing the Prevailing Wage applicable to the Project. The Union will provide copies of the applicable collective bargaining agreements pursuant to part (c) of the preceding sentence to the Prime Contractor. Assignments by the Contractors or Subcontractors amongst the trades shall be consistent with area practices; in the event of unresolved disagreements as to the propriety of such assignments, the provisions of Article VI shall apply.
- 1.7 Subject to the limitations of paragraphs 1.4 to 1.6 of this Article, the terms of each applicable collective bargaining agreement as determined in accordance with paragraph 1.6 are incorporated herein by reference, and the terms of this PLA shall be deemed incorporated into such other applicable collective bargaining agreements only for purposes of their application to the Project.

- 1.8 To the extent necessary to comply with the requirements of any fringe benefit fund to which the Prime Contractor or Subcontractor is required to contribute under the terms of an applicable collective bargaining agreement pursuant to the preceding paragraph, the Prime Contractor or Subcontractor shall execute all "Participation Agreements" as may be reasonably required by the Union to accomplish such purpose; provided, however, that such Participation Agreements shall, when applicable to the Prime Contractor or Subcontractor solely as a result of this PLA, be amended as reasonably necessary to reflect such fact. Upon written notice in the form of a lien of a Contractor's or Subcontractor's delinquency from any applicable fringe benefit fund, IDOT will withhold from the Contractor's periodic pay request an amount sufficient to extinguish any delinquency obligation of the Contractor or Subcontractor arising out of the Project.
- 1.9 In the event that the applicable collective bargaining agreement between a Prime Contractor and the Union or between the Subcontractor and the Union expires prior to the completion of this Project, the expired applicable contract's terms will be maintained until a new applicable collective bargaining agreement is ratified. The wages and fringe benefits included in any new applicable collective bargaining agreement will apply on and after the effective date of the newly negotiated collective bargaining agreement, except to the extent wage and fringe benefit retroactivity is specifically agreed upon by the relevant bargaining parties.

### ARTICLE II - APPLICABILITY, RECOGNITION, AND COMMITMENTS

- 2.1 The term Construction Work as used herein shall include all "construction, demolition, rehabilitation, renovation, or repair" work performed by a "laborer or mechanic" at the "site of the work" for the purpose of "building" the specific structures and improvements that constitute the Project. Terms appearing within quotation marks in the preceding sentence shall have the meaning ascribed to them pursuant to 29 CFR Part 5 and Illinois labor laws.
- 2.2 By executing the Letters of Assent, Prime Contractor and each of its Subcontractors recognizes the Unions signatory to this PLA as the sole and exclusive bargaining representatives for their craft employees employed on the jobsite for this Project. Unions who are signatory to this PLA will have recognition on the Project for their craft.
- 2.3 The Prime Contractor and each of its Subcontractors retains and shall be permitted to exercise full and exclusive authority and responsibility for the management of its operations, except as expressly limited by the terms of this PLA or by the terms and conditions of the applicable collective bargaining agreement.
- 2.4 Except to the extent contrary to an express provision of the relevant collective bargaining agreement, equipment or materials used in the Project may be pre-assembled or pre-fabricated, and there shall be no refusal by the Union to handle, transport, install, or connect such equipment or materials. Equipment or materials delivered to the job-site will be unloaded and handled promptly without regard to potential jurisdictional disputes; any such disputes shall be handled in accordance with the provisions of this PLA.

- 2.5 The parties are mutually committed to promoting a safe working environment for all personnel at the job-site. It shall be the responsibility of each employer to which this PLA applies to provide and maintain safe working conditions for its employees, and to comply with all applicable federal, state, and local health and safety laws and regulations.
- 2.6 The use or furnishing of alcohol or drugs and the conduct of any other illegal activity at the job-site is strictly prohibited. The parties shall take every practical measure consistent with the terms of applicable collective bargaining agreements to ensure that the job-site is free of alcohol and drugs.
- 2.7 All parties to this PLA agree that they will not discriminate against any employee based on race, creed, religion, color, national origin, union activity, age, gender or sexual orientation and shall comply with all applicable federal, state, and local laws.
- In accordance with the Act and to promote diversity in employment, IDOT will establish, in cooperation with the other parties, the apprenticeship hours which are to be performed by minorities and females on the Project. IDOT shall consider the total hours to be performed by these underrepresented groups, as a percentage of the workforce, and create aspirational goals for each Project, based on the level of underutilization for the service area of the Project (together "Project Employment Objectives"). IDOT shall provide a quarterly report regarding the racial and gender composition of the workforce on the Project.

Persons currently lacking qualifications to enter apprenticeship programs will have the opportunity to obtain skills through basic training programs as have been established by the Department. The parties will endeavor to support such training programs to allow participants to obtain the requisite qualifications for the Project Employment Objectives.

The parties agree that all Contractors and Subcontractors working on the Project shall be encouraged to utilize the maximum number of apprentices as permitted under the terms of the applicable collective bargaining agreements to realize the Project Employment Objectives.

The Unions shall assist the Contractor and each Subcontractor in efforts to satisfy Project Employment Objectives. A Contractor or Subcontractor may request from a Union specific categories of workers necessary to satisfy Project Employment Objectives. The application of this section shall be consistent with all local Union collective bargaining agreements, and the hiring hall rules and regulations established for the hiring of personnel, as well as the apprenticeship standards set forth by each individual Union.

2.9 The parties hereto agree that engineering/architectural/surveying consultants' materials testing employees are subject to the terms of this PLA for Construction Work performed for a Contractor or Subcontractor on this Project. These workers shall be fully expected to objectively and responsibly perform their duties and obligations owed to the Department without regard to the potential union affiliation of such employees or of other employees on the Project.

2.10 This Agreement shall not apply to IDOT employees or employees of any other governmental entity.

### **ARTICLE III - ADMINISTRATION OF AGREEMENT**

- 3.1 In order to assure that all parties have a clear understanding of the PLA, and to promote harmony, at the request of the Unions a post-award pre-job conference will be held among the Prime Contractor, all Subcontractors and Union representatives prior to the start of any Construction Work on the Project. No later than the conclusion of such pre-job conference, the parties shall, among other matters, provide to one another contact information for their respective representatives (including name, address, phone number, facsimile number, e-mail). Nothing herein shall be construed to limit the right of the Department to discuss or explain the purpose and intent of this PLA with prospective bidders or other interested parties prior to or following its award of the job.
- 3.2 Representatives of the Prime Contractor and the Unions shall meet as often as reasonably necessary following award until completion of the Project to assure the effective implementation of this PLA.
- 3.3 Any notice contemplated under Article VI and VII of this Agreement to a signatory labor organization shall be made in writing to the Local Union with copies to the local union's International Representative.

## ARTICLE IV - HOURS OF WORK AND GENERAL CONDITIONS

- 4.1 The standard work day and work week for Construction Work on the Project shall be consistent with the respective collective bargaining agreements. In the event Project site or other job conditions dictate a change in the established starting time and/or a staggered lunch period for portions of the Project or for specific crafts, the Prime Contractor, relevant Subcontractors and business managers of the specific crafts involved shall confer and mutually agree to such changes as appropriate. If proposed work schedule changes cannot be mutually agreed upon between the parties, the hours fixed at the time of the pre-job meeting shall prevail.
- 4.2 Shift work may be established and directed by the Prime Contractor or relevant Subcontractor as reasonably necessary or appropriate to fulfill the terms of its contract with the Department. If used, shift hours, rates and conditions shall be as provided in the applicable collective bargaining agreement.
- 4.3 The parties agree that chronic and/or unexcused absenteeism is undesirable and must be controlled in accordance with procedures established by the applicable collective bargaining agreement. Any employee disciplined for absenteeism in accordance with such procedures shall be suspended from all work on the Project for not less than the maximum period permitted under the applicable collective bargaining agreement.

- 4.4 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, employment begins and ends at the Project site; employees shall be at their place of work at the starting time; and employees shall remain at their place of work until quitting time.
- 4.5 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, there shall be no limit on production by workmen, no restrictions on the full use of tools or equipment, and no restrictions on efficient use of manpower or techniques of construction other than as may be required by safety regulations.
- 4.6 The parties recognize that specialized or unusual equipment may be installed on the Project. In such cases, the Union recognizes the right of the Prime Contractor or Subcontractor to involve the equipment supplier or vendor's personnel in supervising the setting up of the equipment, making modifications and final alignment, and performing similar activities that may be reasonably necessary prior to and during the start-up procedure in order to protect factory warranties. The Prime Contractor or Subcontractor shall notify the Union representatives in advance of any work at the job-site by such vendor personnel in order to promote a harmonious relationship between the equipment vendor's personnel and other Project employees.
- 4.7 For the purpose of promoting full and effective implementation of this PLA, authorized Union representatives shall have access to the Project job-site during scheduled work hours. Such access shall be conditioned upon adherence to all reasonable visitor and security rules of general applicability that may be established for the Project site at the pre-job conference or from time to time thereafter.

# ARTICLE V – GRIEVANCE PROCEDURES FOR DISPUTES ARISING UNDER A PARTICULAR COLLECTIVE BARGAINING AGREEMENT

- 5.1 In the event a dispute arises under a particular collective bargaining agreement specifically not including jurisdictional disputes referenced in Article VI below, said dispute shall be resolved by the Grievance/Arbitration procedure of the applicable collective bargaining agreement. The resulting determination from this process shall be final and binding on all parties bound to its process.
- 5.2 Employers covered under this Agreement shall have the right to discharge or discipline any employee who violates the provisions of this Agreement. Such discharge or discipline by a contractor or subcontractor shall be subject to Grievance/Arbitration procedure of the applicable collective bargaining agreement only as to the fact of such violation of this agreement. If such fact is established, the penalty imposed shall not be disturbed. Work at the Project site shall continue without disruption or hindrance of any kind as a result of a Grievance/Arbitration procedure under this Article.
- 5.3 In the event there is a deadlock in the foregoing procedure, the parties agree that the matter shall be submitted to arbitration for the selection and decision of an Arbitrator governed under paragraph 6.8.

## **ARTICLE VI - DISPUTES: GENERAL PRINCIPLES**

- 6.1 This Agreement is entered into to prevent strikes, lost time, lockouts and to facilitate the peaceful adjustment of jurisdictional disputes in the building and construction industry and to prevent waste and unnecessary avoidable delays and expense, and for the further purpose of at all times securing for the employer sufficient skilled workers.
- A panel of Permanent Arbitrators are attached as addendum (A) to this agreement. By mutual agreement between IDOT and the Unions, the parties can open this section of the agreement as needed to make changes to the list of permanent arbitrators.
- 6.3 The PLA Jurisdictional Dispute Resolution Process ("Process") sets forth the procedures below to resolve jurisdictional disputes between and among Contractors, Subcontractors, and Unions engaged in the building and construction industry. Further, the Process will be followed for any grievance or dispute arising out of the interpretation or application of this PLA by the parties except for the prohibition on attorneys contained in 6.11. All decisions made through the Process are final and binding upon all parties.

## **DISPUTE PROCESS**

- Administrative functions under the Process shall be performed through the offices of the President and/or Secretary-Treasurer of the Illinois State Federation of Labor, or their designated representative, called the Administrator. In no event shall any officer, employee, agent, attorney, or other representative of the Illinois Federation of Labor, AFL-CIO be subject to any subpoena to appear or testify at any jurisdictional dispute hearing.
- There shall be no abandonment of work during any case participating in this Process or in violation of the arbitration decision. All parties to this Process release the Illinois State Federation of Labor ("Federation") from any liability arising from its action or inaction and covenant not to sue the Federation, nor its officers, employees, agents or attorneys.
- 6.6 In the event of a dispute relating to trade or work jurisdiction, all parties, including the employers, Contractors or Subcontractors, agree that a final and binding resolution of the dispute shall be resolved as follows:
  - (a) Representatives of the affected trades and the Contractor or Subcontractor shall meet on the job site within two (2) business days after receiving written notice in an effort to resolve the dispute. (In the event there is a dispute between local unions affiliated with the same International Union, the decision of the General President, or his/her designee, as the internal jurisdictional authority of that International Union, shall constitute a final and binding decision and determination as to the jurisdiction of work.)

- (b) If no settlement is achieved subsequent to the preceding Paragraph, the matter shall be referred to the local area Building & Construction Trades Council, which shall meet with the affected trades within two (2) business days subsequent to receiving written notice. In the event the parties do not wish to avail themselves of the local Building & Construction Trades Council, the parties may elect to invoke the services of their respective International Representatives with no extension of the time limitations. An agreement reached at this Step shall be final and binding upon all parties.
- (c) If no settlement agreement is reached during the proceedings contemplated by Paragraphs "a" or "b" above, the matter shall be immediately referred to the Illinois Jurisdictional Dispute Process for final and binding resolution of said dispute. Said referral submission shall be in writing and served upon the Illinois State Federation of Labor, or the Administrator, pursuant to paragraph 6.4 of this agreement. The Administrator shall, within three (3) days, provide for the selection of an available Arbitrator to hear said dispute within this time period. Upon good cause shown and determined by the Administrator, an additional three (3) day extension for said hearing shall be granted at the sole discretion of the Administrator. Only upon mutual agreement of all parties may the Administrator extend the hearing for a period in excess of the time frames contemplated under this Paragraph. Business days are defined as Monday through Friday, excluding contract holidays.
- 6.7 The primary concern of the Process shall be the adjustment of jurisdictional disputes arising out of the Project. A sufficient number of Arbitrators shall be selected from list of approved Arbitrators as referenced Sec. 6.2 and shall be assigned per Sec. 6.8. Decisions shall be only for the Project and shall become effective immediately upon issuance and complied with by all parties. The authority of the Arbitrator shall be restricted and limited specifically to the terms and provisions of Article VI and generally to this Agreement as a whole.
- 6.8 The Arbitrator chosen shall be randomly selected based on the list of Arbitrators in Sec. 6.2 and geographical location of the jurisdictional dispute and upon his/her availability, and ability to conduct a Hearing within two (2) business days of said notice. The Arbitrator may issue a "bench" decision immediately following the Hearing or he/she may elect to only issue a written decision, said decision must be issued within two (2) business days subsequent to the completion of the Hearing. Copies of all notices, pleadings, supporting memoranda, decisions, etc. shall be provided to all disputing parties and the Illinois State Federation of Labor.

Any written decision shall be in accordance with this Process and shall be final and binding upon all parties to the dispute and may be a "short form" decision. Fees and costs of the arbitrator shall be divided evenly between the contesting parties except that any party wishing a full opinion and decision beyond the short form decision shall bear the reasonable fees and costs of such full opinion. The decision of the Arbitrator shall be final and binding upon the parties hereto, their members, and affiliates.

In cases of jurisdictional disputes or other disputes between a signatory labor organization and another labor organization, both of which is an affiliate or member of the same International Union, the matter or dispute shall be settled in the manner set forth by their International Constitution and/or as determined by the International Union's General President whose decision shall be final and binding upon all parties. In no event shall there be an abandonment of work.

- 6.9 In rendering a decision, the Arbitrator shall determine:
  - (a) First, whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between National or International Unions to the dispute or agreements between local unions involved in the dispute, governs;
  - (b) Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider the established trade practice in the industry and prevailing practice in the locality. Where there is a previous decision of record governing the case, the Arbitrator shall give equal weight to such decision of record, unless the prevailing practice in the locality in the past ten years favors one craft. In that case, the Arbitrator shall base his decision on the prevailing practice in the locality. Except, that if the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wages or by the use of vertical agreements, the Arbitrator shall rely on the decision of record and established trade practice in the industry rather than the prevailing practice in the locality; and,
  - (c) Only if none of the above criteria is found to exist, the Arbitrator shall then consider that because efficiency, cost or continuity and good management are essential to the well being of the industry, the interests of the consumer or the past practices of the employer shall not be ignored.
- 6.10 The Arbitrator shall set forth the basis for his/her decision and shall explain his/her findings regarding the applicability of the above criteria. If lower ranked criteria are relied upon, the Arbitrator shall explain why the higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall only apply to the Project. Agreements of Record, for other PLA projects, are applicable only to those parties signatory to such agreements. Decisions of Record are those that were either attested to by the former Impartial Jurisdictional Disputes Board or adopted by the National Arbitration Panel.
- 6.11 All interested parties, as determined by the Arbitrator, shall be entitled to make presentations to the Arbitrator. Any interested labor organization affiliated to the PLA Committee and party present at the Hearing, whether making a presentation or not, by such presence shall be deemed to accept the jurisdiction of the Arbitrator and to agree to be bound by its decision. In addition to the representative of the local labor organization, a representative of the labor organization's International Union may appear on behalf of the parties. Each party is responsible for arranging for its witnesses. In the event an Arbitrator's subpoena is required, the party requiring said subpoena shall prepare the subpoena for the Arbitrator to execute. Service of the subpoena upon any witness shall be the responsibility of the issuing party.

Attorneys shall not be permitted to attend or participate in any portion of a Hearing.

The parties are encouraged to determine, prior to Hearing, documentary evidence which may be presented to the Arbitrator on a joint basis.

- 6.12 The Order of Presentation in all Hearings before an Arbitrator shall be
  - I. Identification and Stipulation of the Parties
  - II. Unions(s) claiming the disputed work presents its case
  - III. Union(s) assigned the disputed work presents its case
  - IV. Employer assigning the disputed work presents its case
  - V. Evidence from other interested parties (i.e., general contractor, project manager, owner)
  - VI. Rebuttal by union(s) claiming the disputed work
  - VII. Additional submissions permitted and requested by Arbitrator
  - VIII.Closing arguments by the parties
- 6.13 All parties bound to the provisions of this Process hereby release the Illinois State Federation of Labor and IDOT, their respective officers, agents, employees or designated representatives, specifically including any Arbitrator participating in said Process, from any and all liability or claim, of whatsoever nature, and specifically incorporating the protections provided in the Illinois Arbitration Act, as amended from time to time.
- 6.14 The Process, as an arbitration panel, nor its Administrator, shall have any authority to undertake any action to enforce its decision(s). Rather, it shall be the responsibility of the prevailing party to seek appropriate enforcement of a decision, including findings, orders or awards of the Arbitrator or Administrator determining non-compliance with a prior award or decision.
- 6.15 If at any time there is a question as to the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process, the primary responsibility for any determination of the arbitrability of a dispute and the jurisdiction of the Arbitrator shall be borne by the party requesting the Arbitrator to hear the underlying jurisdictional dispute. The affected party or parties may proceed before the Arbitrator even in the absence or one or more stipulated parties with the issue of jurisdiction as an additional item to be decided by the Arbitrator. The Administrator may participate in proceedings seeking a declaration or determination that the underlying dispute is subject to the jurisdiction and process of the Illinois Jurisdictional Dispute Resolution Process. In any such proceedings, the non-prevailing party and/or the party challenging the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process shall bear all the costs, expenses and attorneys' fees incurred by the Illinois Jurisdictional Dispute Resolution Process and/or its Administrator in establishing its jurisdiction.

## **ARTICLE VII - WORK STOPPAGES AND LOCKOUTS**

- 7.1 During the term of this PLA, no Union or any of its members, officers, stewards, employees, agents or representatives shall instigate, support, sanction, maintain, or participate in any strike, picketing, walkout, work stoppage, slow down or other activity that interferes with the routine and timely prosecution of work at the Project site or at any other contractor's or supplier's facility that is necessary to performance of work at the Project site. Hand billing at the Project site during the designated lunch period and before commencement or following conclusion of the established standard workday shall not, in itself, be deemed an activity that interferes with the routine and timely prosecution of work on the Project.
- 7.2 Should any activity prohibited by paragraph 7.1 of this Article occur, the Union shall undertake all steps reasonably necessary to promptly end such prohibited activities.
  - 7.2.A No Union complying with its obligations under this Article shall be liable for acts of employees for which it has no responsibility or for the unauthorized acts of employees it represents. Any employee who participates or encourages any activity prohibited by paragraph 7.1 shall be immediately suspended from all work on the Project for a period equal to the greater of (a) 60 days; or (b) the maximum disciplinary period allowed under the applicable collective bargaining agreement for engaging in comparable unauthorized or prohibited activity.
  - 7.2.B Neither the PLA Committee nor its affiliates shall be liable for acts of employees for which it has no responsibility. The principal officer or officers of the PLA Committee will immediately instruct, order and use the best efforts of his office to cause the affiliated union or unions to cease any violations of this Article. The PLA Committee in its compliance with this obligation shall not liable for acts of its affiliates. The principal officer or officers of any involved affiliate will immediately instruct, order or use the best effort of his office to cause the employees the union represents to cease any violations of this Article. A union complying with this obligation shall not be liable for unauthorized acts of employees it represents. The failure of the Contractor to exercise its rights in any instance shall not be deemed a waiver of its rights in any other instance.

During the term of this PLA, the Prime Contractor and its Subcontractors shall not engage in any lockout at the Project site of employees covered by this Agreement.

7.3 Upon notification of violations of this Article, the principal officer or officers of the local area Building and Construction Trades Council, and the Illinois AFL-CIO Statewide Project Labor Agreement Committee as appropriate, will immediately instruct, order and use their best efforts to cause the affiliated union or unions to cease any violations of this Article. A Trades Council and the Committee otherwise in compliance with the obligations under this paragraph shall not be liable for unauthorized acts of its affiliates.

- 7.4 In the event that activities in violation of this Article are not immediately halted through the efforts of the parties, any aggrieved party may invoke the special arbitration provisions set forth in paragraph 7.5 of this Article.
- 7.5 Upon written notice to the other involved parties by the most expeditious means available, any aggrieved party may institute the following special arbitration procedure when a breech of this Article is alleged:
  - 7.5.A The party invoking this procedure shall notify the individual designated as the Permanent Arbitrator pursuant to paragraph 6.8 of the nature of the alleged violation; such notice shall be by the most expeditious means possible. The initiating party may also furnish such additional factual information as may be reasonably necessary for the Permanent Arbitrator to understand the relevant circumstances. Copies of any written materials provided to the arbitrator shall also be contemporaneously provided by the most expeditious means possible to the party alleged to be in violation and to all other involved parties.
  - 7.5.B Upon receipt of said notice the Permanent Arbitrator shall set and hold a hearing within twenty-four (24) hours if it is contended the violation is ongoing, but not before twenty-four (24) hours after the written notice to all parties involved as required above.
  - 7.5.C The Permanent Arbitrator shall notify the parties by facsimile or any other effective written means, of the place and time chosen by the Permanent Arbitrator for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Permanent Arbitrator.
  - 7.5.D The sole issue at the hearing shall be whether a violation of this Article has, in fact, occurred. An Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Permanent Arbitrator may order cessation of the violation of this Article, and such Award shall be served on all parties by hand or registered mail upon issuance.
  - 7.5.E Such Award may be enforced by any court of competent jurisdiction upon the filing of the Award and such other relevant documents as may be required. Facsimile or other hardcopy written notice of the filing of such enforcement proceedings shall be given to the other relevant parties. In a proceeding to obtain a temporary order enforcing the Permanent Arbitrator's Award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be <a href="example such agreement does not waive any party">example such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Permanent Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail.

- 7.6 Individuals found to have violated the provisions of this Article are subject to immediate termination. In addition, IDOT reserves the right to terminate this PLA as to any party found to have violated the provisions of this Article.
- 7.7 Any rights created by statue or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by parties to whom they accrue.
- 7.8 The fees and expenses of the Permanent Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

### <u>ARTICLE VIII – TERMS OF AGREEMENT</u>

- 8.1 If any Article or provision of this Agreement shall be declared invalid, inoperative or unenforceable by operation of law or by any of the above mentioned tribunals of competent jurisdiction, the remainder of this Agreement or the application of such Article or provision to persons or circumstances other than those as to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.
- 8.2 This Agreement shall be in full force as of and from the date of the Notice of Award until the Project contract is closed.
- 8.3 This PLA may not be changed or modified except by the subsequent written agreement of the parties. All parties represent that they have the full legal authority to enter into this PLA. This PLA may be executed by the parties in one or more counterparts.
- 8.4 Any liability arising out of this PLA shall be several and not joint. IDOT shall not be liable to any person or other party for any violation of this PLA by any other party, and no Contractor or Union shall be liable for any violation of this PLA by any other Contractor or Union.
- 8.5 The failure or refusal of a party to exercise its rights hereunder in one or more instances shall not be deemed a waiver of any such rights in respect of a separate instance of the same or similar nature.

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## Addendum A

## **IDOT Slate of Permanent Arbitrators**

- 1. Bruce Feldacker
- 2. Thomas F. Gibbons
- 3. Edward J. Harrick
- 4. Brent L. Motchan
- 5. Robert Perkovich
- 6. Byron Yaffee
- 7. Glenn A. Zipp

## **Execution Page**

| Illinois Department of Transportation                      |                              |               |
|--|------------------------------|---------------|
| Omer M. Osman, Director of Highways                        | _                            |               |
| Michael A. Forti, Chief Counsel                            | _                            |               |
| Erica J. Borggren, Acting Secretary                        | (Date)                       |               |
| Illinois AFL-CIO Statewide Project Labor Agrelisted below: | eement Committee, representi | ng the Unions |
|  |                              |               |
|  | (Date)                       |               |
| List Unions:   |                              |               |

## \*\*RETURN WITH BID\*\*

| Exhibit A - Contractor Letter of Assent   |
|---|
| (Date)  |
| To All Parties:   |
| In accordance with the terms and conditions of the contract for Construction Work on [Contract No. <b>66B84</b> ], this Letter of Assent hereby confirms that the undersigned Prime Contractor or Subcontractor agrees to be bound by the terms and conditions of the Project Labor Agreement established and entered into by the Illinois Department of Transportation in connection with said Project.  |
| It is the understanding and intent of the undersigned party that this Project Labor Agreement shall pertain only to the identified Project. In the event it is necessary for the undersigned party to become signatory to a collective bargaining agreement to which it is not otherwise a party in order that it may lawfully make certain required contributions to applicable fringe benefit funds, the undersigned party hereby expressly conditions its acceptance of and limits its participation in such collective bargaining agreement to its work on the Project. |
| (Authorized Company Officer)  |
| (Company)   |

\*\*RETURN WITH BID\*\*

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- 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 singleuser restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

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

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

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

#### 1. Minimum wages

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

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

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

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

### 2. Withholding

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

action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose Wage and Hour Division Web http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
  - d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

#### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

#### 18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

## 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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## 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

## Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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## XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

## MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.